

**CONTRACT DOCUMENTS
FOR
CONSTRUCTION OF DUXBURY BEACH SEAWALL
PHASE II**

CONTRACT NO. 2024-II

**TOWN OF DUXBURY
MASSACHUSETTS**



July 31, 2024

PGB Engineering, LLC
49 Tupelo Road
Marshfield, MA 02050

TABLE OF CONTENTS

<u>Section Number</u>	<u>Section Title</u>
-----------------------	----------------------

BIDDING REQUIREMENTS

00105	Invitation to Bid
00200	Instructions to Bidders
00412	Bid Form
00440	Notice of Award

CONTRACTING REQUIREMENTS

00500	Agreement
00610	Contract Bonds
00680	Notice to Proceed
00700	Special Conditions
	Minimum Wage Rates

DIVISION 1 - GENERAL REQUIREMENTS

01100	Summary of Work
01200	Measurement and Payment
01300	Administrative Requirements
01330	Submittal Procedures
01400	Quality Requirements
01500	Temporary Facilities and Controls
01600	Product Requirements
01700	Execution Requirements

DIVISION 2 – SITE CONSTRUCTION

02050	Soils and Borrow Materials
02117	Clean Up
02200	Earth Excavation, Backfill, Fill and Grading
02221	Demolition
02230	Site Clearing
02320	Steel Sheet Piles
02900	Landscape

DIVISION 3 – CONCRETE

03100	Concrete Forms and Accessories
03200	Concrete Reinforcement
03300	Cast-In-Place Concrete

APPENDIX	BOUND IN BACK
----------	---------------

(this page intentionally left blank)

SECTION 00105
INVITATION TO BID

The Duxbury Town Manager as Chief Procurement Officer, Duxbury, MA (the Owner), requests sealed bids for Construction of Duxbury Beach Seawall - Phase II, Contract 2024-II.

1. Sealed bids for General Contractor Work, endorsed “Bid for Construction of Duxbury Beach Seawall - Phase II, Contract 2024-II, Duxbury, MA” will be received at the Municipal Services office located at 878 Tremont Street, Duxbury, MA 02332, until 2:00 PM, on Wednesday, August 21, 2024, at which time and place bids will be opened publicly and read aloud.
2. The work includes, but is not limited to, construction of 2,860 linear feet of reinforced concrete seawall and footing including steel sheeting, and revetment reconstruction. The work also includes a cobble berm; dune restoration; removing and disposing of the existing unreinforced concrete seawall and removing some of the existing riprap revetment stone and transporting the stone to a location designated by the Owner.
3. Contract Documents may be obtained via email request to PGBEngineeringLLC@gmail.com There is no charge for emailed documents.

All Bids shall be based on Town Manager issued Contract Documents and any addenda to the Contract.

A deposit of \$50.00 (cash, certified check or money order) is required for each set of Contract Documents obtained, made payable to PGB Engineering, LLC. Such deposit will be refunded if the documents are returned within 15 calendar days after Bid opening. Requests for Documents to be mailed will be accepted if accompanied by a non-refundable payment of \$25.00 made payable to PGB Engineering LLC.

4. There will be a non- mandatory pre-bid meeting at the project site, meet at the Duxbury Beach Reservation’s north parking lot on the east side of Gurnet Road, just south of #265 Gurnet Road, Duxbury, MA on Tuesday, August 13, 2024 at 10:00 AM. All prospective bidders are encouraged to attend.
5. Bid Security Five percent (5%) of the General Bid in the form of a certified check or bid bond, payable to the Owner.
6. The successful General Bidder must furnish 100 percent (100%) Performance Bond and 100 percent (100%) Labor and Materials Bond.
7. The successful bidder will be required to complete the entire project by December 1, 2025.
8. The Duxbury Town Manager reserves the right to reject any and all bids should it be in the public interest to do so.

9. MASSACHUSETTS GENERAL LAWS, CHAPTER 30S, 39M, AS AMENDED TO DATE APPLIES. Contract 2024-II is subject to the minimum wage rates issued by the Commissioner of Labor and Industries, in accordance with Chapter 149, Sections 26 and 27D. It is the responsibility of the contractor, before bid opening, to request if necessary, any additional information on Minimum Wage Rates for those trades people who may be employed for the proposed work under this contract.
10. Each bidder agrees to waive any claim it has or may have against the Owner, the Engineer, or their respective employees arising out of or in connection with the administration, evaluation or recommendation of any bid.

**DUXBURY TOWN MANAGER
DUXBURY, MASSACHUSETTS**

END OF SECTION

SECTION 00200
INSTRUCTIONS TO BIDDERS

PART 1 SUMMARY

1.01 DOCUMENT INCLUDES

- A. Part 2 - Invitation
 - 1. Bid Submission
 - 2. Intent
 - 3. Work Identified in Contract Documents
 - 4. Contract Time
 - 5. Pre-Bid Meeting

- B. Part 3 - Bid Documents and Contract Documents
 - 1. Definitions
 - 2. Contract Documents Identification
 - 3. Availability
 - 4. Examination
 - 5. Inquiries/Addenda
 - 6. Product/Assembly/System Substitutions
 - 7. Regulations
 - 8. Guarantee

- C. Part 4 - Site Assessment
 - 1. Site Examination

- D. Part 5 - Qualifications
 - 1. Evidence of Qualifications
 - 2. Subcontractors/Suppliers/Others

- E. Part 6 - Bid Submission
 - 1. Submission Procedure
 - 2. Comparison of Bids
 - 3. Bid Ineligibility

- F. Part 7 - Bid Enclosures/Requirements
 - 1. Security Deposit
 - 2. Performance Assurance
 - 3. Insurance
 - 4. Bid Form Requirements
 - 5. Bid Form Signature
 - 6. Additional Bid Information
 - 7. Selection and Award

- G. Part 8 - Offer Acceptance/Rejection
 - 1. Bid Opening
 - 2. Duration of Offer
 - 3. Acceptance of Offer

1.02 RELATED DOCUMENTS

- A. Document 00105 - Invitation to Bid
- B. Document 00412 - Bid Form – General Contract

PART 2 INVITATION

2.01 BID SUBMISSION

- A. General Bids, signed, sealed and executed will be received at the Municipal Services Office, 878 Tremont Street, Duxbury, MA 02332, until 2:00 PM, on Wednesday, August 21, 2024.
- B. Offers submitted after the above time will be returned to bidder unopened.
- C. Offers will be opened publicly immediately after time for receipt of bids and read aloud.

2.02 INTENT

- A. The intent of this Bid request is to obtain an offer to perform work to complete Construction of Duxbury Beach Seawall - Phase II located in Duxbury, MA, based on unit prices bid and estimated quantities for comparison of bids.

2.03 WORK IDENTIFIED IN CONTRACT DOCUMENTS

- A. The work includes, but is not limited to, construction of 2,860 linear feet of reinforced concrete seawall and footing including steel sheeting, and revetment reconstruction. The work also includes removing and disposing of the existing unreinforced concrete seawall and removing the existing riprap revetment stone and transporting the stone to a location designated by the Owner.

2.04 CONTRACT TIME

- A. The successful bidder will be required to complete the entire project by December 1, 2025. The bidder, in submitting an offer, accepts the Contract Time period stated for performing the Work.

2.05 PRE-BID MEETING

- A. There will be a non- mandatory pre-bid meeting at the project site, meet at the Duxbury Beach Reservation's north parking lot on the east side of Gurnet Road, just south of #265 Gurnet Road, Duxbury, MA on Tuesday, August 13, 2024 at 10:00 AM. All prospective bidders are encouraged to attend.

PART 3 BID DOCUMENTS AND CONTRACT DOCUMENTS

3.01 DEFINITIONS

- A. Bid Documents: Contract Documents supplemented with Invitation to Bid, Instructions to Bidders, Bid Form and Bid security identified.
- B. Bid, Offer, or Bidding: Act of submitting an offer.
- C. Bid Price, Bid Amount: Monetary sum identified by the Bidder in the Bid Form.

3.02 CONTRACT DOCUMENTS IDENTIFICATION

- A. The Contract Documents are identified as Contract 2024-II prepared by PGB Engineering LLC, 49 Tupelo Road, Marshfield, MA 02050.

3.03 AVAILABILITY

- A. Bid Documents may be obtained via email request to PGBEngineeringLLC@gmail.com . Hard copies of the Contract Documents may be obtained at the office of PGB Engineering LLC, 49 Tupelo Road, Marshfield, MA. Office hours are Monday through Thursday, 8:00 AM to 4:00 PM; Friday 8:00 AM to 12:00 PM.
- B. Bid Documents can be obtained by Bidders upon receipt of a refundable deposit, by cash, certified check or money order, payable to PGB Engineering LLC, in the amount of \$50.00 per set. There is no charge for emailed documents.
- C. Deposit will be refunded when Bid Documents are returned complete, undamaged, unmarked and reusable, within 15 days of the Bid submission. Failure to comply will result in forfeiture of deposit.
- D. Bid Documents are made available only for the purpose of obtaining offers for this project. Their use does not grant a license for other purposes.
- E. Requests for documents to be mailed will be accepted if accompanied by a non-refundable payment of \$25.00 payable to PGB Engineering LLC

3.04 EXAMINATION

- A. Bid Documents may be viewed at the Municipal Services office, second floor of Town Hall, 878 Tremont Street, Duxbury, MA.
- B. Upon receipt of Bid Documents verify documents are complete. Notify Engineer if documents are incomplete.
- C. Immediately notify Engineer upon finding discrepancies or omissions in Bid Documents.

3.05 INQUIRIES/ADDENDA

- A. Direct questions in writing to PGB Engineering LLC, email: pgebengineeringllc@gmail.com
- B. Addenda may be issued during bidding period. Addenda become part of the Contract Documents. Include resultant costs in the Bid Price.
- C. Verbal answers are not binding on any party.
- D. Submit clarification requests in writing not less than 7 days before date set for receipt of Bids. Replies will be made by Addendum, a copy of which will be forwarded to known recipients.

3.06 PRODUCT/ASSEMBLY/SYSTEM SUBSTITUTIONS

- A. Where Bid Documents stipulate particular Products, substitutions will not be considered prior to receipt of bids.
- B. Provide Products as specified. Substitutions may be submitted for consideration after award of the Contract.

3.07 REGULATIONS

- A. Applicable provisions of Massachusetts General Laws and Regulations and/or the United States Code and Code of Federal Regulations govern this Contract and any provision in violation of the foregoing shall be deemed null, void and of no effect. Where conflict between Code of Federal Regulations and State Laws and Regulations exist, the more stringent requirement shall apply.
- B. Minimum Wage Rates as determined by the Commissioner of Department of Labor and Industries under the provision of the Massachusetts General Laws, Chapter 149, Sections 26 to 27D, as amended, apply to this project. It is the responsibility of the contractor, before bid opening, to request if necessary, any additional information on Minimum Wage Rates for those trades people who may be employed for the proposed work under this contract.

- C. This project is subject to the Safety and Health Regulations of the U.S. Department of Labor set forth in Title 29 CFR, Part 1926 and to all subsequent amendments, and to the Massachusetts Department of Labor and Industries, Division of Industrial Safety 'Rules and Regulations for the Prevention of Accidents in Construction Operations' (Chapter 454 CMR 10.00 et seq.). Contractors shall be familiar with the requirements of these regulations.

3.08 GUARANTEE

- A. The contractor guarantees that the Work and Services to be performed under the Contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction of the same shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Drawings, Specifications, and other contract documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the Work as stated in the final estimate. If part of the Work is accepted in accordance with that subsection of this AGREEMENT titled "Partial Acceptance", the guarantee for that part of the Work shall be for a period of one year from the date fixed for such acceptance.
- B. If at any time within the said period of guarantee any part of the Work requires repairing, correction or replacement, the Owner may notify the contractor in writing to make the required repairs, correction or replacements. If the Contractor neglects to commence making such repairs, corrections or replacements to the satisfaction of the Owner within seven (7) days from the date of receipt of such notice, or having commenced fails to prosecute such Work with diligence, the Owner may employ other persons to make said repairs, correction or replacements, and charge the costs, including compensation for additional professional services, to the Contractor.

PART 4 SITE ASSESSMENT

4.01 SITE EXAMINATION

- A. Contact Engineer at the following address and phone number in order to arrange date and time to visit project site:
PGB Engineering LLC
49 Tupelo Road
Marshfield, 781-834-8987
Attn.: Patrick Brennan, P.E.
Email: pgbengineeringllc@gmail.com
- B. Bidders are required to submit their Bids, upon the following express conditions which shall apply to and be deemed a part of every Bid received, viz.:

Bidders must satisfy themselves by personal examination of the site of the Work, and by such other means as they may wish, as to the actual conditions there existing, the character and requirements of the Work, the difficulties attendant upon its execution, and the accuracy of all estimated quantities stated in the Bid, and neither the Engineer nor the Owner makes any warranty or representation as to any of said matters or as to the accuracy of the methods by which any descriptions or estimates have been obtained.

- C. All information given on the Drawings or in the other Contract Documents relating to subsurface and other conditions, natural phenomena, existing pipes, and other structures is from the best sources at present available to the Owner.

All such information is furnished only for the information and convenience of Bidders and is not guaranteed nor is the quality of the sources of such information guaranteed.

It is agreed and understood that the Owner and Engineer do not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes or other structures encountered during construction will be the same as, or similar to, those indicated on the Drawings or in the other Contract Documents.

It is agreed further and understood that no Bidder or Contractor shall use or be entitled to use any of the information made available to him or obtained in any examination made by him in any manner as a basis of or ground for any claim or demand against the Owner or the Engineer, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other conditions, natural phenomena, existing pipes or other structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

PART 5 QUALIFICATIONS

5.01 EVIDENCE OF QUALIFICATIONS

- A. Prospective Bidders for Contract 2024-II shall submit with their bids an experience list showing all contracts in the last five years of similar scope and magnitude.
- B. Prospective bidders must have successfully completed five concrete seawall construction projects of similar size (wall size) within the last ten years.
- C. No award will be made to any Bidder who cannot satisfy the Owner that he has sufficient ability and experience in this class of work and sufficient capital and plant to enable him to prosecute and complete the Work successfully within the time named. The Owner's decision or judgment on these matters shall be final, conclusive and binding.

- D. The Owner may make such investigations as it deems necessary, and the Bidder shall furnish to the Owner, under oath if so required, all such information relating to the ability and experience of the Bidder as the Owner may request. THE OWNER RESERVES THE RIGHT TO REJECT ANY BID OF A BIDDER WHO CANNOT SATISFY THE OWNER THAT HE HAS SUFFICIENT EXPERIENCE AND RESOURCES TO SUCCESSFULLY COMPLETE THE PROJECT.

5.02 SUBCONTRACTORS/SUPPLIERS/OTHERS

- A. The Owner reserves the right to reject a proposed Subcontractor for reasonable cause.

PART 6 BID SUBMISSION

6.01 SUBMISSION PROCEDURE

- A. Bidders shall be solely responsible for delivery of bids in manner and time prescribed.
- B. Submit one copy of the complete BID FORM, Pages 00412-1 through 00412-10 containing the executed offer on Bid Forms provided, signed and sealed with required security in a closed opaque envelope, clearly identified with bidder's name, project name and Owner's name on the outside.

6.02 COMPARISON OF BIDS

- A. Bids will be compared on the total price bid for the work, based on the quantities and unit and lump-sum prices stated in the bid form.
- B. In the event that there is a discrepancy in the bid between the lump-sum or unit price written in words and figures, the price written in words will govern.

6.03 BID INELIGIBILITY

- A. Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alternations, or irregularities of any kind, may at the Owner's discretion, be declared unacceptable.
- B. The Owner reserves the right to reject any bid in the event a bid item or items thereof are obviously unbalanced or appear to the Owner to be so unbalanced as to affect or to be liable to affect adversely any interests of the Owner.
- C. Any bid which does not comply with the statutes of Massachusetts General Laws regulating competitive bidding need not be accepted. The OWNER may reject every such bid.

PART 7 BID ENCLOSURES/REQUIREMENTS

7.01 SECURITY DEPOSIT

- A. Bids shall be accompanied by a security deposit as follows:
- B. Bid Bond on a standard surety company form, or certified check of a sum no less than 5% percent of the Bid Price, payable to the Town of Duxbury.
- C. The security deposit will be returned after delivery to the Owner of the required Performance and Payment Bonds by the accepted Bidder.
- D. After a bid has been accepted, security deposits will be returned to the respective Bidders.
- E. If no contract is awarded, security deposits will be returned.

7.02 PERFORMANCE ASSURANCE

- A. Accepted Bidder: Provide 100 percent (100%) Performance Bond and 100 percent (100%) Labor and Materials Bonds.

7.03 INSURANCE

- A. The Contractor will not be permitted to start any work until he has submitted certificates covering all insurances called for under that subsection of the Agreement, titled "Insurance".

7.04 BID FORM REQUIREMENTS

- A. Complete requested information in the Bid Form and Appendices.
- B. Materials and equipment purchased for permanent installation in this project will be exempt from the State Sales and Use Tax. The exemption certificate number will be furnished to the Contractor. Each bidder shall take this exemption into account in calculating his Bid for the Work.

7.05 BID FORM SIGNATURE

- A. Sign Bid Form, as follows:
 - 1. Sole Proprietorship: Signature of sole proprietor in the presence of a witness who will also sign. Insert the words "Sole Proprietor" under the signature. Affix seal.
 - 2. Partnership: Signature of all partners in the presence of a witness who will also sign. Insert the word "Partner" under each signature. Affix seal with each signature.
 - 3. Corporation: Signature of a duly authorized signing officer in their normal signature. Insert the officer's capacity in which the signing officer

acts, under each signature. Affix the corporate seal. If the bid is signed by officials other than the president and secretary of the company, or the president/secretary/treasurer of the company, submit a copy of the by-law resolution of their board of directors authorizing them to do so, with the Bid Form in the bid envelope.

4. Joint Venture: Signature of each party of the joint venture under their respective seals in a manner appropriate to such party as described above, similar to requirements for partnerships.

7.06 ADDITIONAL BID INFORMATION

- A. The general contractor shall apply for and obtain and pay for all permits as required by the Town (Trench Permit). The Town waives all fees for such Town permits.

7.07 SELECTION AND AWARD

- A. The Owner will make award of the Contract to the lowest responsible bidder based on available funding for the project. The selection of the lowest responsible bidder will be based on evaluation of the bids by the Owner on the basis of the Lowest Total Sum for Items 1 through 12.
- B. The Owner may reject any and all bids, which include, for any item, a unit or lump-sum price that is abnormally high or low.

PART 8 OFFER ACCEPTANCE/REJECTION

8.01 BID OPENING

- A. Bids will be opened publicly and read aloud. Bidders may be present.

8.02 DURATION OF OFFER

- A. The time period for holding bids is 30 days after the opening of bids, Saturdays, Sundays and holidays excluded.

8.03 ACCEPTANCE OF OFFER

- A. The Owner reserves the right to accept or reject any or all offers.
- B. The Engineer, on behalf of the Owner and after acceptance by the Owner, will issue to the successful Bidder a written Bid Acceptance.

END OF SECTION

(this page intentionally left blank)

SECTION 00412
BID FORM

To: Town of Duxbury, MA

Project: Construction of Duxbury Beach Seawall - Phase II, Contract 2024-II

Date: _____

Submitted by: _____
(full name)

(full address)

The Owner reserves the right to reject any bid in the event that any bid item is obviously unbalanced or appears to the Owner to be so unbalanced as to affect or to be liable to affect adversely any interest of the Owner.

In the event of a discrepancy in any bid item between the amount written in words and the amount written in figures, the amount written in words shall govern.

The Owner reserves the right to reject any or all bids if it deems to be in its best interest to do so.

The undersigned states that no officer, agent or employee of the Owner directly or indirectly has a financial interest in the Bid.

1. OFFER

Having examined the Place of the Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by PGB Engineering LLC, Engineer for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work, including the work of all Subcontractors, for the **TOTAL SUM PRICE** for Items 1 through 12, inclusive, of:

.....dollars

and cents(\$.....) \$.....

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief description, unit or lump-sum price bid in both words and figures</u>	<u>Total in Figures</u>
1	Lump sum	Mobilization / Demobilization, the lump sum price of dollars and cents (\$.....)	\$.....
2	5,500* cu. yd.	Remove & dispose of existing concrete, per cubic yard, dollars and cents (\$.....)	\$.....
3	2,860 lin. ft.	Construct new seawall, per linear foot, dollars and cents (\$.....)	\$.....
4	Lump sum	Construct new seawall return wall at southern end, the lump sum price of dollars and cents (\$.....)	\$.....
5	3,200* sq. yd.	Steel sheeting, per square yard, dollars and cents (\$.....)	\$.....
6	150* cu. yd.	Construct cobble berm, per cubic yard, dollars and cents (\$.....)	\$.....

* Indeterminate quantity assumed for comparison of bids.

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief description, unit or lump-sum price bid in both words and figures</u>	<u>Total in Figures</u>
7	150* cu. yd.	Reconstruct sand dune, per cubic yard. dollars and cents (\$.....)	\$.....
8	1,500* cu. yd.	Earth excavation below normal depth, per cubic yard, dollars and cents (\$.....)	\$.....
9	1,800* cu. yd.	Crushed stone, per cubic yard, dollars and cents (\$.....)	\$.....
10		<u>Remove & Reconstruct (R&R) Existing Revetment</u>	
10a	850 l.f.	R&R existing permitted revetment, per linear foot, dollars and cents (\$.....)	\$.....
10b	Lump sum	R&R existing revetment end wall protection at Sta. 29+50, the lump sum price of, dollars and cents (\$.....)	\$.....
10c	Lump sum	R&R existing revetment end wall protection at Sta. 33+00, the lump sum price of, dollars and cents (\$.....)	\$.....

* Indeterminate quantity assumed for comparison of bids.

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief description, unit or lump-sum price bid in both words and figures</u>	<u>Total in Figures</u>
11	400 cu. yd.	Remove existing revetment stone and transport to DBR, per cubic yard, dollars and cents (\$.....)	\$.....
12	550 s.y.	Plant Cape American Beach Grass, per square yard, dollars and cents (\$.....)	\$.....

We have included the security deposit or Bid Bond in the form of a certified check or Bid Bond, payable to the Owner, in the amount of Five percent (5%) of the General Bid Amount.

2. ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for *thirty* days, Saturdays, Sundays and legal Holidays excluded, from the bid closing date.

The time period for holding bids, where Federal approval is not required is 30 days, Saturdays, Sundays and legal holidays excluded, after the opening of bids and where Federal approval is required, the time period for holding bids is 30 days, Saturdays, Sundays and holidays excluded after Federal approval.

If this bid is accepted by the Owner within the time period stated above, we will:

- Execute the Agreement within *fourteen* days of receipt of Notice of Award.
- Furnish the required 100 percent (100%) Performance and 100 percent (100%) Labor and Materials Bonds within *fourteen* days of receipt of Notice of Award in the form described in Supplementary Conditions.
- Commence work within *seven* days after written Notice to Proceed.

If this bid is accepted within the time stated, and we fail to provide the required bonds, the security deposit shall be forfeited as damages to the Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

In the event our bid is not accepted within the time stated above, the required security deposit will be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

We understand that the estimated quantities for unit-price work are approximate only and may increase or decrease from the quantities listed and that the bid prices are fair compensation for the work whether or not actual quantities are more or less than estimated.

3. CONTRACT TIME

If this Bid is accepted, we will:

- Complete the Work by December 1, 2025.

4. BIDDINGS LAWS

Bids for Contract 2024-II are subject to MASSACHUSETTS GENERAL LAWS, CHAPTER 30s, 39M, AS AMENDED TO DATE, APPLIES. Contract 2024-II is subject to the minimum wage rates issued by the Commissioner of Department of Labor and Industries, in accordance with MGL Chapter 149, Sections 26 to 27D, as amended, apply to this project. It is the responsibility of the Contractor, before bid opening, to request, if necessary, any additional information on minimum wage rates for those trades people who may be employed for the proposed work under this contract.

5. ADDENDA

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

Addendum # _____ Dated _____
Addendum # _____ Dated _____
Addendum # _____ Dated _____

6. LIQUIDATED DAMAGES

Liquidated damages specified in this contract are \$1000 per day for each calendar day beyond the contract completion date that work remains incomplete.

7. APPLICABLE GENERAL LAWS AND REGULATIONS

Applicable provisions of Massachusetts General Laws and Regulations and/or the United States Code and Code of Federal Regulations govern Contract 2024-II and any provision violation of the foregoing shall be deemed null, void and of no effect. Where conflict between Code of Federal Regulations and State Laws and Regulations exist, the more stringent requirement shall apply.

8. CERTIFICATION STATEMENTS

The undersigned bidder certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph, the work "person" shall mean any natural person, joint venture/partnership,

corporation or other business or legal entity.

The undersigned bidder certifies under penalties of perjury that there have been no substantial changes in his financial position or business organization other than those changes noted within the application since the applicant's most recent pre-qualification statement and that the bid is in all respects bona fide, fair and made without collusion or fraud with any other person. "Person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity which sells material, equipment or supplies used in or for, or engages in the performance of, the same or similar construction, reconstruction, installation, demolition, maintenance or repair work or any part thereof.

The undersigned bidder certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards made subject to *section forty-four A*.

The undersigned bidder certifies under penalties of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of Section twenty-nine F of Chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

9. BID FORM SIGNATURES

The Corporate Seal of

(Bidder - print the full name of your firm)

(Bidder's address, city, state, zip)

was hereunto affixed in the presence of:

(Authorized signing officer and Title)

(Seal)

(Authorized signing officer and Title)

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture/partnership in the appropriate form or forms as above. The Bidder is requested to state below what work of a similar character to that included in the

AFFIDAVIT

State of _____)

_____) ss _____ 2024

(Bid Opening Date)

The undersigned being duly sworn, deposes and says that he is the _____
sole owner, partner, president, treasurer, or other duly authorized agent or official of

(Name of bidder as appearing in submitted proposal)

for work in _____ or _____
(City/Town)

and certifies that of his own knowledge, said bidder has not either directly or indirectly,
entered into any agreement, participated in any collusion, or otherwise taken any action in
restraint of free competitive bidding in connection with this contract.

(Signature and title of person making affidavit)

Sworn to before me this

_____ day of _____ 2024

Notary Public

CERTIFICATION TO PAYMENT OF TAXES

Pursuant to M.G.L. Ch.62C, s49A, I hereby certify under the penalties of perjury that

(Name of Bidder)

has filed all State tax returns, paid all State taxes required under law and complied with all laws of the Commonwealth of Massachusetts relating to the payment of taxes.

Signed under the penalties of perjury.

Signature of Authorized Representative

Date

OSHA 10 COURSE

Pursuant to M.G.L. CH30 S39M(c)

Under the provisions of M.G.L. CH30 S39M(c), “any person submitting a bid for, or signing a contract to work on” any public works or public building, **estimated to be worth more than \$10,000**, must certify that “all employees to be employed at the worksite” have successfully completed a 10 hour course in construction safety approved by the United States Occupational Safety and Health Administration (OSHA), referred to as the OSHA 10 course. In order to demonstrate compliance, the Act requires persons to submit documentation of successful completion of the OSHA 10 course with the submission of the first prevailing wage certified payroll report (CPR) for each employee. The Attorney General's Office (AGO) is responsible for enforcement of the Act and is authorized to undertake two actions to remedy violations of the Act. First, the AGO can institute proceedings in Superior Court to restrain the awarding of and performance of contracts, and second, it may remove employees who do not have OSHA 10 training from the worksite.

The Act requires “all employees to be employed at the worksite” to have the appropriate OSHA 10 training. In enforcing the Act, the AGO will require two categories of employees to have OSHA 10 training. The first category includes any employee who is entitled to receive the prevailing wage while on the worksite as determined by the Division of Occupational Safety. See M.G.L. CH149 S26-27D and 27F. The second category includes any other employee of any entity that is required to pay the prevailing wage at the worksite. Generally, supervisors (with the exception of so-called “working foremen”) are not entitled to receive the prevailing wage and therefore serve an example of employees who fall into this second category. Employees who fall into one of these two categories and work on a public works or public building worksite shall be required to have the OSHA 10 training (the “Covered Employees”). Examples of individuals who are not Covered Employees are truck drivers and individuals delivering materials provided they are not entitled to the prevailing wage while on the worksite.

In summary, all employees to be employed at the worksite shall have successfully completed a course in construction safety approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time that the employee begins work. Employers shall submit documentation of successful completion of OSHA 10 course with the submission of the first certified payroll for each employee. An OSHA Completion Card or copy thereof will be accepted as documentation.

Pursuant to M.G.L. CH30 S39M as amended and this bid proposal, I certify under the penalties of perjury that all employees to be employed at the worksite will have successfully completed the “OSHA 10” training, 10 hour course in construction safety approved by the Division of Occupational Safety prior to commencement of work at the project site.

Signature of Individual or Corporate Officer

SECTION 00440
NOTICE OF AWARD

TO: _____

Project Description: Construction of Duxbury Beach Seawall - Phase II, Contract 2024-II

The OWNER has considered the Bid submitted by you on August 21, 2024, for the above-described Work in response to its Advertisement for Bid and Information for Bidders.

You are hereby notified that your Bid has been accepted for the **TOTAL SUM PRICE** of

\$ _____

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance Bond, Payment Bond and certificates of insurance within *fourteen (14)* calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said Bonds within the *fourteen (14)* calendar days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your Bid as abandoned and as a forfeiture of your Bid Security. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged ACCEPTANCE OF NOTICE to the OWNER.

Dated this _____ day of _____, 2024.

FOR THE OWNER:

**TOWN MANAGER
DUXBURY, MA**

ACCEPTANCE OF NOTICE

Receipt of the Notice of Award is hereby acknowledged by:

this the _____ day of _____, 2024.

By _____

Title _____

END OF SECTION

SECTION 00500
AGREEMENT

CONSTRUCTION OF DUXBURY BEACH SEAWALL
PHASE II

CONTRACT 2024-II

THIS AGREEMENT, executed this _____ day of _____ in the year Two Thousand Twenty-four (herein referred to as the “AGREEMENT”) by and between the Town of Duxbury, MA, acting by and through its Town Manager, duly authorized therefor, which acts solely for said Town without personal liability to its members, party of the first part, and

party of the second part.

WITNESSETH, that the parties to these presents, each in consideration of the undertakings, promises, and agreements on the part of the other herein contained, have undertaken, promised, and agreed and do hereby undertake, promise, and agree, the party of the first part for itself, its successors and assigns, and the party of the second part for himself and his heirs, executors, administrators, successors and assigns, as follows:

(This page intentionally left blank)

A1	DEFINITIONS
A2	THE CONTRACT DOCUMENTS
A3	OBLIGATIONS AND LIABILITY OF CONTRACTOR
A4	AUTHORITY OF THE ENGINEER
A5	SAFETY
A6	SUPERVISION OF WORK
A7	INSURANCE
A8	PATENTS
A9	COMPLIANCE WITH LAWS
A10	PROVISIONS REQUIRED BY LAW DEEMED INSERTED
A11	PERMITS
A12	NOT TO SUBLET OR ASSIGN
A13	DELAY BY OWNER
A14	TIME FOR COMPLETION
A15	LIQUIDATED DAMAGES
A16	NIGHT AND SUNDAY WORK
A17	EMPLOY COMPETENT PERSONS
A18	EMPLOY SUFFICIENT LABOR AND EQUIPMENT
A19	INTOXICATING CHEMICALS
A20	ACCESS TO WORK
A21	EXAMINATION OF WORK
A22	DEFECTIVE WORK
A23	PROTECTION AGAINST WATER, STORM OR ADVERSE WEATHER
A24	MISTAKES OF CONTRACTOR
A25	RIGHT TO MATERIALS
A26	CHANGES
A27	EXTRA WORK
A28	EXTENSION OF TIME ON ACCOUNT OF EXTRA WORK
A29	CHANGES NOT TO AFFECT BONDS
A30	CLAIMS FOR DAMAGES
A31	ABANDONMENT OF WORK OR OTHER DEFAULT
A32	PRICES FOR WORK
A33	MONEYS MAY BE RETAINED
A34	USE OR PARTIAL PAYMENT NOT ACCEPTANCE
A35	PERIODIC ESTIMATES
A36	FINAL ESTIMATE AND PAYMENT
A37	LIENS
A38	CLAIMS
A39	APPLICATION OF MONEYS RETAINED
A40	NO WAIVER
A41	LIABILITY OF OWNER
A42	GUARANTEE
A43	RETURN OF DRAWINGS
A44	LEGAL ADDRESS OF CONTRACTOR
A45	HEADINGS
A46	MODIFICATION OR TERMINATION
A47	LIMITATION OF LIABILITY OF ENGINEER
A48	NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

A1 DEFINITIONS

Wherever the words hereinafter defined or pronouns used in their stead occur in the Contract Documents, they shall have the following meanings:

The word "Owner" shall mean the party of the first part above designated.

The word "Contractor" shall mean the party of the second part above designated.

The word "Engineer" shall mean that person duly appointed by the Owner to undertake the duties and powers herein assigned to the Engineer, acting either directly or through duly authorized representatives.

The word "Work" shall mean furnishing, installing, removing, altering and constructing equipment and structures as shown or specified by the Drawings and Specifications.

The words "herein", "hereinafter", "hereunder" and words of like import shall be deemed to refer to the Contract Documents.

A2 THE CONTRACT DOCUMENTS

All divisions of this document, the Drawings, and all Addenda and amendments to any of the foregoing collectively constitute the Contract Documents, and are sometimes herein referred to as the "Contract".

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In the event of any conflict or inconsistency between the provisions of the SPECIAL CONDITIONS and the provisions of any of the other Contract Documents, the provisions of the SPECIAL CONDITIONS shall prevail. In the event of conflict or inconsistency between the provisions of the AGREEMENT and the provisions of the Contract Documents other than the SPECIAL CONDITIONS, the provisions of the AGREEMENT shall prevail.

A3 OBLIGATIONS AND LIABILITY OF CONTRACTOR

The Contractor shall supervise and direct the work using his best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the Contract.

The Contractor shall do all the work and perform and furnish all the labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies and all other things (except as otherwise expressly provided herein) necessary and as herein specified for the proper performance and completion of the Work in the manner and within the time hereinafter specified, in strict accordance with the Contract Documents, in conformity with the directions and to the satisfaction of the Engineer, and at the prices herein agreed upon therefore.

All parts of the Work and all fixtures, equipment, apparatus and other items indicated on the Drawings and not mentioned in the Specifications, or vice versa, and all work and material usual and necessary to make the Work complete in all its parts, including all incidental work necessary to make it complete and satisfactory and ready for use and operation, whether or not they are indicated on the Drawings or mentioned in the Specifications, shall be furnished and executed the same as if they were called for both by the Drawings and by the Specifications.

The Contractor shall coordinate his operations with those of any other contractors who may be employed on other work of the Owner, shall avoid interference therewith, and shall cooperate in the arrangements for storage of materials and equipment.

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

The Contractor shall have complete responsibility for the Work and the protection thereof, and for preventing injuries to persons and damage to the Work and property and utilities on or about the Work, until final completion and acceptance thereof. He shall in no way be relieved of his responsibility by any right of the Engineer to give permission or directions relating to any part of the Work, by any such permission or directions given, or by failure of the Engineer to give such permission or directions. The Contractor shall bear all costs, expenses, losses and damages on account of the quantity or character of the Work or the nature of the land (including but not limited to subsurface conditions) in or under or on which the Work is done being different from that indicated or shown in the Contract Documents or from what was estimated or expected, or on account of the weather, elements, or other causes. The Contractor shall indemnify and save harmless the Owner and the Engineer and their officers, agents and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, of whatever kind, directly or indirectly arising out of, relating to or in connection with the Work, whether or not due or claimed to be due in whole or in part to the active, passive or concurrent negligence or fault of the Contractor, his officers, agents, Engineer or any of their respective officers, agents or employees and/or any other person or persons, and whether or not such claims, demands, suits or proceedings are just, unjust, groundless, false or fraudulent; and the Contractor shall and does hereby assume and agree to pay for the defense of all such claims, demands, suits and proceedings, including, if demanded in writing at any time by the Owner or Engineer, counsel chosen by the Owner or Engineer separate from the counsel chosen by the Contractor; provided, however, that the Contractor shall not be required to indemnify the Engineer, his officers, agents or employees, against any such damages occasioned solely by the negligence or fault of the Engineer; and provided further, that the Contractor shall not be required to indemnify the Owner, his officers, agents or employees, against any such damages occasioned solely by faults of the Owner.

The Contractor shall conduct his operations so as not to damage existing structures of work installed either by him or by other contractors. In case of any such damage resulting from his operations, he shall repair and make good as new the damaged portions at his own expense with the consent of the damaged party. In the event that consent is not given, the Contractor shall continue solely liable for the damage caused.

The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, their officers, agents and employees as he is for his own acts and omissions and those of his own officers, agents and employees.

Should the Contractor sustain any loss, damage or delay through any act or omission of any other contractor or any subcontractor of any such other contractor, the Contractor shall have no claim against the Owner or Engineer therefore, other than for an extension of time, but shall have recourse solely to such other contractor or subcontractor.

If any other contractor or any subcontractor of any such other contractor shall suffer or claim to have suffered loss, damage or delay by reason of the acts or omissions of the Contractor or of any of his subcontractors, the Contractor agrees to assume the defense against any such claim and to reimburse such other contractor or subcontractor for such loss or damage. The Contractor agrees to and does hereby indemnify and save harmless the Owner and Engineer from and against any and all claims by such other contractors or subcontractors alleging such loss, damage or delay and from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, arising out of, relating to or resulting from such claims.

The Contractor shall promptly pay all federal, state and local taxes which may be assessed against him in connection with the Work or his operations under the AGREEMENT and/or the other Contract Documents, including, but not limited to, taxes attributable to the purchase of material and equipment, to the performance of services, and the employment of persons in the prosecution of the Work.

The Contractor shall not participate in or cooperate with an international boycott, as defined in Section 999(b)(3) and (4) of the Internal Revenue Code of 1954, as amended, or engage in conduct declared to be unlawful by Section 2 of Chapter 151E of the Massachusetts General Laws.

A4 AUTHORITY OF THE ENGINEER

The Engineer shall be the sole judge of the intent and meaning of the Drawings and Specifications and his decisions thereon and his interpretation thereof shall be final, conclusive and binding on all parties. No party shall be entitled to rely on any such interpretation nor shall the Engineer be bound by any such interpretation except if it is in writing. The Engineer shall promptly, on the request of any affected party, put any such interpretation in writing.

The Engineer shall be the Owner's representative during the life of the Contract and he shall have all the rights of the Owner to observe the Work in progress. He shall have authority (1) to act on behalf of the Owner to the extent expressly provided in the Contract or otherwise in writing; and (2) to determine the amount, quality, acceptability and fitness of all work, materials and equipment required by the Contract.

The Contractor shall proceed without delay to perform the work as directed, instructed, determined or decided by the Engineer and shall comply promptly with such directions, instructions, determinations or decisions. If the Contractor has any objection thereto, he may require that any such direction, instruction, determination or decision be put in writing and within ten (10) days after receipt of any such writing he may file a written protest with the Owner stating clearly and in detail his objections, the reasons therefore, and the nature and amount of additional compensation, if any, to which he claims he will be entitled thereby. A copy of such protest shall be filed with the Engineer at the same time it is filed with the Owner. Unless the Contractor files such written protest with the Owner and Engineer within such ten (10) day period, he shall be deemed to have waived all grounds for protest of such direction, instruction, determination, or decision and all claims for additional compensation or damages occasioned thereby, and shall further be deemed to have accepted such direction, instruction, determination, or decision as being fair, reasonable, and finally determinative of his obligations and rights under the Contract.

The Engineer shall not be responsible for the construction means, controls, techniques, sequences, procedures, or safety procedures of the Contractor, his employees, subcontractors or suppliers.

A5 SAFETY

The Contractor shall be responsible for jobsite safety, including safety programs and safety procedures. Neither the Owner nor the Engineer assumes responsibility for such programs or procedures.

A6 SUPERVISION OF WORK

The Contractor shall give the work the constant attention necessary to ensure the expeditious and orderly progress thereof and shall cooperate with the Engineer in every possible way.

At all times, the Contractor shall have as his agent on the Work a competent superintendent capable of reading and thoroughly understanding the Drawings and Specifications, with full authority to execute the directions of the Engineer regarding the same without delay and to supply promptly such labor, services, materials, equipment, plant, apparatus, appliances, tools, supplies and other items as may be required.

A7 INSURANCE

Before starting and until final completion and acceptance of the Work and expiration of the guarantee period provided for in the AGREEMENT, the Contractor shall procure and maintain insurance of the types specified in paragraphs (a) to (d), inclusive, below, and to the limits for this insurance specified under SPECIAL CONDITIONS. All insurance shall be obtained from companies with an A.M. Best Co. rating of A.

Insurance shall be in such form as will protect the Contractor from all claims and liability for damages of any kind, which may arise from operations under the Contract, whether such operations be by himself, his subcontractors, or by any one directly or indirectly employed or engaged by him.

The following types of insurance shall be provided:

- (a) Workmen's Compensation and Employer's Liability Insurance.
- (b) General Liability Insurance including:
 - (i) Bodily Injury Liability (including Personal Injury) Insurance for Operations and Completed Operations and Contractor's Protective Bodily Injury Insurance.
 - (ii) Property Damage Liability Insurance (including Broad Form Property Damage Liability Coverage) for Operations and Completed Operations and Contractor's Protective Property Damage Insurance, each including coverage for injury to or destruction of wires, conduits, pipes, mains, tanks, tunnels, or any similar property, and the collapse of, or structural injury to, any building or structure except those on which work under the Contract is being done. Blasting and explosion coverage shall be obtained if there is a need for blasting under the Contract, and no blasting shall be performed until such insurance has been secured.
- (c) Insurance to cover liability for Bodily Injury and Property Damage resulting from the use of owned, non-owned, and hired motor vehicles while such vehicles are being operated in connection with the prosecution of the Work.

(d) Contractual Liability Insurance covering the liability assumed by the Contractor under the subsection titled OBLIGATIONS AND LIABILITY OF CONTRACTOR of this AGREEMENT.

All policies shall be so written that 1) the Owner will be notified in writing of cancellation or restrictive amendment at least 30 days prior to the effective date of such cancellation or amendment, and 2) the Owner will be designated as an additional insured on the General Liability Policy.

Certificates from the Contractor's insurance carriers stating the coverages provided, the limits of liability, and expiration dates shall be filed in duplicate with the Owner before operations are begun.

The Contractor shall furnish renewal certificates to the Owner at least thirty (30) days prior to the expiration date of any of the initial insurances.

The Contractor shall also furnish such other insurance as may be called for by the SPECIAL CONDITIONS.

No insurance required or furnished hereunder shall in any way relieve the Contractor of or diminish any of his responsibilities, obligations and liabilities under the Contract.

A8 PATENTS

The Contractor shall indemnify and save harmless the Owner and Engineer and all persons acting for or on behalf of the Owner and Engineer from all claims and liability of any nature or kind, and all damages, costs and expenses, including attorney's fees, arising from or occasioned by an infringement or alleged infringement of any patents or patent rights or any trademark or copyright or any alleged unfair competition relating to any invention, process, material, equipment, article, or apparatus, or any part thereof, furnished and installed by the Contractor, or arising from or occasioned by the use or manufacture thereof, including their use by the Owner.

A9 COMPLIANCE WITH LAWS

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

A10 PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein, the Contract shall be read and enforced as though they were included herein and such provision shall prevail over any inconsistent language herein. If through mistake or otherwise any such provision is not inserted then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

A11 PERMITS

The Contractor shall, at his own expense, take out and maintain all necessary permits from the county, municipal, or other public authorities; shall give all notices required by law; and shall post all bonds and pay all fees and charges incident to the due and lawful prosecution of the Work. The Owner has secured Orders of Conditions from the Duxbury Conservation Commission and authorization for the work from the Army Corps of Engineers and MassDEP.

A12 NOT TO SUBLET OR ASSIGN

The Contractor shall constantly give his personal attention to the faithful prosecution of the Work, shall keep the same under his personal control, shall not assign the Contract or sublet the Work or any part thereof without the previous written consent of the Owner, and shall not assign any of the moneys payable under the Contract, or his claim thereto, unless by and with the like written consent of the Owner and the Surety on the Contract Bonds. Any assignment or subletting in violation hereof shall be void and unenforceable.

A13 DELAY BY OWNER

The Owner may delay the beginning of the work or any part thereof if the necessary lands or rights-of-way for such work shall not have been obtained. The Contractor shall have no claim for additional compensation or damages on account of such delay, subject to Section 00700, of the SPECIAL CONDITIONS.

A14 TIME FOR COMPLETION

The rate of progress shall be such that the Work shall be performed and completed in accordance with the Contract before the expiration of the time limit stipulated under Section 00200 "INSTRUCTIONS TO BIDDERS", except as otherwise expressly provided.

No extension of time will be given for ordinary or foreseeable delays, inclement weather, or accidents, and the occurrence of such will not relieve the Contractor of completing the Work within the stipulated time limit. No extension of time will be given, or if given will be valid, unless based on a written application stating all grounds on which the Contractor relies and delivered to the Engineer promptly upon the occurrence of such grounds as the application states, and in any event prior to the stipulated time for completion of the Work.

If delays are caused by acts of God, acts of government, unavoidable strikes, extra work, or other causes or contingencies clearly beyond the control or responsibility of the Contractor, the Contractor shall be entitled to so much additional time to perform and complete the Work as the

Engineer shall certify in writing to be just.¹ The Contractor agrees that he shall not have or assert any claim for, nor shall he be entitled to any additional compensation or damages on account of such delays.

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

A15 LIQUIDATED DAMAGES

If the Contractor fails to complete the Work satisfactorily on or before the date of completion fixed herein or as duly extended by written certification of the Engineer, the Contractor agrees that the Owner shall deduct from the payments due the Contractor each month the sum set forth under Section 00700, for each calendar day of delay which sum is agreed upon not as a penalty, but as fixed and liquidated damages for each day of such delay. If the payments due the Contractor are less than the amount of such liquidated damages, said damages shall be deducted from any other moneys due or to become due the Contractor, and, in case such damages shall exceed the amount of all moneys due or to become due the Contractor, the Contractor or his Surety shall pay the balance to the Owner.

A16 NIGHT AND SUNDAY WORK

No work shall be done at night or on Sunday except (1) usual protective work, such as pumping and the tending of lights, (2) work done in case of emergency threatening injury to persons or property, or (3) if all of the conditions set forth in the next paragraph below are met.

No work other than that included in (1) and (2) above shall be done at night except when (a), in the sole judgment of the Engineer, the work will be of advantage to the Owner and can be performed satisfactorily at night, (b) the work will be done by a crew organized for regular and continuous night work, and (c) the Engineer has given written permission for such night work.

A17 EMPLOY COMPETENT PERSONS

The Contractor shall employ only competent persons on the Work and shall not employ persons or means which may cause strikes, work stoppages or any disturbances by working people employed by the Contractor, any subcontractor, the Owner, the Engineer or any other contractor.

A18 EMPLOY SUFFICIENT LABOR AND EQUIPMENT

If in the sole judgment of the Engineer the Contractor is not employing sufficient labor, plant, equipment or other means to complete the Work within the time specified, the Engineer may, after giving written notice, require the Contractor to employ such additional labor, plant, equipment and other means as the Engineer deems necessary to enable the Work to progress properly.

¹ This paragraph will be interpreted to include delays in receipt of equipment provided that the Contractor placed his order and submitted shop drawings for such equipment promptly after execution of the Contract, that he has shown due diligence in following the progress of the order, and that the time required for delivery is in accordance with conditions generally prevailing in the industry.

A19 INTOXICATING CHEMICALS

The Contractor shall not sell and shall neither permit nor suffer the introduction or use of intoxicating chemicals upon or about the Work.

A20 ACCESS TO WORK

The Owner, the Engineer, the Commonwealth of Massachusetts representatives, and their officers, agents, and employees may at any and all times and for any and all purposes, enter upon the Work and the site thereof and the premises used by the Contractor, and the Contractor shall at all times provide safe and proper facilities thereof.

A21 EXAMINATION OF WORK

The Engineer shall be furnished by the Contractor with every reasonable facility for examining and inspecting the Work and for ascertaining that the Work is being performed in accordance with the requirements and intent of the Contract, even to the extent of requiring the uncovering or taking down portions of finished work by the Contractor.

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

A22 DEFECTIVE WORK

The inspection of the Work shall not relieve the Contractor of any of his obligations to perform and complete the Work as required by the Contract. Defective work shall be corrected and unsuitable materials, equipment, apparatus and other items shall be replaced by the Contractor, notwithstanding that such work, materials, equipment, apparatus and other items may have been previously overlooked or accepted or estimated for payment. If the Work or any part thereof shall be found defective at any time before the final acceptance of the Work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Engineer; if any material, equipment, apparatus or other items brought upon the site for use or incorporation in the Work, or selected for the same, is condemned by the Engineer as unsuitable or not in conformity with the Specifications or any of the other Contract Documents, the Contractor shall forthwith remove such materials, equipment, apparatus and other items from the site of the Work and shall at his own cost and expense make good and replace the same and any material furnished by the Owner which shall be damaged or rendered defective by the handling or improper installation by the Contractor, his agents, employees or subcontractors.

A23 PROTECTION AGAINST WATER, STORM OR ADVERSE WEATHER

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

The Contractor shall provide for protection against weather in accordance with MGL C. 149, SS 44F and 44G.

A24 MISTAKES OF CONTRACTOR

The Contractor shall promptly correct and make good any and all defects, damages, omissions or mistakes for which he and/or his agents, employees or subcontractors are responsible, and he shall pay to the Owner all costs, expenses, losses, and damages resulting there from or by reason thereof as determined by the Engineer.

A25 RIGHT TO MATERIALS

Nothing in the Contract shall be construed as vesting in the Contractor any right of property in the materials, equipment, apparatus and other items furnished after they have been installed or incorporated in or attached or affixed to the Work or the site, but all such materials, equipment, apparatus and other items shall, upon being so installed, incorporated, attached or affixed, become the property of the Owner.

A26 CHANGES

The Owner may make changes in the Work and in the Drawings and Specifications therefore by making alterations therein, additions thereto or omissions there from. All work resulting from such changes shall be performed and furnished under and pursuant to the terms and conditions of the Contract. If such changes result in an increase or decrease in the Work to be done hereunder, or increase or decrease the quantities thereof, adjustment in compensation shall be made therefore at the unit prices stipulated in the Contract for such work, except that if unit prices are not stipulated for such work, compensation for additional or increased work shall be made as provided hereinafter under the subsection titled EXTRA WORK; and for eliminated or decreased work the Contractor shall allow the Owner a reasonable credit as determined by the Engineer. All decisions with respect to any such changes shall be made by the Engineer and shall be conclusive and binding upon the Contractor.

Except in an emergency endangering life or property, no change shall be made unless in pursuance of a written order from the Engineer authorizing the change, and no claim for additional compensation shall be valid unless the change is so ordered.

The Contractor agrees that he shall neither have nor assert any claim for or be entitled to any additional compensation for damages or for loss of anticipated profits on work that is eliminated.

A27 EXTRA WORK

The Contractor shall perform any extra work (work in connection with the Contract but not provided for herein) when and as ordered in writing by the Engineer, at the unit prices stipulated in the Contract for such work or, if none are so stipulated, either (a) at the price agreed upon before such work is commenced and named in the written order for such work, or (b) if the Engineer so elects, for the reasonable cost of such work, as determined by the Contractor and approved by the Engineer, plus a percentage of such cost, as set forth below. No extra work shall be paid for unless specifically ordered as such in writing by the Engineer.

The cost of extra work done under (b) above shall include the reasonable cost to the Contractor of materials used and equipment installed, common and skilled labor, and foremen, and the fair rental of all machinery and equipment used on the extra work for the period of such use.

At the request of the Engineer, the Contractor shall furnish itemized statements of the cost of the extra work ordered as above and give the Engineer access to all records, accounts, bills and vouchers and correspondence relating thereto.

The Contractor may include in the cost of extra work the amounts of additional premiums, if any, (other than premiums on bonds) paid on the required insurance on account of such extra work, of Social Security or other direct assessments under the Contractor's payroll by Federal or other properly authorized public agencies, and of other approved assessments when such assessments are not normally included in payments made by the Contractor directly to his employees, but in fact are, and are customarily recognized as, part of the cost of doing work.

The fair rental for all machinery and equipment shall be based upon the most recent edition of "Compilation of Rental Rates for Construction Equipment," published by the Associated Equipment Distributors, or a similar publication approved by the Engineer. Rental for machinery and equipment shall be based upon an appropriate fraction of the approved monthly rate schedule. If said extra work requires the use of machinery or equipment not already on the site of the Work the actual cost of transportation, not exceeding a distance of 100 miles, of such machinery or equipment to and from the Work shall be added to the fair monthly rental provided, however, that this shall not apply to machinery or equipment already required to be furnished under the terms of the Contract.

The Contractor shall not include in the cost of extra work any cost or rental of small tools, buildings, or any portion of the time of the Contractor, his superintendent, or his office and engineering staff.

To the cost of extra work done by the Contractor's own forces under (b) above (determined as stated above), the Contractor shall add 15 percent to cover his overhead, use of capital, the premium on the Bonds as assessed upon the amount of this extra work, and profit.

In the case of extra work done under (b) above by a subcontractor, the subcontractor shall compute, as above, his cost for the extra work, to which he shall add 15 percent as in the case of the Contractor, and the Contractor shall be allowed an additional 15 percent of the subcontractor's cost for the extra work to cover the costs of the Contractor's overhead, use of capital, and the premium on the Bonds as assessed upon the amount of this extra work, and profit. Said subcontractor's cost must be reasonable and approved by the Engineer.

If extra work is done under (b) above, the Contractor and/or subcontractor shall keep daily records of such extra work. The daily record shall include the names of persons employed, the nature of the work performed, and hours worked, materials and equipment used, if any, in the prosecution of such extra work. This daily record, to constitute verification that the work was done, must be signed by the Contractor's authorized representative. A separate daily record shall be submitted for each Extra Work Order.

A28 EXTENSION OF TIME ON ACCOUNT OF EXTRA WORK

When extra work is ordered at any time during the progress of the Work which in the sole judgment of the Engineer unavoidably increases the time for the completion of the Work, an extension of time shall be granted as hereinbefore provided under CONTRACT TIME.

A29 CHANGES NOT TO AFFECT BONDS

It is distinctly agreed and understood that any changes made in the Work or the Drawings or Specifications therefore (whether such changes increase or decrease the amount thereof or the time required for its performance) or any changes in the manner or time of payments made by the Owner to the Contractor, or any other modifications of the Contract, shall in no way annul, release, diminish or affect the liability of the Surety on the CONTRACT BONDS given by the Contractor, it being the intent hereof that notwithstanding such changes the liability of the Surety on said bonds continue and remain in full force and effect.

A30 CLAIMS FOR DAMAGES

If the Contractor makes claim for any damages alleged to have been sustained by breach of contract or otherwise, he shall, within ten (10) days after occurrence of the alleged breach or within ten (10) days after such damages are alleged to have been sustained, whichever date is the earlier, file with the Engineer a written, itemized statement in triplicate of the details and amount of the alleged damages. The Contractor agrees that unless such statement is made and filed as so required, his claim for damages shall be deemed waived, invalid and unenforceable, and that he shall not be entitled to any compensation for any such alleged damages. Within ten (10) days after the timely filing of such statement, the Engineer shall file with the Owner one copy of the statement, together with his recommendations for action by the Owner.

The Contractor shall not be entitled to claim any additional compensation for damages by reason of any direction, instruction, determination or decision of the Engineer, nor shall any such claims be considered, unless the Contractor shall have complied in all respects with the third paragraph of that subsection above of this AGREEMENT titled AUTHORITY OF THE ENGINEER including, but not limited to the filing of a written protest in the manner and within the time therein provided.

A31 ABANDONMENT OF WORK OR OTHER DEFAULT

If the Work shall be abandoned, or any part thereof shall be sublet without previous written consent of the Owner, or the Contract or any moneys payable hereunder shall be assigned otherwise than as herein specified, or if at any time the Engineer shall certify in writing that the conditions herein specified as to rate of progress are not being complied with or that the Work or any part thereof is being unnecessarily or unreasonably delayed or that the Contractor has violated or is in default under any of the provisions of the Contract, or if the Contractor becomes bankrupt or insolvent or goes or is put into liquidation or dissolution, either voluntarily, or petitions for an arrangement or reorganization under the Bankruptcy Act, or makes a general assignment for the benefit of creditors or otherwise acknowledges insolvency, the happening of any of which shall be and constitute a default under the Contract, the Owner may notify the Contractor in writing, with a copy of such notice mailed to the Surety, to discontinue all work or any part thereof; thereupon the Contractor shall discontinue such Work forthwith or such part thereof as the Owner may designate, and the Owner may, upon giving such notice, by contract or otherwise as it may determine, complete the Work or such part thereof and charge the entire cost and expense of so completing the Work or such part thereof to the Contractor. In addition to the said entire cost and expense of completing the Work the Owner shall be entitled to reimbursement from the Contractor and the Contractor agrees to pay to the Owner any losses, damages, costs and expenses, including attorney's fees, sustained or incurred by the Owner by

reason of any of the foregoing causes. For the purposes of such completion the Owner may for itself or for any contractors employed by the Owner take possession of and use or cause to be used any and all materials, equipment, plant, machinery, appliances, tools, supplies and such other items of every description that may be found or located at the site of the Work.

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

A32 PRICES FOR WORK

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

A33 MONEYS MAY BE RETAINED

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

A34 USE OR PARTIAL PAYMENT NOT ACCEPTANCE

It is agreed that this is an entire contract for one whole and complete Work or result and that neither the Owner's entrance upon or use of the Work, or any part thereof nor any partial payments by the Owner shall constitute an acceptance of the Work or any part thereof before its entire completion and final acceptance.

A35 PERIODIC ESTIMATES

Once a month, except as hereinafter provided, the Contractor shall make an estimate in writing to the Owner, in a format designated by the Engineer, of the total amount and value of the work done to the first of the month. The estimate shall be reviewed and recommended for payment by the Engineer before submittal to the Owner. Submittal without the Engineer's recommendation shall be considered not in the required form. The Owner shall retain a percentage of such estimated value, as set forth under SPECIAL CONDITIONS, as part security for fulfillment of the Contract by the Contractor and shall deduct from the balance all previous payments made to the Contractor, all sums chargeable against the Contractor and all sums to be retained under the provisions of the Contract. The Owner shall pay monthly to the Contractor the balance not

deducted and/or retained as aforesaid, except that payment may be withheld at any time if, in the sole judgment of the Engineer, the Work is not proceeding in accordance with the Contract. If the Owner deems it expedient to do so, it may cause estimates and payments to be made more frequently than once in each month. No periodic estimate or payment need be made when, in the sole judgment of the Engineer, the total value of the work done since the last estimate amounts to less than the amount set forth under SPECIAL CONDITIONS.

Estimates of lump-sum items shall be based on a schedule dividing each such item into its appropriate component parts together with a quantity and a unit price for each part so that the sum of the products of prices and quantities will equal the Contract price for the item. This schedule shall be submitted by the Contractor for and must have the approval of the Engineer before the first estimate becomes due.

If the Engineer determines that the progress of the Work will be benefited by the delivery to the site of certain materials and equipment, when available, in advance of actual requirement therefore and if such materials and equipment are delivered and properly stored and protected, the cost to the Contractor or subcontractor as established by invoices or other suitable vouchers satisfactory to the Engineer, less the retained percentages as above provided, may be included in the periodic estimates; provided always that there be duly executed and delivered by the Contractor to the Engineer at the same time a Bill of Sale in form satisfactory to the Owner, transferring and assigning to the Owner full ownership and title to such materials or equipment. Prior to the subsequent payment estimate, the Contractor shall demonstrate that suppliers of such materials and equipment have been properly paid.

A36 FINAL ESTIMATE AND PAYMENT

Within sixty-five days after (a) the Contractor fully completes the Work or substantially completes the Work so that the value of the work remaining to be done is, in the estimate of the Owner, less than one percent of the original contract price, or (b) the Contractor substantially completes the Work and the Owner takes possession for occupancy, whichever occurs first, the Owner shall pay the Contractor the entire balance due on the contract as determined by the Engineer less (1) a retention based on its estimate of the fair value of its claims against the Contractor and of the cost of completing the incomplete and unsatisfactory items of work and less (2) a retention for direct payments to subcontractors. The Engineer also shall fix the date of completion of the work and incorporate the same into the final estimate.

All quantities shown on periodic estimates and all prior payments shall be subject to correction in the final estimate and payment.

The Contractor's acceptance of such final payment shall constitute a waiver of all claims by the Contractor against the Owner, the Engineer and any agent, servant or employee of either, except for such claims as have previously been made in writing, and submitted to the Engineer.

A37 LIENS

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

A38 CLAIMS

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

A39 APPLICATION OF MONEYS RETAINED

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

A40 NO WAIVER

Neither the inspection by the Owner or the Engineer, nor any order, measurement, approval, determination or decision or certificate by the Engineer, nor any order by the Owner for the payment of money, nor any payment for or use, occupancy, possession or acceptance of the whole or any part of the Work by the Owner, nor any extension of time, nor any other act or omission of the Owner or of the Engineer shall constitute or be deemed to be an acceptance of any defective or improper work, materials, or equipment; nor operate as a waiver of any requirement or provision of the Contract, nor of any remedy, power or right herein reserved to the Owner, nor of any right to damages for breach of contract. Any and all rights and/or remedies provided for in the Contract are intended and shall be construed to be cumulative; and, in addition to each and every other right and remedy provided for herein or by law, the Owner shall be entitled as of right to an injunction against any breach or threatened breach of the Contract by the Contractor, by his subcontractors or by any other person or persons.

A41 LIABILITY OF OWNER

No person, firm or corporation, other than the Contractor, who signed this Contract as such, shall have any interest herein or right hereunder. No claim shall be made or be valid either against the Owner or any employee, servant or agent of the Owner or the Engineer and neither the Owner nor any employee, servant or agent of the Owner or the Engineer shall be liable for or be held to pay any money except as herein provided. The acceptance by the Contractor of the payment as fixed in the final estimate shall operate as and shall be a full and complete release of the Owner and of every employee, servant or agent of the Owner or the Engineer of and from any and all claims, demands, damages and liabilities of, by or to the Contractor for anything done or furnished for or arising out of or relating to or by reason of the Work except the claim against the Owner for the unpaid balance, if any there be, of the amounts retained as herein provided.

A42 GUARANTEE

The Contractor guarantees that the Work and services to be performed under the Contract, and all workmanship, materials and equipment performed, furnished, used or installed in the construction of the same, shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Drawings, Specifications, and other Contract Documents,

that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the Work as stated in the final estimate.

If part of the Work is accepted in accordance with that subsection of this Agreement titled "Partial Acceptance", the guarantee for that part of the Work shall be for a period of one year from the date fixed for such acceptance.

If at any time within the said period of guarantee, any part of the Work requires repairing, correction or replacement, the Owner may notify the Contractor in writing to make the required repairs, correction or replacements. If the Contractor neglects to commence making such repairs, corrections or replacements to the satisfaction of the Owner within ten (10) days from the date of receipt of such notice, or having commenced fails to prosecute such Work with diligence, the Owner may employ other persons to make said repairs, correction or replacements, including compensation for additional professional services, shall be paid by the Contractor.

Nothing contained in the Section shall be construed as a limitation as to any and all rights the Owner may have against the Contractor for any neglect or for any breach of this AGREEMENT.

A43 RETURN OF DRAWINGS

All Drawings furnished by the Owner or the Engineer to the Contractor may be used only in connection with the prosecution of the Work and shall be returned by the Contractor upon completion of the Work.

A44 LEGAL ADDRESS OF CONTRACTOR

The Contractor's business address and his office at or near the site of the Work are both hereby designated as places to which communications shall be delivered. The depositing of any letter notice, or other communication in a postpaid wrapper, directed to the Contractor's business address, in a post office box regularly maintained by the Post Office Department or the delivery at either designated address of any letter, notice, or other communication by mail or otherwise shall be deemed sufficient service thereof upon the Contractor, and the date of such service shall be the date of receipt. The first-named address may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor, and delivered to the Engineer. Service of any notice, letter, or other communication upon the Contractor personally shall likewise be deemed sufficient service.

A45 HEADINGS

The headings or titles of any section, subsection, paragraph, provision, or part of the Contract Documents shall not be deemed to limit or restrict the content, meaning or effect of such section, subsection, paragraph, provision or part.

A46 MODIFICATION OR TERMINATION

Except as otherwise expressly provided herein, the Contract may not be modified or terminated except in writing signed by the parties hereto.

A47 LIMITATION OF LIABILITY OF ENGINEER

Neither the Engineer's authority to act under any section of this Agreement or under any other provision in the Contract Documents, nor any decision made by the Engineer to either exercise or not exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, to any subcontractor, manufacturer, fabricator, supplier, or distributor, or to any of their agents, employees, or any other person performing any of the work.

A48 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

Discriminatory employment practices by contractors, subcontractors and suppliers of goods and services based on race, color, religion, national origin, ancestry, age or sex are prohibited. Contractors and suppliers of goods and services shall give written notice of their commitment to non-discrimination to any labor union, association or brotherhood with which they have a collective bargaining or other agreement.

(This page intentionally left blank)

IN WITNESS HEREOF, the parties of this AGREEMENT have hereunto set their hands and seals as of the day and year first above written.

FOR THE TOWN OF DUXBURY, MA

By: _____

Town Manager (Party of the First Part)

and: _____

(Party of the Second Part)

Approved as to Form for the Town of Duxbury, MA

Town Counsel

Date

I hereby certify that funds in the amount of this contract are available.

By: _____
Town Accountant

Date

Chief Procurement Officer

Date

(This page intentionally left blank)

**CERTIFICATE OF ACKNOWLEDGMENT
OF CONTRACTOR IF A CORPORATION
For AGREEMENT**

State of _____)

_____)ss:

County of _____)

On this _____ day of _____, 2024, before me personally came _____ to me known, who being by me duly sworn, did depose and say as follows:

That he resides at _____ and is the _____ of _____

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

Notary Public (Seal)

My commission expires _____

END OF SECTION

(This page intentionally left blank)

SECTION 00610
CONTRACT BONDS

PERFORMANCE BOND:

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

KNOW ALL MEN BY THESE PRESENTS: That we

_____ (an individual, a partnership, a corporation)

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

_____, and having a usual place of

business at _____, as Principal, and

_____ a corporation duly

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

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

and having a usual place of business at _____,

as Surety are holden and stand firmly bound and obligated unto the Town of Duxbury, MA as

obligee, in the sum of _____

lawful money of the United States of America, to and for the true payment whereof we bind

ourselves and, each of us, our heirs, executors, administrators, successors, and assigns, jointly

and severally, firmly by these presents.

WHEREAS, the Principal, by means of a written AGREEMENT (which together with the Contract Documents in said AGREEMENT referred to are collectively sometimes referred to as the “CONTRACT”) dated _____ has entered into a contract with the said obligee for Construction of Duxbury Beach Seawall - Phase II, Contract 2024-II, a copy of which AGREEMENT is attached hereto and by reference made a part hereof.

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

Wherever the said Principal shall be, and declared by the Owner to be, in default under the said Contract, the Owner having performed the Owner’s obligations thereunder, the Surety, for value received, shall promptly remedy the default, or, at the option of the Owner, shall promptly

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

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

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

IN WITNESS WHEREOF, we have hereunto set our hands and seals to counterparts of this Bond, this _____ day of _____, in the year Two Thousand Twenty-four.

_____	<i>SEAL</i>
Principal	
_____	<i>SEAL</i>
Principal	
_____	<i>SEAL</i>
Surety	
_____	<i>SEAL</i>
Surety	

(NOTE:

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

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

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

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

LABOR AND MATERIALS BOND:

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

KNOW ALL MEN BY THESE PRESENTS:

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

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

and having a usual place of business at _____

as Principal, and _____

a corporation duly organized under the Laws of the State (or Commonwealth) of

_____ and duly

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

having a usual place of business at _____

as Surety, are holden and stand firmly bound and obligated unto the Town of Duxbury, MA, as

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

WHEREAS, the Principal, by means of a written AGREEMENT (which together with the Contract Documents in said AGREEMENT referred to are collectively sometimes referred to as

the "Contract") dated _____ has entered into a contract with the said obligee for Construction of Duxbury Beach Seawall - Phase II, Contract 2024-II, a copy of which AGREEMENT is attached hereto and by reference made a part hereof.

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

1. A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, materials and/or equipment used or reasonably required for use in the performance of the said Work, labor and materials being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the said AGREEMENT and/or Contract and any modifications thereof.
2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials or equipment were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant,
 - (a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: The Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials or equipment for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials or equipment were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the said Work is located, save that such service need not be made by a public officer;
 - (b) After the expiration of one (1) year following the date on which the Principal ceased work on said AGREEMENT and/or Contract and any modifications thereof, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - (c) Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the said Work, or any part thereof, is situated, or in the United States District Court for the district in which the said Work, or any part thereof, is situated, and not elsewhere.

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

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

IN WITNESS WHEREOF, we have hereunto set our hands and seals to counterparts of this Bond, this _____ day of _____, in the year Two Thousand Twenty-four.

_____	<i>SEAL</i>
Principal	
_____	<i>SEAL</i>
Principal	
_____	<i>SEAL</i>
Surety	
_____	<i>SEAL</i>
Surety	

(NOTE:

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

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

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

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

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

State of _____)

_____)

County of _____)

On this _____ day of _____, 2024,

before me personally came _____

to me known, who being by me duly sworn, did depose and say as follows:

That he resides at _____

and is the _____

of _____

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

Notary Public

SEAL

My commission expires _____

SECTION 00680
NOTICE TO PROCEED

To: _____

Date: _____

Work: Construction of Duxbury Beach Seawall
Phase II
Contract 2024-II, Duxbury, MA

You are hereby notified to commence Work in accordance with the Agreement dated

_____, 2024, and you are to complete the Work by December 1, 2025.

FOR THE TOWN OF DUXBURY, MA

Town Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED
Is hereby acknowledged by:

This the _____ day of

_____ 2024

By: _____

Title: _____

END OF SECTION

(This page intentionally left blank.)

SECTION 00700
SPECIAL CONDITIONS

SC1 CONFLICT OR INCONSISTENCY

If there be any conflict or inconsistency between the provisions of the SPECIAL CONDITIONS and the provisions of the other Contract Documents, the provisions of the SPECIAL CONDITIONS shall prevail. If there be any conflict or inconsistency between the provisions of the AGREEMENT and the provisions of any of the Contract Documents other than the SPECIAL CONDITIONS, the provisions of the AGREEMENT shall prevail.

SC2 AMOUNT OF LIQUIDATED DAMAGES

The amount of liquidated damages for delay to be assessed under that Subsection of the AGREEMENT entitled LIQUIDATED DAMAGES shall be *\$1,000* for each calendar day of delay.

SC3 PERCENTAGE OF PERIODIC ESTIMATES TO BE RETAINED.

The percentage of estimated value to be retained under that Subsection of the AGREEMENT entitled PERIODIC ESTIMATES shall be 5 (five) percent.

SC4 AMOUNT OF MINIMUM PERIODIC ESTIMATES

No periodic estimate or payment need be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than \$10,000 as set forth in that Subsection of the AGREEMENT entitled PERIODIC ESTIMATES.

SC5 LIMITS FOR INSURANCE

The limits for the various types of insurance required under that Subsection of the AGREEMENT entitled INSURANCE shall be not less than:

- (a) For Workmen's Compensation and Employers' Liability Insurance, as required by the provisions of MGL C. 149, S 34A.

For Employers Liability Insurance, *\$500,000* on account of each accident, *\$500,000* disease each employee, and *\$500,000* disease policy limit.
- (b) For general liability for bodily injury (including accidental death) and property damage combined, the combined single limit of *\$1,000,000* for any one occurrence and *\$3,000,000* aggregate of all occurrences.
- (c) For liability for property damage and bodily injury combined covering the operation of motor vehicles, the combined single limit of *\$1,000,000*.
- (d) For umbrella for excess liability endorsement not less than *\$3,000,000*.
- (e) For all liability other than as indicated above, the amounts required under (b) and (c) above.

The umbrella limit specified may be used to meet the underlying policy limits. However, excess liability limits over and above these stated amounts are recommended.

All subcontractors, where applicable, shall adhere to these limits.

All certificates shall provide for at least thirty (30) days notice to the Owner on cancellation of material change.

The Owner shall be named as an additional insured on the certificate of insurance to be provided by the Contractor and on all certificates of insurance of subcontractors hired by the Contractor.

SC6 EXCERPTS FROM MASSACHUSETTS STATUTES

In addition to the requirements as set forth under COMPLIANCE WITH LAWS in the AGREEMENT, particular attention is directed to certain stipulations of Chapter 149 of the General Laws of Massachusetts, as amended to date as follows:

Section 25. “Every employee in public work shall lodge, board, and trade where and with whom he elects; and no person or his agents or employees under contract with the commonwealth, a county, city or town, or with a department, board, commission or officer acting therefor, for the doing of public work shall directly or indirectly require, as a condition of employment therein, that the employee shall lodge, board or trade at a particular place or with a particular person. This section shall be made a part of the contract for such employment.”

Section 26. “In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works by the commonwealth, or by a county, town or district, or by persons contracting or subcontracting for such works, preference shall first be given to citizens of the commonwealth who have been residents of the commonwealth for at least six months at the commencement of their employment who are male veterans as defined in clause Forty-third of section seven of chapter four, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the commonwealth generally who have been residents of the commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect.”

“Each county, town or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town or district. The rate per hour of the wages paid to said mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the commissioner as hereinafter provided; provided, that the wages paid to laborers employed on said works shall not be less than those paid to laborers in the municipal service of the town or towns where said works are being constructed; provided, further, that where the same public work is to be constructed in two or more towns, the wages paid to laborers shall not be less than those paid to laborers in the municipal service of the town paying the highest rate; provided, further, that if, in any of the towns where the works are to be constructed, a wage rate or wage rates have been established in certain trades and occupations by collective agreements or understandings in the private construction industry between organized labor and employers, the rate or rates to be paid on said works shall not be less than the rates so established; provided further, that in towns where no such rate or rates have been so established, the wages paid to mechanics, teamsters, chauffeurs and laborers on public works, shall not be less than the wages paid to the employees in the same trades and occupations by private employers engaged in the construction industry. This section shall also apply to regular employees of the commonwealth or of a county, town or district, when such employees are employed in the construction, addition to or alteration of public buildings for

which special appropriations of more than one thousand dollars are provided. Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

Permanent and temporary laborers employed by the state department of public works and by the metropolitan district commission shall receive such salary or compensation as may be fixed under and in accordance with sections forty-five to fifty inclusive of chapter thirty.”

Section 34. “Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen, mechanics, foremen or inspectors, to which the commonwealth or any county or any town, subject to section thirty, is a party, shall contain a stipulation that no laborer, workman, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, subcontractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of emergency, or in case any towns subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid...”

“Provided, that in contracts entered into by the department of public works for the construction of highways there may be inserted in said stipulation a provision that said department, or any contractor or subcontractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner of labor and industries, public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void.”

Section 34A. “Every contract for the construction, alteration, maintenance, repair or demolition of or addition to, any public building or other public works for the commonwealth or any political subdivision thereof shall contain stipulations requiring that the contractor shall, before commencing performance of such contract, provide by insurance for the payment of compensation and the furnishing of other benefits under chapter one hundred and fifty-two to all persons to be employed under the contract, and that the contractor shall continue such insurance in full force and effect during the term of the contract. No officer or agent contracting in behalf of the commonwealth or any political subdivision thereof shall award such a contract until he has been furnished with sufficient proof of compliance with the aforesaid stipulations. Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the contract and shall operate as an immediate termination thereof. No cancellation of such insurance, whether by the insurer or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to the other party and to the officer or agent who awarded the contract at least fifteen days prior to the intended effective date thereof, which date shall be expressed in said notice. Notice of cancellation sent by the party proposing cancellation by registered mail, postage prepaid, with a return receipt of the addressee requested, shall be a sufficient notice...”

“An affidavit of any officer, agent or employee of the insurer or of the insured, as the case may be, duly authorized for the purpose, that he has so sent such notice addressed as aforesaid shall be prima facie evidence of the sending thereof as aforesaid. This section shall apply to the legal representative, trustee in bankruptcy, receiver, assignee, trustee and the successor in interest of any such contractor. The superior court shall have jurisdiction in equity to enforce this section.”

“Whoever violates any provision of this section shall be punished by a fine of not more than one hundred dollars or by imprisonment for six months, or both; and, in addition, any contractor who violates any provision of this section shall be prohibited from contracting, directly or indirectly, with the commonwealth or any political subdivision thereof, for the construction, alteration, demolition, maintenance or repair of, or addition to, any public works or public building for a period of two years from the date of conviction of said violation.”

Section 34B. “Every contract for the construction, alteration, maintenance, repair of demolition of, or addition to, any public works for the commonwealth or any political subdivision thereof shall contain stipulations requiring that the contractor shall pay to any reserve police officer employed by him in any city or town the prevailing rate of wage paid to regular police officers employed by him in such city or town.”

Attention is also directed to Chapter 30, Section 39F, 39I, 39J, 39K, 39L, 39M, 39N, 39O, 39P and 39R of the General Laws as amended to date:

Section 39F. (1) Every contract awarded pursuant to sections [forty-four A](#) to [L](#), inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to [section thirty-nine M of chapter thirty](#) shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.

- (a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (b) Not later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the subcontract less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the subcontractor; and the awarding authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (c) Each payment made by the awarding authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor; and the awarding authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the awarding authority has received a demand for direct payment from a subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (a) and (b), the awarding authority shall act upon the demand as provided in this section.

- (d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of that balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the subcontractor has substantially completed the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the general contractor, the general contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the awarding authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.
- (e) Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided, that the awarding authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The awarding authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.
- (f) The awarding authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the general contractor and the subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by decree of a court of competent jurisdiction.

- (g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the general contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the general contractor to the extent of such payment.
- (h) The awarding authority shall deduct from payments to a general contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.
- (i) If the subcontractor does not receive payment as provided in subparagraph (a) or if the general contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (a), the subcontractor may demand direct payment by following the procedure in subparagraph (d) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the awarding authority shall proceed as provided in subparagraph (e), (f), (g) and (h).
- (2) Any assignment by a subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of [section twenty-nine of chapter one hundred forty-nine](#) shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the awarding authority or which are on deposit pursuant to subparagraph (f) of paragraph (1) shall be subordinate to the rights of all subcontractors who are entitled to be paid under this section and who have not been paid in full.
- (3) “Subcontractor” as used in this section (i) for contracts awarded as provided in sections [forty-four A to forty-four H](#), inclusive, of chapter one hundred forty-nine shall mean a person who files a sub-bid and receives a subcontract as a result of that filed sub-bid or who is approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, (ii) for contracts awarded as provided in paragraph (a) of [section thirty-nine M of chapter thirty](#) shall mean a person approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, and (iii) for contracts with the commonwealth not awarded as provided in [forty-four A to forty-four H](#), inclusive, of chapter one hundred forty-nine shall also mean a person contracting with the general contractor to supply materials used or employed in a public works project for a price in excess of five thousand dollars.

- (4) A general contractor or a subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in subparagraph (f) of paragraph 1 by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in subparagraph (f) of paragraph 1 by a petition in equity in the superior court against the awarding authority and the general contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. Sections [fifty-nine](#) and [fifty-nine B](#) of chapter two hundred thirty-one shall apply to such petitions. The court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to sections [fifty-nine](#) and [fifty-nine B](#) and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any subcontractor with the petition of one or more subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a subcontractor filing a demand for direct payment for which no funds due the general contractor are available for direct payment shall have a right to file a petition in court of equity against the awarding authority claiming a demand for direct payment is premature and such subcontractor must file the petition before the awarding authority has made a direct payment to the subcontractor and has made a deposit of the disputed portion as provided in part (iii) of subparagraph (e) and in subparagraph (f) of paragraph (1).
- (5) In any petition to collect any claim for which a subcontractor has filed a demand for direct payment the court shall, upon motion of the general contractor, reduce by the amount of any deposit of a disputed amount by the awarding authority as provided in part (iii) of subparagraph (e) and in subparagraph (f) of paragraph (1) any amount held under a trustee writ or pursuant to a restraining order or injunction.
- (1) Every contract awarded pursuant to sections forty-four A to L, inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to section thirty-nine M of chapter thirty shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.
- (a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.
- (b) Not later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the subcontract less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the

subcontractor; and the awarding authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

- (c) Each payment made by the awarding authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor; and the awarding authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the awarding authority has received a demand for direct payment from the subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (a) and (b), the awarding authority shall act upon the demand as provided in this section.
- (d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of that balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the general contractor, the general contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the awarding authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.
- (e) Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided, that the awarding authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The awarding authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.

- (f) The awarding authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the general contractor and the subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by decree of a court of competent jurisdiction.
 - (g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the general contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the general contractor to the extent of such payment.
 - (h) The awarding authority shall deduct from payments to a general contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.
 - (i) If the subcontractor does not receive payment as provided in subparagraph (a) or if the general contractor does not submit a periodic estimate for the value of the labor and materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (a), the subcontractor may demand direct payment by following the procedure in subparagraph (d) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the awarding authority shall proceed as provided in subparagraph (e), (f), (g) and (h).
- (2) Any assignment by a subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of section twenty-nine of chapter one hundred forty-nine shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the awarding authority or which are on deposit pursuant to subparagraph (f) of paragraph (1) shall be subordinate to the rights of all subcontractors who are entitled to be paid under this section and who have not been paid in full.
- (3) “Subcontractor” as used in this section (i) for contracts awarded as provided in sections forty-four A to forty-four L, inclusive, of chapter one hundred forty-nine shall mean a person who files a sub-bid and receives a subcontract as a result of that filed sub-bid or who is approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, (ii) for contracts awarded as provided in paragraph (a) of section thirty-nine M of chapter thirty shall mean a person approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a

contract with the general contractor, and (iii) for contracts with the commonwealth not awarded as provided in sections forty-four A to forty-four L, inclusive, of chapter one hundred forty-nine shall also mean a person contracting with the general contractor to supply materials used or employed in a public works project for a price in excess of ten thousand dollars.

- (4) A general contractor or a subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in subparagraph (f) of paragraph 1 by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in subparagraph (f) of paragraph 1 by a petition in equity in the superior court against the awarding authority and the general contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. Sections fifty-nine and fifty-nine B of chapter two hundred thirty-one shall apply to such petitions. The court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to sections fifty-nine and fifty-nine B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any subcontractor with the petition of one or more subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No person except a subcontractor filing a demand for direct payment for which no funds due the general contractor are available for direct payment shall have a right to file a petition in court of equity against the awarding authority claiming a demand for direct payment is premature and such subcontractor must file the petition before the awarding authority has made a direct payment to the subcontractor and has made a deposit of the disputed portion as provided in part (iii) of subparagraph (e) and in subparagraph (f) of paragraph (1).
- (5) In any petition to collect any claim for which a subcontractor has filed a demand for direct payment the court shall, upon motion of the general contractor, reduce by the amount of any deposit of a disputed amount by the awarding authority as provided in part (iii) of subparagraph (e) and in subparagraph (f) of paragraph (1) any amount held under a trustee writ or pursuant to a restraining order or injunction.

Section 39I. Every contractor having a contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or public works for the commonwealth, or of any political subdivision thereof, shall perform all the work required by such contract in conformity with the plans and specifications contained therein. No willful and substantial deviation from said plans and specifications shall be made unless authorized in writing by the awarding authority or by the engineer or architect in charge of the work who is duly authorized by the awarding authority to approve such deviations. In order to avoid delays in the prosecution of the work required by such contract such deviation from the plans or specifications may be authorized by a written order of the awarding authority or such engineer or architect so authorized to approve such deviation. Within thirty days thereafter, such written order shall be confirmed by a certificate of the awarding authority stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why

such materials, fixtures or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefor; (2) that the specified deviation does not materially injure the project as a whole; (3) that either the work substituted for the work specified is of the same cost and quality, or that an equitable adjustment has been agreed upon between the contracting agency and the contractor and the amount in dollars of said adjustment; and (4) that the deviation is in the best interest of the contracting authority.

Such certificate shall be signed under the penalties of perjury and shall be a permanent part of the file record of the work contracted for.

Whoever violates any provision of this section willfully and with intent to defraud shall be punished by a fine of not more than five thousand dollars or by imprisonment for not more than six months, or both.

Section 39J. Notwithstanding any contrary provision of any contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public works by the commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount of the contract is more than five thousand dollars in the case of the commonwealth and more than two thousand dollars in the case of any county, city, town, district, board, commission or other public body, a decision, by the contracting body or by any administrative board, official or agency, or by any architect or engineer, on a dispute, whether of fact or of law, arising under said contract shall not be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, or arbitrarily is unsupported by substantial evidence, or is based upon error of law.

Section 39K. "Every contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building by the commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount is more than five thousand dollars in the case of the commonwealth and more than two thousand dollars in the case of any county, city, town, district, board, commission or other public body, shall contain the following paragraph: - Within fifteen days (twenty-four days in the case of the commonwealth) after receipt from the contractor, at the place designated by the awarding authority if such a place is so designated, of a periodic estimate requesting payment of the amount due for the preceding month, the awarding authority will make a periodic payment to the contractor for the work performed during the preceding month and for the materials not incorporated in the work but delivered and suitably stored at the site (or at some location agreed upon in writing) to which the Contractor has title or to which a subcontractor has title and has authorized the contractor to transfer title to the awarding authority, less (1) a retention based on its estimate of the fair value of its claims against the contractor and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section thirty-nine F, and less (3) a retention not exceeding five percent of the approved amount of the periodic payment. After the receipt of a periodic estimate requesting final payment and within sixty-five days after (a) the contractor fully completes the work or substantially completes the work so that the value of the work remaining to be done is, in the estimate of the awarding authority, less than one percent of the original contract price, or (b) the contractor substantially completes the work and the awarding authority takes possession for occupancy, whichever occurs first, the awarding authority shall pay the contractor the entire balance due on the contract less (1) a retention based on its estimate of the fair value of its claims against the contractor and of the cost of completing the incomplete and unsatisfactory items of work and less (2) a retention for direct payments to subcontractors based on demands for same in accordance with the provisions of section

thirty-nine F, or based on the record of payments by the contractor to the subcontractors under this contract if such record of payment indicates that the contractor has not paid subcontractors as provided in section thirty-nine F. If the awarding authority fails to make payments as herein provided, there shall be added to each such payment daily interest at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston commencing on the first day after said payment is due and continuing until the payment is delivered or mailed to the contractor; provided, that no interest shall be due, in any event, on the amount due on a periodic estimate for final payment until fifteen days (twenty-four days in the case of the commonwealth) after receipt of such a periodic estimate from the contractor, at the place designated by the awarding authority if such a place is so designated. The contractor agrees to pay to each subcontractor a portion of any such interest paid in accordance with the amount due each subcontractor.

The awarding authority may make changes in any periodic estimate submitted by the contractor and the payment due on such periodic estimate shall be computed in accordance with the changes so made, but such changes or any requirement for a corrected periodic estimate shall not affect the due date for the periodic payment or the date for the commencement of interest charges on the amount of the periodic payment computed in accordance with the changes made, as provided herein; provided, that the awarding authority may, within seven days after receipt, return to the contractor for correction, any periodic estimate which is not in the required form or which contains computations not arithmetically correct and, in that event, the date of receipt of such periodic estimate shall be the date of receipt of a periodic estimate received on a Saturday shall be the first working day thereafter. The provisions of section thirty-nine G shall not apply to any contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building to which this section applies.

All periodic estimates shall be submitted to the awarding authority, or to its designee as set forth in writing to the contractor, and the date of receipt by the awarding authority or its designee shall be marked on the estimate.

All periodic estimates shall contain a separate item for each filed subtrade and a column listing the amount paid to each filed subcontractor as of the date the periodic estimate is filed. The person making payment for the awarding authority shall add the daily interest provided for herein to each payment for each day beyond the due date based on the date of receipt on the estimate.

Section 39L. The commonwealth and every county, city, town, district, board, commission or other public body which, as the awarding authority, requests proposals, bids or sub-bids for any work in the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or other public works (1) shall not enter into a contract for such work with, and shall not approve as a subcontractor furnishing labor and materials for a part of any such work, a foreign corporation which has not filed with such awarding authority a certificate of the state secretary stating that such corporation has complied with sections three and five of chapter one hundred and eighty-one and the date of such compliance, and (2) shall report to the state secretary and to the department of corporations and taxation any foreign corporation performing work under such contract or subcontract, and any person, other than a corporation, performing work under such contract or subcontract, and residing or having a principal place of business outside the commonwealth.

Section 39M. Specifications for such contracts, and specifications for contracts awarded pursuant to the provisions of said sections [forty-four A](#) to [forty-four L](#) of said chapter one hundred and forty-nine, shall be written to provide for full competition for each item of material to be furnished under the contract; except, however, that said specifications may be otherwise written for sound reasons in the public interest stated in writing in the public records of the awarding authority or promptly given in writing by the awarding authority to anyone making a written request therefor, in either instance such writing to be prepared after reasonable investigation. Every such contract shall provide that an item equal to that named or described in the said specifications may be furnished; and an item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design, (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased, and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the said specifications. For each item of material the specifications shall provide for either a minimum of three named brands of material or a description of material which can be met by a minimum of three manufacturers or producers, and for the equal of any one of said named or described materials.

Section 39N. Every contract subject to section forty-four A of the chapter one hundred and forty-nine or subject to section thirty-nine M chapter thirty shall contain the following paragraph in its entirety and an awarding authority may adopt reasonable rules or regulations in conformity with that paragraph concerning the filing, investigation and settlement of such claims.

If, during the progress of the work, the contractor or the awarding authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the contract documents either the contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a contractor, or upon its own initiative, the contracting authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the contract documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and contract documents and are of such a nature as to cause an increase or decrease in the cost of performance of the work or a change in the construction methods required for the performance of the work which results in an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.

Section 39O. Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

- (a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.
- (b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act or failure to act involved in the claim.

Section 39P. Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the awarding authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.

Section 39R. (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 A½](#) 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 A½](#) 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 A½](#) 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 deputy commissioner of capital planning and operations 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.
- (d) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital planning and operations during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the awarding authority upon request.
- (e) The office of inspector general, the commissioner for capital planning and operations and any other awarding authority shall enforce the provisions of this section. The commissioner of capital planning and operations may after providing an opportunity for the inspector general and other interested parties to comment, promulgate pursuant to the provisions of [chapter thirty A](#) such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to [section forty-four C of chapter one hundred and forty-nine](#).
- (f) Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in [section seven of chapter four](#) and shall not be open to public inspection; provided, however, that such records and statements shall be made available pursuant to the provisions of clause (2) of paragraph (b).

Section 34. Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen, mechanics, foremen or inspectors, to which the commonwealth or any county or any town, subject to section thirty, is a party, shall contain a stipulation that no laborer, workman, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, sub-contractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided, that in contracts entered into by the department of highways for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or sub-contractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner of labor and industries, public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void.

Section 44J.

(1) No public agency or authority of the commonwealth or any political subdivision thereof shall award any contract for which competitive bids are required pursuant to [section forty-four A of this chapter](#) or [section thirty-nine M of chapter thirty](#), or for which competitive proposals are required pursuant to subsection (4) of [section forty-four E](#) of this chapter or [section eleven C of chapter twenty-five A](#), unless a notice inviting bids or proposals therefor shall have been posted no less than one week prior to the time specified in such notice for the receipt of said bids or proposals in a conspicuous place in or near the offices of the awarding authority, and shall have remained posted until the time so specified, and unless such notice shall also have been published at least once not less than two weeks prior to the time so specified in the central register published by the secretary of state pursuant to [section twenty A of chapter nine](#) and in a newspaper of general circulation in the locality of the proposed project. Said notice shall also be published at such other times and in such other newspapers or trade periodicals as the commissioner of capital planning and operations may require, having regard to the locality of the work involved.

(2) Said notice shall specify the time and place where plans and specifications of the proposed work may be had; the time and place of submission of general bids; and the time and place for opening of the general bids. For contracts subject to the provisions of sections [forty-four A to H](#), inclusive, of this chapter, said notice shall also specify the time and place for submission of filed sub-bids, where required pursuant to [section forty-four F](#); and the time and place for opening of said filed sub-bids.

Said notice shall also provide sufficient facts concerning the nature and scope of such project, the type and elements of construction, and such other information as will assist applicants in deciding to bid on such contract.

(3) No contract or preliminary plans and specifications shall be split or divided for the purpose of evading the provisions of this section.

(4) General bids and filed sub-bids for any contract subject to this section shall be in writing and shall be opened in public at the time and place specified in the posted or published notice, and after being so opened shall be open to public inspection.

(5) The provisions of this section shall not apply to any transaction between the commonwealth and any public service corporation.

(6) The provisions of this section may be waived in cases of extreme emergency involving the health and safety of the people and their property, upon the written approval of said commissioner. The written approval shall contain a description of the circumstances and the reasons for the commissioner's determination.

(7) Whoever violates any provision of this section shall be punished by a fine of not more than ten thousand dollars or by imprisonment in the state prison for not more than three years or in a jail or house of correction for not more than two and one-half years, or by both said fine and imprisonment; and in the event of final conviction, said person shall be incapable of holding any office of honor, trust or profit under the commonwealth or under any county, district or municipal agency.

Each and every person who shall cause or conspire to cause any contract or preliminary plans and specifications to be split or divided for the purpose of evading the provisions of this section shall forfeit and pay to the commonwealth, a political subdivision thereof or other awarding authority subject to this section, the sum of not more than five thousand dollars and, in addition, such person or persons shall pay, apportioned among them, double the amount of damages which the commonwealth or political subdivision thereof or other awarding authority may have sustained by reason of the doing of such act, together with the costs of the action.

- (8) If an awarding authority rejects all general bids or does not receive any general bids, and advertises for a second opening of general bids with the original filed sub-bids as set forth in subsection (1) of [section forty-four E](#) the notice for receipt of such general bids may be published in the central register and elsewhere as required not less than one week prior to the time specified for such second opening of general bids.

Attention is also directed to Chapter 82, Section 40 of the General Laws as amended to date:

Section 40. No person shall, except in an emergency, contract for, or make an excavation, which shall include, but not be limited to, the discharge of explosives and the demolition of any structure but which shall not be deemed to include gardening or tilling the soil in the case of privately owned land, in any public way, any public utility company right of way or easement, or any privately owned land under which any public utility company, municipal utility department, natural gas pipeline company, or cable television company maintains underground facilities, including pipes, mains, wires or conduits, unless at least seventy-two hours, exclusive of Saturdays, Sundays and legal holidays, but not more than thirty days, before the proposed excavation is to be made such person has given an initial notice in writing of the proposed excavation to such natural gas pipeline companies, public utility companies, cable television companies and municipal utility departments as supply gas, electricity, telephone or cable television service in or to the city or town where such excavation is to be made. Such notice shall set forth the name of the street or the route number of said way and a reasonably accurate description of the location in said way or on private property the excavation is to be made. In addition, such initial notice shall indicate whether any such excavation will involve blasting and, if so, the date on which the specific location at which such blasting is to occur; provided, however, that in no event shall any excavation by blasting take place unless written notice thereof, either in the initial notice or a subsequent notice, accurately specifying the date and location of such blasting shall have been given and received at least twenty-four hours in advance, except in the case of an unanticipated obstruction requiring blasting when such notice should not be less than four hours in advance to such natural gas pipeline companies, public utility companies, cable television companies and municipal utility departments as supply gas, electricity, telephone or cable television services in or to the city or town where such excavation by blasting is to be made. If any such notice cannot be given as aforesaid because of an emergency, it shall be given as soon as may be practicable. Copies of such notices together with a statement certifying that they have been mailed or delivered to such cable television companies and public utility companies as required by this section shall be filed with the officer or board having charge of any such public way before a permit to excavate or to blast may be approved or issued, except in case of an emergency.

Where an excavation is to be made by a contractor as part of the work required by a contract with the commonwealth or with any political subdivision thereof or other public agency, for the construction, reconstruction, relocation or improvement of a public way or for the installation of a railway track, conduit, sewer or water main, such contractor shall be deemed to have complied with the requirements of this section by giving such notices as required by this section setting forth the location and the approximate time required to perform the work involved to each of said companies.

Within seventy-two hours, exclusive of Saturdays, Sundays and legal holidays, from the time said initial notice is received or at such time as said company and the excavator agree in writing, said company shall respond to the original written notice or to subsequent oral or written notice by designating at the locus, the location of pipes, mains, wires or conduits, in that portion of the public way, public utility company right-of-way or easement or privately owned land in which the excavation is to be made; provided, however, that in the event that the excavator has given notice of proposed excavation as aforesaid at a locus at which because of its length or size the company cannot reasonably designate the location of all such pipes, mains, wires or conduits within such seventy-two hour period, then the excavator shall notify the company of the portion of the locus in which excavation is to be first made and the company shall designate the location of such pipes, mains, wires or conduits in such portion within seventy-two hours and shall designate the location of the pipes, mains, wires or conduits in the remaining portion of the locus within a reasonable time thereafter; and the providing of such designation by the company shall constitute prima facie evidence of an exercise of reasonable precaution by the company as required by this section. After a company has designated the location of such pipes, mains, wires and conduits at the locus of the excavation in accordance with the provisions of this section, the excavator shall be responsible for maintaining the designation markings at such locus, unless the said excavator requests re-marking at the locus due to the obliteration, destruction or other removal of such markings and the company shall then have twenty-four hours following the receipt of such request to re-mark such locus.

Any such excavation shall be performed in such manner, and such reasonable precautions taken to avoid damage to the pipes, mains, wires or conduits in use under the surface of said public way, public utility company right-of-way or easement, or privately owned land, including, but not limited to, any substantial weakening of structural or lateral support of such pipe, main, wire, or conduit, penetration or destruction of any pipe, main, wire or the protective coating thereof, or the severance of any pipe, main or conduit.

When any damage of any such pipe, main, wire or conduit or its protective coating occurs, the public utility company, natural gas pipeline company, cable television company or municipal utility department shall be notified immediately by the person or public agency responsible for the excavation causing the damage.

The making of an excavation without providing any or all notice or notices required by this section with respect to any proposed excavation which results in any damage to a pipe, main, wire or conduit or its protective coating shall be prima facie evidence in any legal or administrative proceeding that such damage was caused by the negligence of such person.

Notice to the public utility underground plant damage prevention system pursuant to [section seventy-six D of chapter one hundred and sixty-four](#), which notice is given during normal business hours each day of the year exclusive of Saturdays, Sundays and legal holidays, and which notice is given with the time periods established in this section, shall constitute compliance with the written notice requirements of this section.

Nothing contained in this section shall be construed to affect or impair local ordinances or by-laws requiring permits to be obtained before excavation in a public way, except that, notwithstanding any contrary provision of local ordinances or by-laws, no permit to excavate in a public way shall be approved or issued by the officer or board having charge of any such way, except in any emergency, until such time as copies of such notices to public utility companies and cable television companies are filed with said officer or board by the applicant for a permit as required by this section and copies of such notices are served by said officer or board upon the appropriate water and sewer department.

Any person, contractor or company found by the department of telecommunications and energy, after a hearing, to have violated any provision of this section shall forfeit to the commonwealth the sum of two hundred dollars for the first offense and not less than five hundred nor more than one thousand dollars for any subsequent offense.

SC7 MINIMUM WAGE RATES

A schedule of minimum wage rates excerpted from that “Mechanics, Teamsters, Chauffeurs, and Laborers” issued for this contract by the Commissioner of Labor and Industries of Massachusetts in accordance with General Laws, Chapter 149, Sections 26 to 27D, as amended, is attached at the end of this Section. It is the responsibility of the Contractor, before bid opening, to request if necessary, any additional information on minimum wage rates for those trades people who may be employed for the proposed work under this contract.

In accordance with the MGL c149, s27B, the Contractor shall maintain a true and accurate record of all persons employed on the project for which the attached rates have been provided. The Payroll Form included indicates all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

Every contractor and subcontractor is required to submit a copy of weekly payroll records to the awarding authority. This is required to be done on a weekly basis. Each such contractor or subcontractor shall furnish to the Executive Office of Labor, within fifteen days after completion of its portion of the work, a statement, executed by the contractor or subcontractor on the attached Statement of Compliance Form.

SC8 INTERFERENCE WITH EXISTING WORKS

The Contractor shall develop a program, in cooperation with the Engineer and Owner, which shall provide for the construction and putting into service of the new work in the most orderly manner possible.

The Contractor shall have no claim for additional compensation by reason of delay or inconvenience in adapting his operations to meet the above requirements.

SC9 TIME FOR DECISIONS

All decisions concerning the interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall be made within thirty (30) days of the time the Owner or the Engineer receives from the Contractor, a written request for any such decision; provided that if any such decision requires further investigation and study by the Engineer, then in such case, the Owner or the Engineer shall within thirty (30) days after receipt of the written request for such decision give the party making such request written notice of the reason or reasons why such decision cannot be made within the thirty (30) day period and the date by which such decision will be made.

SC10 STANDARDS

Wherever the manufacturer of equipment or materials is referenced to a standard, the latest edition to the standard shall apply.

SC11 SPECIAL REQUIREMENTS

The Contractor shall provide the telephone number(s) of a responsible member(s) of his organization whose duty it shall be to take immediate action to correct unsafe or hazardous conditions. This person(s) is/are to be available 24 hrs. per day.

SC12 RIGHT-TO-KNOW LAW

The Contractor shall maintain documentation to indicate that he is in conformance with 105 CMR 670.000, the Right-to-Know Law, as promulgated by the Dept. of Public Health; with 310 CMR 33.00. Implementation of M.G.L. Chapter 111F, Employee and Community "Right-to-Know" as promulgated by the Department of Environmental Protection; and with 441 CMR 21.00 "Right-to-Know" M.G.L. Chapter 111F as promulgated by the Department of Labor and Industries, Division of Industrial Safety. The documentation shall include all pertinent Material Safety Data Sheets (MSDS) where such MSDS are available, letters to manufacturers indicating he has made a diligent effort to obtain the MSDS, personnel listings and any other documents or reports required by the regulations. In addition, in compliance with the regulations, all materials covered by the regulations shall be properly labeled.

SC13 SAFETY AND HEALTH REGULATIONS

This project is subject to all Safety and Health Regulations promulgated by the U.S. Department of Labor including, but not limited to, rules and regulations of the Occupational Safety and Health Administration (OSHA). Contractors are urged to make themselves familiar with the requirements of these regulations.

The Contractor shall be solely responsible for safety precautions and programs in connection with the work. The Contractor shall take all necessary precautions and provide all necessary safeguards to prevent personal injury and property damage. The Contractor shall provide protection for all persons including but not limited to his employees and other employees of other contractors or subcontractors; members of the public; and employees, agents and representatives of the Owner, the Engineer, and regulatory agencies that may be on or about the Work. the Contractor shall provide protection for all public and private property including but not limited to structures, pipe and utilities, above and below ground.

The Contractor shall provide and maintain all necessary safety equipment such as fences, barriers, signs, lights, walkways, guards and fire prevention and fire-fighting equipment and shall take such other action as is required to fulfill his obligations under this subsection.

The Contractor shall comply with all applicable Federal, State and local laws, ordinances, rules and regulations and lawful orders of all authorities having jurisdiction for the safety of persons and protection of property.

The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This "competent person", as defined by OSHA, shall have the authority to take immediate action to correct unsafe or hazardous conditions and to enforce safety precautions and programs.

SC14 SANITARY REGULATIONS

The Contractor shall provide adequate sanitary facilities for the use of those employed on the Work. Such facilities shall be made available when the first employees arrive on the site of the Work, shall be properly secluded from public observation, and shall be constructed and maintained during the progress of the Work in suitable numbers and at such points and in such manner as may be required or approved.

The Contractor shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use. He shall rigorously prohibit the committing of nuisances on the site of the Work, on the lands of the Owner, or on adjacent property.

The Owner and the Engineer shall have the right to inspect such facilities at all times to determine whether or not they are being properly and adequately maintained.

SC15 VEHICLE ENGINE ANTI-IDLING AND MASSDOT DIESEL RETROFIT PROGRAM

The engines of all construction vehicles and equipment utilized in the Work shall be turned off when not being used actively for greater than five minutes, except as exempted by 310 CMR 7.11(1)(b).

In accordance with the MassDOT Diesel Retrofit Program for Non-Road Construction Equipment, all non-road construction equipment, greater than 50 horsepower, shall be equipped with emission control devices such as Diesel Oxidation Catalysts (DOC) or Diesel Particulate Filters (DPF).

SC16 ORDER OF CONTIONS

Local and State Orders of Conditions, issued by the Duxbury Conservation Commission, follows this section and are a part of this Contract. The Contractor shall comply with the Orders of Conditions.

SC17 ARMY CORPS OF ENGINEERS AUTHORIZATION

An authorization letter from the Army Corps of Engineers follows this section and is a part of this Contract. Contractor shall pay particular attention to special conditions 1, 3, 4, 5 and 6 included in the authorization. The Town will ensure compliance with special conditions 2 and 7.

END OF SECTION

(this page intentionally left blank)



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:
MassDEP File #:018-2052
eDEP Transaction #:1611021
City/Town:DUXBURY

PROPOSED REPAIRS

DUXBURY BEACH

SEAWALLS - PHASE II CABLE HILL WAY & GURNET ROAD (SHEET 2 OF 5)

PGB ENGINEERING LLC PATRICK G BRENNAN, RPE

12/12/2023

1"=20'

PROPOSED REPAIRS

DUXBURY BEACH

SEAWALLS - PHASE II GURNET ROAD, PLYMOUTH AVENUE & BAY AVENUE (SHEET 3 OF 5)

PGB ENGINEERING LLC PATRICK G BRENNAN, RPE

12/12/2023

1"=20'

PROPOSED REPAIRS

DUXBURY BEACH

SEAWALLS - PHASE II PLAN - BAY AVENUE & DETAIL (SHEET 4 OF 5)

PGB ENGINEERING LLC PATRICK G BRENNAN, RPE

12/12/2023

VARIOUS

PROPOSED REPAIRS

DUXBURY BEACH

SEAWALLS - PHASE II DETAILS, SECTIONS AND ELEVATION (SHEET 5 OF 5)

PGB ENGINEERING LLC PATRICK G BRENNAN, RPE

12/12/2023

VARIOUS

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act

Following the review of the 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.

Check all that apply:

Table with 3 columns and 3 rows of checkboxes for various environmental interests like Public Water Supply, Land Containing Shellfish, Prevention of Pollution, etc.

2. Commission hereby finds the project, as proposed, is:



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:
MassDEP File #:018-2052
eDEP Transaction #:1611021
City/Town:DUXBURY

Approved subject to:

a. [X] 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.

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 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 interests of the Act, 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 310CMR10.02(1)(a).

a. linear feet

Inland Resource Area Impacts:(For Approvals Only):

Table with 5 columns: Resource Area, Proposed Alteration, Permitted Alteration, Proposed Replacement, Permitted Replacement. Rows include Bank, Bordering Vegetated Wetland, Land under Waterbodies and Waterways, Bordering Land Subject to Flooding, Isolated Land Subject to Flooding, and Riverfront Area.



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:
 MassDEP File #:018-2052
 eDEP Transaction #:1611021
 City/Town:DUXBURY

	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	g. square feet	h. square feet	i. square feet	j. square feet

Coastal Resource Area Impacts:

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input type="checkbox"/> Land Under the Ocean	<u> </u>	<u> </u>		
	a. square feet	b. square feet		
	<u> </u>	<u> </u>		
	c. c/y dredged	d. c/y dredged		
12. <input checked="" type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input checked="" type="checkbox"/> Coastal Beaches	<u>14877</u>	<u> </u>	<u>0</u>	<u> </u>
	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
14. <input type="checkbox"/> Coastal Dunes	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	a. square feet	b. square feet	c. c/y nourishment	d. c/y nourishment
15. <input checked="" type="checkbox"/> Coastal Banks	<u>2861</u>	<u> </u>		
	a. linear feet	b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	<u> </u>	<u> </u>		
	a. square feet	b. square feet		
17. <input type="checkbox"/> Salt Marshes	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	a. square feet	b. square feet	c. square feet	d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	<u> </u>	<u> </u>		
	a. square feet	b. square feet		
	<u> </u>	<u> </u>		
	c. c/y dredged	d. c/y dredged		
19. <input type="checkbox"/> Land Containing Shellfish	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	a. square feet	b. square feet	c. square feet	d. square feet
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	<u> </u>	<u> </u>		
	c. c/y dredged	d. c/y dredged		
21. <input checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	<u>14877</u>	<u> </u>		
	a. square feet	b. square feet		

22. Restoration/Enhancement (For Approvals Only)



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:
 MassDEP File #:018-2052
 eDEP Transaction #:1611021
 City/Town:DUXBURY

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 & d or B.17.c & d above, please entered the additional amount here.

_____ a. square feet of BVW

_____ b. square feet of Salt Marsh

23.

Γ Streams Crossing(s)

If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

_____ 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.
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.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not exceed the issuance date of the original Final Order of Conditions.
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.
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 then two square feet or more than three square feet in size bearing the words,

" Massachusetts Department of Environmental Protection"



**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:
MassDEP File #:018-2052
eDEP Transaction #:1611021
City/Town:DUXBURY

[or "MassDEP"]

File Number : "018-2052"

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 Mass DEP.
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.
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.

NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. The work associated with this Order (the "Project") is (1) is not (2) subject to the Massachusetts Stormwater Standards. If the work is subject to 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 Pollutant Discharge Elimination System Construction General Permit as required by Stormwater Standard 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



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:
MassDEP File #:018-2052
eDEP Transaction #:1611021
City/Town:DUXBURY

the requirements of Stormwater Standard 10; *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 19(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 Pollutant 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.
- 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



**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:
MassDEP File #:018-2052
eDEP Transaction #:1611021
City/Town:DUXBURY

Credits) shall not be altered without the prior written approval of the issuing authority.

- 1) 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:

SEE ATTACHMENT A (1 PAGE) DATED 01/02/2024

SPECIAL CONDITIONS

- A. The Commission reserves the right to require additional protective measures for the resource areas should a site visit indicate the necessity for those additional measures.
- B. In conjunction with the sale of any lot within a resource area, the applicant shall submit to the Conservation Commission a signed statement by the buyer that he is aware of an outstanding Order of Conditions on the property and has received notice under #16 above.
- C. **Prior to the start of the project, the contractor shall send a letter to the Conservation Commission stating that they have read these Orders of Conditions; that they understand them; and they will comply with the Orders.**
- D. **Prior to the start of the project, the applicant shall inform the Commission in writing of the names, addresses, business and home phone numbers of both the project supervisor and his/her alternate who will be responsible for ensuring onsite compliance with this order.**
- E. The Conservation Administrator shall be notified a minimum of 48 hours (more notice is preferred) in advance of the commencement of work.
- F. **Prior to the start of work, the project manager shall provide copies of the Orders of Conditions and all permits and conditions to all subcontractors and ensure that they understand the limitations and conditions. This should be done at an onsite meeting with subcontractors and the Conservation Administrator. **A preconstruction meeting shall be held with the Conservation Administrator before any work takes place on this project.****
- G. The work shall conform to the plans and specifications listed in Section A. General Information number 8 on Page 1 of this document.
- H. All grading shall be consistent with the above-referenced plan.
- I. The applicant must submit to the Commission written permission from the owner of each property over which access is being provided prior to the start of the project.
- J. Any conditions from the National Heritage and Endangered Species Program shall become part of these Order of Conditions.
- K. Sand used in this project shall be clean and of a compatible grain size with the existing beach.
- L. The applicant/contractor needs to clean the street at the end of each workday, if dirt is tracked out into the street.
- M. All disturbed areas shall be revegetated and/or stabilized prior to a Certificate of Compliance being issued.
- N. Certificate of Compliance: Prior to a Certificate of Compliance being issued, the applicant's engineer shall certify to the Conservation Commission that all work has been done in conformance with the above-referenced plan and the Orders of Conditions. An as-built plan showing the final grades must also be provided.



D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? Yes No

2. The Conservation Commission hereby (check one that applies):

a. DENIES the proposed work which cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw specifically:

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 or Conditions is issued. Which are necessary to comply with a municipal ordinance or bylaw:

b. APPROVES the proposed work, subject to the following additional conditions.

1. Municipal Ordinance or Bylaw _____ TOWN OF DUXBURY WETLANDS BYLAW _____
 2. Citation CHAPTER 9

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:
 SEE ATTACHMENT B (PAGES 1 THROUGH 3) DATED 01/02/2024

Findings

The Duxbury Conservation Commission has reviewed the above-reference Notice of Intent and plans and has held a Public Hearing on the project. Based on the information available to the Commission at this time, the Commission has determined that the area on which the proposed work is to be done is significant to the following wetland values in accordance with the Presumption of Significance set forth in the regulations for each Area Subject to Protection and in accordance with the Wetlands Protection bylaw and Regulations of the Town of Duxbury:

- | | |
|---|---|
| <input checked="" type="checkbox"/> protection of groundwater | <input checked="" type="checkbox"/> protection of aesthetics |
| <input checked="" type="checkbox"/> protection of fisheries | <input checked="" type="checkbox"/> protection of wildlife & wildlife habitat |
| <input checked="" type="checkbox"/> prevention of water pollution | <input type="checkbox"/> protection of public or private water supply |
| <input checked="" type="checkbox"/> protection of shellfish | <input checked="" type="checkbox"/> storm damage prevention, including coastal storm flowage |
| <input checked="" type="checkbox"/> protection of aquaculture | <input checked="" type="checkbox"/> protection of rare species habitat, including rare plant & animal species |
| <input checked="" type="checkbox"/> flood control | <input checked="" type="checkbox"/> erosion and sedimentation control |
| <input type="checkbox"/> protection of agriculture | |
| <input checked="" type="checkbox"/> protection of recreation | |

Therefore, the Conservation Commission hereby finds the following conditions are necessary, in accordance with the Performance Standards set forth in the regulations, to protect those wetland values checked above and the Wetland Protection Bylaw and Regulations for the Town of Duxbury. The Commission orders that all work shall be performed in accordance with said 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.

GENERAL CONDITIONS

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. This 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 any of the following apply: (a) the work is a maintenance dredging project as provided for in the Act; (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 and both that date and the special circumstances warranting the extended time period are set forth in this Order; or (c) a shorter time for completion is required as set forth in this Order.
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 of the Order.
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 **January 2, 2027** unless extended in writing by the Department.
7. Any fill used in connection with the project shall be clean fill, containing 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.

8. No work shall be undertaken until all administrative appeal periods from this Order have elapsed or, if such appeal has been filed, until all proceedings have been completed.
9. No work shall be undertaken until the Final Order 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. 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 clearly legible 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 (MA DEP) File Number (#) **SE 18-2052**. The sign shall be clearly visible from the road and shall remain so displayed until construction is completed and a Certificate of Compliance has been granted.
11. Where the Department of Environmental Protection is requested to make a determination and to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before the MASS DEP.
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. All construction must comply with the above-referenced plan and the conditions of this Order. For any proposed change in the approved plans or in the work, the applicant shall file a new Notice of Intent or inquire, in writing, of the Conservation Commission whether the change is substantial enough to require a new Notice of Intent. No change in plan or change in work under this filing is permissible without prior written approval from the Conservation Commission.
15. Any member of the Conservation Commission or its Administrators has the right to enter upon the property to inspect the proposed work and to inspect for compliance with the Orders of Conditions until a Certificate of Compliance is issued.
16. The provisions of this Order shall apply to and be binding upon the applicant, owner, employees, agents, and all successors and assigns in interest or control.

SPECIAL CONDITIONS

17. The Commission reserves the right to require additional protective measures for the resource areas should a site visit indicate the necessity for those additional measures.
18. In conjunction with the sale of any lot within a resource area, the applicant shall submit to the Conservation Commission a signed statement by the buyer that he is aware of an outstanding Order of Conditions on the property and has received notice under #16 above.
19. **Prior to the start of the project, the contractor** shall send a letter to the Conservation Commission stating that they have read these Orders of Conditions; that they understand them; and they will comply with the Orders.
20. **Prior to the start of the project, the applicant** shall inform the Commission in writing of the names, addresses, business and home phone numbers of both the project supervisor and his/her alternate who will be responsible for ensuring onsite compliance with this order.
21. The Conservation Administrator shall be notified a minimum of 48 hours (more notice is preferred) in advance of the commencement of work.

22. **Prior to the start of work**, the project manager shall provide copies of the Orders of Conditions and all permits and conditions to all subcontractors and ensure that they understand the limitations and conditions. This should be done at an onsite meeting with subcontractors and the Conservation Administrator. **A preconstruction meeting shall be held with the Conservation Administrator before any work takes place on this project.**
23. The work shall conform to the plans and specifications listed in Section A. General Information number 8 on Page 1 of this document.
24. All grading shall be consistent with the above-referenced plan.
25. The applicant must submit to the Commission written permission from the owner of each property over which access is being provided prior to the start of the project.
26. Any conditions from the National Heritage and Endangered Species Program shall become part of these Order of Conditions.
27. Sand used in this project shall be clean and of a compatible grain size with the existing beach.
28. The applicant/contractor needs to clean the street at the end of each workday, if dirt is tracked out into the street.
29. All disturbed areas shall be revegetated and/or stabilized prior to a Certificate of Compliance being issued.
30. Certificate of Compliance: Prior to a Certificate of Compliance being issued, the applicant's engineer shall certify to the Conservation Commission that all work has been done in conformance with the above-referenced plan and the Orders of Conditions. An as-built plan showing the final grades must also be provided.
31. Appeal: Any applicant, owner, abutter, or other party in interest may appeal an Order of the Conservation Commission under this Bylaw to the Superior Court of Plymouth County no later than sixty (60) days following the date of issuance of the Order.



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:
 MassDEP File #:018-2052
 eDEP Transaction #:1611021
 City/Town:DUXBURY

E. Signatures

This Order is valid for three years from the date of issuance, unless otherwise specified pursuant to General Condition #4. If this is an Amended Order of Conditions, the Amended Order expires on the same date as the original Order of Conditions.

01/02/2024
 1. Date of Original Order

Please indicate the number of members who will sign this form. This Order must be signed by a majority of the Conservation Commission.

6
 2. Number of Signers

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.

Signatures:

[Signature]
[Signature]
 by hand delivery on

[Signature]
[Signature]
 by certified mail, return receipt requested, on

Date 01/02/2024

Date

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.

G. Recording Information

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.

DUXBURY



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:
 MassDEP File #:018-2052
 eDEP Transaction #:1611021
 City/Town:DUXBURY

subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

DUXBURY
 Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:
DUXBURY
 Conservation Commission

Please be advised that the Order of Conditions for the Project at:

OCEAN ROAD NORTH, OCEAN ROAD SOUTH,
 CABLE HILL WAY, GURNET ROAD, BAY AVENUE
 Project Location

018-2052
 MassDEP File Number

Has been recorded at the Registry of Deeds of:

County	Book	Page
for:		
<u>Property Owner MULTIPLE PROPERTY OWNERS SEE ATTACHMENT C</u>		

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

Rev. 4/1/2010

SE18-2052: DUXBURY SEAWALL PHASE II
ATTACHMENT C: List of Property Owners

List of Property Owners

SITE ADDRESS	TOWN	PARCELID	OWNER	OWNER ADDRESS	OWNER CITY	OWNER STATE	OWNER ZIP	SIGNED EASEMENT (Y/N)	BOOK	PAGE	CERTIFICATE/TITLE NO.
0 BAY AVE	DUXBURY	821370090100800	BURMAN SAMANTHA TROTMAN	70 WILSONDALEST	DOVER	MA	02030 Y		40727	326	
0 BAY AVE	DUXBURY	821370090100820	MCGUINNESS KATHERINE M TT	10 LONGWOOD DRIVE, UNIT 353	WESTWOOD	MA	02080 Y		35230	321	
0 BAY AVE	DUXBURY	821370090100630	BENINATI ELIZABETH A	8 SNOWS HILL LANE	DOVER	MA	02030 Y		42477	299	
7 BAY AVE	DUXBURY	821380090100730	TEDESCHI TIMOTHY N	7 BAY AVE	DUXBURY	MA	02332 Y		12873	103	
12 BAY AVE	DUXBURY	821380090100750	CALLAHAN LAUREN B TT	12 BAY AVE	DUXBURY	MA	02332 Y		39421	87	
21 BAY AVE	DUXBURY	821380090100710	RYAN JAMES P IT	21 BAY AVE	DUXBURY	MA	02332 Y		9297	130	
25 BAY AVE	DUXBURY	821380090100690	FITZGIBBONS CHARLES & JAMES TT	28 AUTUMN LANE	MARSHFIELD	MA	02050 Y		20005	246	
33 BAY AVE	DUXBURY	821380090100680	DOHERTY EDWARD J	159 MEETINGHOUSE CIR	NEEDHAM	MA	02192 Y				86009
45 BAY AVE	DUXBURY	821380090100640	BRENNICK DOROTHY ETT	52 BLUEBERRY LN	S HAMILTON	MA	01982 Y		33104	338	
5 CABLE HILL WAY	DUXBURY	8213800901600050	CHIMINIELLO FRANCIS & ROBYN	PO BOX 535	GREEN HARBOR	MA	02041 Y		5450	200	
11 CABLE HILL WAY	DUXBURY	8213800901600040	11 CABLE HILL WAY REALTY TRUST	1010 CONGRESS ST	DUXBURY	MA	02332 Y		54056	36	
15 CABLE HILL WAY	DUXBURY	8213800901600030	BEJES MARYE	PO BOX 272A	DUXBURY	MA	02331 Y				96155
0 GURNET RD	DUXBURY	821380090100110	MCSHANE KEVIN & GERALYN	103 ROCKLAND ST	CANTON	MA	02021 Y		31922	267	
0 GURNET RD	DUXBURY	821370090100380	NIKOPoulos LAURIE ATT	151 GURNET RD	DUXBURY	MA	02332 Y		54954	255	
71 GURNET RD	DUXBURY	821370090100380	KUZINEVICH JOHN J & HELEN C	71 GURNET RD	DUXBURY	MA	02332 Y		44209	189	
77 GURNET RD	DUXBURY	821370090100130	SHEEHAN MICHAEL & MARGUERITE	77 GURNET RD	DUXBURY	MA	02332 Y				123869
81 GURNET RD	DUXBURY	821370090100010	GREENE TIMOTHY F	81 GURNET RD	DUXBURY	MA	02332 Y		54985	293	
83 GURNET RD	DUXBURY	821370090100020	MULHERN DANIEL MTT	83 GURNET ROAD	DUXBURY	MA	02332 Y		51752	135	
87 GURNET RD	DUXBURY	821370090100030	WEINTRAUB ROBERT TT	776 BOYLSTON ST, UNIT E88	BOSTON	MA	02199 Y		54690	313	
91 GURNET RD	DUXBURY	821370090100040	COLOMBO DAVID J	91 GURNET ROAD	DUXBURY	MA	02332 Y		52319	321	
93 GURNET RD	DUXBURY	821370090100050	MASTROMARINO JOHN L & MARY E	52 FAIROAKS LN	COHASSET	MA	02025 Y		17158	259	
97 GURNET RD	DUXBURY	821370090100060	SILVA NANNETTE M TRUSTEE	PO BOX 1635	DUXBURY	MA	02332 Y		53347	327	
103 GURNET RD	DUXBURY	821370090100070	COLEMAN MARYLTT	PO BOX 733	MARSHFIELD	MA	02050 Y		51527	85	
105 GURNET RD	DUXBURY	821370090100080	SANDY TOES COTTAGE LLC	585 ETTHST, UNIT 3	BOSTON	MA	02127 Y		55353	57	
109 GURNET RD	DUXBURY	821370090100090	LEONARD JOHN P & CATHERINEV	PO BOX 1151	DUXBURY	MA	02331 Y		11455	313	
123 GURNET RD	DUXBURY	821380090100120	PICCRILLO ROGO & ELIZABETH	123 GURNET RD	DUXBURY	MA	02332 Y				132516
137 GURNET RD	DUXBURY	821380090100110	PLANTE RANDALL & DOGGETT-PLANTE H	99 RUSSELL AVE	WATERTOWN	MA	02472 Y		39085	335	
143 GURNET RD	DUXBURY	821380090100160	SHEEHAN DIANE MTT	60 N MAIN ST 47	NATICK	MA	01780 Y		23977	107	
147 GURNET RD	DUXBURY	821380090100170	DONOVAN NANCY L	12 WARNER RD	ABINGTON	MA	02351 Y		17326	124	
151 GURNET RD	DUXBURY	821380090100180	NIKOPoulos LAURIE ATT	151 GURNET RD	DUXBURY	MA	02332 Y		54954	255	
3 LEWIS CT	DUXBURY	821390004200020	MURPHY CHRISTINE	PO BOX 745	GREEN HARBOR	MA	02041 Y		17499	135	
4 LEWIS CT	DUXBURY	821390004200010	CLIFFORD MICHAEL L	8 MEREDITH DR	N EASTON	MA	02356 Y		52607	277	
31 OCEAN RD N	DUXBURY	821390093901200	FREER JAMES TT	PO BOX 355	BRYANTVILLE	MA	02327 Y				124729
33 OCEAN RD N	DUXBURY	821390093901190	DODDS ROBERT F & FLYNN PAULINE A	33 OCEAN RD N	DUXBURY	MA	02332 Y				99708
35 OCEAN RD N	DUXBURY	821390093901180	SHEBLER ROBERT C & TRACEY L T	81 BEDFORD ST	BURLINGTON	MA	01803 Y				131326
37 OCEAN RD N	DUXBURY	821390093901170	MCLAUGHLIN BRENDAN T	23 RUSKIN ST	WEST ROXBURY	MA	02132 Y				119205
39 OCEAN RD N	DUXBURY	821390093901150	DEADY JEFFREY	5 SOUTHGATE LN	HINGHAM	MA	02043 Y		127008		
41 OCEAN RD N	DUXBURY	821390093901140	SHEBLER MARY B & THOMAS P TT	PO BOX 334	GREEN HARBOR	MA	02041 Y				123206
43 OCEAN RD N	DUXBURY	821390093901130	KELLEY THOMAS & GAIL	PO BOX 2435	DUXBURY	MA	02331 Y				128127
45 OCEAN RD N	DUXBURY	821390093901120	ARENA EDWARD & MARTHA C	3 PARKVIEW ST	NATICK	MA	01780 Y				127827
49 OCEAN RD N	DUXBURY	821390093901110	CARR BRENDAN MTT	23 VESTA RD	NATICK	MA	01780 Y				95487
53 OCEAN RD N	DUXBURY	821390093901100	POTTER DEBRA	45 UPLAND RD	NATICK	MA	01780 Y				123244
55 OCEAN RD N	DUXBURY	821390093901090	NORRIS DONALD RTT	53 OCEAN RD N	DUXBURY	MA	02332 Y				127641
57 OCEAN RD N	DUXBURY	821390093901080	BUCKLEY CHARLES F III TT	55 OCEAN RD N	DUXBURY	MA	02332 Y				117041
59 OCEAN RD N	DUXBURY	821390093901070	SMITH KERRY ANN, REED SANDRA A &	59 PERSEVERANCE PATH	PLYMOUTH	MA	02360 Y				121282
59 OCEAN RD N	DUXBURY	821390093901060	DUFFY JAMES J III	10 HUTCHINSON LN	QUINCY	MA	02171 Y				116244
61 OCEAN RD N	DUXBURY	821390093901050	SPELLMAN TIMOTHY J	61 OCEAN RD N	DUXBURY	MA	02332 Y				82950
63 OCEAN RD N	DUXBURY	821390093901040	SPELLMAN SHEILA M	63 OCEAN RD N	DUXBURY	MA	02332 Y				131749
65 OCEAN RD N	DUXBURY	821390093901030	OBEY ANTHONY & LISA	959 ALLAMANDA DRIVE	DELRAY BEACH	FL	33483 Y				130870
69 OCEAN RD N	DUXBURY	821390093901010	LEONARD TARYN	90 THORNDIKE ST	CAMBRIDGE	MA	02141 Y				117674
71 OCEAN RD N	DUXBURY	821390093900910	MACKAY ALISON	151 W CANTON ST	BOSTON	MA	02118 Y		47248	42	
7 OCEAN RD S	DUXBURY	821410093901320	TANVAKOLOGOS JOHN & MARIA	2 BEECHWOOD LANE	MILTON	MA	02186 Y				130297
3 OCEAN RD S	DUXBURY	821410093901310	ANDERSON KATHLEEN C	157 MARKET ST	BROCKTON	MA	02301 Y				25938
5 OCEAN RD S	DUXBURY	821410093901300	HALEY ARTHUR AJR & MARY LOU	9 HEMLOCK LN	MILFORD	MA	01757 Y				65842
7 OCEAN RD S	DUXBURY	82140093901290	OHS BARRY W	1286 CURVEST	CARLISLE	MA	01741 Y				127719
9 OCEAN RD S	DUXBURY	82140093901280	9 OCEANSOUTH LLC & BABCOCK CALICIA	9 ELDREDGE LANE	COHASSET	MA	02025 Y				128288
11 OCEAN RD S	DUXBURY	82140093901270	VERITY JOHN P & TARA J	26 BAYRIDGE LANE	DUXBURY	MA	02332 Y				123716
13 OCEAN RD S	DUXBURY	82140093901260	EN PROPERTIES LLC & BOESS CARSTEN	26 SUNSET RD	DUXBURY	MA	02332 Y				125558
15 OCEAN RD S	DUXBURY	821390093901250	PALMIERI JOHN R & PATRICIA	11 KRESS FARM RD	HINGHAM	MA	02043 Y				62954
17 OCEAN RD S	DUXBURY	821390093901240	LEONE JOYCE & LEONE DEBRA TRU	17 OCEAN RD S	DUXBURY	MA	02332 Y				129117
19 OCEAN RD S	DUXBURY	821390093901230	JORDAN MICHAEL R & DEBORAH M	21084 CARTHAGENA COURT	ASHBURN	VA	20147 Y				117430
21 OCEAN RD S	DUXBURY	821390093901220	JERNEGAN JACQUELINE G TT	45 FOREST ST	BRAINTREE	MA	02184 Y				112829
23 OCEAN RD S	DUXBURY	821390093901210	DALRYMPLE WILLIAM K	620 LINCOLN ST	DUXBURY	MA	02332 Y				113523
0 PLYMOUTH AVE	DUXBURY	821370090100190	MARTIN CANDACE B TT & GILBERT E JR TT	59 GURNET RD	DUXBURY	MA	02332 Y		45245	176	
0 PLYMOUTH AVE	DUXBURY	821370090101380	DUFFY SR JOHN ATT	2916 INDIGOBUSH WAY	NAPLES	FL	34105 Y		53965	1	
0 PLYMOUTH AVE	DUXBURY	821370090100140	JULIA DENNISWEENEYQUAL PR TRUST	4465 S JONES BLVD	LAS VEGAS	NV	89103 Y		25543	283	



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

July 19, 2024

Regulatory Division
File Number: NAE-2021-00399

René Read
Town of Duxbury
878 Tremont Street
Duxbury, MA 02332
Sent by email: read@town.duxbury.ma.us

Dear Mr. Read:

The U.S. Army Corps of Engineers (USACE) has reviewed your application to discharge up to 120 cubic yards (CY) of sand into 2,725 square feet (SF) (0.0626-acre) below the High Tide Line (HTL) of Massachusetts Bay in order to restore an eroded sand dune, and 130 CY of cobble into 2,320 SF (0.0533-acre) below the HTL of Massachusetts Bay in order to construct a cobble berm to protect against scour at the end of a repaired seawall, and in front of the restored dune. The town will also discharge up to 322.2 CY of concrete and crushed stone into 2,030 SF (0.0466-acre) below the HTL of Massachusetts Bay in order to replace 2,860 linear feet of existing concrete seawall and revetment. Existing revetment and excavated material will be used to create temporary berms in front of the active construction area along the seawall. The temporary berms will not exceed the limits of the seawall's maintenance easement and will be restored after completion of the active construction area's seawall repair.

This project is located in Massachusetts Bay, from 1 Ocean Road South to 12 Bay Avenue in Duxbury, Massachusetts. All work will be performed in accordance with the enclosed plans, sheets 1 – 17, dated February 13 and 25, 2024.

Based on the information that you have provided, we verify that the activity is authorized under Regional General Permit (RGP) 7, Dredging, Disposal of Dredged Material, Beach Nourishment, Rock Removal, and Rock Relocation and RGP 9, Bank and Shoreline Stabilization of the June 2, 2023, federal permit known as the Massachusetts General Permits (GPs). The GPs are available at <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit>.

Please review the enclosed RGPs and their general conditions carefully and ensure that you and all personnel performing work authorized by the RGPs are fully aware of and comply with its terms and conditions. A copy of the RGPs and this verification letter

shall be available at the work site as required by General Condition 17. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work. Additionally, you must perform this work in compliance with the following special condition(s):

1. All work must be completed in dewatered conditions, either at low tide (i.e., for berm construction) or after a berm is constructed to protect the active work area from wave and tidal action.
2. Temporary revetment stone must be removed such that only native beach sand and cobble will remain on the beach after construction of the replacement seawall. The permittee must prepare delineations of existing boulder-cobble-pebble conditions according to the "Inshore Cod HAPC and Rocky Habitat Definition" post revetment removal (i.e., restoration to baseline conditions). All reports shall be submitted concurrently to the Army Corps of Engineers New England District Regulatory Division (roberta.k.budnik@usace.army.mil) and National Marine Fisheries Service (kaitlyn.shaw@noaa.gov) within thirty days after preparation.
3. The project proponent will familiarize themselves in the identification of red knots and piping plover and will ensure any contractor hired to perform the work is familiarized with the identification of piping plovers and red knots.
4. Should one or more piping plover(s) and/or red knot(s) be sighted within the construction area during active construction, measures will be taken by construction personnel that the bird(s) is/are not disturbed and is/are allowed to leave the area of their own volition (i.e., the bird or birds will not be chased or scared away).
5. Should any injured or deceased piping plovers or red knots be discovered within or near the construction area, the project proponent will report the discovery to the U.S. Fish and Wildlife Service, New England Field Office (603-223-2541; newengland@fws.gov).
6. No work shall be performed on the southernmost portion of the seawall and dune restoration project (to Sta. 14+90) from April 1 to August 31 in order to avoid impacts to piping plovers and red knots.
7. The permittee must survey the beach elevation within the excavation footprint immediately pre- and post-construction and, if necessary, add beach-compatible material to bring the post-construction beach up to its pre-construction elevation.

This authorization expires on June 1, 2028. You must commence or have under contract to commence the work authorized herein by June 1, 2028, and complete the

work by June 1, 2029. If not, you must contact this office to determine the need for further authorization and we recommend you contact us *before* the work authorized herein expires. Please contact us immediately if you change the plans or construction methods for work within our jurisdiction as we must approve any changes before you undertake them. Performing work within our jurisdiction that is not specifically authorized by this determination or failing to comply with the special condition(s) provided above or all the terms and conditions of the RGPs may subject you to the enforcement provisions of our regulations.

This authorization does not obviate the need to obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining any other approvals.

Your project is located within, or may affect resources within, the coastal zone. The Massachusetts Office of Coastal Zone Management (CZM) has already determined that no further Federal Consistency Review is required.

We continually strive to improve our customer service. To better serve you, we would appreciate your completing our Customer Service Survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey>.

Please contact Roberta Budnik of my staff at roberta.k.budnik@usace.army.mil or (978) 318-8766 if you have any questions.

Sincerely,



Paul Maniccia
Chief, Massachusetts Section
Regulatory Division

Enclosures

cc:

Patrick Brennon, PGB Engineering, LLC (agent)

pgebengineeringllc@gmail.com

Ed Reiner, EPA

reiner.ed@epa.gov

Rachel Croy, EPA

croy.rachel@epa.gov

Kaitlyn Shaw, NMFS

kaitlyn.shaw@noaa.gov

Meg Harrington, USFWS

margaret_harrington@fws.gov

Sean Duffey, Coastal Zone Management

sean.duffey@mass.gov

Patrice Bordonaro, Coastal Zone Management

patrice.bordonaro@mass.gov

Daniel Gilmore, DEP SERO

daniel.gilmore@mass.gov

David Robinson, BUAR

david.s.robinson@mass.gov

Duxbury ConCom

conservation-administrator@town.duxbury.ma.us

grady@town.duxbury.ma.us

GP 7. DREDGING (Authority: §10), DISPOSAL OF DREDGED MATERIAL (Authorities: §10, §404), BEACH NOURISHMENT (Authorities: §10 & §404), ROCK REMOVAL (Authority: §10) AND ROCK RELOCATION (Authorities: §10 & §404)

New, improvement and maintenance dredging (see notes below) including: (a) Disposal of dredged material at a confined aquatic disposal cell, beach nourishment location, near shore site, or ocean disposal site selected under Section 404 of the Clean Water Act pursuant to the 404(b)(1) Guidelines, provided the dredged material meets the requirements for such disposal; (b) Beach nourishment not associated with dredging; and (c) Rock removal and relocation for navigation.

Not authorized under GP 7 (IP required): (a) Dredging where ocean disposal is required for the disposal of dredged material (Section 103); New dredging >½ acre; ≥10,000 CY; >1000 SF permanent impacts to intertidal areas, saltmarsh, mud flats, riffle and pool complexes, or non-tidal vegetated shallows; or >100 SF permanent impacts to tidal vegetated shallows; (b) Maintenance or improvement dredging and/or disposal with >1 acre of impacts to intertidal areas, saltmarsh, mudflats, riffle and pool complexes, or non-tidal vegetated shallows; (c) New dredging where the primary purpose is sand mining for beach nourishment; (d) Beach scraping; (e) Boulder removal and relocation for navigation >½ acre; or (f) Blasting.

Self-Verification Eligible

1. Maintenance dredging of previously dredged areas, with upland disposal, that meet all of the following terms:
 - a. Dredged area ≤1/2 acre; and
 - b. Activities comply with GC 20, TOY Restrictions. The time-of-year restriction(s) stated in Appendix B of the MA Division of Marine Fisheries (DMF) Technical Report TR-47¹ can apply instead if the general TOY restriction if a TOY is provided for a specific waterbody and is less restrictive. This is to protect endangered species, EFH, and other species; and
 - c. The dredge footprint is located >25' from salt marsh or >100' from vegetated shallows; and
 - d. Combined permanent and temporary impacts that are (i) ≤1,000 SF in mudflats or natural rocky habitat, or (ii) ≤5,000 SF within intertidal habitat and areas containing shellfish (an area contains shellfish unless: it is verified that minimal shellfish are present per the local shellfish constable or a shellfish survey; or it is not mapped as a MassGIS shellfish suitability area).
 - e. No return water from upland disposal areas.
2. Boulder relocation with ≤1,000 SF of impacts, relocated to a similar depth and substrate.

Pre-Construction Notification Required

1. Maintenance dredging where the primary purpose is sand mining for beach nourishment.
2. New dredging and associated disposal ≤1/2 acre or <10,000 cubic yards.
3. Improvement dredging.
4. Beach nourishment in waters of the U.S. not associated with dredging.
5. Activities that are located in saltmarsh and tidal vegetated shallows.
6. Dredging in a Federal Navigation Project or within the buffer zone (see GC 15).
7. Activities that are not eligible for SV and do not require an IP.

Notes:

1. See Section VII for definitions of improvement and maintenance dredging.
2. For PCN activities, the USACE may waive or adjust the time of year requirement on a case-by-case basis after consultation with resource agencies.
3. Disposal site of any dredged material must be identified prior to obtaining USACE authorization.
4. Contact the USACE if a ten-year authorization to maintain an area is desired.

¹ The MA DMF Technical Report TR-47: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>

GP 9. BANK AND SHORELINE STABILIZATION (Authorities: §10 & §404)

Bank stabilization activities necessary for erosion protection along the banks of lakes, ponds, streams, estuarine and ocean waters, and any other open waters. Includes bulkheads, seawalls, riprap, revetments, living seawalls, or slope protection & similar structures, specifically for the purpose of shoreline protection. This GP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the activities above.

Activities must meet the following criteria: (a) No material is placed in excess of the minimum needed for erosion protection; (b) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the U.S.; (c) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas); (d) Native plants appropriate for current site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization; (e) The activity is not a stream channelization activity; and (f) The activity must be properly maintained, which may require repairing it after severe storms or erosion events. This GP authorizes those maintenance and repair activities if they require authorization. This GP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the bank stabilization activity. See GP 20 for living shoreline stabilization structures or fills.

Not authorized under GP 9 (IP required): (a) New bank stabilization >500 feet in total length (>1,000 linear feet in total length when necessary to protect transportation infrastructure) or permanent loss of saltmarsh >1,000 SF, unless the District Engineer waives this criterion by making a written determination concluding that the discharge of dredged or fill material will result in no more than minimal adverse environmental effects (an exception is for bulkheads – the district engineer cannot issue a waiver for a new bulkhead that is >1,000 feet in length along the bank); (b) Stream channelization or relocation activities; or (c) Breakwaters, groins or jetties.

Self-Verification Eligible

1. Activities in tidal and non-tidal waters that are:
 - a. <200 feet in length.
 - b. <400 feet in length when necessary to protect transportation infrastructure.
 - c. ≤1 cubic yard of fill per linear foot average along the bank waterward of the plane of OHW or HTL.
 - d. Not located in non-tidal wetlands, saltmarsh, vegetated shallows.

Pre-Construction Notification Required

1. Activities in tidal and non-tidal waters that are:
 - a. ≥200 feet to ≤500 feet in total length. Activities >500 feet in total length must have a written waiver from USACE.
 - b. ≥400 feet to ≤1,000 feet in total length when necessary to protect transportation infrastructure. Activities >1,000 feet in total length must have a written waiver from USACE.
 - c. >1 cubic yard of fill per linear foot average along the bank waterward of the plane of OHW or HTL.
 - d. Located in non-tidal wetlands, saltmarsh, vegetated shallows.
2. Activities with permanent loss of tidal or non-tidal waters that is (a) ≥5,000 SF or (b) ≥1,000 SF in mudflats and natural rocky habitat.
3. Activities that are (a) located in the Connecticut River or Merrimack River and/or (b) require installation of steel piles/steel sheet piles that cannot be done in the dry where NOAA ESA-listed species are mapped as present.
4. Activities on USACE properties & USACE-controlled easements.
5. Activities that require grouted riprap and/or poured/unformed concrete.
6. Activities that are not eligible for SV and do not require an IP.

Note: The applicant shall comply with GC 24. This includes utilization of bioengineering techniques in lieu of hard armoring to the maximum extent practicable as site conditions allow.

SECTION IV. GENERAL CONDITIONS:

To qualify for GP authorization, the applicant must comply with the following general conditions, as applicable, in addition to authorization-specific conditions imposed by the division or district engineer.

1. Other Permits
2. Federal Jurisdictional Boundaries
3. Single and Complete Projects
4. Use of Multiple General Permits
5. Suitable Material
6. Tribal Rights & Burial Sites
7. Avoidance, Minimization, and Compensatory Mitigation
8. Water Quality & Stormwater Management
9. Coastal Zone Management
10. Federal Threatened and Endangered Species
11. Essential Fish Habitat
12. National Lands
13. Wild and Scenic Rivers
14. Historic Properties
15. USACE Property and Federal Projects (§408)
16. Navigation
17. Permit/Authorization Letter On-Site
18. Storage of Seasonal Structures
19. Pile Driving and Pile Removal in Navigable Waters
20. Time of Year Restrictions
21. Heavy Equipment in Wetlands
22. Temporary Fill & Construction Mats
23. Restoration of Wetland Areas
24. Bank Stabilization
25. Soil Erosion and Sediment Controls
26. Aquatic Life Movements and Management of Water Flows
27. Spawning, Breeding, and Migratory Areas
28. Vernal Pools
29. Invasive Species
30. Fills Within 100-Year Floodplains
31. Stream Work and Crossings & Wetland Crossings
32. Utility Line Installation and Removal
33. Water Supply Intakes
34. Coral Reefs
35. Blasting
36. Inspections
37. Maintenance
38. Property Rights
39. Transfer of GP Verifications
40. Modification, Suspension, and Revocation
41. Special Conditions
42. False or Incomplete Information
43. Abandonment
44. Enforcement Cases
45. Previously Authorized Activities
46. Duration of Authorization

1. Other Permits. Authorization under these GPs does not obviate the need for the permittee to obtain other Federal, State, or local permits, approvals, or authorizations required by law. Permittees are responsible for obtaining all required permits, approvals, or authorizations. Activities that are not regulated by the State, but subject to USACE jurisdiction, may still be eligible for these GPs.

2. Federal Jurisdictional Boundaries.

a. Applicability of these GPs shall be evaluated with reference to Federal jurisdictional boundaries. Activities shall be evaluated with reference to “waters of the U.S.” under the CWA (33 CFR 328) and “navigable waters of the U.S.” under §10 of the Rivers and Harbors Act of 1899 (33 CFR 329).

Permittees are responsible for ensuring that the boundaries used satisfy the Federal criteria defined at 33 CFR 328-329. These sections prescribe the policy, practice, and procedures to be used in determining the extent of the USACE jurisdiction. Note: Waters of the U.S. includes all waters pursuant to 33 CFR 328.3(a), and adjacent wetlands as the term is defined in 33 CFR 328.3(c).

b. Wetlands shall be delineated in accordance with the USACE Wetlands Delineation Manual and the most recent Northcentral/Northeast Regional Supplement. Wetland delineation and jurisdiction information is located at: www.nae.usace.army.mil/missions/regulatory/jurisdiction-and-wetlands and maps are located at www.nae.usace.army.mil/missions/regulatory/state-general-permits/massachusetts-general-permit.

c. Vegetated shallows shall be delineated when present on the project site. Vegetated shallow survey guidance and maps are located at: www.nae.usace.army.mil/missions/regulatory/state-general-permits/massachusetts-general-permit.

d. Natural rocky habitats shall be delineated when present on the project site. The definition of natural rocky habitats is in Section VII of the MA GP. Natural rocky habitat survey guidance and maps are located at: www.nae.usace.army.mil/missions/regulatory/state-general-permits/massachusetts-general-permit.

3. Single and Complete Projects. The MA GP shall not be used for piecemeal work and shall be applied to single and complete projects. The term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers.

a. For non-linear projects, a single and complete project must have independent utility. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed, even if the other phases were not built, can be considered as separate single and complete projects with independent utility.

b. Unless USACE determines the activity has independent utility, all components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be evaluated as one single and complete project.

c. For linear projects such as power lines or pipelines with multiple crossings, a “single and complete project” is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately. If any crossing requires a PCN review or an individual permit review, then the entire linear project shall be reviewed as one project under PCN or the individual permit procedures.

4. Use of Multiple General Permits. The use of more than one GP for a single and complete project is prohibited, except when the acreage loss of waters of the U.S. authorized by the GPs does not exceed the acreage limit of the GPs with the highest specified acreage limit. For example, if a road crossing over waters is constructed under GP 23, with an associated utility line

crossing authorized by GP 6, if the maximum acreage loss of waters of the U.S. for the total project is ≥ 1 acre it shall be evaluated as an IP.

5. Suitable Material & Discharge of Pollutants. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). All activities involving any discharge into waters of the U.S. authorized under these GPs shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. 1251), and applicable state and local laws. If applicable water quality standards, limitations, etc., are revised or modified during the term of this GP, the authorized work shall be modified to conform with these standards within six months from the effective date of such revision or modification, or within a longer period of time deemed reasonable by the District Engineer in consultation with the Regional Administrator of the EPA. Unless monitoring data indicates otherwise, applicants may presume that their activity complies with state water quality standards provided they are in compliance with the Section 401 WQC (Applicable only to the Section 404 activity).

6. Tribal Rights & Burial Sites

- a. For all SV and PCN applications, prospective permittees shall follow the guidance set forth in Appendix A, Guidance for NHPA Section 106 Compliance in Massachusetts.
- b. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- c. Many tribal resources are not listed on the National Register of Historic Places (NRHP) and may require identification and evaluation in collaboration with the identifying tribe and by qualified professionals. The Tribal Historic Preservation Officer (THPO) and State Historic Preservation Officer (SHPO) may be able to assist with locating information on:
 - i. Previously identified tribal resources; and
 - ii. Areas with potential for the presence of tribal resources.
- d. Discovery of Previously Unknown Remains and Artifacts: If any previously unidentified human remains, cultural deposits, or artifacts are discovered while accomplishing the activity authorized by this permit, you must immediately notify the USACE of what you have found, and to the maximum extent practicable, cease work and avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The USACE will initiate the appropriate the Federal, Tribal, and state coordination required to determine if the items or remains are eligible for listing in the NRHP and warrant a recovery effort or can be avoided.
- e. Burial Sites: Burial sites, marked or unmarked, are subject to state law (Massachusetts Unmarked Burial Law). Native American burial sites on federal or tribal land are subject to the provisions of Native American Graves Protection and Repatriation Act (NAGPRA). Regulated activities may not result in disturbance or removal of human remains until disposition of the remains has been determined by the appropriate authority under these laws, and the work is authorized by the USACE. Regulated activities which result in an inadvertent discovery of human remains must stop immediately, and the USACE, as well as the appropriate state and tribal authority, must be notified. Regulated work at inadvertent discovery sites requires compliance with state law or NAGPRA, as appropriate, prior to re-starting work.

7. Avoidance, Minimization, and Compensatory Mitigation. To qualify under the MA GP, activities must comply with Section V Mitigation Standards and the following as applicable:

- a. Avoid and Minimize: Activities must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S. to the maximum extent practicable at the project site. Avoidance and minimization are required to the extent necessary to ensure that the adverse effects to the aquatic environment (both area and function) are no more than minimal.

b. Compensatory mitigation for unavoidable impacts to waters of the U.S., including direct, indirect, secondary, and temporal loss, will generally be required for permanent impacts that exceed the thresholds identified in Section V, and may be required for temporary impacts, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no secondary effects may generally be excluded from this requirement.

c. Mitigation proposals shall follow the guidelines found in the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule April 10, 2008; 33 CFR 332. Prospective permittees may purchase mitigation credits in-lieu of permittee-responsible mitigation as compensation for unavoidable impacts to waters of the U.S. in the Commonwealth of Massachusetts.

8. Water Quality & Stormwater Management. The 401 WQC requirement applies to all activities listed under GPs 1-25, unless determined otherwise by MassDEP. Permittees shall also satisfy stormwater management requirements in Massachusetts.

a. General 401 WQC: MassDEP issued a WQC on April 21, 2023 which conditionally certifies all activities in GPs 1 – 24 eligible for SV and PCN so long as the activity is described in 314 CMR 9.03, and is not an activity described in 314 CMR 9.04, and so long as the activity meets all other requirements, terms and conditions of the WQC. The MassDEP WQC also conditionally certifies activities described in GP 25 so long as the activity meets all other conditions of the WQC.

Emergency projects described in GP 25 must obtain an emergency certification or otherwise be authorized pursuant to 310 CMR 10.06, qualify under a Severe Weather Emergency Declaration pursuant to 310 CMR 10.06(8) issued by the MassDEP, or meet the requirements of 9.12(2) or (3) in order to be certified under the WQC. Prospective permittees may refer to the following link to determine if their activity is eligible: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>. The General 401 WQC is located here, and it provides detailed information regarding what activities are certified and the conditions for certification. Activities listed in 314 CMR 9.03 that are not exempt from the Wetland Protection Act must have a valid Final Order of Conditions (OOC) or Final Restoration Order of Conditions pursuant to 310 CMR 10.00 to be eligible under the General 401 WQC.

b. Individual 401 WQC: Prospective permittees shall contact MassDEP and apply for an individual 401 WQC if their activity does not qualify for a General 401 WQC as outlined above. MassDEP may issue, waive, or deny the individual 401 WQC on a case-by-case basis. All activities listed in 314 CMR 9.04 must obtain an individual 401 WQC from MassDEP to be eligible under these GPs. When an Individual 401 WQC is required for *PCN activities*, the prospective permittee shall submit their Individual 401 WQC application concurrently to MassDEP and USACE to comply with 40 CFR 121.

c. The prospective permittee is responsible for determining the appropriate 401 WQC requirement and submitting this information to the USACE at the time of their PCN application or when completing their SVN. Prospective permittees that are unsure of whether their activity has been certified should contact MassDEP for a determination.

d. As applicable, all activities shall be compliant with the Massachusetts Stormwater Handbook. The Stormwater Handbook can be accessed on the NAE Regulatory website here: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>.

e. No work requiring authorization under Section 404 of the CWA may be performed unless (1) the prospective permittee qualifies for coverage under the April 21, 2023 General 401 WQC, (2) the prospective permittee receives an individual Section 401 WQC from the MassDEP, or (3) the MassDEP waives individual Section 401 WQC.

9. Coastal Zone Management. The permittee must obtain CZM consistency concurrence when an activity is located in the coastal zone in order to be eligible under the MA GP. This requirement

shall be satisfied by acquiring one of the following from the Massachusetts Office of Coastal Zone Management (MA CZM):

- a. General CZM Federal Consistency Concurrence (General Concurrence): MA CZM has granted General Concurrence for all SV and PCN activities for GPs 1-25. The prospective permittee must obtain all applicable permits and approvals before construction of the authorized activity begins (e.g., before work begins on site). For SVs, General Concurrence is automatically granted and no further action is required from the prospective permittee. For PCNs, the USACE will coordinate with MA CZM to acquire General Concurrence as part of the PCN application review.
- b. Individual CZM Federal Consistency Concurrence (Individual Concurrence): In certain cases, MA CZM may elevate any GP activity 1-25 and require Individual Concurrence. The prospective permittee must contact MA CZM and follow the procedures to obtain Individual Concurrence as determined appropriate by MA CZM.
- c. Permittees must obtain CZM consistency concurrence as outlined above before commencing work authorized under these GPs.

10. Federal Threatened and Endangered Species

- a. No activity is authorized under any GP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any GP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”
- b. Other Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If a PCN is required for the proposed activity, the Federal permittee must provide USACE with the appropriate documentation to demonstrate compliance with those requirements. The USACE will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.
- c. USFWS ESA-Listed Species: Non-federal applicants shall use the USFWS website, Information for Planning and Consultation (IPAC), to determine if their activity is located within the ESA-listed species range. The IPAC website can be accessed on the NAE Regulatory website: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>. Applicants shall ensure they have an updated, valid species list before construction begins. This may require applicants to update their species list in IPAC before the start of construction. Note: Applicants should refer to the NAE Regulatory Website at the link above to determine if they have been designated as a non-federal representative. Applicants shall complete Section 7 consultation according to the guidance document located on the NAE Regulatory Website. After completing the Rangewide Determination Key and reaching the outcome “may affect, not likely to adversely affect”, you may be required to wait up to 15 days before that outcome is final and compliance under Section 7 of the ESA is fulfilled.
 - i. Self-Verification Criteria: The activity is SV-eligible if:
 - 1) The activity is not located within the ESA-listed species range;
 - 2) Another (lead) Federal agency has completed Section 7 consultation; or
 - 3) The activity is located within the ESA-listed species range and USACE has designated the applicant as a non-federal representative under 50 CFR 402.08 of the ESA for all

species within the project's action area. As the non-federal representative, the applicant shall complete consultation through IPAC and reach the outcome of "no effect" or "not likely to adversely affect".

ii. *Pre-Construction Notification Criteria*: The activity requires a PCN if:

- 1) The activity is located within the ESA-listed species range and USACE has NOT designated the applicant as a non-federal representative under 50 CFR 402.08 of the ESA for all species within the project's action area;
- 2) The activity is located in designated or proposed critical habitat; or
- 3) The activity is located within the ESA-listed species range and completion of the IPAC determination key has resulted in the outcome of "may affect" or "may affect, likely to adversely affect"; or
- 4) A PCN is required elsewhere in this document.

d. **NOAA-Listed Species**: Non-federal applicants shall refer to the Section 7 Mapper for federally listed species to determine if any species are mapped as present. When NOAA-listed species are present, the applicant shall generate a species report through the mapper and submit this document as part of their PCN or SVN submission. The NOAA Fisheries' Section 7 Mapper can be accessed here on the NAE Regulatory website here: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>.

e. Authorization of an activity by an GP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

11. Essential Fish Habitat (EFH).

a. SV eligible activities have been determined to result in no more than minimal adverse effects, provided the permittee complies with all terms and conditions of the MA GP as applicable to the activity. NMFS has granted General Concurrence [50 CFR 600.920(g)] for all SV eligible activities. These activities do not require project specific EFH consultation.

b. For PCN required activities, the applicant is required to describe and identify potential adverse effects to EFH and should refer to NOAA Fisheries' EFH Mapper (<http://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper>) and Omnibus Essential Fish Habitat Amendment 2 Volume 2: EFH and HAPC Designation Alternatives and Environmental Impacts (https://www.habitat.noaa.gov/application/efhmapper/oa2_efh_hapc.pdf). If an activity is located within EFH, the PCN application must contain:

1. A description of the action located in EFH.
2. An analysis of the potential adverse effects of the action on EFH and the managed Species.
3. Conclusions regarding the effects of the action on EFH.
4. Proposed mitigation, if applicable (refer to the mitigation thresholds located in Section V).

c. Federal agencies shall follow their own procedures for complying with the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act. For activities requiring a PCN, the applicant is responsible for furnishing documentation that demonstrates consultation for EFH has been completed.

d. For PCN activities, no work may commence until EFH consultation as required by the Magnuson-Stevens Act has been completed.

12. National Lands. Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Marine Sanctuary, National Historic Landmarks or any other area administered by the National Park Service, U. S. Fish and Wildlife Service (USFWS) or U.S. Forest Service (USFS) require a PCN or Individual Permit. Federal land managers seeking authorization for activities located in the above listed National Lands may proceed under SV, unless a PCN is required elsewhere in this document.

13. Wild and Scenic Rivers. The following activities in designated river or study river segments in the National Wild and Scenic River (WSR) System require a PCN unless the Federal agency with direct management responsibility for such river, in Massachusetts this is generally the National Park Service, has determined in writing to the proponent that the proposed work will not adversely affect the WSR designation or study status:

- a. Activities that occur in WSR segments, in and 0.25 miles up or downstream of WSR segments, or in tributaries within 0.25 miles of WSR segments;
- b. Activities that occur in wetlands within 0.25 miles of WSR segments;
- c. Activities that have the potential to alter free-flowing characteristics in WSR segments.

No GP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

As of May 10, 2023, affected rivers in Massachusetts include: the Taunton River (40 miles), Sudbury River (16.6 miles), Assabet River (4.4 miles), Concord River (8 miles), Nashua River (27 miles), Squannacook River (16.3 miles), Nissitissit River (4.7 miles), and the Westfield River, including West Branch, Middle Branch, Gendale Brook, East Branch, Drowned Land Brook, Center Brook, Windsor Jambs Brook, Shaker Mill Brook, Depot Brook, Savery Brook, Watson Brook, Center Pond Brook (78.1 miles). The most up to date list of designated and study rivers and their descriptions may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

14. Historic Properties

- a. For all SV and PCN applications, permittees shall follow the guidance set forth in Appendix A, Guidance for NHPA Section 106 Compliance in Massachusetts.
- b. No undertaking authorized by these GPs shall cause effects¹ (defined in 36 CFR Part 800 and 33 CFR Part 325, Appendix C, and its Interim Guidance) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places (NRHP)², including previously unknown historic properties within the permit area, unless the USACE or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (Section 106). If another Federal agency is determined the lead federal agency for compliance with Section 106, applicant must obtain the appropriate documentation and provide this information to the USACE to demonstrate compliance with Section 106. The applicant shall not begin the activity until the USACE notifies them in writing that the documentation provided satisfies Section 106 requirements.

¹ Effect means the alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register of Historic Properties.

² See the NAE Regulatory website, National Register of Historic Places link here: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>.

- c. Many historic properties are not listed on the NRHP and may require identification and evaluation by qualified historic preservation and/or archaeological consultants. The State Historic Preservation Officer (SHPO), Massachusetts Board of Underwater Archaeological Resources (BUAR), local historical societies, certified local governments, general public, and NRHP may also be able to assist with locating information on:
- i. Previously identified historic properties; and
 - ii. Areas with potential for the presence of historic properties.
- d. Discovery of Previously Unknown Remains and Artifacts: If any previously unidentified human remains, cultural deposits, or artifacts are discovered while accomplishing the activity authorized by this permit, you must immediately notify the USACE of what you have found, and to the maximum extent practicable, cease work and avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The USACE will initiate the Federal, State and tribal coordination required to determine if the items or remains warrant a recovery effort and/or if the site is eligible for listing in the National Register of Historic Places.
- e. Section 110k: Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. § 306113) prevents the USACE from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106, has intentionally significantly adversely effected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the USACE, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the USACE is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties effected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or effects historic properties on tribal lands or effects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- f. Underwater Archaeological Resources: Under Massachusetts General Law Ch. 6, s.'s 179-180, and Ch. 91, s. 63, the BUAR has statutory jurisdiction within state waters and is the sole trustee of the Commonwealth's underwater heritage, charged with the responsibility of encouraging the discovery and reporting, as well as the preservation and protection, of underwater archaeological resources. Underwater archaeological resources located within the waters of the Commonwealth of Massachusetts are property of the Commonwealth, which holds title to these resources and retains regulatory authority over their use. Under Massachusetts General Law, no person, organization or corporation may "remove, displace, damage, or destroy" any underwater archaeological resources located within the Commonwealth's submerged lands except through consultation with the BUAR and in conformity with the permits it issues. <https://www.mass.gov/orgs/board-of-underwater-archaeological-resources>.

15. USACE Property and Federal Projects. (33 USC §408)

- a. USACE projects and property can be found at: <https://www.nae.usace.army.mil/Missions/Civil-Works/>.
- b. In addition to any authorization under these GPs, prospective permittee shall contact the USACE Real Estate Division (<https://www.nae.usace.army.mil/Missions/Real-Estate-Division/>) at (978) 318-8585 for work occurring on or potentially affecting USACE properties and/or USACE-controlled easements. Work may not commence on USACE properties and/or USACE-controlled easements until they have received any required USACE real estate documents evidencing site-specific permission to work.
- c. Any proposed temporary or permanent occupation or alteration of a Federal project (including, but not limited to, a levee, dike, floodwall, channel, anchorage, breakwater, seawall, bulkhead, jetty, wharf, pier, or other work built or maintained but not necessarily owned by the United States),

is not eligible for SV and requires a PCN. This includes all proposed structures and work in, over, or under a USACE federal navigation project (FNP) or in the FNP's buffer zone. The buffer zone is an area that extends from the horizontal limits of the FNP to a distance of three times the FNP's authorized depth. The activity also requires review and approval by the USACE pursuant to 33 USC 408 (Section 408 Permission). The prospective permittee may reach out to the POCs located here: <https://www.nae.usace.army.mil/Missions/Section-408/>.

d. Any structure or work constructed in a FNP or its buffer zone shall be subject to removal at the owner's expense prior to any future USACE dredging or the performance of periodic hydrographic surveys.

e. Where a Section 408 permission is required, written verification for the PCN will not be issued prior to the decision on the Section 408 permission request.

16. Navigation

a. No activity may cause more than a minimal adverse effect on navigation.

b. Any safety lights and signals prescribed by the U.S. Coast Guard, must be installed, and maintained at the permittee's expense on authorized facilities in navigable waters of the U.S.

c. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.

d. The permittee understands and agrees that if future U.S. operations require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

17. Permit/Authorization Letter On-Site. For PCNs, the permittee shall ensure that a copy of these GPs and the accompanying authorization letter are at the work site (and the project office) whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and sub-contracts for work that affects areas of USACE jurisdiction at the site of the work authorized by these GPs. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means these GPs, including GCs and the authorization letter (including its drawings, plans, appendices, special conditions, and other attachments), and any permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or sub-contract as a change order. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire authorization letter, and no contract or sub-contract shall require or allow unauthorized work in areas of USACE jurisdiction. For SVs, the permittee shall ensure that a complete and signed copy of the SVN is present on site during construction and is made available for review at any time by USACE and other Federal, State, & Local regulatory agencies. A complete and signed copy of the SVN must be submitted to USACE Regulatory within 30 days of initiating construction of the authorized activity, unless stated otherwise in the applicable GP.

18. Storage of Seasonal Structures. Coastal structures such as pier sections, floats, etc., that

are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location, located above MHW and not in tidal wetlands. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate and the substrate seaward of MHW.

19. Pile Driving and Pile Removal in Navigable Waters.

- a. Derelict, degraded or abandoned piles and sheet piles in navigable waters of the U.S., except for those inside existing work footprints for piers, must be completely removed, cut and/or driven to 3 feet below the substrate to prevent interference with navigation, and existing creosote piles that are affected by project activities shall be completely removed if practicable. In areas of fine-grained substrates, piles must be removed by the direct, vibratory or clamshell pull method¹ to minimize sedimentation and turbidity impacts and prevent interference with navigation from cut piles. Removed piles shall be disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands or mudflats.
- b. A PCN is required for the installation or removal of structures with jetting techniques.
- c. A PCN is required for the installation of >12 inch-diameter piles of any material type or steel piles of any size in tidal waters, unless they are installed in the dry. If piles are not installed in the dry:
 - i. Impact pile driving shall commence with an initial set of three strikes by the hammer at 40% energy, followed by a one-minute wait period, then two subsequent 3-strike sets at 40% energy, with one minute waiting periods, before initiating continuous impact driving.
 - ii. Vibratory pile driving shall be initiated for 15 seconds at reduced energy followed by a one-minute waiting period. This sequence of 15 seconds of reduced energy driving, one-minute waiting period shall be repeated two more times, followed immediately by pile-driving at full rate and energy.
 - iii. In addition to using a soft start at the beginning of the workday for pile driving as described in 19c(i-ii), a soft start must also be used at any time following a cessation of pile driving for a period of 30 minutes or longer.
- d. Bubble curtains may be used to reduce sound pressure levels during vibratory or impact hammer pile driving.

20. Time-of-Year (TOY) Restrictions. Activities that include in-water work must comply with the TOY Restrictions below to be SV eligible, otherwise a PCN is required. PCN submittals shall contain written justification for deviation from the TOY Restrictions. The term “in-water work” does not include conditions where the work site is “in-the-dry” (e.g., intertidal areas exposed at low tide). The term “in-the-dry” includes work contained within a cofferdam so long as the cofferdam is installed and subsequently removed outside the TOY Restriction. The TOY restrictions stated in Appendix B of the MA DMF Technical Report TR-47² can apply instead for activities in tidal waters if (1) TOYs are provided for a specific waterbody where the activity is proposed and (2) the TOYs are less restrictive than below. The activity must also not require a PCN elsewhere in this document to be SV eligible.

¹ Direct Pull: Each piling is wrapped with a choker cable or chain that is attached at the top to a crane. The crane then pulls the piling directly upward, removing the piling from the sediment. Vibratory Pull: The vibratory hammer is a large mechanical device (5-16 tons) that is suspended from a crane by a cable. The vibrating hammer loosens the piling while the crane pulls up. Clamshell Pull: This can remove intact, broken or damaged pilings. The clamshell bucket is a hinged steel apparatus that operates like a set of steel jaws. The bucket is lowered from a crane and the jaws grasp the piling stub as the crane pulls up. The size of the clamshell bucket is minimized to reduce turbidity during piling removal.

² The MA DMF Technical Report TR-47: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>

TOY Restriction (No work)

Non-tidal Waters

Defer to TR-47

Tidal Waters

January 15 – November 15

Alternate work windows proposed under a PCN will generally be coordinated with the USFWS and NMFS. Resulting written verifications may include species-specific work allowed windows.

21. Heavy Equipment in Wetlands. Operating heavy equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and such equipment shall not be stored, maintained, or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall:

- i. Have low ground pressure (typically ≤ 3 psi);
- ii. Be placed on swamp/construction/timber mats (herein referred to as “construction mats” or “mats”) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. See GC 22 for information on the placement of construction mats; or
- iii. Be operated on adequately dry or frozen wetlands such that shear pressure does not cause subsidence of the wetlands immediately beneath the equipment and upheaval of adjacent wetlands. Construction mats are to be placed in the wetland from the upland or from equipment positioned on mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written USACE authorization.

22. Temporary Fill, Work & Construction Mats.

a. Construction mats in non-tidal waters: Temporary construction mats shall be in place ≤ 1 year and for one growing season or less to be SV eligible. A PCN is required if construction mats are in place > 1 year or for more than one growing season. Construction mats can be placed in an area of any size in non-tidal waters. The activity may occur in segments to ensure the requirements for SV above are met, otherwise a PCN is required.

b. Construction mats in tidal waters: Temporary construction mats placed in an area $< 5,000$ SF in tidal waters are SV eligible, provided those mats are in place ≤ 6 months. Temporary construction mats placed in an area $\geq 5,000$ SF or in place > 6 months in tidal waters require a PCN.

c. Management of construction mats: At a minimum, construction mats shall be managed in accordance with the following construction mat best management practices (BMPs):

1. Mats shall be in good condition to ensure proper installation, use, and removal.
2. As feasible, mats shall be placed in a location that will minimize the amount of mats needed for the wetland crossing(s).
3. Inspect mats prior to their re-use and remove any plant debris. Mats are to be thoroughly cleaned before re-use to prevent the spread of invasive plant species.
4. Impacts to wetland areas shall be minimized during installation, use, and removal of the mats.
5. Adequate erosion & sediment controls shall be installed at approaches to mats to promote a smooth transition to, and minimize sediment tracking onto, the mats.
6. In most cases, mats should be placed along the travel area so that the individual boards are resting perpendicular to the direction of traffic. No gaps should exist between mats. Place mats far enough on either side of the resource area to rest on firm ground.

d. A PCN is required for temporary fills in place > 2 years. All temporary fills and disturbed soils shall be stabilized to prevent the material from eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.

- e. Activities that require unconfined temporary fill and are authorized for discharge into waters of the U.S. shall consist of material that minimizes effects to water quality.
- f. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Materials shall be placed in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.
- g. Construction debris and deteriorated materials shall not be located in waters of the U.S.
- h. Temporary fills, construction mats, and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized activity and the disturbed areas be restored to pre-construction contours and conditions.
- i. Construction equipment, such as temporary barges in tidal waters, shall provide clearance above the substrate to avoid grounding onto the substrate during all tides.

23. Restoration of Wetland Areas.

- a. Upon completion of construction, all disturbed wetland areas shall be stabilized with a wetland seed mix or plant plugs containing only plant species native to New England, and be appropriate for site conditions, including salinity and frequency of inundation, and shall not contain any species listed in the "Invasive and Other Unacceptable Plant Species" Appendix K of the New England District "Compensatory Mitigation Standard Operating Procedures" found at <https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation.aspx>.
- b. The introduction or spread of invasive plant species in disturbed areas shall be prevented and controlled. Equipment shall be thoroughly cleaned before and after project construction to prevent the spread of invasive species. This includes, but is not limited to, tire treads and construction mats.
- c. In areas of authorized temporary disturbance, if trees are cut in USACE jurisdiction, they shall be cut at or above ground level and not uprooted in order to prevent disruption of any kind to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.
- d. Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.

24. Bank Stabilization.

- a. Projects involving construction or reconstruction/maintenance of bank stabilization within USACE jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, conversion of natural shoreline to hard armoring, etc. to the maximum extent practicable.
- b. Projects involving the construction of new bank stabilization within USACE jurisdiction shall use bioengineering techniques and natural materials in the project design to the maximum extent practicable. Use of hard structures shall be eliminated or minimized unless the prospective permittee can demonstrate that use of bioengineering techniques is not practicable due to site conditions.
- c. Where possible, bank stabilization projects shall optimize the natural function of the shoreline, including self-sustaining stability to attenuate flood flows, fishery, wildlife habitat and water quality protection, while protecting upland infrastructure from storm events that can cause erosion as well as impacts to public and private property.
- d. No material shall be placed in excess of the minimum needed for erosion protection.
- e. No material shall be placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas).

- f. Native plants appropriate for current site conditions, including salinity, must be used for bioengineering or vegetative bank stabilization.
- g. The activity must be properly maintained, which may require repairing it after severe storms or erosion events.

25. Soil Erosion and Sediment Controls.

- a. Appropriate soil erosion and sediment controls¹ (hereinafter referred to as “controls”) must be installed prior to earth disturbance and maintained in effective operating condition during construction. Biodegradable wildlife friendly erosion controls should be used whenever practicable to minimize effects to water quality.
- b. Activities in streams (rivers, streams, brooks, etc.) and tidal waters that are capable of producing sedimentation or turbidity should be done during periods of low-flow or no-flow, when the stream or tide is waterward of the work area. Controls may also be used to obtain dry work conditions (e.g., coffer dam, turbidity curtain). The prospective permittee must demonstrate in the project plans where the controls are proposed and how these controls would avoid and/or minimize turbidity or sedimentation.
- c. A PCN is required for controls that encroach: i) >25% of the stream width measured from OHW in non-tidal diadromous streams from March 15 to June 30; or ii) >25% of the waterway width measured from MHW in tidal waters from Feb. 1 to June 30, or >50% of the waterway width measured from MHW in tidal waters from July 1 to Jan. 14. This is to protect upstream fish passage. Proponents must also maintain downstream fish passage throughout the project.
- d. No dewatering shall occur with direct discharge to waters or wetlands. Excess water in isolated work areas shall be pumped or directed to a sedimentation basin, tank or other dewatering structures in an upland area adequately separated from waters or wetlands. Suspended solids shall be removed prior to discharge back into waters or wetlands from these dewatering structures. All discharge points back into waters and wetlands shall use appropriate energy dissipaters and erosion and sedimentation control BMPs.
- e. Temporary controls shall be removed upon completion of work, but not until all exposed soil and other fills, as well as any work waterward of OHW or the HTL, are permanently stabilized at the earliest practicable date. Sediment and debris collected by these devices shall be removed and placed at an upland location in a manner that will prevent its later erosion into a waterway or wetland. Controls may be left in place if they are biodegradable and flows and aquatic life movements are not disrupted.

26. Aquatic Life Movements and Management of Water Flows.

- a. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water. All permanent and temporary crossings of waterbodies and wetlands shall be:
 - i. Suitably spanned, bridged, culverted, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and
 - ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the crossing.

¹ Appropriate soil erosion, sediment and turbidity controls include cofferdams, bypass pumping around barriers immediately up and downstream of the work footprint (i.e., dam and pump), installation of sediment control barriers (i.e., silt fence, vegetated filter strips, geotextile silt fences, filter tubes, erosion control mixes, hay bales or other devices) downhill of all exposed areas, stream fords, retention of existing vegetated buffers, application of temporary mulching during construction, phased construction, and permanent seeding and stabilization, etc.

- b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when necessary to perform the authorized work.
- c. For work in tidal waters, in-stream controls (e.g., cofferdams) should be installed in such a way as to not obstruct fish passage.
- d. Riprap and other stream bed materials shall be installed in a manner that avoids organism entrapment in rock voids or water displaced to subterranean flow with crushed stone and riprap.
- e. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity shall not restrict or impede the passage of normal or high flows unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

27. Spawning, Breeding, and Migratory Areas.

- a. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized under these GPs.
- b. Activities in waters of the U.S. that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- c. The applicant is responsible for obtaining any “take” permits required under the USFWS’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The applicant should contact the appropriate local office of the USFWS to determine if such “take” permits are required for a particular activity.
- d. Information on spawning habitat for species managed under the Magnuson-Stevens Fishery Conservation and Management Act (i.e., EFH for spawning adults) can be obtained from NAE Regulatory website, Essential Fish Habitat section, at: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>.
- e. Information regarding diadromous fish habitat can be obtained from the following DMF website at: <https://www.mass.gov/info-details/massgis-data-diadromous-fish>.

28. Vernal Pools.

- a. A PCN is required if a discharge of dredged or fill material is proposed within a vernal pool depression that is also a water of the U.S.
- b. Vernal pools must be identified on the plans that show aquatic resource delineations.
- c. Adverse impacts to vernal pools shall be avoided & minimized to the maximum extent practicable.

29. Invasive Species.

- a. The introduction, spread or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work shall be avoided. Construction mats shall be thoroughly cleaned before reuse to avoid spread of invasive species.
- b. Unless otherwise directed by USACE, all applications for PCN non-tidal projects proposing fill in USACE jurisdiction shall include an Invasive Species Control Plan. Additional information can be found at: <https://www.nae.usace.army.mil/Missions/Regulatory/Invasive-Species/>, <https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/>.

30. Fills Within 100-Year Floodplains. The activity shall comply with applicable Federal Emergency Management Agency (FEMA) approved, Massachusetts Emergency Management

Agency (MEMA) approved and/or local floodplain management requirements. Applicants should contact FEMA and/or MEMA regarding floodplain management requirements.

31. Stream Work and Crossings & Wetland Crossings.

- a. When feasible, all temporary and permanent crossings of waterbodies and wetlands (hereinafter referred to as “crossings”) shall conform to the “Massachusetts River and Stream Crossing Standards” located at: <https://www.mass.gov/doc/massachusetts-river-and-stream-crossing-standards/download> or <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Massachusetts-General-Permit/>. Projects that do not conform to these guidelines shall be reviewed under PCN or IP procedures.
- b. Crossings shall be suitably culverted, bridged, or otherwise designed to withstand and to prevent the restriction of high flows, to maintain existing low flows, maintain water quality, and not obstruct the movement of aquatic life indigenous to the waterbody beyond the duration of construction.
- c. Crossings shall be installed in such a manner as to preserve hydraulic capacity and flow, sediment transport, and organism passage at its present level, between the wetlands on either side of the road. The applicant shall take necessary measures to correct any wetland damage resulting from deficiencies in hydraulic capacity, sediment transport and organism passage.
- d. Stream crossings shall utilize a natural mixed grain-size streambed material composition that matches upstream and downstream substrates to create a stable streambed. Substrate should function appropriately during normal and high flows without washing out. If natural streambed material is not utilized, a PCN is required.
- e. Activities involving open trench excavation in flowing waters require a PCN. Work should not occur in flowing waters (requires using management techniques such as temporary flume pipes, culverts, cofferdams, etc.). Normal flows should be maintained within the stream boundary’s confines when practicable. Projects utilizing these management techniques must meet all applicable terms and conditions of the GP, including the GCs in Section IV.

32. Utility Line Installation and Removal

- a. Subsurface utility lines must be installed at a sufficient depth to avoid damage from anchors, dredging, etc., and to prevent exposure from erosion and stream adjustment.
- b. When utility lines are installed via horizontal directional drilling, a frac-out contingency plan shall be present on site for the duration of construction. As necessary, the applicant shall immediately contain, control, recover, and remove drilling fluids released into the environment.
- c. Abandoned or inactive utility lines must be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) must be removed or repaired. A written verification from the USACE is required if they are to remain in place, e.g., to protect sensitive areas or ensure safety.
- d. Utility lines shall not adversely alter existing hydrology, and trenches cannot be constructed or backfilled in such a manner as to drain waters of the U.S. (e.g., backfilling with extensive gravel layers, creating a French drain effect). In wetland areas, structures such as ditch plugs, cut-off walls, clay blocks, bentonite, or other suitable material shall be used within utility trenches to ensure that the trench through which the utility line is installed does not drain waters of the U.S. including wetlands.
- e. Stockpiling of tree debris, to the extent where it has the effect of fill material, shall not occur in waters of the U.S. Tree debris shall be removed from waters of the U.S. and placed in uplands without causing additional disturbance to aquatic resources. Failure to meet this condition could change the bottom elevation of the wetland and be considered a discharge of fill material, and depending on the area of alteration, may require a PCN or IP.

33. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

34. Coral Reefs. Impacts to coral reefs are not authorized under these GPs. Coral reefs consist of the skeletal deposit, usually of calcareous or siliceous materials, produced by the vital activities of anthozoan polyps or other invertebrate organisms present in growing portions of the reef.

35. Blasting. Blasting in waters of the U.S. associated with work such as dredging, trenching, pile installation, etc. is not authorized under these GPs.

36. Inspections. The permittee shall allow USACE to make periodic inspections at any time deemed necessary to ensure that the work is being or has been performed in accordance with the terms and conditions of this permit. To facilitate these inspections, for activities requiring a PCN, the permittee shall complete and return the Certificate of Compliance when it is provided with a PCN verification letter. For SV-eligible activities, the permittee shall complete and submit the SVN to USACE within 30 days of initiating project construction, at which point, USACE may opt to inspect the activity to verify compliance with the terms and conditions of the GP. Post-construction engineering drawings may be required by USACE for completed work. This includes post-dredging survey drawings for any dredging work.

37. Maintenance. The permittee shall maintain the activity authorized by these GPs in good condition and in conformance with the terms and conditions of this permit. Some maintenance activities may not be subject to federal regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). This condition is not applicable to maintenance of dredging projects. Prospective permittees should contact USACE to inquire about maintenance of dredging projects, and its eligibility under these GPs. Maintenance dredging is subject to the review thresholds in GP #7 as well as any conditions included in a written USACE authorization. Maintenance dredging includes only those areas and depths previously authorized and dredged.

38. Property Rights. Per 33 CFR 320.4(g)(6), these GPs do not convey any property rights, either in real estate or material, or any exclusive privileges, nor do they authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

39. Transfer of GP Verifications. When the work authorized by these GPs is still in existence at the time the property is transferred, the terms and conditions of these GPs, including any special conditions, will continue to be binding on the entity or individual who received the GP authorizations, as well as the new owner(s) of the property. If the permittee sells the property associated with a GP authorization, the applicant may transfer the GP authorization to the new owner by submitting a letter to USACE to validate the transfer. A copy of the GP authorization letter must be attached to the letter, and the letter must include the following statement: "The terms and conditions of these general permits, including any special conditions, will continue to be binding on the new owner(s) of the property." This letter shall be signed by both the seller and new property owner(s).

40. Modification, Suspension, and Revocation. These GPs and any individual authorization issued thereof may be either modified, suspended, or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7; and any such action shall not be the basis for any claim for damages against the U.S.

41. Special Conditions. The USACE may impose other special conditions on a project authorized pursuant to these GPs that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization, including special conditions, constitutes a permit violation and may subject the applicant to criminal, civil, or administrative penalties or restoration.

42. False or Incomplete Information. If USACE makes a determination regarding the eligibility of a project under these GPs, and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the applicant, the authorization will not be valid, and the U.S. Government may institute appropriate legal proceedings.

43. Abandonment. If the permittee decides to abandon the activity authorized under these GPs, unless such abandonment is merely the transfer of property to a third party, he/she/they may be required to restore the area to the satisfaction of USACE.

44. Enforcement cases. These GPs do not apply to any existing or proposed activity in USACE jurisdiction associated with an on-going USACE or EPA enforcement action, until such time as the enforcement action is resolved or USACE or EPA determines that the activity may proceed independently without compromising the enforcement action.

45. Previously Authorized Activities.

a. Completed projects that received prior authorization from USACE (SV or PCN), shall remain authorized in accordance with the original terms and conditions of those authorizations, including their terms, GCs, and any special conditions provided in a written verification.

b. Activities authorized pursuant to 33 CFR 330.3 (activities occurring before certain dates) are not affected by these GPs.

46. Duration of Authorization.

These GPs expire on June 1, 2028. Activities authorized under these GPs will remain authorized until the GPs expire, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 325.2(e)(2). Activities authorized under GPs 1-25 that have either commenced (i.e., are under construction) or are under contract to commence in reliance upon this authorization will have until June 1, 2029 to complete the work. If requested by USACE, the permittee shall furnish documentation that demonstrates the project was under construction or under contract to commence by June 1, 2028. If work is not completed before June 1, 2029, the permittee must contact USACE. The USACE may issue a new authorization provided the project meets the terms and conditions of the MA GPs in effect at the time. Activities completed under the SV or PCN authorizations of these GPs will continue to be authorized after their expiration date.



MAURA HEALEY
Governor

KIM DRISCOLL
Lt. Governor

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

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: Town of Duxbury
Contract Number: **City/Town:** DUXBURY
Description of Work: Construction/replacement of 2,860 l.f. of concrete seawall, including steel sheeting and concrete footing; reconstruction of 835 l.f. of stone revetment and removal of about 360 l.f. stone revetment.
Job Location: Ocean Road South to Bay Avenue

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 annual update requirement is not applicable to 27F "rental of equipment" contracts. **The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.**
- 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.

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Construction						
(2 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2024	\$39.95	\$15.07	\$18.67	\$0.00	\$73.69
	12/01/2024	\$39.95	\$15.07	\$20.17	\$0.00	\$75.19
	01/01/2025	\$39.95	\$15.57	\$20.17	\$0.00	\$75.69
	06/01/2025	\$40.95	\$15.57	\$20.17	\$0.00	\$76.69
	12/01/2025	\$40.95	\$15.57	\$21.78	\$0.00	\$78.30
	01/01/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$78.90
	06/01/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$79.90
	12/01/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$81.64
	01/01/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2024	\$40.02	\$15.07	\$18.67	\$0.00	\$73.76
	12/01/2024	\$40.02	\$15.07	\$20.17	\$0.00	\$75.26
	01/01/2025	\$40.02	\$15.57	\$20.17	\$0.00	\$75.76
	06/01/2025	\$41.02	\$15.57	\$20.17	\$0.00	\$76.76
	12/01/2025	\$41.02	\$15.57	\$21.78	\$0.00	\$78.37
	01/01/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$78.97
	06/01/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$79.97
	12/01/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$81.71
	01/01/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2024	\$40.14	\$15.07	\$18.67	\$0.00	\$73.88
	12/01/2024	\$40.14	\$15.07	\$20.17	\$0.00	\$75.38
	01/01/2025	\$40.14	\$15.57	\$20.17	\$0.00	\$75.88
	06/01/2025	\$41.14	\$15.57	\$20.17	\$0.00	\$76.88
	12/01/2025	\$41.14	\$15.57	\$21.78	\$0.00	\$78.49
	01/01/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$79.09
	06/01/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$80.09
	12/01/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$81.83
	01/01/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
AIR TRACK OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$39.28	\$9.65	\$17.80	\$0.00	\$66.73
	12/01/2024	\$40.61	\$9.65	\$17.80	\$0.00	\$68.06
	06/01/2025	\$42.00	\$9.65	\$17.80	\$0.00	\$69.45
	12/01/2025	\$43.38	\$9.65	\$17.80	\$0.00	\$70.83
	06/01/2026	\$44.82	\$9.65	\$17.80	\$0.00	\$72.27
	12/01/2026	\$46.26	\$9.65	\$17.80	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	06/01/2024	\$41.80	\$14.50	\$11.05	\$0.00	\$67.35
	12/01/2024	\$42.80	\$14.50	\$11.05	\$0.00	\$68.35
	06/01/2025	\$43.80	\$14.50	\$11.05	\$0.00	\$69.35
	12/01/2025	\$44.80	\$14.50	\$11.05	\$0.00	\$70.35

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
ASPHALT RAKER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
ASPHALT RAKER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$56.03	\$15.30	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.48	\$15.30	\$16.40	\$0.00	\$89.18
	06/01/2025	\$58.78	\$15.30	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.23	\$15.30	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.53	\$15.30	\$16.40	\$0.00	\$93.23
	12/01/2026	\$62.98	\$15.30	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BACKHOE/FRONT-END LOADER <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$56.03	\$15.30	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.48	\$15.30	\$16.40	\$0.00	\$89.18
	06/01/2025	\$58.78	\$15.30	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.23	\$15.30	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.53	\$15.30	\$16.40	\$0.00	\$93.23
	12/01/2026	\$62.98	\$15.30	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$39.28	\$9.65	\$17.80	\$0.00	\$66.73
	12/01/2024	\$40.61	\$9.65	\$17.80	\$0.00	\$68.06
	06/01/2025	\$42.00	\$9.65	\$17.80	\$0.00	\$69.45
	12/01/2025	\$43.38	\$9.65	\$17.80	\$0.00	\$70.83
	06/01/2026	\$44.82	\$9.65	\$17.80	\$0.00	\$72.27
	12/01/2026	\$46.26	\$9.65	\$17.80	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
BOILER MAKER <i>BOILERMAKERS LOCAL 29</i>	01/01/2024	\$48.12	\$7.07	\$20.60	\$0.00	\$75.79

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BOILERMAKER - Local 29

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	65	\$31.28	\$7.07	\$13.22	\$0.00	\$51.57
2	65	\$31.28	\$7.07	\$13.22	\$0.00	\$51.57
3	70	\$33.68	\$7.07	\$14.23	\$0.00	\$54.98
4	75	\$36.09	\$7.07	\$15.24	\$0.00	\$58.40
5	80	\$38.50	\$7.07	\$16.25	\$0.00	\$61.82
6	85	\$40.90	\$7.07	\$17.28	\$0.00	\$65.25
7	90	\$43.31	\$7.07	\$18.28	\$0.00	\$68.66
8	95	\$45.71	\$7.07	\$19.32	\$0.00	\$72.10

Notes:

Apprentice to Journeyworker Ratio:1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	02/01/2024	\$62.40	\$11.49	\$23.59	\$0.00	\$97.48
BRICKLAYERS LOCAL 3 (QUINCY)	08/01/2024	\$64.50	\$11.49	\$23.59	\$0.00	\$99.58
	02/01/2025	\$65.80	\$11.49	\$23.59	\$0.00	\$100.88
	08/01/2025	\$67.95	\$11.49	\$23.59	\$0.00	\$103.03
	02/01/2026	\$69.30	\$11.49	\$23.59	\$0.00	\$104.38
	08/01/2026	\$71.50	\$11.49	\$23.59	\$0.00	\$106.58
	02/01/2027	\$72.90	\$11.49	\$23.59	\$0.00	\$107.98

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Quincy

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.20	\$11.49	\$23.59	\$0.00	\$66.28
2	60	\$37.44	\$11.49	\$23.59	\$0.00	\$72.52
3	70	\$43.68	\$11.49	\$23.59	\$0.00	\$78.76
4	80	\$49.92	\$11.49	\$23.59	\$0.00	\$85.00
5	90	\$56.16	\$11.49	\$23.59	\$0.00	\$91.24

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$32.25	\$11.49	\$23.59	\$0.00	\$67.33
2	60	\$38.70	\$11.49	\$23.59	\$0.00	\$73.78
3	70	\$45.15	\$11.49	\$23.59	\$0.00	\$80.23
4	80	\$51.60	\$11.49	\$23.59	\$0.00	\$86.68
5	90	\$58.05	\$11.49	\$23.59	\$0.00	\$93.13

Notes:

Apprentice to Journeyworker Ratio:1:5

BULLDOZER/GRADER/SCRAPER	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
<i>OPERATING ENGINEERS LOCAL 4</i>	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

CAISSON & UNDERPINNING BOTTOM MAN	06/01/2024	\$46.63	\$9.65	\$18.22	\$0.00	\$74.50
<i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2024	\$48.10	\$9.65	\$18.22	\$0.00	\$75.97
	06/01/2025	\$49.60	\$9.65	\$18.22	\$0.00	\$77.47
	12/01/2025	\$51.10	\$9.65	\$18.22	\$0.00	\$78.97
	06/01/2026	\$52.65	\$9.65	\$18.22	\$0.00	\$80.52
	12/01/2026	\$54.15	\$9.65	\$18.22	\$0.00	\$82.02

For apprentice rates see "Apprentice- LABORER"

CAISSON & UNDERPINNING LABORER	06/01/2024	\$45.48	\$9.65	\$18.22	\$0.00	\$73.35
<i>LABORERS - FOUNDATION AND MARINE</i>	12/01/2024	\$46.95	\$9.65	\$18.22	\$0.00	\$74.82
	06/01/2025	\$48.45	\$9.65	\$18.22	\$0.00	\$76.32
	12/01/2025	\$49.95	\$9.65	\$18.22	\$0.00	\$77.82
	06/01/2026	\$51.50	\$9.65	\$18.22	\$0.00	\$79.37
	12/01/2026	\$53.00	\$9.65	\$18.22	\$0.00	\$80.87

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CAISSON & UNDERPINNING TOP MAN <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2024	\$45.81	\$9.65	\$18.22	\$0.00	\$73.68
	12/01/2024	\$47.28	\$9.65	\$18.22	\$0.00	\$75.15
	06/01/2025	\$48.78	\$9.65	\$18.22	\$0.00	\$76.65
	12/01/2025	\$50.28	\$9.65	\$18.22	\$0.00	\$78.15
	06/01/2026	\$51.83	\$9.65	\$18.22	\$0.00	\$79.70
	12/01/2026	\$53.33	\$9.65	\$18.22	\$0.00	\$81.20

For apprentice rates see "Apprentice- LABORER"

CARBIDE CORE DRILL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
---	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

CARPENTER <i>CARPENTERS -ZONE 2 (Eastern Massachusetts)</i>	03/01/2024	\$47.12	\$9.83	\$19.97	\$0.00	\$76.92
	09/01/2024	\$48.37	\$9.83	\$19.97	\$0.00	\$78.17
	03/01/2025	\$49.62	\$9.83	\$19.97	\$0.00	\$79.42
	09/01/2025	\$50.87	\$9.83	\$19.97	\$0.00	\$80.67
	03/01/2026	\$52.12	\$9.83	\$19.97	\$0.00	\$81.92
	09/01/2026	\$53.37	\$9.83	\$19.97	\$0.00	\$83.17
	03/01/2027	\$54.62	\$9.83	\$19.97	\$0.00	\$84.42

Apprentice - CARPENTER - Zone 2 Eastern MA

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$21.20	\$9.83	\$1.73	\$0.00	\$32.76
2	45	\$21.20	\$9.83	\$1.73	\$0.00	\$32.76
3	55	\$25.92	\$9.83	\$3.40	\$0.00	\$39.15
4	55	\$25.92	\$9.83	\$3.40	\$0.00	\$39.15
5	70	\$32.98	\$9.83	\$16.51	\$0.00	\$59.32
6	70	\$32.98	\$9.83	\$16.51	\$0.00	\$59.32
7	80	\$37.70	\$9.83	\$18.24	\$0.00	\$65.77
8	80	\$37.70	\$9.83	\$18.24	\$0.00	\$65.77

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$21.77	\$9.83	\$1.73	\$0.00	\$33.33
2	45	\$21.77	\$9.83	\$1.73	\$0.00	\$33.33
3	55	\$26.60	\$9.83	\$3.40	\$0.00	\$39.83
4	55	\$26.60	\$9.83	\$3.40	\$0.00	\$39.83
5	70	\$33.86	\$9.83	\$16.51	\$0.00	\$60.20
6	70	\$33.86	\$9.83	\$16.51	\$0.00	\$60.20
7	80	\$38.70	\$9.83	\$18.24	\$0.00	\$66.77
8	80	\$38.70	\$9.83	\$18.24	\$0.00	\$66.77

Notes:

Apprentice to Journeyworker Ratio:1:5

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
CARPENTER WOOD FRAME	10/01/2023	\$25.55	\$7.02	\$4.80	\$0.00	\$37.37
CARPENTERS-ZONE 3 (Wood Frame)	10/01/2024	\$26.65	\$7.02	\$4.80	\$0.00	\$38.47
	10/01/2025	\$27.75	\$7.02	\$4.80	\$0.00	\$39.57
	10/01/2026	\$28.85	\$7.02	\$4.80	\$0.00	\$40.67

All Aspects of New Wood Frame Work

Apprentice - CARPENTER (Wood Frame) - Zone 3

Effective Date - 10/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$15.33	\$7.02	\$0.00	\$0.00	\$22.35
2	60	\$15.33	\$7.02	\$0.00	\$0.00	\$22.35
3	65	\$16.61	\$7.02	\$1.00	\$0.00	\$24.63
4	70	\$17.89	\$7.02	\$1.00	\$0.00	\$25.91
5	75	\$19.16	\$7.02	\$4.80	\$0.00	\$30.98
6	80	\$20.44	\$7.02	\$4.80	\$0.00	\$32.26
7	85	\$21.72	\$7.02	\$4.80	\$0.00	\$33.54
8	90	\$23.00	\$7.02	\$4.80	\$0.00	\$34.82

Effective Date - 10/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$15.99	\$7.02	\$0.00	\$0.00	\$23.01
2	60	\$15.99	\$7.02	\$0.00	\$0.00	\$23.01
3	65	\$17.32	\$7.02	\$1.00	\$0.00	\$25.34
4	70	\$18.66	\$7.02	\$1.00	\$0.00	\$26.68
5	75	\$19.99	\$7.02	\$4.80	\$0.00	\$31.81
6	80	\$21.32	\$7.02	\$4.80	\$0.00	\$33.14
7	85	\$22.65	\$7.02	\$4.80	\$0.00	\$34.47
8	90	\$23.99	\$7.02	\$4.80	\$0.00	\$35.81

Notes:

% Indentured After 10/1/17; 45/45/55/55/70/70/80/80
Step 1&2 \$18.52/ 3&4 \$21.07/ 5&6 \$28.70/ 7&8 \$31.26

Apprentice to Journeyworker Ratio:1:5

CEMENT MASONRY/PLASTERING	01/01/2024	\$49.33	\$13.00	\$23.57	\$1.30	\$87.20
BRICKLAYERS LOCAL 3 (QUINCY)						

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - CEMENT MASONRY/PLASTERING - Eastern Mass (Quincy)

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.67	\$13.00	\$15.93	\$0.00	\$53.60
2	60	\$29.60	\$13.00	\$18.57	\$1.30	\$62.47
3	65	\$32.06	\$13.00	\$19.57	\$1.30	\$65.93
4	70	\$34.53	\$13.00	\$20.57	\$1.30	\$69.40
5	75	\$37.00	\$13.00	\$21.57	\$1.30	\$72.87
6	80	\$39.46	\$13.00	\$22.57	\$1.30	\$76.33
7	90	\$44.40	\$13.00	\$23.57	\$1.30	\$82.27

Notes:
Steps 3,4 are 500 hrs. All other steps are 1,000 hrs.

Apprentice to Journeyworker Ratio:1:3

CHAIN SAW OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$57.15	\$15.30	\$16.40	\$0.00	\$88.85
	12/01/2024	\$58.63	\$15.30	\$16.40	\$0.00	\$90.33
	06/01/2025	\$59.96	\$15.30	\$16.40	\$0.00	\$91.66
	12/01/2025	\$61.43	\$15.30	\$16.40	\$0.00	\$93.13
	06/01/2026	\$62.76	\$15.30	\$16.40	\$0.00	\$94.46
	12/01/2026	\$64.24	\$15.30	\$16.40	\$0.00	\$95.94
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
COMPRESSOR OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$36.17	\$15.30	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.12	\$15.30	\$16.40	\$0.00	\$68.82
	06/01/2025	\$37.97	\$15.30	\$16.40	\$0.00	\$69.67
	12/01/2025	\$38.92	\$15.30	\$16.40	\$0.00	\$70.62
	06/01/2026	\$39.78	\$15.30	\$16.40	\$0.00	\$71.48
	12/01/2026	\$40.73	\$15.30	\$16.40	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DELEADER (BRIDGE) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
DIRECTIONAL DRILL MACHINE OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$68.70	\$9.40	\$23.12	\$0.00	\$101.22
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$73.60	\$9.40	\$23.12	\$0.00	\$106.12
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$103.05	\$9.40	\$23.12	\$0.00	\$135.57
For apprentice rates see "Apprentice- PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) <i>DRAWBRIDGE - SEIU LOCAL 888</i>	07/01/2020	\$26.77	\$6.67	\$3.93	\$0.16	\$37.53
ELECTRICIAN <i>ELECTRICIANS LOCAL 223</i>	09/01/2023	\$47.87	\$11.75	\$16.86	\$0.00	\$76.48

Apprentice - ELECTRICIAN - Local 223

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$19.15	\$11.75	\$0.57	\$0.00	\$31.47
2	45	\$21.54	\$11.75	\$0.65	\$0.00	\$33.94
3	50	\$23.94	\$11.75	\$0.72	\$0.00	\$36.41
4	55	\$26.33	\$11.75	\$0.79	\$0.00	\$45.87
5	60	\$28.72	\$11.75	\$0.83	\$0.00	\$48.78
6	65	\$31.12	\$11.75	\$0.85	\$0.00	\$51.52
7	70	\$33.51	\$11.75	\$0.93	\$0.00	\$54.64
8	75	\$35.90	\$11.75	\$0.90	\$0.00	\$57.55

Notes:

Apprentice to Journeyworker Ratio:2:3***

ELEVATOR CONSTRUCTOR <i>ELEVATOR CONSTRUCTORS LOCAL 4</i>	01/01/2022	\$65.62	\$16.03	\$20.21	\$0.00	\$101.86
--	------------	---------	---------	---------	--------	----------

Apprentice - ELEVATOR CONSTRUCTOR - Local 4

Effective Date - 01/01/2022

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$32.81	\$16.03	\$0.00	\$0.00	\$48.84
2	55	\$36.09	\$16.03	\$20.21	\$0.00	\$72.33
3	65	\$42.65	\$16.03	\$20.21	\$0.00	\$78.89
4	70	\$45.93	\$16.03	\$20.21	\$0.00	\$82.17
5	80	\$52.50	\$16.03	\$20.21	\$0.00	\$88.74

Notes:
Steps 1-2 are 6 mos.; Steps 3-5 are 1 year

Apprentice to Journeyworker Ratio:1:1

ELEVATOR CONSTRUCTOR HELPER ELEVATOR CONSTRUCTORS LOCAL 4	01/01/2022	\$45.93	\$16.03	\$20.21	\$0.00	\$82.17
--	------------	---------	---------	---------	--------	---------

For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"

FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY) LABORERS - ZONE 2 (HEAVY & HIGHWAY)	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21

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

FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4	05/01/2024	\$50.79	\$15.00	\$16.40	\$0.00	\$82.19
	11/01/2024	\$52.08	\$15.00	\$16.40	\$0.00	\$83.48
	05/01/2025	\$53.52	\$15.00	\$16.40	\$0.00	\$84.92
	11/01/2025	\$54.81	\$15.00	\$16.40	\$0.00	\$86.21
	05/01/2026	\$56.25	\$15.00	\$16.40	\$0.00	\$87.65
	11/01/2026	\$57.54	\$15.00	\$16.40	\$0.00	\$88.94
	05/01/2027	\$58.97	\$15.00	\$16.40	\$0.00	\$90.37

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4	05/01/2024	\$52.37	\$15.00	\$16.40	\$0.00	\$83.77
	11/01/2024	\$53.67	\$15.00	\$16.40	\$0.00	\$85.07
	05/01/2025	\$55.12	\$15.00	\$16.40	\$0.00	\$86.52
	11/01/2025	\$56.42	\$15.00	\$16.40	\$0.00	\$87.82
	05/01/2026	\$57.87	\$15.00	\$16.40	\$0.00	\$89.27
	11/01/2026	\$59.17	\$15.00	\$16.40	\$0.00	\$90.57
	05/01/2027	\$60.62	\$15.00	\$16.40	\$0.00	\$92.02

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY <i>OPERATING ENGINEERS LOCAL 4</i>	05/01/2024	\$24.91	\$15.00	\$16.40	\$0.00	\$56.31
	11/01/2024	\$25.67	\$15.00	\$16.40	\$0.00	\$57.07
	05/01/2025	\$26.52	\$15.00	\$16.40	\$0.00	\$57.92
	11/01/2025	\$27.28	\$15.00	\$16.40	\$0.00	\$58.68
	05/01/2026	\$28.13	\$15.00	\$16.40	\$0.00	\$59.53
	11/01/2026	\$28.89	\$15.00	\$16.40	\$0.00	\$60.29
	05/01/2027	\$29.74	\$15.00	\$16.40	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FIRE ALARM INSTALLER <i>ELECTRICIANS LOCAL 223</i>	09/01/2020	\$43.66	\$10.90	\$14.66	\$0.00	\$69.22
For apprentice rates see "Apprentice- ELECTRICIAN"						
FIRE ALARM REPAIR / MAINTENANCE <i>LOCAL 223</i> / COMMISSIONING <i>ELECTRICIANS</i>	09/01/2020	\$36.86	\$10.90	\$12.45	\$0.00	\$60.21
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"						
FIREMAN (ASST. ENGINEER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$45.23	\$15.30	\$16.40	\$0.00	\$76.93
	12/01/2024	\$46.41	\$15.30	\$16.40	\$0.00	\$78.11
	06/01/2025	\$47.47	\$15.30	\$16.40	\$0.00	\$79.17
	12/01/2025	\$48.64	\$15.30	\$16.40	\$0.00	\$80.34
	06/01/2026	\$49.70	\$15.30	\$16.40	\$0.00	\$81.40
	12/01/2026	\$50.88	\$15.30	\$16.40	\$0.00	\$82.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
FLAGGER & SIGNALER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$27.01	\$9.65	\$17.80	\$0.00	\$54.46
	12/01/2024	\$27.01	\$9.65	\$17.80	\$0.00	\$54.46
	06/01/2025	\$28.09	\$9.65	\$17.80	\$0.00	\$55.54
	12/01/2025	\$28.09	\$9.65	\$17.80	\$0.00	\$55.54
	06/01/2026	\$29.21	\$9.65	\$17.80	\$0.00	\$56.66
	12/01/2026	\$29.21	\$9.65	\$17.80	\$0.00	\$56.66
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
FLOORCOVERER <i>FLOORCOVERERS LOCAL 2168 ZONE 1</i>	03/01/2024	\$54.73	\$8.83	\$20.27	\$0.00	\$83.83
	09/01/2024	\$56.23	\$8.83	\$20.27	\$0.00	\$85.33
	03/01/2025	\$57.73	\$8.83	\$20.27	\$0.00	\$86.83
	09/01/2025	\$59.23	\$8.83	\$20.27	\$0.00	\$88.33
	03/01/2026	\$60.73	\$8.83	\$20.27	\$0.00	\$89.83
	09/01/2026	\$62.23	\$8.83	\$20.27	\$0.00	\$91.33
	03/01/2027	\$63.73	\$8.83	\$20.27	\$0.00	\$92.83

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - FLOORCOVERER - Local 2168 Zone I

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$24.63	\$8.83	\$1.76	\$0.00	\$35.22
2	45	\$24.63	\$8.83	\$1.76	\$0.00	\$35.22
3	55	\$30.10	\$8.83	\$3.52	\$0.00	\$42.45
4	55	\$30.10	\$8.83	\$3.52	\$0.00	\$42.45
5	70	\$38.31	\$8.83	\$16.75	\$0.00	\$63.89
6	70	\$38.31	\$8.83	\$16.75	\$0.00	\$63.89
7	80	\$43.78	\$8.83	\$18.51	\$0.00	\$71.12
8	80	\$43.78	\$8.83	\$18.51	\$0.00	\$71.12

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	45	\$25.30	\$8.83	\$1.76	\$0.00	\$35.89
2	45	\$25.30	\$8.83	\$1.76	\$0.00	\$35.89
3	55	\$30.93	\$8.83	\$3.52	\$0.00	\$43.28
4	55	\$30.93	\$8.83	\$3.52	\$0.00	\$43.28
5	70	\$39.36	\$8.83	\$16.75	\$0.00	\$64.94
6	70	\$39.36	\$8.83	\$16.75	\$0.00	\$64.94
7	80	\$44.98	\$8.83	\$18.51	\$0.00	\$72.32
8	80	\$44.98	\$8.83	\$18.51	\$0.00	\$72.32

Notes: Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

FORK LIFT/CHERRY PICKER OPERATING ENGINEERS LOCAL 4	06/01/2024	\$56.03	\$15.30	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.48	\$15.30	\$16.40	\$0.00	\$89.18
	06/01/2025	\$58.78	\$15.30	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.23	\$15.30	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.53	\$15.30	\$16.40	\$0.00	\$93.23
	12/01/2026	\$62.98	\$15.30	\$16.40	\$0.00	\$94.68

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS OPERATING ENGINEERS LOCAL 4	06/01/2024	\$36.17	\$15.30	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.12	\$15.30	\$16.40	\$0.00	\$68.82
	06/01/2025	\$37.97	\$15.30	\$16.40	\$0.00	\$69.67
	12/01/2025	\$38.92	\$15.30	\$16.40	\$0.00	\$70.62
	06/01/2026	\$39.78	\$15.30	\$16.40	\$0.00	\$71.48
	12/01/2026	\$40.73	\$15.30	\$16.40	\$0.00	\$72.43

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS) GLAZIERS LOCAL 35 (ZONE 2)	07/01/2024	\$46.76	\$9.95	\$23.95	\$0.00	\$80.66
	01/01/2025	\$47.96	\$9.95	\$23.95	\$0.00	\$81.86

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - GLAZIER - Local 35 Zone 2

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$9.95	\$0.00	\$0.00	\$33.33
2	55	\$25.72	\$9.95	\$6.66	\$0.00	\$42.33
3	60	\$28.06	\$9.95	\$7.26	\$0.00	\$45.27
4	65	\$30.39	\$9.95	\$7.87	\$0.00	\$48.21
5	70	\$32.73	\$9.95	\$20.32	\$0.00	\$63.00
6	75	\$35.07	\$9.95	\$20.93	\$0.00	\$65.95
7	80	\$37.41	\$9.95	\$21.53	\$0.00	\$68.89
8	90	\$42.08	\$9.95	\$22.74	\$0.00	\$74.77

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.98	\$9.95	\$0.00	\$0.00	\$33.93
2	55	\$26.38	\$9.95	\$6.66	\$0.00	\$42.99
3	60	\$28.78	\$9.95	\$7.26	\$0.00	\$45.99
4	65	\$31.17	\$9.95	\$7.87	\$0.00	\$48.99
5	70	\$33.57	\$9.95	\$20.32	\$0.00	\$63.84
6	75	\$35.97	\$9.95	\$20.93	\$0.00	\$66.85
7	80	\$38.37	\$9.95	\$21.53	\$0.00	\$69.85
8	90	\$43.16	\$9.95	\$22.74	\$0.00	\$75.85

Notes:

Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

HOISTING ENGINEER/CRANES/GRADALLS	06/01/2024	\$56.03	\$15.30	\$16.40	\$0.00	\$87.73
OPERATING ENGINEERS LOCAL 4	12/01/2024	\$57.48	\$15.30	\$16.40	\$0.00	\$89.18
	06/01/2025	\$58.78	\$15.30	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.23	\$15.30	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.53	\$15.30	\$16.40	\$0.00	\$93.23
	12/01/2026	\$62.98	\$15.30	\$16.40	\$0.00	\$94.68

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - OPERATING ENGINEERS - Local 4

Effective Date - 06/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$30.82	\$15.30	\$0.00	\$0.00	\$46.12
2	60	\$33.62	\$15.30	\$16.40	\$0.00	\$65.32
3	65	\$36.42	\$15.30	\$16.40	\$0.00	\$68.12
4	70	\$39.22	\$15.30	\$16.40	\$0.00	\$70.92
5	75	\$42.02	\$15.30	\$16.40	\$0.00	\$73.72
6	80	\$44.82	\$15.30	\$16.40	\$0.00	\$76.52
7	85	\$47.63	\$15.30	\$16.40	\$0.00	\$79.33
8	90	\$50.43	\$15.30	\$16.40	\$0.00	\$82.13

Effective Date - 12/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$31.61	\$0.00	\$0.00	\$0.00	\$31.61
2	60	\$34.49	\$15.30	\$16.40	\$0.00	\$66.19
3	65	\$37.36	\$15.30	\$16.40	\$0.00	\$69.06
4	70	\$40.24	\$15.30	\$16.40	\$0.00	\$71.94
5	75	\$43.11	\$15.30	\$16.40	\$0.00	\$74.81
6	80	\$45.98	\$15.30	\$16.40	\$0.00	\$77.68
7	85	\$48.86	\$15.30	\$16.40	\$0.00	\$80.56
8	90	\$51.73	\$15.30	\$16.40	\$0.00	\$83.43

Notes:

Apprentice to Journeyworker Ratio:1:6

HVAC (DUCTWORK) SHEETMETAL WORKERS LOCAL 17 - A	02/01/2024	\$57.22	\$14.59	\$27.50	\$2.98	\$102.29
	08/01/2024	\$58.97	\$14.59	\$27.50	\$2.98	\$104.04
	02/01/2025	\$60.72	\$14.59	\$27.50	\$2.98	\$105.79
	08/01/2025	\$62.57	\$14.59	\$27.50	\$2.98	\$107.64
	02/01/2026	\$64.52	\$14.59	\$27.50	\$2.98	\$109.59

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS) ELECTRICIANS LOCAL 223	09/01/2020	\$43.66	\$10.90	\$14.66	\$0.00	\$69.22
--	------------	---------	---------	---------	--------	---------

For apprentice rates see "Apprentice- ELECTRICIAN"

HVAC (TESTING AND BALANCING - AIR) SHEETMETAL WORKERS LOCAL 17 - A	02/01/2024	\$57.22	\$14.59	\$27.50	\$2.98	\$102.29
	08/01/2024	\$58.97	\$14.59	\$27.50	\$2.98	\$104.04
	02/01/2025	\$60.72	\$14.59	\$27.50	\$2.98	\$105.79
	08/01/2025	\$62.57	\$14.59	\$27.50	\$2.98	\$107.64
	02/01/2026	\$64.52	\$14.59	\$27.50	\$2.98	\$109.59

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (TESTING AND BALANCING - WATER) PLUMBERS & PIPEFITTERS LOCAL 51	08/28/2023	\$51.99	\$10.15	\$19.95	\$0.00	\$82.09
	08/26/2024	\$54.74	\$10.15	\$19.95	\$0.00	\$84.84
	08/25/2025	\$57.49	\$10.15	\$19.95	\$0.00	\$87.59

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
HVAC MECHANIC <i>PLUMBERS & PIPEFITTERS LOCAL 51</i>	08/28/2023	\$51.99	\$10.15	\$19.95	\$0.00	\$82.09
	08/26/2024	\$54.74	\$10.15	\$19.95	\$0.00	\$84.84
	08/25/2025	\$57.49	\$10.15	\$19.95	\$0.00	\$87.59
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
HYDRAULIC DRILLS <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.61	\$9.65	\$17.14	\$0.00	\$65.40
For apprentice rates see "Apprentice- LABORER"						
HYDRAULIC DRILLS (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$39.28	\$9.65	\$17.80	\$0.00	\$66.73
	12/01/2024	\$40.61	\$9.65	\$17.80	\$0.00	\$68.06
	06/01/2025	\$42.00	\$9.65	\$17.80	\$0.00	\$69.45
	12/01/2025	\$43.38	\$9.65	\$17.80	\$0.00	\$70.83
	06/01/2026	\$44.82	\$9.65	\$17.80	\$0.00	\$72.27
	12/01/2026	\$46.26	\$9.65	\$17.80	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
INSULATOR (PIPES & TANKS) <i>HEAT & FROST INSULATORS LOCAL 6 (BOSTON)</i>	09/01/2023	\$53.50	\$14.75	\$19.61	\$0.00	\$87.86
	09/01/2024	\$56.92	\$14.75	\$19.61	\$0.00	\$91.28
	09/01/2025	\$60.34	\$14.75	\$19.61	\$0.00	\$94.70
	09/01/2026	\$63.76	\$14.75	\$19.61	\$0.00	\$98.12

Apprentice - ASBESTOS INSULATOR (Pipes & Tanks) - Local 6 Boston

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$26.75	\$14.75	\$14.32	\$0.00	\$55.82
2	60	\$32.10	\$14.75	\$15.37	\$0.00	\$62.22
3	70	\$37.45	\$14.75	\$16.43	\$0.00	\$68.63
4	80	\$42.80	\$14.75	\$17.49	\$0.00	\$75.04

Effective Date - 09/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.46	\$14.75	\$14.32	\$0.00	\$57.53
2	60	\$34.15	\$14.75	\$15.37	\$0.00	\$64.27
3	70	\$39.84	\$14.75	\$16.43	\$0.00	\$71.02
4	80	\$45.54	\$14.75	\$17.49	\$0.00	\$77.78

Notes:

Steps are 1 year

Apprentice to Journeyworker Ratio:1:4

IRONWORKER/WELDER <i>IRONWORKERS LOCAL 7 (BOSTON AREA)</i>	03/16/2024	\$53.97	\$8.35	\$26.70	\$0.00	\$89.02
---	------------	---------	--------	---------	--------	---------

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - IRONWORKER - Local 7 Boston

Effective Date - 03/16/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$32.38	\$8.35	\$26.70	\$0.00	\$67.43
2	70	\$37.78	\$8.35	\$26.70	\$0.00	\$72.83
3	75	\$40.48	\$8.35	\$26.70	\$0.00	\$75.53
4	80	\$43.18	\$8.35	\$26.70	\$0.00	\$78.23
5	85	\$45.87	\$8.35	\$26.70	\$0.00	\$80.92
6	90	\$48.57	\$8.35	\$26.70	\$0.00	\$83.62

Notes:

Apprentice to Journeyworker Ratio:1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS - ZONE 2	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
---	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

LABORER LABORERS - ZONE 2	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
------------------------------	------------	---------	--------	---------	--------	---------

Apprentice - LABORER - Zone 2

Effective Date - 12/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$22.72	\$9.65	\$16.89	\$0.00	\$49.26
2	70	\$26.50	\$9.65	\$16.89	\$0.00	\$53.04
3	80	\$30.29	\$9.65	\$16.89	\$0.00	\$56.83
4	90	\$34.07	\$9.65	\$16.89	\$0.00	\$60.61

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER (HEAVY & HIGHWAY) LABORERS - ZONE 2 (HEAVY & HIGHWAY)	06/01/2024	\$38.53	\$9.65	\$17.80	\$0.00	\$65.98
	12/01/2024	\$39.86	\$9.65	\$17.80	\$0.00	\$67.31
	06/01/2025	\$41.25	\$9.65	\$17.80	\$0.00	\$68.70
	12/01/2025	\$42.63	\$9.65	\$17.80	\$0.00	\$70.08
	06/01/2026	\$44.07	\$9.65	\$17.80	\$0.00	\$71.52
	12/01/2026	\$45.51	\$9.65	\$17.80	\$0.00	\$72.96

Apprentice - LABORER (Heavy & Highway) - Zone 2

Effective Date - 06/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$23.12	\$9.65	\$17.80	\$0.00	\$50.57
2	70	\$26.97	\$9.65	\$17.80	\$0.00	\$54.42
3	80	\$30.82	\$9.65	\$17.80	\$0.00	\$58.27
4	90	\$34.68	\$9.65	\$17.80	\$0.00	\$62.13

Effective Date - 12/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	60	\$23.92	\$9.65	\$17.80	\$0.00	\$51.37
2	70	\$27.90	\$9.65	\$17.80	\$0.00	\$55.35
3	80	\$31.89	\$9.65	\$17.80	\$0.00	\$59.34
4	90	\$35.87	\$9.65	\$17.80	\$0.00	\$63.32

Notes:

Apprentice to Journeyworker Ratio:1:5

LABORER: CARPENTER TENDER LABORERS - ZONE 2	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
--	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER LABORERS - ZONE 2	12/01/2023	\$38.36	\$9.40	\$16.89	\$0.00	\$64.65
--	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS - ZONE 2	12/01/2023	\$37.95	\$9.65	\$17.20	\$0.00	\$64.80
--	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

LABORER: MASON TENDER LABORERS - ZONE 2	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
--	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS - ZONE 2 (HEAVY & HIGHWAY)	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21

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

LABORER: MULTI-TRADE TENDER LABORERS - ZONE 2	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
--	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

LABORER: TREE REMOVER LABORERS - ZONE 2	12/01/2023	\$37.86	\$9.65	\$17.14	\$0.00	\$64.65
--	------------	---------	--------	---------	--------	---------

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"

LABORER: LASER BEAM OPERATOR LABORERS - ZONE 2	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
---	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
LASER BEAM OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21

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

MARBLE & TILE FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2024	\$47.89	\$11.49	\$21.37	\$0.00	\$80.75
	08/01/2024	\$49.32	\$11.49	\$21.62	\$0.00	\$82.43
	02/01/2025	\$50.36	\$11.49	\$21.62	\$0.00	\$83.47
	08/01/2025	\$52.08	\$11.49	\$21.62	\$0.00	\$85.19
	02/01/2026	\$53.16	\$11.49	\$21.62	\$0.00	\$86.27
	08/01/2026	\$54.92	\$11.49	\$21.62	\$0.00	\$88.03
	02/01/2027	\$56.04	\$11.49	\$21.62	\$0.00	\$89.15

Apprentice - MARBLE & TILE FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.95	\$11.49	\$21.62	\$0.00	\$57.06
2	60	\$28.73	\$11.49	\$21.62	\$0.00	\$61.84
3	70	\$33.52	\$11.49	\$21.62	\$0.00	\$66.63
4	80	\$38.31	\$11.49	\$21.62	\$0.00	\$71.42
5	90	\$43.10	\$11.49	\$21.62	\$0.00	\$76.21

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.66	\$11.49	\$21.62	\$0.00	\$57.77
2	60	\$29.59	\$11.49	\$21.62	\$0.00	\$62.70
3	70	\$34.52	\$11.49	\$21.62	\$0.00	\$67.63
4	80	\$39.46	\$11.49	\$21.62	\$0.00	\$72.57
5	90	\$44.39	\$11.49	\$21.62	\$0.00	\$77.50

Notes:

Apprentice to Journeyworker Ratio:1:3

MARBLE MASONS, TILELAYERS & TERRAZZO MECH <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2024	\$62.42	\$11.49	\$23.56	\$0.00	\$97.47
	08/01/2024	\$64.52	\$11.49	\$23.56	\$0.00	\$99.57
	02/01/2025	\$65.82	\$11.49	\$23.56	\$0.00	\$100.87
	08/01/2025	\$67.97	\$11.49	\$23.56	\$0.00	\$103.02
	02/01/2026	\$69.32	\$11.49	\$23.56	\$0.00	\$104.37
	08/01/2026	\$71.52	\$11.49	\$23.56	\$0.00	\$106.57
	02/01/2027	\$72.92	\$11.49	\$23.56	\$0.00	\$107.97

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - MARBLE-TILE-TERRAZZO MECHANIC - Local 3 Marble & Tile

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.21	\$11.49	\$23.56	\$0.00	\$66.26
2	60	\$37.45	\$11.49	\$23.56	\$0.00	\$72.50
3	70	\$43.69	\$11.49	\$23.56	\$0.00	\$78.74
4	80	\$49.94	\$11.49	\$23.56	\$0.00	\$84.99
5	90	\$56.18	\$11.49	\$23.56	\$0.00	\$91.23

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$32.26	\$11.49	\$23.56	\$0.00	\$67.31
2	60	\$38.71	\$11.49	\$23.56	\$0.00	\$73.76
3	70	\$45.16	\$11.49	\$23.56	\$0.00	\$80.21
4	80	\$51.62	\$11.49	\$23.56	\$0.00	\$86.67
5	90	\$58.07	\$11.49	\$23.56	\$0.00	\$93.12

Notes:

Apprentice to Journeyworker Ratio:1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MECHANICS MAINTENANCE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
MILLWRIGHT (Zone 2) <i>MILLWRIGHTS LOCAL 1121 - Zone 2</i>	01/01/2024	\$42.76	\$10.08	\$21.47	\$0.00	\$74.31
	01/06/2025	\$45.09	\$10.08	\$21.47	\$0.00	\$76.64
	01/05/2026	\$47.42	\$10.08	\$21.47	\$0.00	\$78.97

Apprentice - MILLWRIGHT - Local 1121 Zone 2

Effective Date - 01/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$23.52	\$10.08	\$5.50	\$0.00	\$39.10
2	65	\$27.79	\$10.08	\$6.50	\$0.00	\$44.37
3	75	\$32.07	\$10.08	\$18.97	\$0.00	\$61.12
4	85	\$36.35	\$10.08	\$19.97	\$0.00	\$66.40

Effective Date - 01/06/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	55	\$24.80	\$10.08	\$5.50	\$0.00	\$40.38
2	65	\$29.31	\$10.08	\$6.50	\$0.00	\$45.89
3	75	\$33.82	\$10.08	\$18.97	\$0.00	\$62.87
4	85	\$38.33	\$10.08	\$19.97	\$0.00	\$68.38

Notes: Step 1&2 Appr. indentured after 1/6/2020 receive no pension, but do receive annuity. (Step 1 \$5.72, Step 2 \$6.66)
Steps are 2,000 hours

Apprentice to Journeyworker Ratio:1:4

MORTAR MIXER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
---	------------	---------	--------	---------	--------	---------

For apprentice rates see "Apprentice- LABORER"

OILER (OTHER THAN TRUCK CRANES,GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$24.71	\$15.30	\$16.40	\$0.00	\$56.41
	12/01/2024	\$25.37	\$15.30	\$16.40	\$0.00	\$57.07
	06/01/2025	\$25.97	\$15.30	\$16.40	\$0.00	\$57.67
	12/01/2025	\$26.63	\$15.30	\$16.40	\$0.00	\$58.33
	06/01/2026	\$27.22	\$15.30	\$16.40	\$0.00	\$58.92
	12/01/2026	\$27.89	\$15.30	\$16.40	\$0.00	\$59.59

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OILER (TRUCK CRANES, GRADALLS) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$30.28	\$15.30	\$16.40	\$0.00	\$61.98
	12/01/2024	\$31.08	\$15.30	\$16.40	\$0.00	\$62.78
	06/01/2025	\$31.80	\$15.30	\$16.40	\$0.00	\$63.50
	12/01/2025	\$32.60	\$15.30	\$16.40	\$0.00	\$64.30
	06/01/2026	\$33.32	\$15.30	\$16.40	\$0.00	\$65.02
	12/01/2026	\$34.12	\$15.30	\$16.40	\$0.00	\$65.82

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

OTHER POWER DRIVEN EQUIPMENT - CLASS II <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS) <i>PAINTERS LOCAL 35 - ZONE 2</i>	07/01/2024	\$57.26	\$9.95	\$23.95	\$0.00	\$91.16
	01/01/2025	\$58.46	\$9.95	\$23.95	\$0.00	\$92.36

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 - BRIDGES/TANKS

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$28.63	\$9.95	\$0.00	\$0.00	\$38.58
2	55	\$31.49	\$9.95	\$6.66	\$0.00	\$48.10
3	60	\$34.36	\$9.95	\$7.26	\$0.00	\$51.57
4	65	\$37.22	\$9.95	\$7.87	\$0.00	\$55.04
5	70	\$40.08	\$9.95	\$20.32	\$0.00	\$70.35
6	75	\$42.95	\$9.95	\$20.93	\$0.00	\$73.83
7	80	\$45.81	\$9.95	\$21.53	\$0.00	\$77.29
8	90	\$51.53	\$9.95	\$22.74	\$0.00	\$84.22

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$29.23	\$9.95	\$0.00	\$0.00	\$39.18
2	55	\$32.15	\$9.95	\$6.66	\$0.00	\$48.76
3	60	\$35.08	\$9.95	\$7.26	\$0.00	\$52.29
4	65	\$38.00	\$9.95	\$7.87	\$0.00	\$55.82
5	70	\$40.92	\$9.95	\$20.32	\$0.00	\$71.19
6	75	\$43.85	\$9.95	\$20.93	\$0.00	\$74.73
7	80	\$46.77	\$9.95	\$21.53	\$0.00	\$78.25
8	90	\$52.61	\$9.95	\$22.74	\$0.00	\$85.30

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	07/01/2024	\$48.16	\$9.95	\$23.95	\$0.00	\$82.06
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	01/01/2025	\$49.36	\$9.95	\$23.95	\$0.00	\$83.26

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - New

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.08	\$9.95	\$0.00	\$0.00	\$34.03
2	55	\$26.49	\$9.95	\$6.66	\$0.00	\$43.10
3	60	\$28.90	\$9.95	\$7.26	\$0.00	\$46.11
4	65	\$31.30	\$9.95	\$7.87	\$0.00	\$49.12
5	70	\$33.71	\$9.95	\$20.32	\$0.00	\$63.98
6	75	\$36.12	\$9.95	\$20.93	\$0.00	\$67.00
7	80	\$38.53	\$9.95	\$21.53	\$0.00	\$70.01
8	90	\$43.34	\$9.95	\$22.74	\$0.00	\$76.03

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.68	\$9.95	\$0.00	\$0.00	\$34.63
2	55	\$27.15	\$9.95	\$6.66	\$0.00	\$43.76
3	60	\$29.62	\$9.95	\$7.26	\$0.00	\$46.83
4	65	\$32.08	\$9.95	\$7.87	\$0.00	\$49.90
5	70	\$34.55	\$9.95	\$20.32	\$0.00	\$64.82
6	75	\$37.02	\$9.95	\$20.93	\$0.00	\$67.90
7	80	\$39.49	\$9.95	\$21.53	\$0.00	\$70.97
8	90	\$44.42	\$9.95	\$22.74	\$0.00	\$77.11

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER (SPRAY OR SANDBLAST, REPAINT)	07/01/2024	\$46.22	\$9.95	\$23.95	\$0.00	\$80.12
PAINTERS LOCAL 35 - ZONE 2	01/01/2025	\$47.42	\$9.95	\$23.95	\$0.00	\$81.32

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - Spray/Sandblast - Repaint

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.11	\$9.95	\$0.00	\$0.00	\$33.06
2	55	\$25.42	\$9.95	\$6.66	\$0.00	\$42.03
3	60	\$27.73	\$9.95	\$7.26	\$0.00	\$44.94
4	65	\$30.04	\$9.95	\$7.87	\$0.00	\$47.86
5	70	\$32.35	\$9.95	\$20.32	\$0.00	\$62.62
6	75	\$34.67	\$9.95	\$20.93	\$0.00	\$65.55
7	80	\$36.98	\$9.95	\$21.53	\$0.00	\$68.46
8	90	\$41.60	\$9.95	\$22.74	\$0.00	\$74.29

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.71	\$9.95	\$0.00	\$0.00	\$33.66
2	55	\$26.08	\$9.95	\$6.66	\$0.00	\$42.69
3	60	\$28.45	\$9.95	\$7.26	\$0.00	\$45.66
4	65	\$30.82	\$9.95	\$7.87	\$0.00	\$48.64
5	70	\$33.19	\$9.95	\$20.32	\$0.00	\$63.46
6	75	\$35.57	\$9.95	\$20.93	\$0.00	\$66.45
7	80	\$37.94	\$9.95	\$21.53	\$0.00	\$69.42
8	90	\$42.68	\$9.95	\$22.74	\$0.00	\$75.37

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, NEW) *	07/01/2024	\$46.76	\$9.95	\$23.95	\$0.00	\$80.66
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2	01/01/2025	\$47.96	\$9.95	\$23.95	\$0.00	\$81.86

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER - Local 35 Zone 2 - BRUSH NEW

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.38	\$9.95	\$0.00	\$0.00	\$33.33
2	55	\$25.72	\$9.95	\$6.66	\$0.00	\$42.33
3	60	\$28.06	\$9.95	\$7.26	\$0.00	\$45.27
4	65	\$30.39	\$9.95	\$7.87	\$0.00	\$48.21
5	70	\$32.73	\$9.95	\$20.32	\$0.00	\$63.00
6	75	\$35.07	\$9.95	\$20.93	\$0.00	\$65.95
7	80	\$37.41	\$9.95	\$21.53	\$0.00	\$68.89
8	90	\$42.08	\$9.95	\$22.74	\$0.00	\$74.77

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.98	\$9.95	\$0.00	\$0.00	\$33.93
2	55	\$26.38	\$9.95	\$6.66	\$0.00	\$42.99
3	60	\$28.78	\$9.95	\$7.26	\$0.00	\$45.99
4	65	\$31.17	\$9.95	\$7.87	\$0.00	\$48.99
5	70	\$33.57	\$9.95	\$20.32	\$0.00	\$63.84
6	75	\$35.97	\$9.95	\$20.93	\$0.00	\$66.85
7	80	\$38.37	\$9.95	\$21.53	\$0.00	\$69.85
8	90	\$43.16	\$9.95	\$22.74	\$0.00	\$75.85

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER / TAPER (BRUSH, REPAINT)	07/01/2024	\$44.82	\$9.95	\$23.95	\$0.00	\$78.72
PAINTERS LOCAL 35 - ZONE 2	01/01/2025	\$46.02	\$9.95	\$23.95	\$0.00	\$79.92

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - PAINTER Local 35 Zone 2 - BRUSH REPAINT

Effective Date - 07/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$22.41	\$9.95	\$0.00	\$0.00	\$32.36
2	55	\$24.65	\$9.95	\$6.66	\$0.00	\$41.26
3	60	\$26.89	\$9.95	\$7.26	\$0.00	\$44.10
4	65	\$29.13	\$9.95	\$7.87	\$0.00	\$46.95
5	70	\$31.37	\$9.95	\$20.32	\$0.00	\$61.64
6	75	\$33.62	\$9.95	\$20.93	\$0.00	\$64.50
7	80	\$35.86	\$9.95	\$21.53	\$0.00	\$67.34
8	90	\$40.34	\$9.95	\$22.74	\$0.00	\$73.03

Effective Date - 01/01/2025

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$23.01	\$9.95	\$0.00	\$0.00	\$32.96
2	55	\$25.31	\$9.95	\$6.66	\$0.00	\$41.92
3	60	\$27.61	\$9.95	\$7.26	\$0.00	\$44.82
4	65	\$29.91	\$9.95	\$7.87	\$0.00	\$47.73
5	70	\$32.21	\$9.95	\$20.32	\$0.00	\$62.48
6	75	\$34.52	\$9.95	\$20.93	\$0.00	\$65.40
7	80	\$36.82	\$9.95	\$21.53	\$0.00	\$68.30
8	90	\$41.42	\$9.95	\$22.74	\$0.00	\$74.11

Notes:
Steps are 750 hrs.

Apprentice to Journeyworker Ratio:1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	06/01/2024	\$38.53	\$9.65	\$17.80	\$0.00	\$65.98
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/01/2024	\$39.86	\$9.65	\$17.80	\$0.00	\$67.31
	06/01/2025	\$41.25	\$9.65	\$17.80	\$0.00	\$68.70
	12/01/2025	\$42.63	\$9.65	\$17.80	\$0.00	\$70.08
	06/01/2026	\$44.07	\$9.65	\$17.80	\$0.00	\$71.52
	12/01/2026	\$45.51	\$9.65	\$17.80	\$0.00	\$72.96

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

PANEL & PICKUP TRUCKS DRIVER	06/01/2024	\$39.78	\$15.07	\$18.67	\$0.00	\$73.52
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2024	\$39.78	\$15.07	\$20.17	\$0.00	\$75.02
	01/01/2025	\$39.78	\$15.57	\$20.17	\$0.00	\$75.52
	06/01/2025	\$40.78	\$15.57	\$20.17	\$0.00	\$76.52
	12/01/2025	\$40.78	\$15.57	\$21.78	\$0.00	\$78.13
	01/01/2026	\$40.78	\$16.17	\$21.78	\$0.00	\$78.73
	06/01/2026	\$41.78	\$16.17	\$21.78	\$0.00	\$79.73
	12/01/2026	\$41.78	\$16.17	\$23.52	\$0.00	\$81.47
	01/01/2027	\$41.78	\$16.77	\$23.52	\$0.00	\$82.07

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) <i>PILE DRIVER LOCAL 56 (ZONE 1)</i> For apprentice rates see "Apprentice- PILE DRIVER"	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59
PILE DRIVER <i>PILE DRIVER LOCAL 56 (ZONE 1)</i>	08/01/2020	\$49.07	\$9.40	\$23.12	\$0.00	\$81.59

Apprentice - PILE DRIVER - Local 56 Zone 1

Effective Date - 08/01/2020

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.54	\$9.40	\$23.12	\$0.00	\$57.06
2	60	\$29.44	\$9.40	\$23.12	\$0.00	\$61.96
3	70	\$34.35	\$9.40	\$23.12	\$0.00	\$66.87
4	75	\$36.80	\$9.40	\$23.12	\$0.00	\$69.32
5	80	\$39.26	\$9.40	\$23.12	\$0.00	\$71.78
6	80	\$39.26	\$9.40	\$23.12	\$0.00	\$71.78
7	90	\$44.16	\$9.40	\$23.12	\$0.00	\$76.68
8	90	\$44.16	\$9.40	\$23.12	\$0.00	\$76.68

Notes:
 % Indentured After 10/1/17; 45/45/55/55/70/70/80/80
 Step 1&2 \$34.01/ 3&4 \$41.46/ 5&6 \$62.80/ 7&8 \$69.25

Apprentice to Journeyworker Ratio:1:5

PIPELAYER <i>LABORERS - ZONE 2</i> For apprentice rates see "Apprentice- LABORER"	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
PIPELAYER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)						
PLUMBER & PIPEFITTER <i>PLUMBERS & PIPEFITTERS LOCAL 51</i>	08/28/2023	\$51.99	\$10.15	\$19.95	\$0.00	\$82.09
	08/26/2024	\$54.74	\$10.15	\$19.95	\$0.00	\$84.84
	08/25/2025	\$57.49	\$10.15	\$19.95	\$0.00	\$87.59

Apprentice - PLUMBER/PIPEFITTER - Local 51

Effective Date - 08/28/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$20.80	\$10.15	\$2.50	\$0.00	\$33.45
2	50	\$26.00	\$10.15	\$2.50	\$0.00	\$38.65
3	60	\$31.19	\$10.15	\$8.80	\$0.00	\$50.14
4	70	\$36.39	\$10.15	\$14.08	\$0.00	\$60.62
5	80	\$41.59	\$10.15	\$17.60	\$0.00	\$69.34

Effective Date - 08/26/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$21.90	\$10.15	\$2.50	\$0.00	\$34.55
2	50	\$27.37	\$10.15	\$2.50	\$0.00	\$40.02
3	60	\$32.84	\$10.15	\$8.80	\$0.00	\$51.79
4	70	\$38.32	\$10.15	\$14.08	\$0.00	\$62.55
5	80	\$43.79	\$10.15	\$17.60	\$0.00	\$71.54

Notes:
Steps 2000hrs. Prior 9/1/05; 40/40/45/50/55/60/65/75/80/85

Apprentice to Journeyworker Ratio:1:3

PNEUMATIC CONTROLS (TEMP.) <i>PLUMBERS & PIPEFITTERS LOCAL 51</i>	08/28/2023	\$51.99	\$10.15	\$19.95	\$0.00	\$82.09
	08/26/2024	\$54.74	\$10.15	\$19.95	\$0.00	\$84.84
	08/25/2025	\$57.49	\$10.15	\$19.95	\$0.00	\$87.59
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"						
PNEUMATIC DRILL/TOOL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
POWDERMAN & BLASTER <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.86	\$9.65	\$17.14	\$0.00	\$65.65
For apprentice rates see "Apprentice- LABORER"						
POWDERMAN & BLASTER (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$39.53	\$9.40	\$17.55	\$0.00	\$66.48
	12/01/2024	\$40.86	\$9.40	\$17.55	\$0.00	\$67.81
	06/01/2025	\$42.25	\$9.40	\$17.55	\$0.00	\$69.20
	12/01/2025	\$43.63	\$9.40	\$17.55	\$0.00	\$70.58
	06/01/2026	\$45.07	\$9.40	\$17.55	\$0.00	\$72.02
	12/01/2026	\$46.51	\$9.40	\$17.55	\$0.00	\$73.46
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
POWER SHOVEL/DERRICK/TRENCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$56.03	\$15.30	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.48	\$15.30	\$16.40	\$0.00	\$89.18
	06/01/2025	\$58.78	\$15.30	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.23	\$15.30	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.53	\$15.30	\$16.40	\$0.00	\$93.23
	12/01/2026	\$62.98	\$15.30	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (CONCRETE) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
PUMP OPERATOR (DEWATERING, OTHER) <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$36.17	\$15.30	\$16.40	\$0.00	\$67.87
	12/01/2024	\$37.12	\$15.30	\$16.40	\$0.00	\$68.82
	06/01/2025	\$37.97	\$15.30	\$16.40	\$0.00	\$69.67
	12/01/2025	\$38.92	\$15.30	\$16.40	\$0.00	\$70.62
	06/01/2026	\$39.78	\$15.30	\$16.40	\$0.00	\$71.48
	12/01/2026	\$40.73	\$15.30	\$16.40	\$0.00	\$72.43
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
READY-MIX CONCRETE DRIVER <i>TEAMSTERS 653 - Southeastern Concrete (Weymouth)</i>	08/01/2023	\$25.00	\$13.91	\$6.90	\$0.00	\$45.81
RECLAIMERS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RIDE-ON MOTORIZED BUGGY OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
ROLLER/SPREADER/MULCHING MACHINE <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg) <i>ROOFERS LOCAL 33</i>	02/01/2024	\$50.03	\$12.78	\$21.45	\$0.00	\$84.26
	08/01/2024	\$51.53	\$12.78	\$21.45	\$0.00	\$85.76
	02/01/2025	\$52.78	\$12.78	\$21.45	\$0.00	\$87.01
	08/01/2025	\$54.28	\$12.78	\$21.45	\$0.00	\$88.51
	02/01/2026	\$55.53	\$12.78	\$21.45	\$0.00	\$89.76

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - ROOFER - Local 33

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.02	\$12.78	\$6.21	\$0.00	\$44.01
2	60	\$30.02	\$12.78	\$21.45	\$0.00	\$64.25
3	65	\$32.52	\$12.78	\$21.45	\$0.00	\$66.75
4	75	\$37.52	\$12.78	\$21.45	\$0.00	\$71.75
5	85	\$42.53	\$12.78	\$21.45	\$0.00	\$76.76

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$25.77	\$12.78	\$6.21	\$0.00	\$44.76
2	60	\$30.92	\$12.78	\$21.45	\$0.00	\$65.15
3	65	\$33.49	\$12.78	\$21.45	\$0.00	\$67.72
4	75	\$38.65	\$12.78	\$21.45	\$0.00	\$72.88
5	85	\$43.80	\$12.78	\$21.45	\$0.00	\$78.03

Notes: ** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1
 Step 1 is 2000 hrs.; Steps 2-5 are 1000 hrs.
 (Hot Pitch Mechanics' receive \$1.00 hr. above ROOFER)

Apprentice to Journeyworker Ratio:**

ROOFER SLATE / TILE / PRECAST CONCRETE	02/01/2024	\$50.28	\$12.78	\$21.45	\$0.00	\$84.51
ROOFERS LOCAL 33	08/01/2024	\$51.78	\$12.78	\$21.45	\$0.00	\$86.01
	02/01/2025	\$53.03	\$12.78	\$21.45	\$0.00	\$87.26
	08/01/2025	\$54.53	\$12.78	\$21.45	\$0.00	\$88.76
	02/01/2026	\$55.78	\$12.78	\$21.45	\$0.00	\$90.01

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER	02/01/2024	\$57.22	\$14.59	\$27.50	\$2.98	\$102.29
SHEETMETAL WORKERS LOCAL 17 - A	08/01/2024	\$58.97	\$14.59	\$27.50	\$2.98	\$104.04
	02/01/2025	\$60.72	\$14.59	\$27.50	\$2.98	\$105.79
	08/01/2025	\$62.57	\$14.59	\$27.50	\$2.98	\$107.64
	02/01/2026	\$64.52	\$14.59	\$27.50	\$2.98	\$109.59

Apprentice - SHEET METAL WORKER - Local 17-A

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	42	\$24.03	\$14.59	\$6.13	\$0.00	\$44.75
2	42	\$24.03	\$14.59	\$6.13	\$0.00	\$44.75
3	47	\$26.89	\$14.59	\$12.11	\$1.61	\$55.20
4	47	\$26.89	\$14.59	\$12.11	\$1.61	\$55.20
5	52	\$29.75	\$14.59	\$13.09	\$1.72	\$59.15
6	52	\$29.75	\$14.59	\$13.34	\$1.73	\$59.41
7	60	\$34.33	\$14.59	\$14.75	\$1.91	\$65.58
8	65	\$37.19	\$14.59	\$15.73	\$2.03	\$69.54
9	75	\$42.92	\$14.59	\$17.69	\$2.26	\$77.46
10	85	\$48.64	\$14.59	\$19.15	\$2.47	\$84.85

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	42	\$24.77	\$14.59	\$6.13	\$0.00	\$45.49
2	42	\$24.77	\$14.59	\$6.13	\$0.00	\$45.49
3	47	\$27.72	\$14.59	\$12.11	\$1.63	\$56.05
4	47	\$27.72	\$14.59	\$12.11	\$1.63	\$56.05
5	52	\$30.66	\$14.59	\$13.09	\$1.75	\$60.09
6	52	\$30.66	\$14.59	\$13.34	\$1.76	\$60.35
7	60	\$35.38	\$14.59	\$14.75	\$1.94	\$66.66
8	65	\$38.33	\$14.59	\$15.73	\$2.06	\$70.71
9	75	\$44.23	\$14.59	\$17.69	\$2.30	\$78.81
10	85	\$50.12	\$14.59	\$19.15	\$2.52	\$86.38

Notes:
Steps are 6 mos.

Apprentice to Journeyworker Ratio:1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS	06/01/2024	\$40.24	\$15.07	\$18.67	\$0.00	\$73.98
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	12/01/2024	\$40.24	\$15.07	\$20.17	\$0.00	\$75.48
	01/01/2025	\$40.24	\$15.57	\$20.17	\$0.00	\$75.98
	06/01/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$76.98
	12/01/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$78.59
	01/01/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$79.19
	06/01/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$80.19
	12/01/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$81.93
	01/01/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$82.53

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
SPECIALIZED EARTH MOVING EQUIP > 35 TONS <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2024	\$40.53	\$15.07	\$18.67	\$0.00	\$74.27
	12/01/2024	\$40.53	\$15.07	\$20.17	\$0.00	\$75.77
	01/01/2025	\$40.53	\$15.57	\$20.17	\$0.00	\$76.27
	06/01/2025	\$41.53	\$15.57	\$20.17	\$0.00	\$77.27
	12/01/2025	\$41.53	\$15.57	\$21.78	\$0.00	\$78.88
	01/01/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$79.48
	06/01/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$80.48
	12/01/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$82.22
	01/01/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$82.82
SPRINKLER FITTER <i>SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1</i>	03/01/2024	\$69.04	\$11.51	\$23.30	\$0.00	\$103.85
	10/01/2024	\$70.84	\$11.51	\$23.30	\$0.00	\$105.65
	03/01/2025	\$72.64	\$11.51	\$23.30	\$0.00	\$107.45

Apprentice - SPRINKLER FITTER - Local 550 (Section A) Zone 1

Effective Date - 03/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$24.16	\$11.51	\$12.90	\$0.00	\$48.57
2	40	\$27.62	\$11.51	\$13.70	\$0.00	\$52.83
3	45	\$31.07	\$11.51	\$14.50	\$0.00	\$57.08
4	50	\$34.52	\$11.51	\$15.30	\$0.00	\$61.33
5	55	\$37.97	\$11.51	\$16.10	\$0.00	\$65.58
6	60	\$41.42	\$11.51	\$16.90	\$0.00	\$69.83
7	65	\$44.88	\$11.51	\$17.70	\$0.00	\$74.09
8	70	\$48.33	\$11.51	\$18.50	\$0.00	\$78.34
9	75	\$51.78	\$11.51	\$19.30	\$0.00	\$82.59
10	80	\$55.23	\$11.51	\$20.10	\$0.00	\$86.84

Effective Date - 10/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	35	\$24.79	\$11.51	\$12.90	\$0.00	\$49.20
2	40	\$28.34	\$11.51	\$13.70	\$0.00	\$53.55
3	45	\$31.88	\$11.51	\$14.50	\$0.00	\$57.89
4	50	\$35.42	\$11.51	\$15.30	\$0.00	\$62.23
5	55	\$38.96	\$11.51	\$16.10	\$0.00	\$66.57
6	60	\$42.50	\$11.51	\$16.90	\$0.00	\$70.91
7	65	\$46.05	\$11.51	\$17.70	\$0.00	\$75.26
8	70	\$49.59	\$11.51	\$18.50	\$0.00	\$79.60
9	75	\$53.13	\$11.51	\$19.30	\$0.00	\$83.94
10	80	\$56.67	\$11.51	\$20.10	\$0.00	\$88.28

Notes: Apprentice entered prior 9/30/10:
40/45/50/55/60/65/70/75/80/85
Steps are 850 hours

Apprentice to Journeyworker Ratio:1:3

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
STEAM BOILER OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TELECOMMUNICATION TECHNICIAN <i>ELECTRICIANS LOCAL 223</i>	09/01/2023	\$39.40	\$11.50	\$13.91	\$0.00	\$64.81
	09/01/2024	\$40.69	\$11.75	\$14.53	\$0.00	\$66.97

Apprentice - TELECOMMUNICATION TECHNICIAN - Local 223

Effective Date - 09/01/2023

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Notes: See Electrician Apprentice Wages

Telecom Apprentice Wages shall be the same as the Electrician Apprentice Wages

Apprentice to Journeyworker Ratio:2:3***

TERRAZZO FINISHERS <i>BRICKLAYERS LOCAL 3 - MARBLE & TILE</i>	02/01/2024	\$61.34	\$11.49	\$23.59	\$0.00	\$96.42
	08/01/2024	\$63.44	\$11.49	\$23.59	\$0.00	\$98.52
	02/01/2025	\$64.74	\$11.49	\$23.59	\$0.00	\$99.82
	08/01/2025	\$66.89	\$11.49	\$23.59	\$0.00	\$101.97
	02/01/2026	\$68.24	\$11.49	\$23.59	\$0.00	\$103.32
	08/01/2026	\$70.44	\$11.49	\$23.59	\$0.00	\$105.52
	02/01/2027	\$71.84	\$11.49	\$23.59	\$0.00	\$106.92

Classification

Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Apprentice - TERRAZZO FINISHER - Local 3 Marble & Tile

Effective Date - 02/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$30.67	\$11.49	\$23.59	\$0.00	\$65.75
2	60	\$36.80	\$11.49	\$23.59	\$0.00	\$71.88
3	70	\$42.94	\$11.49	\$23.59	\$0.00	\$78.02
4	80	\$49.07	\$11.49	\$23.59	\$0.00	\$84.15
5	90	\$55.21	\$11.49	\$23.59	\$0.00	\$90.29

Effective Date - 08/01/2024

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$31.72	\$11.49	\$23.59	\$0.00	\$66.80
2	60	\$38.06	\$11.49	\$23.59	\$0.00	\$73.14
3	70	\$44.41	\$11.49	\$23.59	\$0.00	\$79.49
4	80	\$50.75	\$11.49	\$23.59	\$0.00	\$85.83
5	90	\$57.10	\$11.49	\$23.59	\$0.00	\$92.18

Notes:

Apprentice to Journeyworker Ratio:1:3

TEST BORING DRILLER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2024	\$49.81	\$9.65	\$18.22	\$0.00	\$77.68
	12/01/2024	\$51.28	\$9.65	\$18.22	\$0.00	\$79.15
	06/01/2025	\$52.78	\$9.65	\$18.22	\$0.00	\$80.65
	12/01/2025	\$54.28	\$9.65	\$18.22	\$0.00	\$82.15
	06/01/2026	\$55.83	\$9.65	\$18.22	\$0.00	\$83.70
	12/01/2026	\$57.33	\$9.65	\$18.22	\$0.00	\$85.20

For apprentice rates see "Apprentice- LABORER"

TEST BORING DRILLER HELPER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2024	\$45.60	\$9.65	\$18.22	\$0.00	\$73.47
	12/01/2024	\$47.07	\$9.65	\$18.22	\$0.00	\$74.94
	06/01/2025	\$48.57	\$9.65	\$18.22	\$0.00	\$76.44
	12/01/2025	\$50.07	\$9.65	\$18.22	\$0.00	\$77.94
	06/01/2026	\$51.62	\$9.65	\$18.22	\$0.00	\$79.49
	12/01/2026	\$53.12	\$9.65	\$18.22	\$0.00	\$80.99

For apprentice rates see "Apprentice- LABORER"

TEST BORING LABORER <i>LABORERS - FOUNDATION AND MARINE</i>	06/01/2024	\$45.48	\$9.65	\$18.22	\$0.00	\$73.35
	12/01/2024	\$46.95	\$9.65	\$18.22	\$0.00	\$74.82
	06/01/2025	\$48.45	\$9.65	\$18.22	\$0.00	\$76.32
	12/01/2025	\$49.95	\$9.65	\$18.22	\$0.00	\$77.82
	06/01/2026	\$51.50	\$9.65	\$18.22	\$0.00	\$79.37
	12/01/2026	\$53.00	\$9.65	\$18.22	\$0.00	\$80.87

For apprentice rates see "Apprentice- LABORER"

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TRACTORS/PORTABLE STEAM GENERATORS <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$55.41	\$15.30	\$16.40	\$0.00	\$87.11
	12/01/2024	\$56.85	\$15.30	\$16.40	\$0.00	\$88.55
	06/01/2025	\$58.13	\$15.30	\$16.40	\$0.00	\$89.83
	12/01/2025	\$59.57	\$15.30	\$16.40	\$0.00	\$91.27
	06/01/2026	\$60.85	\$15.30	\$16.40	\$0.00	\$92.55
	12/01/2026	\$62.29	\$15.30	\$16.40	\$0.00	\$93.99
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TRAILERS FOR EARTH MOVING EQUIPMENT <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2024	\$40.82	\$15.07	\$18.67	\$0.00	\$74.56
	12/01/2024	\$40.82	\$15.07	\$20.17	\$0.00	\$76.06
	01/01/2025	\$40.82	\$15.57	\$20.17	\$0.00	\$76.56
	06/01/2025	\$41.82	\$15.57	\$20.17	\$0.00	\$77.56
	12/01/2025	\$41.82	\$15.57	\$21.78	\$0.00	\$79.17
	01/01/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$79.77
	06/01/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$80.77
	12/01/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$82.51
01/01/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$83.11	
TUNNEL WORK - COMPRESSED AIR <i>LABORERS (COMPRESSED AIR)</i>	06/01/2024	\$57.71	\$9.65	\$19.00	\$0.00	\$86.36
	12/01/2024	\$59.18	\$9.65	\$19.00	\$0.00	\$87.83
	06/01/2025	\$60.68	\$9.65	\$19.00	\$0.00	\$89.33
	12/01/2025	\$62.18	\$9.65	\$19.00	\$0.00	\$90.83
	06/01/2026	\$63.73	\$9.65	\$19.00	\$0.00	\$92.38
	12/01/2026	\$65.23	\$9.65	\$19.00	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) <i>LABORERS (COMPRESSED AIR)</i>	06/01/2024	\$59.71	\$9.65	\$19.00	\$0.00	\$88.36
	12/01/2024	\$61.18	\$9.65	\$19.00	\$0.00	\$89.83
	06/01/2025	\$62.68	\$9.65	\$19.00	\$0.00	\$91.33
	12/01/2025	\$64.18	\$9.65	\$19.00	\$0.00	\$92.83
	06/01/2026	\$65.73	\$9.65	\$19.00	\$0.00	\$94.38
	12/01/2026	\$67.23	\$9.65	\$19.00	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2024	\$49.78	\$9.65	\$19.00	\$0.00	\$78.43
	12/01/2024	\$51.25	\$9.65	\$19.00	\$0.00	\$79.90
	06/01/2025	\$52.75	\$9.65	\$19.00	\$0.00	\$81.40
	12/01/2025	\$54.25	\$9.65	\$19.00	\$0.00	\$82.90
	06/01/2026	\$55.80	\$9.65	\$19.00	\$0.00	\$84.45
	12/01/2026	\$57.30	\$9.65	\$19.00	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE) <i>LABORERS (FREE AIR TUNNEL)</i>	06/01/2024	\$51.78	\$9.65	\$19.00	\$0.00	\$80.43
	12/01/2024	\$53.25	\$9.65	\$19.00	\$0.00	\$81.90
	06/01/2025	\$54.75	\$9.65	\$19.00	\$0.00	\$83.40
	12/01/2025	\$56.25	\$9.65	\$19.00	\$0.00	\$84.90
	06/01/2026	\$57.80	\$9.65	\$19.00	\$0.00	\$86.45
	12/01/2026	\$59.30	\$9.65	\$19.00	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"						

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
VAC-HAUL <i>TEAMSTERS JOINT COUNCIL NO. 10 ZONE B</i>	06/01/2024	\$40.24	\$15.07	\$18.67	\$0.00	\$73.98
	12/01/2024	\$40.24	\$15.07	\$20.17	\$0.00	\$75.48
	01/01/2025	\$40.24	\$15.57	\$20.17	\$0.00	\$75.98
	06/01/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$76.98
	12/01/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$78.59
	01/01/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$79.19
	06/01/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$80.19
	12/01/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$81.93
	01/01/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$82.53
WAGON DRILL OPERATOR <i>LABORERS - ZONE 2</i>	12/01/2023	\$38.11	\$9.65	\$17.14	\$0.00	\$64.90
For apprentice rates see "Apprentice- LABORER"						
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) <i>LABORERS - ZONE 2 (HEAVY & HIGHWAY)</i>	06/01/2024	\$38.78	\$9.65	\$17.80	\$0.00	\$66.23
	12/01/2024	\$40.11	\$9.65	\$17.80	\$0.00	\$67.56
	06/01/2025	\$41.50	\$9.65	\$17.80	\$0.00	\$68.95
	12/01/2025	\$42.88	\$9.65	\$17.80	\$0.00	\$70.33
	06/01/2026	\$44.32	\$9.65	\$17.80	\$0.00	\$71.77
	12/01/2026	\$45.76	\$9.65	\$17.80	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"						
WASTE WATER PUMP OPERATOR <i>OPERATING ENGINEERS LOCAL 4</i>	06/01/2024	\$56.03	\$15.30	\$16.40	\$0.00	\$87.73
	12/01/2024	\$57.48	\$15.30	\$16.40	\$0.00	\$89.18
	06/01/2025	\$58.78	\$15.30	\$16.40	\$0.00	\$90.48
	12/01/2025	\$60.23	\$15.30	\$16.40	\$0.00	\$91.93
	06/01/2026	\$61.53	\$15.30	\$16.40	\$0.00	\$93.23
	12/01/2026	\$62.98	\$15.30	\$16.40	\$0.00	\$94.68
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER <i>PLUMBERS & PIPEFITTERS LOCAL 51</i>	08/28/2023	\$51.99	\$10.15	\$19.95	\$0.00	\$82.09
	08/26/2024	\$54.74	\$10.15	\$19.95	\$0.00	\$84.84
	08/25/2025	\$57.49	\$10.15	\$19.95	\$0.00	\$87.59
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"						

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)

Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

** Multiple ratios are listed in the comment field.

*** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

**** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form is available from the Department of Labor Standards (DLS) at www.mass.gov/dols/pw and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

On a weekly basis, every contractor and subcontractor is required to submit a certified copy of their weekly payroll records to the awarding authority; this includes the payroll forms and the Statement of Compliance form. The certified payroll records must be submitted either by regular mail or by e-mail to the awarding authority. Once collected, the awarding authority is required to preserve those records for three years from the date of completion of the project.

Each such contractor and subcontractor shall furnish weekly **and** within 15 days after completion of its portion of the work, to the awarding authority directly by first-class mail or e-mail, a statement, executed by the contractor, subcontractor or by any authorized officer thereof who supervised the payment of wages, this form, accompanied by their payroll:

STATEMENT OF COMPLIANCE

_____, 20_____

I, _____, _____
(Name of signatory party) (Title)

do hereby state:

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

_____ on the _____
(Contractor, subcontractor or public body) (Building or project)

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 _____

MASSACHUSETTS WEEKLY CERTIFIED PAYROLL REPORT FORM



Company's Name:		Address:				Phone No.:			Payroll No.:									
Employer's Signature:		Title:				Contract No.:		Tax Payer ID Number		Work Week Ending:								
Awarding Authority's Name:		Public Works Project Name:				Public Works Project Location:			Min. Wage Rate Sheet Number									
General / Prime Contractor's Name:		Subcontractor's Name:				"Employer" Hourly Fringe Benefit Contributions												
										(B+C+D+E)	(A x F)							
Employee Name & Complete Address	Work Classification:	Employee is OSHA 10 certified (?)	Appr. Rate (%)	Hours Worked							Project Hours (A) All Other Hours	Hourly Base Wage (B)	Health & Welfare Insurance (C)	ERISA Pension Plan (D)	Supp. Unemp. (E)	Total Hourly Prev. Wage (F)	Project Gross Wages	Check No. (H)
				Su.	Mo.	Tu.	We.	Th.	Fr.	Sa.							Total Gross Wages	

Are all apprentice employees identified above currently registered with the MA DLS's Division of Apprentice Standards? YES NO

For all apprentices performing work during the reporting period, attach a copy of the apprentice identification card issued by the Massachusetts Department of Labor Standards / Division of Apprentice Standards. No apprentices are identified above

NOTE: Pursuant to MGL c. 149, s. 27B, every contractor and subcontractor is required to submit a **true and accurate** copy of their certified weekly payroll records to the awarding authority by first-class mail or e-mail. In addition, each weekly payroll must be accompanied by a statement of compliance signed by the employer. Failure to comply may result in the commencement of a criminal action or the issuance of a civil citation.

Date Received by Awarding Authority / /
--

SECTION 01100
SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Work
- B. Contract Type
- C. Work Sequence
- D. Use of Premises

1.02 DESCRIPTION OF WORK

- A. This contract is for Construction of Duxbury Beach Seawall - Phase II in Duxbury, MA.
- B. Work under this contract generally includes (but is not necessarily limited to) the following:
 - 1. Concrete seawall demolition and disposal.
 - 2. Excavation and backfill.
 - 3. Temporary shoring.
 - 4. Steel sheeting installation.
 - 5. Reinforced concrete seawall and footing.
 - 6. Reconstruction of existing revetment.
 - 7. Removal and disposal of existing revetment stone.
 - 8. Cobble berm construction.
 - 9. Sand dune reconstruction and planting.
- C. Related Sections:
 - 1. Section 02050 – Soils and Borrow Materials
 - 2. Section 02117 – Clean Up
 - 3. Section 02200 – Earth Excavation, Backfill, Fill, and Grading
 - 4. Section 02230 – Site Clearing
 - 5. Section 02900 – Landscape

1.03 CONTRACT TYPE

- A. Construct the Work under a unit price contract.

1.04 WORK SEQUENCE

- A. The Contractor shall coordinate his work with the Owner as necessary.
- B. The work shall be completed and functional by December 1, 2025.

1.05 USE OF PREMISES

- A. Contractor shall limit use of premises for work storage and access and shall allow:
 - 1. Access to site by Town representatives.
 - 2. Unimpeded access by owners to private residences along the seawall.
 - 3. Emergency vehicular traffic passage.
- B. Coordinate work schedule with the Owner.
- C. Assume full responsibility for protection and safekeeping of products under this Contract.
- D. Assume full responsibility for protection of private property during the work, including the private dwelling and bituminous concrete driveway on the dam and repair any damage caused by his operations.

END OF SECTION

SECTION 01200
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Procedures
 - 2. Scope of Payment
 - 3. Partial Payments

1.02 PROCEDURES

- A. For unit price items, the Contractor shall be paid for the actual amount of work accepted during the period of construction. After the work is completed, before final payment is made, the Engineer shall make final measurements to determine the quantities of the various items of work accepted as the basis for final payment.
- B. For lump sum items, the Contractor shall be paid in accordance with the progress schedule and schedule of values on the basis of actual percentage of work accepted until the work item is completed. Upon completion of the item, 100% of the lump sum price may be paid, less retainage.
- C. Once each month the Contractor shall prepare and sign an Application for Payment, and submit the original and five (5) copies for review and signature of the Owner and the Engineer. These completed forms will provide the basis upon which payment will be made to the Contractor.
- D. No payment of any application for Payment or of any retained percentage shall relieve the Contractor of his obligation to repair or replace any defective parts of the construction or to be responsible for all damage due to such defects during the construction period or the one-year guarantee period.

1.03 SCOPE OF PAYMENT

- A. Payments to the Contractor shall be made for the actual quantities of the contract unit price items performed and accepted in accordance with the Contract Documents. Upon completion of construction, if these actual quantities show either an increase or decrease from the quantities given in the Bid, the contract unit prices will still prevail, except as provided in the General Conditions, Supplementary Conditions or Special Conditions.
- B. No payment of any Application for Payment or of any retained percentage shall relieve the Contractor of his obligation to repair or replace any defective parts of the construction or to be responsible for all damage due to such defects during the construction period or the one-year guarantee period.

1.04 PARTIAL PAYMENTS

- A. Partial payment shall be made monthly as the work progresses. All partial payments shall be subject to correction in subsequent partial payments or the final Application for Payment.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 GENERAL

- A. The items of work required by the General Conditions, Supplemental Conditions, Special Conditions and Division 1 – General Requirements shall not be measured and paid separately except as expressly indicated therein, but shall be included in the prices bid for each unit and lump sum item.
- B. Each unit or lump sum price stated in the BID FORM shall constitute full compensation as herein specified for each item of work completed, including cleaning up, in accordance with the drawings and specifications.
- C. The prices for those items, which involve excavation, shall include compensation for disposal of surplus excavated material, handling water, and installation of all necessary sheeting and bracing.

3.02 PAYMENT – CONSTRUCTION OF DUXBURY BEACH SEAWALL

PHASE II

The payment for various unit and lump sum items listed below shall include all labor, tools, equipment and incidental work necessary to complete the item in accordance with the plans and specifications whether or not the particular work is mentioned in the following paragraphs.

ITEM 1 – MOBILIZATION / DEMOBILIZATION

- 1. The lump-sum price bid for Item 1 shall constitute full compensation for furnishing and transporting to the work site and, upon completion of the work, dismantling and removal of all equipment and materials necessary to perform the work and for cleaning up the site.
- 2. The lump-sum price under Item 1 shall be paid in two installments; fifty percent (50%) with the first payment request after the Contractor has mobilized to the site and fifty percent (50%) upon full completion of the entire project. Compensation under Item 1 shall also constitute full compensation for contract bonds and insurance and other contractual conditions.
- 3. The lump-sum price bid for Item 1 shall not be greater than ten percent (10%) of the total price bid.

ITEM 2 – REMOVE & DISPOSE OF EXISTING CONCRETE

1. Measurement. The quantity of existing concrete to be paid for under Item 2 shall be the number of cubic yards of existing concrete seawalls, return walls, footings, patios, walks stairs, ramps and slabs removed and disposed of complete to the lines and grades as shown on the drawings and as directed.
2. Payment. The unit price bid for Item 2 shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for excavating, cutting, demolishing, removing and disposing of the existing concrete as specified and as directed. Cutting the existing seawall at the Marshfield Town line shall be included in the price bid for Item 2.

ITEM 3 – CONSTRUCT NEW REINFORCED CONCRETE SEAWALL

1. Measurement. The length of reinforced concrete seawall to be paid for under Item 3 shall be measured by the linear foot along the top of the wall as constructed.
2. Payment. The unit price for Item 3 shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for constructing the reinforced concrete seawall and footing, complete, as indicated on the drawings and as specified herein, including excavation and backfill, layout, temporary excavation support, crushed stone, drainage appurtenances (PVC pipes, crushed stone trench, geotextiles), formwork, falsework, reinforcing steel, dowels, adhesives, joint fillers, sealants, expansion joints, construction joints, dowel connection to existing wall, concrete testing, surface preparation, curing, finishing, water control and all work incidental thereto and not specifically included for payment under other items. The unit price for Item 3 shall also include the restoration of adjacent areas damaged by construction.

ITEM 4 – CONSTRUCT NEW SEAWALL RETURN WALL AT SOUTHERN END

The lump-sum price bid for Item 4 shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for constructing the reinforced concrete return wall and footing, complete, as indicated on the drawings and as specified herein, including excavation and backfill, layout, temporary excavation support, crushed stone, formwork, falsework, reinforcing steel, dowels, adhesives, joint fillers, sealants, expansion joints, construction joints, dowel connection to new seawall, concrete testing, surface preparation, curing, finishing, water control and all work incidental thereto and not specifically included for payment under other items. The unit price for Item 4 shall also include the restoration of adjacent areas damaged by construction.

ITEM 5 – STEEL SHEETING

1. Measurement. The quantity of steel sheeting to be paid for under Item 5 shall be measured by the square yard along the face of the sheeting as installed, complete in place to the lines and grades as shown on the drawings and as directed.

2. Payment. The unit price bid for Item 5 shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for installing the sheeting, complete, as indicated on the drawings and as specified herein, including steel sheeting, layout, falsework, cutting, finishing/coating and all work incidental thereto and not specifically included for payment under other items.

ITEM 6 – CONSTRUCT COBBLE BERM

1. Measurement. The quantity of cobble berm to be included for payment under Item 6 shall be the number of cubic yards of cobble material used to construct the cobble berm to the lines and grades as shown on the drawings and as directed.
2. Payment. The unit price bid for Item 6 shall constitute full compensation for furnishing, placing, grading and compacting the cobble berm material, as specified.

ITEM 7 – RECONSTRUCT SAND DUNE

1. Measurement. The quantity of sand to be included for payment under Item 7 shall be the number of cubic yards of sand material used to reconstruct the sand dune to the lines and grades as shown on the drawings and as directed.
2. Payment. The unit price bid for Item 7 shall constitute full compensation for furnishing, placing, grading and compacting the sand material, as specified. Planting of Cape American Beach grass on the reconstructed dune, shall be paid for under Item 12.

ITEM 8 – EARTH EXCAVATION BELOW NORMAL DEPTH

1. Measurement. The quantity of earth excavation below normal depth (limit of normal excavation) to be included for payment under Item 8 shall be the number of cubic yards of unsuitable material excavated, measured to the depths and lengths ordered, and to the width between payment limits for normal excavation as indicated on the drawings.
2. Payment. The unit price bid for Item 8 shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for excavation below normal depth and disposal of the unsuitable material. Replacement of the unsuitable material shall be paid for under Item 9 – crushed stone.

ITEM 9 – CRUSHED STONE

1. Measurement. Crushed stone backfill below normal depth shall be paid for under Item 9. The quantity of crushed stone used as backfill below normal depth shall be the same as that number of cubic yards of earth excavation below normal depth measured for payment under Item 8, which said crushed stone replaces. Crushed stone used as backfill in other areas shall only be paid for under Item 9 when approved by the Engineer. Crushed stone shown on the plans as a base for the seawall and return wall footings and for the drain trench along the back of the seawall shall be

paid for under those respective items (Item 3 and Item 4) and shall not be paid for under Item 9. Crushed stone shown on the plans as a base for the proposed reconstructed revetment shall be paid for under Item 10a.

2. Payment. The unit price bid for Item 9 shall constitute full compensation for furnishing, placing and compacting the crushed stone, as specified.

ITEM 10 – REMOVE & RECONSTRUCT EXISTING REVETMENT

1. Measurement. The quantity of existing revetment to be included for payment under Item 10a shall be the number of linear feet of revetment removed and reconstructed as shown on the drawings and as directed.
2. Payment. The unit price bid for Item 10a shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for excavation, removal, stockpiling and reconstructing the stone revetment, including crushed stone base from Sta. 15+69 to Sta. 19+20 and from Sta. 36+65 to the Marshfield Town line.
3. The lump-sum price to be paid for Items 10b and 10c shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for removing and stockpiling the existing revetment stone and reconstructing the revetment to match the existing revetment as directed.

ITEM 11 – REMOVE EXISTING REVETMENT STONE

1. Measurement. The quantity of existing revetment stone to be included for payment under Item 11 shall be the number of cubic yards of revetment stone excavated and removed from the project site as indicated and as directed.
2. Payment. The unit price bid for Item 11 shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary for excavation, removal, transporting the stone over the road and stockpiling the stone at the Duxbury Beach Reservation property.

ITEM 12 – PLANT CAPE AMERICAN BEACH GRASS

1. Measurement. The quantity of Cape American Beach Grass to be measured under Item 12 shall be the total square yards of dune actually planted with Cape American Beach Grass, as shown on the drawings and as directed.
2. Payment. The unit price for Item 12 shall constitute full compensation for furnishing and installing/planting the Cape American Beach Grass. The Cape American Beach Grass shall be planted at two locations as directed. One location is the restored sand dune, the construction of which is paid for under Item 7. The second location is the twenty-five-foot-wide construction vehicle access route over the existing dune between the staging area at the DBR north parking lot and the beach.

END OF SECTION

(this page intentionally left blank)

SECTION 01300
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Coordination and project conditions.
- B. Field engineering.
- C. Preconstruction meeting.
- D. Progress meetings.

1.02 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various sections of Project to ensure efficient and orderly sequence of construction.
- B. Coordinate completion and clean up of Work of separate sections in preparation for Substantial Completion.

1.03 FIELD ENGINEERING

- A. Employ Land Surveyor registered in State of Massachusetts and acceptable to Engineer.
- B. Locate and protect survey control and reference points. Promptly notify Engineer of discrepancies discovered.
- C. Control datum for survey is that shown on Drawings.
- D. Confirm drawing dimensions and elevations.
- E. Provide field-engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.
- F. Submit copy of certificate signed by Land Surveyor certifying elevations and locations of the Work are in conformance with Contract Documents.
- G. Maintain complete and accurate log of control and survey work as Work progresses.

1.04 PRECONSTRUCTION MEETING

- A. Engineer will schedule meeting after Notice of Award.

- B. Attendance Required: Owner, Engineer and Contractor.
- C. Agenda:
 - 1. Submission of schedule of values, progress schedule, suppliers and vendors.
 - 2. Designation of personnel representing parties in Contract and Engineer.
 - 3. Procedures and processing of submittals, substitutions, applications for payments, Change Orders, and Contract closeout procedures.
 - 4. Scheduling.
 - 5. Owner's requirements.
 - 6. Security and housekeeping procedures.
 - 7. Application for payment procedures.
 - 8. Inspection and acceptance of facilities.
- D. Record minutes and distribute copies within two days after meeting to participants.

1.05 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Engineer will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Attendance Required: Job superintendent, Engineer and Owner, as appropriate for each meeting.
- D. Agenda:
 - 1. Review of Work progress.
 - 2. Field observations, problems, and decisions.
 - 3. Identification of problems impeding planned progress.
 - 4. Review of submittals schedule and status of submittals.
 - 5. Review of delivery schedules.
 - 6. Maintenance of progress schedule.
 - 7. Corrective measures to regain projected schedules.
 - 8. Planned progress during succeeding work period.
 - 9. Coordination of projected progress.
 - 10. Maintenance of quality and work standards.
 - 11. Effect of proposed changes on progress schedule and coordination.
 - 12. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants.

END OF SECTION

SECTION 01330
SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedule.
- C. Shop drawings.
- D. Samples.
- E. Design data.
- F. Test reports.
- G. Certificates.

1.02 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Contractor's standard forms.
- B. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.
- C. Certify that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- D. Schedule submittals to expedite Project. Coordinate submission of related items.
- E. Allow space on submittals for Contractor and Architect/Engineer review stamps.
- F. When revised for resubmission, identify changes made since previous submission.
- G. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- H. Submittals not requested will not be recognized or processed.

1.03 CONSTRUCTION PROGRESS SCHEDULE

- A. Submit initial progress schedule within 7 days after date established in Notice to Proceed. After review, resubmit required revised data within ten days.

1.04 SHOP DRAWINGS

- A. Shop Drawings: Submit to Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents. Produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01700.

1.05 SAMPLES

- A. Samples: Submit to Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents. Produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01700.
- B. Samples For Selection as Specified in Product Sections:
 - 1. Submit to Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Engineer selection.
- C. Include identification on each sample.

1.06 DESIGN DATA

- A. Submit for Engineer's knowledge as contract administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.07 TEST REPORTS

- A. Submit for Engineer's knowledge as contract administrator or for Owner.
- B. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.08 CERTIFICATES

- A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Engineer.

END OF SECTION

Submittal Procedures
01330-2

SECTION 01400
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances.
- C. References.
- D. Testing and inspection services.
- E. Manufacturers' field services.
- F. Examination.
- G. Preparation.

1.02 QUALITY CONTROL AND CONTROL OF INSTALLATION

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

1.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.04 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.05 TESTING AND INSPECTION SERVICES

- A. Owner will employ and pay for specified services of an independent firm to perform testing and inspection.
- B. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Engineer and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- C. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- D. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm on instructions by Engineer. Payment for re-testing or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.

1.06 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Refer to Section 01330 - SUBMITTAL PROCEDURES, Manufacturers' Field Reports article.

PART 2 PRODUCTS

- A. Unless otherwise indicated on the drawings or specified, only new materials and equipment shall be incorporated in the work. All materials and equipment furnished by the Contractor to be incorporated in the work shall be subject to the inspection and approval of the Engineer. No material shall be processed for, fabricated for, or delivered to the work without prior approval of the Engineer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

SECTION 01500
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary Utilities:
 - 1. Temporary sanitary facilities.
 - 2. Progress cleaning and waste removal.
 - 3. Barriers.
 - 4. Security.
 - 5. Water control.
 - 6. Dust control.
 - 7. Pollution control.

1.02 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide facilities at time of project mobilization.

1.03 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from site periodically and dispose off-site.

1.04 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide protection for plants designated to remain. Replace damaged plants.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.05 SECURITY

- A. Security Program:
 - 1. Protect Work from theft, vandalism, and unauthorized entry.
 - 2. Initiate program at project mobilization.
 - 3. Maintain program throughout construction period.

- B. Entry Control:
 - 1. Restrict entrance of persons and vehicles into Project site.
 - 2. Allow entrance only to authorized persons with proper identification.
 - 3. Maintain log of workers and visitors, make available to Owner on request.

- 1.06 WATER CONTROL
 - A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
 - B. Protect site from puddling or running water.

- 1.07 DUST CONTROL
 - A. Execute Work by methods to minimize raising dust from construction operations.

- 1.08 POLLUTION CONTROL
 - A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
 - B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

END OF SECTION

SECTION 01600
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Product substitution procedures.

1.02 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.

1.03 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

1.04 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with labels intact and legible.
- C. Store sensitive products in an environment favorable to product.
- D. Provide off-site storage and protection when site does not permit on-site storage or protection.
- E. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

- F. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- G. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- H. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.05 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: products of one of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.06 PRODUCT SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for Substitutions during bidding period to requirements specified in this section.
- B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work, which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension, which may subsequently become apparent.
 - 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities having jurisdiction.

- E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.
- F. Substitution Submittal Procedure:
 - 1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 - 2. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
 - 3. Engineer will notify Contractor in writing of decision to accept or reject request.

END OF SECTION

SECTION 01700
EXECUTION REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Closeout procedures.
- B. Protecting installed construction.
- C. Project record documents.

1.02 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer's review.
- B. Provide submittals to Engineer required by authorities having jurisdiction.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.03 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Prohibit traffic from landscaped areas.

1.04 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.

- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured horizontal and vertical locations of underground appurtenances referenced to permanent surface improvements.
 - 2. Field changes of dimension and detail.
 - 3. Details not on original Contract drawings.
- G. Submit documents to Engineer.

END OF SECTION

SECTION 02050
SOILS AND BORROW MATERIAL

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes materials for backfill, fill and grading purposes.
- B. Related Sections:
 - 1. Section 02200 - Earth Excavation, Backfill, Fill, and Grading
- C. MHD M1.03.0, Type B (Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition) - Bank Run Gravel, 3 inches Largest Dimension
- D. MHD M1.03.1 (Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition) - Processed Gravel for Subbase.
- E. MHD M1.04.0, Type A (Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition) – Sand Borrow, 1/4-inch maximum particle size.
- F. MHD M2.01.0 (Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition) – Crushed Stone
- G. MHD M2.01.7 (Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition) - Dense-Graded Crushed Stone for Subbase.
- H. ASTM D422 - Method for Sieve Analysis of Fine and Coarse Aggregates.
- I. ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb. Rammer and 18 inch Drop.
- J. ASTM D2487 - Classification of Soils for Engineering Purposes.
- K. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- L. ASTM D3017 - Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- M. ASTM D4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

1.02 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.

- B. Materials Source: Submit name of imported materials suppliers.
- C. Submit grain size analysis and curve performed in accordance with ASTM D422 for each proposed source of material for review by the Engineer. The grain size analysis shall indicate that the material conforms to the gradation requirements specified.

1.03 QUALITY ASSURANCE

- A. Perform Work in accordance Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition.

PART 2 PRODUCTS

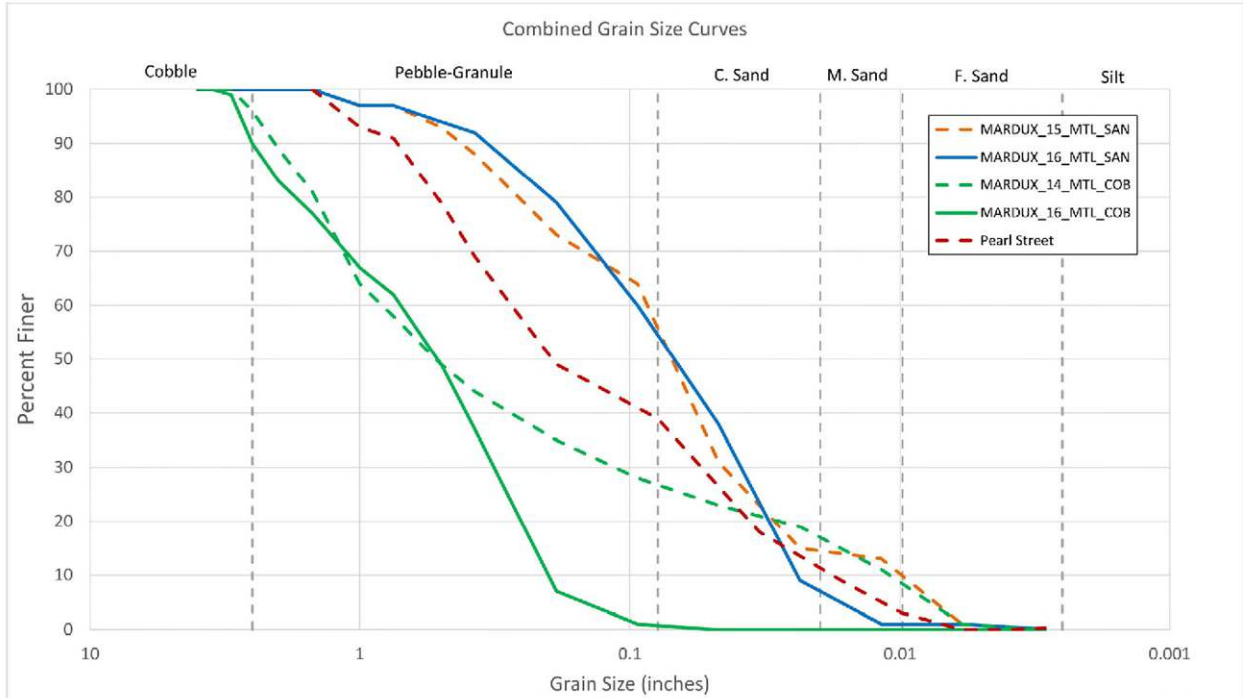
2.01 MATERIALS

- A. Bank-Run Gravel:
 - 1. Bank-run gravel shall conform to meet Massachusetts Standard Specification M1.03.0, Type B.
 - 2. Bank-run gravel shall be a granular material well graded from fine to coarse with a maximum size less than 3 inches, obtained from approved natural deposits and unprocessed except for the removal of unacceptable material and stones larger than the maximum size permitted. It shall not contain vegetation, masses of roots or individual roots more than 12 inches long or more than 1/2 inch in diameter. It shall be substantially free from loam and other organic matter, clay and other fine or harmful substances.
- B. Processed Gravel:
 - 1. Processed gravel shall meet Massachusetts Standard Specification M1.03.1.
 - 2. The gravel shall consist of hard, durable stone and coarse sand. Approved source material shall be processed by mechanical means. Material shall be well graded and stockpiled in such a manner to prevent segregation of particles. Material shall be free of loam, clay or other deleterious material.
- C. Processed Sand:
 - 1. Processed sand shall meet gradation requirements of Massachusetts Standard Specification M1.04.0 Type A.
 - 2. Processed sand shall consist of clean inert, hard, durable grains of quartz or other hard durable rock, free from loam or clay, surface coatings and deleterious materials. The allowable amount of material passing a No. 200 sieve shall not exceed 10 percent by weight.

- D. Crushed Stone:
1. Crushed stone shall meet the gradation requirements of Massachusetts Standard Specification M2.01.1.
 2. The material shall be screened and well graded in size and shall consist of clean, hard and durable particles of rock, free from dirt, vegetation or other objectionable matter, and free from soft, thin elongated, laminated or disintegrated pieces.
- E. Dense Graded Crushed Stone:
1. Dense-graded crushed stone shall meet Massachusetts Standard Specification M2.01.7.
 2. The material shall be uniformly mixed and well graded in size. The crushed stone shall be uniformly mixed coarse and fine aggregates. Coarse aggregates shall consist of hard durable, particles or fragments of stone or gravel. Fine aggregates shall consist of natural or crushed stone. The composite material shall be free from clay, loam or other deleterious material.
- F. Trap Rock:
1. Trap rock shall meet Massachusetts Standard Specification M2.02.4 Modified Rockfill.for pipe end erosion protection
- G. Cobble for cobble berm construction:
1. Gradation for imported cobble material shall meet the following:

Sieve Size		Results	
Standard	Alternate	(% Passing by weight)	
(mm)		Sample Result	Maximum allowed
150	6"	100	100
125	5"	94	95
100	4"	83	80
75	3"	72	70
63	2-1/2"	61	60
50	2"	51	50
37.5	1-1/2"	41	40
25	1"	29	30
19	3/4"	25	25
12.5	1/2"	19	20
4.75	#4	16	15
0.33	#50	3	3
0.075	#200	0.1	0.1

- H. Sand for sand dune reconstruction:
1. The gradation of imported sand shall fall between the solid green and blue lines on the following grain size curves¹:



2.02 SOURCE QUALITY CONTROL

- A. Section 01400 - Quality Requirements: Testing and inspection services.
- B. Testing and Analysis: Perform in accordance with referenced specifications and/or as specified by the Engineer.
- C. When tests indicate materials do not meet specified requirements, change material or material source and retest.
- D. Furnish materials of each type from same source throughout the Work.

PART 3 EXECUTION

3.01 STOCKPILING

- A. Stockpile materials on site at locations designated by the Engineer or Owner.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.

¹ Combined Grain Size Curves from Specifications for Contract 2024-04 – Bay Avenue and Gurnet Road Beach Nourishment Project, Marshfield, MA November 2023, prepared by Marshfield Department of Public Works
Duxbury Beach Seawall – Phase II

- C. Separate differing materials with dividers or stockpile apart to prevent mixing.
- D. Direct surface water away from stockpile site so as to prevent erosion or deterioration of materials.
- E. Stockpile materials on impervious material and cover to prevent erosion and leaching, until disposed of.

3.02 PLACING AND COMPACTING

- A. Bank-Run Gravel:
 - 1. The bank-run gravel shall be spread in layers of uniform thickness not exceeding 8 inches before compaction and moistened or allowed to dry as directed. Then it shall be thoroughly compacted by means of suitable power-driven tampers or other power-driven equipment.
- B. Processed Gravel:
 - 1. The material shall be placed in layers of uniform thickness not greater than 6 inches and then shall be thoroughly compacted by means of a suitable vibrator, vibratory roller or mechanical tamper.
- C. Processed Sand:
 - 1. Processed sand shall be spread in uniform layers not exceeding 12 inches and thoroughly compacted by means of suitable vibratory roller or mechanical tamper.
 - 2. For use as backfill in zone around the pipe: Processed sand shall be spread in uniform layers not exceeding 12 inches. Then it shall be compacted using hand tamping for the zone around the pipe and mechanical tamping for areas above the pipe.
- D. Crushed Stone:
 - 1. The material shall be spread in layers of uniform thickness not greater than 6 inches and then shall be thoroughly compacted by means of a suitable vibrator or mechanical tamper.
- E. Dense Graded Crushed Stone:
 - 1. The material shall be placed in layers of uniform thickness not greater than 6 inches and then shall be thoroughly compacted by means of a suitable vibratory roller or mechanical tamper.

3.03 STOCKPILE CLEANUP

- A. Leave ALL unused materials in neat, compact stockpiles.
- B. When borrow area is indicated, leave area in clean and neat condition. Grade site surface to prevent freestanding surface water.

END OF SECTION

(this page intentionally left blank)

SECTION 02117
CLEAN UP

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes clean up procedures for the Contractor and/or Sub-Contractors to follow throughout construction.

1.02 CLEANUP

- A. **The Contractor is advised that the work site is an environmentally sensitive area. The Contractor shall take care to conduct the work such that hazardous materials and oil or fuel required by the Contractor's equipment shall be well contained and not released on the site. The Contractor shall immediately notify the Town of any such release, REGARDLESS of the extent, and shall clean up the release immediately and in a manner approved by the Town and MassDEP.**
- B. During its progress the work and the adjacent areas affected thereby shall be kept cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall be removed and all damage repaired so that the public and property owners will be inconvenienced as little as possible.
- C. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, work done under this contract, or elsewhere during the course of the Contractor's operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc., shall, upon completion of the work, be left in a clean and neat condition.
- D. On or before the completion of the work, the Contractor shall, unless otherwise especially directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools, and machinery or other construction equipment furnished by him; shall remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around privies, houses, and other buildings used by him; shall remove all rubbish from any grounds which he has occupied; and shall leave the roads and all parts of the premises and adjacent property affected by his operations in a neat and satisfactory condition.

- E. The Contractor shall restore or replace, when and as directed, any public or private property damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk, and landscaping work. Suitable materials, equipment, and methods shall be used for such restoration.
- F. The Contractor shall thoroughly clean all materials and equipment installed by him and his subcontractors, and on completion of the work shall deliver it undamaged and in fresh and new-appearing condition. All mechanical equipment shall be left fully charged with lubricant and ready for operation.
- G. The Contractor shall smooth all ruts and track marks on the beach at the end of each work day.
- H. The Contractor shall thoroughly clean the work area(s) daily, or as directed by the Owner. The Contractor shall dispose of all unsuitable materials and debris in an approved manner.

END OF SECTION

SECTION 02200
EARTH EXCAVATION, BACKFILL, FILL AND GRADING

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes excavating, backfilling, filling and grading required for seawall foundations, site grading, site structures and utility trenches.
- B. Related Sections:
 - 1. Section 02050 – Soils and Borrow Materials
 - 2. Section 02221 – Demolition
 - 3. Section 02230 – Site Clearing

1.02 REFERENCES

- A. ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb. Rammer and 18 inch Drop.
- B. ASTM D2487 - Classification of Soils for Engineering Purposes.
- C. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- D. ASTM D3017 - Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 GENERAL

- A. Make excavations in earth for trenches and structures; backfill and grade such excavations to the extent necessary and construct embankments and fills. All such work shall be done as indicated on the drawings and as herein specified.
- B. Excavation shall be carried out in such manner as to eliminate all possibility of undermining or disturbing the foundations of existing structures or of work previously completed under this contract.
- C. Perform all sheeting work, cofferdaming, pumping, and draining to eliminate undermining and to render the bottom of all excavations firm and dry prior to the placement of any structure.
- D. In no case, except as provided for in the sections EXCAVATION FOR

STRUCTURES and PREPARATION OF SUBGRADE, shall the earth be plowed, scraped, or dug by machinery so as to disturb material below finished subgrade.

3.02 SEPARATION OF SURFACE MATERIALS.

- A. Remove only as much of any existing pavement as is necessary for the prosecution of the work. Prior to excavation, pavement shall be cut along straight edges and, where pavement is removed in large pieces, it shall be disposed of before proceeding with the excavation.
- B. From areas within which excavations are to be made, topsoil shall be carefully removed and separately stored to be used again as directed; or, if the Contractor prefers not to separate the surface materials, he shall furnish, as directed, topsoil at least equal in quantity and quality to that excavated.

3.03 SHEETING AND BRACING

- A. Furnish, install, and maintain such sheeting, bracing, trench box, etc., as may be necessary to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation to less than that necessary for proper construction, or could injure personnel or delay the work, or endanger adjacent structures.
- B. Leave in place to be embedded in the backfill or concrete, all sheeting, bracing, etc., which is indicated on the drawings to be so left in place. Leave in place any other sheeting, bracing, etc., which the Engineer may direct in writing to leave in place, at any time during the progress of the work, for the purpose of preventing injury to structures or property. All other sheeting shall be removed.
- C. All sheeting and bracing not to be left in place shall be carefully removed in such manner as not to endanger the construction or other structures. All voids left or caused by the withdrawal of sheeting shall be backfilled immediately using approved materials and compaction methods. Such sheeting and bracing, when incidental to normal excavation, shall be included in the work to be done under items involving normal excavation.

3.04 DRAINAGE / DEWATERING

- A. To ensure proper conditions at all times during construction, the Contractor shall provide and maintain ample means and devices with which to intercept and/or remove promptly, and dispose of properly, of all water, which is not the result of tidal fluctuations, entering trenches and other excavations. Such excavations shall be kept dry until the structures, pipes and appurtenances to be built therein have been completed.
- B. All water pumped or drained from the work shall be disposed of in a suitable manner without interference with other work or damage to pavement, other

surfaces or property.

3.05 EXCAVATION FOR STRUCTURES

- A. Excavate to the exact depth required for all foundations and structures.
- B. Excavations shall conform to elevations and dimensions shown on the Drawings and extending a sufficient distance from foundations to permit erection and removal of concrete forms, other required construction and for inspection. The Contractor shall exercise care so as not to disturb the bottom of the excavation.

3.06 EXCAVATION NEAR EXISTING STRUCTURES

- A. Attention is directed to the fact that there are pipes, drains and other utilities in certain locations. Some of these have been indicated on the drawings, but all such existing utilities are not necessarily shown. The completeness or accuracy of the information given is not guaranteed.
- B. As the excavation approaches pipes, conduits or other underground structures, digging by machinery shall be discontinued and the excavation shall be done by means of hand tools. Such manual excavation when incidental to normal excavation shall be included in the work to be done under items involving normal excavation.

3.07 PROTECTION OF EXISTING STRUCTURES

- A. All existing pipes, poles, wires, fences, buildings, decks, patios, curbing, pavements, property line markers and other structures which the Engineer decides must be preserved in place, without being temporarily or permanently relocated, shall be carefully supported and protected from injury by the Contractor.
- B. Should such items be injured, the Contractor, without compensation shall restore them therefor, to at least as good condition as that in which they were found immediately before the work was begun.

3.08 RELOCATION AND REPLACEMENT OF EXISTING STRUCTURES

- A. Whenever encountering certain existing structures as described below and so ordered in writing, do the whole or such portions of the work as may be directed to change the location of, remove and later restore, replace such structures or to assist the Owner thereof in so doing. For all such work payment shall be made under such items of work as may be applicable, otherwise as Extra Work.
- B. In removing existing pipes or other structures, care shall be used to avoid damage to materials and the Engineer shall include for payment only those new materials, which, in his judgment, are necessary to replace those unavoidably damaged.
- C. The structures to which the provisions of the preceding two paragraphs shall apply include pipes, wires, decks, patios and other structures which meet all of the

following:

1. Are not indicated on the drawings or otherwise provided for.
2. Encroach upon or are encountered near and substantially parallel to the edge of the excavation.
3. In the opinion of the Engineer will impede progress to such an extent that satisfactory construction cannot progress until they have been changed in location, removed (to be later restored) or replaced.

3.09 CARE AND RESTORATION OF PROPERTY

- A. Protect all private and public property adjacent to work from injury due to work.
- B. On paved surfaces the Contractor shall not use or operate tractors, bulldozers, or other power-operated equipment with treads or wheels so shaped as to cut or otherwise injure such surfaces.
- C. Property injured by the Contractor's operations shall be restored to a condition at least equal to that in which they were found immediately before work was begun. Suitable materials and methods shall be used for such restoration.
- D. The restoration of existing property or structures shall be done as promptly as practicable and shall not be left until the end of the construction period.

3.10 UNAUTHORIZED EXCAVATION

- A. If the bottom of any excavation is taken out beyond the limits indicated or prescribed, the resulting void shall be backfilled and thoroughly compacted at the Contractor's expense with bank-run gravel, crushed stone or suitable excavated material from the work.

3.11 ELIMINATION OF UNSUITABLE MATERIAL

- A. If, in the opinion of the Engineer, material unsuitable for foundation is found at or below the grade to which excavation would normally be carried in accordance with the drawings and/or specifications, remove such material to the required width and depth and replace it with thoroughly compacted processed gravel, bank-run gravel, crushed stone or concrete as directed.

3.12 DISPOSAL/STOCKPILING OF SURPLUS EXCAVATED MATERIALS

- A. No excavated materials shall be removed from the site of the work or disposed of by the Contractor except as directed or approved.
- B. At the direction of the Owner, and at no additional cost to the Owner, suitable surplus excavated material shall be stockpiled on-site until the work is completed.
- C. Surplus excavated materials suitable for backfill shall be used to replace other materials unacceptable for use as backfill; or shall be neatly deposited for other purposes within a haul of one mile from the point of excavation; all as directed or

approved and without additional compensation.

- D. All excavated beach sand and cobble shall remain on the beach and shall not be hauled away. Beach sand and cobble shall be reused for backfill as shown on the Drawings. All excess beach sand and cobble shall be placed on the beach and graded to match the profile of the beach.
- E. Except for beach sand and cobble, surplus excavated materials not needed as specified above shall be hauled away by the Contractor, at his expense, at approved locations, and in accordance with arrangements made by him.

3.13 DUST CONTROL

- A. During the progress of the work, conduct operations and maintain the area of activities, including sweeping and sprinkling of streets, so as to minimize the creation and dispersion of dust.

3.14 BRIDGING EXCAVATIONS

- A. Provide at no expense to the Owner, suitable and safe bridges and other crossings, where required for the accommodation of travel, or access to private property during construction and remove said structures thereafter.

3.15 BACKFILLING - GENERAL

- A. In general, and unless other material is indicated on the drawings or specified, material used for backfilling trenches and excavations around structures shall be suitable material which was removed in the course of making the construction excavations.
- B. Frozen material shall not be placed in the backfill nor shall backfill be placed upon frozen material. Previously frozen material shall be removed or shall be otherwise treated as required before new backfill is placed.
- C. Wherever a percentage of compaction for backfill is indicated or specified, it shall be the percent of maximum density at optimum moisture as determined by Method D of ASTM Standard Methods of Test for Moisture-Density Relations of Soils Using 10-lb. Rammer and 18-in. Drop, Designation D1557.

3.16 FILL AND BACKFILL UNDER STRUCTURES

- A. Unless otherwise indicated or specified, all fill and backfill under structures and pavements adjacent to structures shall be compacted bank-run gravel as specified in Section 02050 – SOILS AND BORROW MATERIALS.
- B. The fill and backfill materials shall be placed in layers not exceeding 6 inches in thickness. Unless otherwise indicated or specified, each layer shall be compacted to 95 percent.

3.17 BACKFILL AROUND STRUCTURES

- A. Backfill shall not be placed against or on structures until they have attained sufficient strength to support the loads (including construction loads) to which they will be subjected, without distortion, cracking or other damage. As soon as practicable after the structures are structurally adequate backfilling shall be started and then shall proceed until its completion. The best of the excavated materials shall be used in backfilling within 2 feet of the structure. Unequal soil pressures shall be avoided. Material shall be placed evenly around the structure to avoid unequal soil pressures.
- B. The materials shall be placed and compacted to 95 percent unless otherwise indicated or specified.

3.18 MATERIALS FOR FILLING AND EMBANKMENTS

- A. Approved selected materials available from the excavations and not required for backfill around pipes or against structures may be used for filling and building embankments, except as otherwise specified. Material needed in addition to that available from construction operations shall be obtained from approved gravel banks or other approved sources.
- B. All material, whether from the excavations or from borrow, shall be of such nature that after it has been placed and properly compacted it will make a dense, stable fill. It shall not contain vegetation, masses of roots, individual roots more than 12 inches long, or more than 1/2 inch in diameter, stones over 6 inches in diameter or porous matter. Organic matter shall not exceed minor quantities and shall be well distributed.

3.19 PREPARATION OF SUBGRADE

- A. The Contractor shall remove loam and topsoil, loose vegetable matter, stumps, large roots, etc., from areas upon which embankments will be built or material will be placed for grading. The subgrade shall be shaped as indicated on the drawings and shall be prepared so that the first layer of the new material placed thereon will be well bonded to it.

3.20 PLACING AND COMPACTING EMBANKMENT MATERIAL

- A. After the subgrade has been prepared as hereinbefore specified, the material shall be placed thereon and built up in successive layers until it has reached the required elevation.
- B. Layers shall not exceed 8 inches in thickness before compaction. In embankments at structures, the layers shall have a slight downward slope away from the structure; in other embankments the layers shall have a slight downward slope away from the center. In general, the finer and less pervious materials shall be placed against the structures or in the center, and the coarser and more

pervious materials, upon the outer parts of embankments.

- C. Each layer of material shall be compacted by the use of approved rollers or other approved means so as to secure a dense, stable and thoroughly compacted mass. At such points as cannot be reached by mobile mechanical equipment, the materials shall be thoroughly compacted by the use of suitable power-driven tampers.
- D. Previously placed or new materials shall be moistened by sprinkling, if required, to ensure proper bond and compaction. No compacting shall be done when the material is too wet, from either rain or too great an application of water, to compact it properly; at such times the work shall be suspended until the previously placed and new materials have dried out sufficiently to permit proper compaction or such other precautions shall be taken as may be necessary to obtain proper compaction.
- E. Except as noted on the drawings, the portion of embankment constructed below proposed structures shall be compacted to 95 percent, the top 2 feet of an embankment below a pavement base shall be compacted to 95 percent, and all other embankments shall be compacted to 95 percent.

END OF SECTION

(This page intentionally left blank)

SECTION 02221
DEMOLITION

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Protecting existing structures during demolition.
 2. Demolition, removal and disposal of the following:
 - a. Removing loose materials prior to demolition.
 - b. Removing designated items indicated by Owner within limits of work prior to demolition.
 - c. Designated concrete seawall and associated structures (stairs, ramps, etc.).
 - d. Concrete slabs within the limits of work.
 - e. Miscellaneous hardware, steel, timber, concrete, rubble and other materials encountered during the course of work which interfere with work specified to be done.
 3. Removing existing revetment stone and either A) transporting, over the road, to the Duxbury Beach Reservation property (see Figure 1 in the Appendix) or B) transporting to the Town stockpile area at the North Hill Country Club, 29 Merry Avenue, Duxbury.
- B. Related Sections:
1. Section 02050 – Soils and Borrow Materials
 2. Section 02230 - Site Clearing

1.02 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Requirements for submittals.
- B. Shop Drawings: Indicate demolition and removal sequence and location of salvageable items; location and construction of barricades, fences, and temporary work.
- C. Design Data: Submit calculations for bracing, shoring, and underpinning signed and sealed by professional engineer.
- D. Existing Building Documentation: Submit the following for existing structures and buildings indicated to remain.
1. Photographic survey indicating conditions before and after demolition work.
- E. Submit copy of permits required by regulatory agencies for demolition.

1.03 CLOSEOUT SUBMITTALS

- A. Section 01700 - Execution Requirements: Requirements for submittals.
- B. Project Record Documents: Accurately record actual locations of subsurface obstructions.
- C. Provide certification that all materials disposed of has been done so in accordance with all municipal, state and federal regulations.

1.04 QUALITY ASSURANCE

- A. Conform to applicable codes for demolition of structures, safety of adjacent structures, dust control, runoff control and disposal of demolition materials.
- B. Conform to applicable codes for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.
- D. Perform Work in accordance with permit requirements and regulations.

1.05 QUALIFICATIONS

- A. Contractor: Company with minimum five years of documented experience in performing work of this section.

1.06 PRE-DEMOLITION MEETINGS

- A. Section 01300 - Administrative Requirements: Pre-demolition meeting.
- B. Convene minimum two weeks prior to commencing work of this section.

1.07 SCHEDULING

- A. Section 01300 - Administrative Requirements: Requirements for scheduling.
- B. Describe demolition removal procedures and schedule.
- C. Coordinate work hours with the Owner and Engineer.

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION

3.01 EXISTING STRUCTURE / BUILDING DOCUMENTATION

- A. Photograph condition of adjacent buildings and structures.
- B. Monitor adjacent structures during demolition operations. Notify Engineer of any observed damage.
- C. Provide the following graphic documentation:
 - 1. Photograph existing buildings (exterior) and seawalls not to be demolished before beginning demolition and after completing demolition.
 - 2. Photographs: Submit digital photographs to Owner and Engineer.
 - a. Identify photographs with date, time, orientation, and project identification.
 - b. Deliver all digital photographs to Owner with project record documents.

3.02 EXAMINATION

- A. Examine existing structures indicated to be demolished before demolition. Contractor shall examine the entire limits of work to determine the types and quantities of demolition, which will be required to fulfill the Contract requirements.
- B. Determine where removals may result in structural deficiency or unplanned structure collapse during demolition. Coordinate demolition sequence and procedures to prevent structures from becoming unstable.
- C. Determine where demolition may affect structural integrity or weather resistance of adjacent buildings indicated to remain.
 - 1. Identify measures required to protect buildings from damage.

3.03 PREPARATION

- A. Notify Dig-Safe not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Notify affected utility companies before starting work and comply with utility's requirements.

- C. Erect, and maintain temporary barriers and security for protection of the public, Owner, and existing facilities indicated to remain.

3.04 DEMOLITION REQUIREMENTS

- A. Submit intended demolition procedures for approval.
- B. Use of explosives is not permitted.
- C. Conduct demolition so as not to interfere with adjacent structures.
- D. Cease operations immediately when adjacent structures appear to be in danger. Notify the Owner and Engineer. Do not resume operations until directed.

3.05 DEMOLITION

- A. Remove existing seawall and footings to minimum of one foot below proposed bottom of excavation for the new wall.
- B. Demolish and remove concrete slabs.
- C. Remove materials to be re-installed or retained in manner to prevent damage. Store and protect in accordance with requirements of Section 01600.
- D. Backfill and compact area to subgrade in accordance with Section 02050.
- E. Regularly cleanup and remove demolished materials from site. Do not allow materials to accumulate on site.
- F. Do not burn or bury materials on site. Leave site in clean condition.

3.06 CONCRETE DISPOSAL REQUIREMENTS

- A. Concrete demolition materials may not be disposed of in a landfill.
- B. All concrete demolition material shall be brought to a recycling/processing facility where it may be processed for use as a recycled aggregate material. Contractor shall provide proof of delivery/disposal at a recycling facility.
- C. On site crushing and/or processing of concrete is prohibited.

3.07 REMOVING EXISTING REVETMENT STONE

- A. Existing revetment stone within the limits of work shall be removed from the immediate area and relocated to one of the following locations as directed:
 - 1. Transport over the road to the Duxbury Beach Reservation property as shown on Appendix Figure 1. Stones shall be stockpiled as directed by the Owner.
 - 2. Transport over the road to the Town stockpile area at the North Hill Country Club, 29 Merry Avenue, Duxbury. Stones shall be stockpiled as directed.

3.08 SCHEDULES

- A. Certain identified items shall remain the property of Owner. Obtain direction from Owner regarding method of removal.

END OF SECTION

(this page intentionally left blank)

SECTION 02230
SITE CLEARING

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes removal of surface debris; clearing and grubbing, removal/chipping of trees, shrubs, other vegetation; and topsoil excavation, screening and stockpiling.
- B. Related Sections:
 - 1. Section 02200 - Earth Excavation, Backfill, Fill, and Grading.
 - 2. Section 02300 - Rock Excavation and Disposal.
 - 3. Section 02900 - Landscape.

PART 2 PRODUCTS

SECTION NOT USED

PART 3 EXECUTION

3.01 STOCKPILING

- A. Section 01300 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Existing vegetation designated to remain shall be tagged or identified.

3.02 PROTECTION

- A. Locate, identify and protect from damage utilities, trees, and structures to remain.
- B. The Contractor shall not cut or injure any trees or other vegetation outside the limits of the areas on which work is to be done. These limits shall be clearly marked in the field prior to site preparation.

3.03 CLEARING

- A. Clear areas required for access to site and execution of Work.
- B. From areas to be cleared, cut or otherwise remove all trees, saplings, brush and vines; windfalls, logs, and trees lying on the ground; dead trees and stubs including their stumps; and any other debris in the area, without disturbing subsoil.
- C. Except where clearing is done by uprooting with machinery or where stumps are left to facilitate subsequent grubbing operations, trees, saplings, brush, vines, stumps to be cleared shall be cut flush with the ground surface.

3.04 GRUBBING

- A. In areas to be grubbed, remove completely all stumps, remove to a depth of 12-in. all roots larger than 3-in. in diameter, and remove to a depth of 6-in. all roots larger than 1/2-in. in diameter. Such depths shall be measured from the existing ground surface or the proposed finished grade whichever is the lower.

3.05 CHIPPING

- A. All acceptable exfoliated branches, limbs, etc., of trees/saplings, brush and shrubs shall be chipped to a size no larger than 5-inches in any dimension by use of a chipper approved by the Engineer and used on site as wood chip mulch.
- B. Excess wood chip mulch shall be spread on exposed slopes on site for erosion control.

3.06 REMOVAL

- A. Remove debris, rock and extracted plant life from site, unless otherwise directed.
- B. Temporary removal and suitable storage of statues, plaques, etc. as directed by the Engineer.
- C. All logs and other wood to be removed in the course of clearing, grubbing and stripping shall become the property of the Contractor and shall be disposed of by him away from the site in an approved manner.

3.07 TOPSOIL EXCAVATION

- A. All stumps, roots, foreign matter, topsoil, loam and unsuitable earth shall be stripped from the ground surface in areas cleared and grubbed. The topsoil and loam shall be utilized for finish surfacing.
- B. Excavate existing topsoil from areas to be excavated, landscaped or graded, without mixing with foreign materials, for use in finish grading.
- C. Excavated topsoil shall be mechanically screened in an approved manner to achieve the requirements designated in Section 02900 LANDSCAPE.
- D. Do not excavate wet topsoil.
- E. Stockpile topsoil in area designated on site to depth not exceeding 8-ft. and protect from erosion.

END OF SECTION

SECTION 02320
STEEL SHEET PILES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Steel sheet piles and associated components.
- B. Related Sections:
 - 1. Section 02050 – Soils and Borrow Materials
 - 2. Section 02200 – Earth Excavation, Backfill, Fill, and Grading
 - 3. Section 02221 – Demolition
 - 4. Section 03300 – Cast-in-Place Concrete

1.02 REFERENCES

- A. AISC - Specifications of the American Institute of Steel Construction
- B. ANSI/AASHTO/AWS - Bridge Welding Code D1.5-88
- C. ASTM - Specifications for the American Society for Testing and Materials
- D. Massachusetts Highway Department, Standard Specifications for Highways and Bridges, latest edition

1.03 SUBMITTALS

- A. Refer to Section 01330, SUBMITTALS for submittal provisions and procedures.
- B. Shop Drawings: Submit shop drawings of work showing size and thickness of each member, type of material, method of connection and assembly. Show dimensions, clearances, anchorages, relationships to surrounding work, coatings, and other pertinent details of fabrication and installation.
- C. Submit to the Engineer:
 - 1. Driving plan and schedule for installation of the steel sheet piles.
 - 2. Method of installation of steel sheet piling including size and type of pile hammer, and temporary systems.
 - 3. Templates and falsework to be used for support and layout of sheet piles during driving.
 - 4. Materials and methods for temporary lateral support of existing structures during sheet pile installation, if required.
 - 5. Welder's Certifications.
- D. Product Data: Provide manufacturer's product data, installation instructions, use

limitations, and recommendations for each material used. Provide certifications that materials comply with requirements.

1.04 QUALITY ASSURANCE

- A. Welding: Perform welding in conformance with ANSI/AASHTO/AWS Bridge Welding Code D1.5-88 as applicable.
- B. Steel sheet piles shall be inspected and/or tested prior to installation. Inspections and/or testing shall include:
 - 1. Checking sheet piles for general straightness: Piles with kinks in local areas along the interlock or that have excessive bowing shall be rejected.
 - 2. Gauging pile interlocks: Thumbs of interlocks shall be of the proper size to fit into the corresponding interlock openings. Piles whose interlocks are not within acceptable tolerance shall be rejected.
 - 3. Checking piles for lamination flaws: Piles showing evidence of lamination flaws shall be rejected.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products in accordance with Section 01600, PRODUCT REQUIREMENTS.
- B. Store work off ground and under cover. Protect from damage. Repair and clean work before erection.

PART 2 PRODUCTS

2.01 MATERIALS

- A. General: Provide products and materials of new stock, free from defects, and of best commercial quality for each intended purpose.
- B. All steel shall meet ASTM A-572, Grade 50 and have a minimum sheet thickness 0.375".
- C. Steel Sheet Piles shall be provided with a high build coal tar coating on both sides for their full length. Coating shall be Protal 600 CTE by Denso North America, Carboline Bitumastic 300 M, or approved equal. Steel sheet piles shall meet the following:
 - 1. Single sheet width (in.) 22.0
 - 2. Maximum sheet height (in.) 9.0
 - 3. Minimum cross sectional area (sq. in./ft.) 6.47
 - 4. Minimum section modulus (cu. in./l.f. of wall) 18.1
- D. Bolts and Fasteners: ASTM F3125, Grade 325.

PART 3 EXECUTION

3.01 INSTALLATION

- A. The Contractor shall establish the sheet pile bulkhead alignment, baseline, and all required elevations. Benchmarks are shown on the Drawings or will be provided by the Engineer. The Contractor shall be responsible for maintenance and protection of the baseline and benchmarks.
- B. Sheet piles shall be driven to elevations specified in the Contract Documents. Notify Engineer immediately if sheet piles cannot be installed to their specified tip elevations.
- C. Splicing of Sheet piles will not be allowed.
- D. Sheet piles shall be driven plumb and true to line. Maximum horizontal deviation from the intended bulkhead line shall not exceed 3 in. over the length of the bulkhead unless otherwise approved by the Engineer.
- E. Brace work rigid and secure to surrounding construction. Provide temporary bracing or anchors where required.
- F. Sheet piles may be driven within falsework or templates, as approved by the Engineer, that are protective of the sheet pile coating.

END OF SECTION

(This page intentionally left blank)

SECTION 02900
LANDSCAPE

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes preparation of subsoil, placing topsoil, seeding/hydroseeding, mulching and fertilizer.
- B. Related Sections:
 - 1. Section 02050 - Soils and Borrow Material.
 - 2. Section 02200 - Earth Excavation, Backfill, Fill, and Grading.

1.02 DEFINITIONS

- A. Weeds: Vegetative species other than specified species to be established in given area.

1.03 CLOSEOUT SUBMITTALS

- A. Section 01700 - Execution Requirements: Closeout procedures.
- B. Operation and Maintenance Data: Include maintenance instructions, cutting method and maximum grass height.

1.04 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging and location of packaging.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Section 01600 - Product Requirements: Product storage and handling requirements.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis and name of manufacturer.

1.06 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.

PART 2 PRODUCTS

2.01 MATERIAL

- A. Topsoil:
 - 1. Topsoil shall consist of fertile, friable, natural topsoil.
 - 2. Free of roots, rocks larger than ½ inch, subsoil, debris, large weeds and foreign matter.
- B. Seed:
 - 1. Seed shall meet Massachusetts Standard Specification M6.03.0 and shall conform to the following:
 - a. Creeping Red Fescue Grass: 50 percent.
 - b. Kentucky Blue Grass: 25 percent.
 - c. Domestic Rye: 10 percent.
 - d. Red Top: 10 percent.
 - e. Ladino Clover: 5 percent.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify building and trench backfilling have been inspected.
- C. Verify substrate base has been contoured and compacted.

3.02 SUBSTRATE PREPARATION

- A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove debris, roots, branches, and stones, in excess of ½ inch in size.
- C. Scarify surface to depth of 3 inches where topsoil is scheduled. Scarify in areas where equipment used for hauling and spreading topsoil has compacted subsoil.

3.03 PLACING TOPSOIL

- A. Place topsoil during dry weather and on dry unfrozen subgrade.

- B. Place topsoil in areas where seeding, sod, and planting is required to nominal depth of 4-inches.
- C. Grade topsoil to eliminate rough, low or soft areas, and to ensure positive drainage. Maintain profiles and contour of subgrade.
- D. Remove roots, weeds, rocks, and foreign material while spreading.
- E. Manually spread topsoil close to building to prevent damage.
- F. Roll placed topsoil.
- G. SURPLUS SUBSOIL AND TOPSOIL TO REMAIN ON SITE.

3.04 FERTILIZING

- A. Apply lime and fertilizer based on results of soil analysis.
- B. Apply after smooth raking of topsoil [and prior to roller compaction].
- C. Do not apply fertilizer at same time or with same machine used to apply seed.
- D. Mix fertilizer thoroughly into upper 2-in. of topsoil.
- E. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.05 SEEDING

- A. Apply seed at rate of approximately 50 lb. per acre evenly in two intersecting directions. Rake in lightly.
- B. Do not seed areas in excess of that which can be mulched on same day.
- C. Planting Season: Between March 15 and June 1, or August 15 to October 15.
- D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.
- E. Roll seeded area with roller not exceeding 100 lbs per tread.
- F. The surface shall be kept moist by a fine spray until the grass shows uniform germination over the entire area. Wherever poor germination occurs in areas larger than 2 sq. ft., the Contractor shall re-seed, roll, and water as necessary to obtain proper germination and shall otherwise maintain and protect seeded areas as necessary to produce a dense, healthy growth of perennial lawn grass.

3.06 HYDROSEEDING

- A. Apply fertilizer and seeded slurry with hydraulic seeder at rate that will yield

deposits of the fertilizer and seed that equal the quantity specified above.

- B. After application, apply water with fine spray immediately after each area has been hydroseeded. Saturate to 4-in. of soil and maintain moisture levels two to four inches.
- C. The surface shall be kept moist by a fine spray until the grass shows uniform germination over the entire area. Wherever poor germination occurs in areas larger than 2 sq. ft., the Contractor shall re-seed, roll, and water as necessary to obtain proper germination and shall otherwise maintain and protect seeded areas as necessary to produce a dense, healthy growth of perennial lawn grass.

3.07 SCHEDULE

- A. Loam and Seed Area: Grass seed mixture specified, 4-in. topsoil.
- B. Sloped Wood Chip Mulched Area: 4-in. depth.

3.08 TOLERANCES

- A. Section 01400 - Quality Requirements: Tolerances.
- B. Depth of Topsoil: Plus or minus 1/2-in.

3.09 PROTECTION OF INSTALLED WORK

- A. Section 01700 - Execution Requirements.
- B. Protect landscaping and other features remaining as final Work.
- C. Protect existing structures, fences, sidewalks, utilities, paving, and curbs.
- D. Prohibit construction traffic over topsoil.

END OF SECTION

SECTION 03100
CONCRETE FORMS AND ACCESSORIES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes formwork for cast-in place concrete, with shoring, bracing, and anchorage; openings for other work; form accessories; and form stripping.
- B. Related Sections:
 - 1. Section 03200 - Concrete Reinforcement.
 - 2. Section 03300 - Cast-in-Place Concrete.

1.02 REFERENCES

- A. ACI (American Concrete Institute) 117 - Standard Specifications for Tolerances for Concrete Construction and Materials.
- B. ACI 301 - Structural Concrete for Buildings.
- C. ACI 318 - Building Code Requirements for Reinforced Concrete.
- D. ACI 347 - Recommended Practice For Concrete Formwork.
- E. ASTM D 1752 - Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-Extruding and Resilient Bituminous types).

1.03 DESIGN REQUIREMENTS

- A. Design, engineer and construct formwork, shoring and bracing to conform to design and code requirements; resultant concrete to conform to required shape, line and dimension.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 347.

1.05 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate this Section with other sections of work, requiring attachment of components to formwork.

PART 2 PRODUCTS

2.01 FORM MATERIALS

- A. Forms shall be constructed of sound lumber, plywood or metal, and shall conform accurately to the dimensions, shapes, and elevations indicated on the drawings. They shall be mortar tight, rigid, and unyielding during the placing and compacting of the concrete. The Contractor shall be entirely responsible for their adequacy.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify lines, levels, and centers before proceeding with formwork. Verify dimensions agree with Drawings.

3.02 INSTALLATION

- A. Earth forms are not permitted.
- B. Erect formwork, shoring, and bracing to achieve design requirements, in accordance with requirements of ACI 301.
- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- D. Obtain Engineer's approval before framing openings in structural members that are not indicated on Drawings.
- E. Install 1-in. chamfer strips on all exposed projecting corners.
- F. Install void forms in accordance with manufacturer's recommendations.
- G. Form surfaces to be in contact with concrete shall be oiled, and if re-used, shall first be cleaned, and reoiled. Do not patch formwork.

3.03 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces are indicated to receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.
- D. Reuse and Coating of Forms: Thoroughly clean forms and reapply form coating before each reuse. For exposed work, do not reuse forms with damaged faces or edges. Apply form coating to forms in accordance with manufacturer's specifications. Do not coat forms for concrete indicated to receive "scored finish". Apply form coatings before placing reinforcing steel.

3.04 INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. All embedded work shall be accurately built into or encased in the masonry by the Contractor as directed, and all necessary precautions shall be taken to prevent such work from being displaced or deformed.
- B. Provide formed openings where required for items to be embedded in passing through concrete work.
- C. Locate and set in place items required to be cast directly into concrete.
- D. Coordinate with Work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.
- E. Install accessories straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- F. Install waterstops continuous without displacing reinforcement.
- G. Form Ties:
 - 1. Use sufficient strength and sufficient quantity to prevent spreading of forms.
 - 2. Place ties at least 1 inch away from finished surface of concrete.
 - 3. Leave inner rods in concrete when forms are stripped.
 - 4. Space form ties equidistant, symmetrical and aligned vertically and horizontally unless otherwise shown on Drawings.

- H. Arrangement: Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.
- I. Construction Joints:
 - 1. Install surfaced pouring strip where construction joints intersect exposed surfaces to provide straight line at joints.
 - 2. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage.
 - 3. Show no overlapping of construction joints. Construct joints to present same appearance as butted plywood joints.
 - 4. Arrange joints in continuous line straight, true and sharp.
- J. Embedded Items:
 - 1. Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, waterstops, and other features.
 - 2. Do not embed wood or uncoated aluminum in concrete.
 - 3. Obtain installation and setting information for embedded items furnished under other Specification sections.
 - 4. Securely anchor embedded items in correct location and alignment prior to placing concrete.
 - 5. Verify conduits and pipes, including those made of coated aluminum, meet requirements of ACI 318, Section 6.3.
- K. Openings for Items Passing Through Concrete:
 - 1. Frame openings in concrete where shown on Drawings. Establish exact locations, sizes, and other conditions required for openings and attachment of work specified under other sections.
 - 2. Coordinate work to avoid cutting and patching of concrete after placement.
 - 3. Perform cutting and repairing of concrete required as result of failure to provide required openings.

3.05 FIELD QUALITY CONTROL

- A. Section 01400 - Quality Requirements: Testing and inspection services.
- B. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.
- C. Notify Engineer after placement of reinforcing steel in forms, but prior to placing concrete.
- D. Schedule concrete placement to permit formwork inspection before placing concrete.

3.06 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.07 FORM REMOVAL

- A. Forms shall not be removed until one of the following have been achieved:
 - 1. The product of the elapsed number of days after placement and the average daily air temperature ($^{\circ}$ F) at the surface of the concrete equals 100 for walls and vertical surfaces and 500 for slabs.
 - 2. 48 hours after concrete has been placed.
- B. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads and Engineer has approved removal.
- C. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- D. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.
- E. Leave forms in place for minimum number of days as specified in ACI 347.

3.08 ERECTION TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 301.
- B. Tolerances: Construct formwork to produce completed concrete surfaces within construction tolerances specified in ACI 117.

END OF SECTION

(This page intentionally left blank)

SECTION 03200
CONCRETE REINFORCEMENT

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes reinforcing steel bars, welded wire fabric and accessories for cast-in-place concrete.
- B. Related Sections:
 - 1. Section 03100 - Concrete Forms and Accessories.
 - 2. Section 03300 - Cast-in-Place Concrete.

1.02 REFERENCES

- A. ACI 301 (American Concrete Institute) - Structural Concrete.
- B. ACI 318 (American Concrete Institute) - Building Code Requirements For Structural Concrete.
- C. ASTM A185 - Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.
- D. ASTM A615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- E. ASTM A775 – Epoxy Coating for Reinforcing Bars
- F. CRSI (Concrete Reinforcing Steel Institute) - Manual of Practice.
- G. CRSI (Concrete Reinforcing Steel Institute) - Placing Reinforcing Bars.
- H. CRSI (Concrete Reinforcing Steel Institute) - Field Handling Techniques for Epoxy-Coated Reinforcing Bar.

1.03 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.
- B. Shop Drawings: Indicate bar sizes, spacing, locations, and quantities of reinforcing steel and welded wire fabric, bending and cutting schedules, and supporting and spacing devices.
- C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with CRSI - Manual of Standard Practice ACI 301.

- B. Maintain one copy of each document on site.
- C. Steel reinforcement stored on-site shall be elevated off the ground and covered.
- D. An approved mill shall roll all bars. The Contractor shall submit at his own expense certified copies of tests of the bars furnished. The tests shall be as specified in the appropriate ASTM Specification referred to above and shall be made by an approved laboratory.

1.05 QUALIFICATIONS

- A. Detail reinforcement and prepare shop drawings in accordance with ACI 318.
- B. Welders' Certificates: Submit under provisions of Section 01400 Manufacturer's Certificates, certifying welders employed on the Work, verifying AWS qualification within previous 12 months.

1.06 STORAGE

- A. Reinforcing steel and accessories delivered, stored and covered in a manner which will ensure that no damage shall occur to it from weather, moisture, dirt, grease, or any other cause that might impair bond to concrete or damage protective epoxy coating.

1.07 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate with placement of formwork, formed openings and other Work.

PART 2 PRODUCTS

2.01 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615, 60-ksi-yield grade unless otherwise specified; deformed billet steel bars, with epoxy-coating conforming to ASTM A775.
- B. The steel shall be newly rolled stock substantially free from mill scale, rust, dirt, grease, or other foreign matter.
- C. Concrete reinforcement in sizes No. 3 (3/8-in.) and larger shall be deformed steel bars of the shapes and sizes indicated on the drawings.
- D. Welded Steel Wire Fabric: ASTM A 185, the gage and spacing of wires shall be as indicated on the drawings.

2.02 ACCESSORY MATERIALS

- A. Tie Wire: Minimum 16 gage dielectric coated steel.
- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions.
- C. All accessories shall be dielectric coated steel or approved plastic accessories, conforming to the applicable requirements of the CRSI Standards.

2.03 FABRICATION

- A. Fabricate concrete reinforcement in accordance with CRSI Manual of Practice and ACI 318.

PART 3 EXECUTION

3.01 PLACEMENT

- A. Before being placed in position, reinforcement shall be thoroughly cleaned of loose mill and rust scale, dirt and other coatings, including ice, that tend to interfere with development of proper bond. Where there is delay in depositing concrete after reinforcement is in place, bars shall be reinspected and cleaned when necessary.
- B. Reinforcement shall be accurately positioned, and supported using plastic-tipped steel-wire chairs, secured against displacement. Use of any supporting device other than steel-wire chairs (such as stone, brick or concrete block) is not allowed.
- C. Place, support and secure reinforcement against displacement. Do not deviate from required position.

3.02 FIELD QUALITY CONTROL

- A. Section 01400 - Quality Requirements: Testing and Inspection Services.

END OF SECTION

(This page intentionally left blank)

SECTION 03300
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes all concrete masonry and control, expansion and contraction joint devices associated with concrete work.
- B. Related Sections:
 - 1. Section 03100 - Concrete Forms and Accessories: Formwork and accessories.
 - 2. Section 03200 - Concrete Reinforcement.

1.02 REFERENCES

- A. ACI 301 (American Concrete Institute) - Standard Specification for Structural Concrete for Buildings.
- B. ACI 302 - Guide for Concrete Floor and Slab Construction.
- C. ACI 305R - Hot Weather Concreting.
- D. ACI 306.1 - Standard Specification for Cold Weather Concreting.
- E. ACI 308 - Standard Practice for Curing Concrete.
- F. ACI 318 - Building Code Requirements for Structural Concrete and Commentary.
- G. ASTM C33 - Concrete Aggregates.
- H. ASTM C40 – Method of Test for Organic Impurities in Sands for Concrete.
- I. ASTM C144 – Aggregate for Masonry Mortar.
- J. ASTM C150 - Portland Cement.
- K. ASTM C231 – Tentative method of Test for Air Content of Freshly Mixed Concrete.
- L. ASTM C260 - Air Entraining Admixtures for Concrete.
- M. ASTM C494 - Chemicals Admixtures for Concrete.
- N. ASTM C1107 - Packaged Dry, Hydraulic Cement Grout (Nonshrink).
- O. ASTM C1240 – Silica Fume Used in Cementitious Mixtures

- P. ASTM D1752 - Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
- Q. ASTM D 1854 – Jet Fuel Resistant Concrete Joint Sealer, Hot-Poured Elastic Type.
- R. TT-S-00227E (3) (COM-NBS) - Interim Federal Specification Sealant Compound, Elastometric Type.

1.03 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data on joint devices, attachment accessories and admixtures.
- C. Submit proposed mix design of concrete to Engineer for review prior to commencement of work.

1.04 CLOSEOUT SUBMITTALS

- A. Section 01700 - Execution Requirements: Closeout procedures.
- B. Project Record Documents: Accurately record actual locations of embedded utilities and components concealed from view in finished construction.

1.05 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 301.
- B. Maintain one copy of each document on site.
- C. Acquire cement and aggregate from one source for Work.
- D. Conform to ACI 305R when concreting during hot weather.
- E. Conform to ACI 306.1 when concreting during cold weather.

1.06 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

PART 2 PRODUCTS

2.01 CONCRETE MATERIALS

- A. Portland Cement: ASTM C150, Type IIA - Air Entraining or, with written permission of the Engineer Type IIIA - Air Entraining. When used in the work, cement shall be free from lumps and partially or wholly set cement.
- B. Fine and Coarse Aggregates: ASTM C33.
- C. Fine Aggregate. ASTM C33.
 - 1. Fine aggregate shall be clean, sound, sharp, screened, well-graded sand and shall have not less than 15 percent nor more than 30 percent, by weight, passing the No. 50 sieve.
 - 2. No fine aggregate shall be used if it contains more than 2 percent of silt or which shows a color darker than Plate 2 when tested according to the ASTM Standard Method of Test for Organic Impurities in Sands for Concrete, Designation C40.
 - 3. The weighted average loss when fine aggregate is subjected to five cycles of the soundness test using magnesium sulfate shall not exceed 10 percent.
- D. Coarse Aggregate: ASTM C33.
 - 1. Coarse aggregate shall be washed, hard, tough and durable screened gravel or crushed stone and shall not have more than 5 percent by weight of deleterious substances and soft fragments. Unless otherwise approved, aggregate shall be well graded and shall conform to the grading requirements for coarse aggregates for nominal size 1-in. to No. 4.
 - 2. No coarse aggregate shall be used if it contains more than 1 percent of silt or which shows a color darker than Plate 1 when tested as above specified for fine aggregate.
 - 3. The weighted average loss when coarse aggregate is subjected to 5 cycles of the soundness test using magnesium sulfate shall not exceed 14 percent.
- E. Water: Clean, clear, free from deleterious amounts of oil, acid, alkali, salts and organic matter, unchlorinated and not detrimental to concrete. The water shall be from an approved source.

2.02 ADMIXTURES

- A. Air Entrainment: ASTM C260; Chloride Free, manufactured by Master Builders Solutions of BASF, Cleveland, OH; Construction Products Division of W. R. Grace & Co., Cambridge, MA; Sika Chemical Co., Lyndhurst, NJ or approved equal product.

- B. Water Reducing: ASTM C494 Type A – Water Reducing, chloride-free, manufactured by Master Builders Solutions of BASF, Cleveland, OH; Construction Products Division of W. R. Grace & Co., Cambridge, MA; Sika Chemical Co., Lyndhurst, NJ or approved equal product.
- C. Silica Fume: ASTM C1240; powder, densified; Sikacrete-950DP by Sika Corporation, Eucon MSA by Euclid Chemical Company or approved equal.
- D. Corrosion Inhibitor: Calcium nitrate-based corrosion inhibitor conforming to ASTM C494. Dosage as recommended by the manufacturer.
- E. Other Admixtures: Admixtures specifically for accelerating or retarding the setting of the concrete mix or superplasticizing the concrete mix shall not be used without approval of the Engineer.

2.03 ACCESSORIES

- A. Non-Shrink Grout: ASTM C1107, premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; saltwater resistant, capable of developing minimum compressive strength of 2,400 psi in 48 hours and 7,000 psi in 28 days.

2.04 JOINT DEVICES AND FILLER MATERIALS

- A. Construction and expansion joints shall be of the types indicated on the drawings and shall be constructed wherever and only in such places as are indicated on the drawings or otherwise directed or approved. The Contractor shall plan the work to minimize the use of joints in addition to those indicated.
- B. Expansion Joints in Slabs: ASTM D1854, Jet-Fuel-Resistant Concrete Joint Sealer, Hot-Poured Elastic Type. The compound shall be applied in accordance with the instructions of the manufacturer, using a suitable primer if necessary.
- C. Construction and Expansion Joints in Walls: Joint sealer shall be Sikadur-Combiflex SG System by Sika Corporation, or equal. The system shall be applied in accordance with manufacturer's instructions.
- D. Premolded-Joint Filler: ASTM D1752, Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction, Type I or Type II. Joints shall be of the thickness indicated on the drawings, of suitable length and width. As far as practicable, sheets shall be of correct width so that no longitudinal cutting will be required in the field. When strips are cut in the field, the cut surface shall be treated as recommended by the manufacturer.

2.05 CONCRETE MIX

- A. QUALITY AND PROPORTIONING OF CONCRETE: Materials for concrete shall be proportioned to produce a thoroughly workable, plastic mixture resulting in a dense, watertight concrete. The concrete shall meet the following limitations:
- | | |
|---|-------|
| 1. Minimum compressive strength at 28 days (psi) | 5,000 |
| 2. Minimum cement content per cubic yard of concrete (lbs.) | 615 |
| 3. Maximum water/cement ratio | 0.40 |
| 4. Maximum fly ash (percent) | 15 |
| 5. Maximum Silica fume (percent) | 10 |
| 6. Design slump (in.) per ACI 318 | 6 |
- B. A field tolerance on slump of plus or minus one inch will be permitted at the discretion of the Engineer, depending on placement conditions.
- C. All Concrete shall contain air-entraining and water-reducing admixtures, designed and used in strict accordance with manufacturer's specifications and the approved concrete mix design.
- D. The amount of air-entraining admixture used shall include allowance for the addition of a water-reducing agent. The average resulting air content shall be 6.0 percent when measured by means of an Acme air meter, in conformance with ASTM C231, Tentative Method of Test for Air Content of Freshly Mixed Concrete by the Pressure Method. No concrete shall be used when the air content is less than 4.5 or greater than 7.5 percent, unless otherwise specified.
- E. Water-reducing admixture shall achieve a minimum 10 percent increase in 28-day compressive strength for any given cement content per cubic-yard.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify requirements for concrete cover over reinforcement.
- C. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

3.02 PREPARATION

- A. In order to secure full bond at construction joints, the surface of the concrete previously placed (including vertical, inclined, and substantially horizontal areas) shall be thoroughly cleaned of foreign materials and laitance, if any, and then roughened so that the aggregate will be slightly exposed over 90 percent of each

2-in. square area. Such cleaning and roughening shall be done by the use of suitable tools and methods, such as picks, wire brushes, wet sandblasting, etc., and shall be followed by recleaning by means of a stream of clean water or compressed air.

- B. After preparation for bonding, the previously placed concrete at the joint shall be saturated with clean water and kept thoroughly wet overnight, after which all pools shall be removed. The concrete shall be given a thorough coating of neat cement mixed to a suitable consistency. The coating shall be 1/8-in. thick on vertical surfaces and 1/4-in. thick on horizontal surfaces, and shall be well scrubbed. New concrete shall be deposited before the neat cement dries.
- C. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

3.03 EMBEDDED WORK IN CONCRETE

- A. All embedded work shall be accurately built into or encased in the masonry by the Contractor as directed, and all necessary precautions shall be taken to prevent such work from being displaced or deformed.

3.04 PLACING CONCRETE

- A. Place concrete in accordance with ACI 301 and ACI 318.
- B. Notify Engineer a minimum of 24 hours prior to commencement of operations.
- C. Concrete placement, once started, shall be performed as a continuous operation until the entire section of approved size and shape is completed.
- D. No concrete shall be placed or frozen sub-grade or in water. Forms and excavations shall be free from water and all dirt, debris, and other foreign matter when concrete is placed.
- E. If chutes are used for conveying concrete, they shall be of metal or shall be metal lined. Chutes causing segregation of the concrete shall not be used.
- F. Concrete may be placed by pumping if approved in writing by the Engineer. Equipment for pumping shall be of such size and design as to ensure a relatively continuous flow of concrete at the discharge end without causing segregation of the concrete.
- G. Concrete shall be deposited in 18-in. layers maximum. Free-fall drop shall not exceed 5-ft. While being deposited, the concrete shall be thoroughly compacted by rodding and spading or by mechanical vibration. Vibration shall be held to the minimum necessary to produce thorough compaction without segregation.
- H. Concrete shall be deposited as near as possible in its final position to avoid re-handling or flowing.

- I. Ensure reinforcement, inserts, embedded parts, and formed expansion and contraction joints, are not disturbed during concrete placement.
- J. Construction and expansion joints shall be of the types indicated on the drawings and shall be constructed wherever and only in such places as are indicated on the drawings or otherwise directed or approved. The Contractor shall plan the work to minimize the use of joints in addition to those indicated.
- K. Footings, walls, and slabs shall have no horizontal joints. Unless otherwise indicated, all construction joints shall have keyways the widths of which are equal to one-third the thickness of the member in which the keyways are placed.
- L. Concrete to be sealed with joint compound shall be clean and dry and, if required, shall be primed. Compound shall be carefully poured, to prevent spilling the material over the adjoining surfaces, or placed with a caulking gun.
- M. Surfaces to which bituminous coating is to be applied shall be prepared and primed and an approved bituminous mastic coating material shall be applied in accordance with the instructions of the manufacturer.
- N. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

3.05 BONDING CONCRETE AT CONSTRUCTION JOINTS

- A. In order to secure full bond at construction joints, the surface of the concrete previously placed (including vertical, inclined, and substantially horizontal areas) shall be thoroughly cleaned of foreign materials and laitance, if any, and then roughened so that the aggregate will be slightly exposed over 90 percent of each 2-in. square area. Such cleaning and roughening shall be done by the use of suitable tools and methods, such as picks, wire brushes, wet sandblasting, etc., and shall be followed by recleaning by means of a stream of clean water or compressed air.
- B. After preparation for bonding, the previously placed concrete at the joint shall be saturated with clean water and kept thoroughly wet overnight, after which all pools shall be removed. The concrete shall be given a thorough coating of neat cement mixed to a suitable consistency. The coating shall be 1/8-in. thick on vertical surfaces and 1/4-in. thick on horizontal surfaces, and shall be well scrubbed. New concrete shall be deposited before the neat cement dries.

3.06 BONDING FILL TO BASE CONCRETE

- A. Where concrete fill is to be placed on structural or other concrete, the previously placed base concrete shall be prepared as hereinafter specified under “Surface Finish”.

3.07 CURING AND PROTECTING

- A. All concrete work shall be protected against damage from the elements and defacement of any nature during construction operations.
- B. The contractor shall cure and protect the concrete in general conformance with the applicable sections of ACI 357.3R-14 – Guide for Design and Construction of Waterfront and Coastal Concrete Marine Structures.
- C. For at least seven days after having been placed, all concrete shall be so protected that the temperature at the surface will not fall below 50° F.
- D. No manure, salt or other chemicals shall be used for protection.
- E. The above-mentioned 7-day period may be reduced to 3 days in each case if high-early-strength cement is used in the concrete.
- F. Wherever practicable, finished slabs shall be protected from the direct rays of the sun to prevent checking and crazing.
- G. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- H. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

3.08 TRIMMING AND REPAIRS

- A. It is the intent of this specification to require forms, mixture of concrete, and workmanship so that concrete surfaces, when exposed, will require a minimum of trimming and repair.
- B. As soon as the forms have been stripped and the concrete surfaces exposed, fins and other projections shall be removed, recesses left by the removal of form ties shall be filled, and surface defects which do not impair structural strength shall be repaired.
- C. Defective concrete shall be cut normal to the surface until sound concrete is reached, but not less than 1-in. deep. The remaining concrete shall be thoroughly roughened and cleaned. Concrete around the cavity of the form-tie recess shall be thoroughly wetted and promptly painted with 1/16-in. brush coat of neat cement mixed to the consistency of lead paint. The hole shall then be filled with mortar.

Mortar shall be 1:1-1/2 cement and sand mix.

- D. For filling form-tie recesses, the mortar shall be mixed slightly damp to the touch (just short of “balling”), hammered into the recess until it is dense and an excess of paste appears on the surface, and then troweled smooth. All patches shall be warm-moist cured as above specified.
- E. The use of mortar patching as above specified shall be confined to the repair of small defects in relatively green concrete. If substantial repairs are required, the defective portions shall be cut out to sound concrete and the masonry replaced by means of a cement gun, or the masonry shall be taken down and rebuilt, all as the Engineer may determine as necessary to meet this specification.

3.09 SURFACE FINISH

- A. Unexposed Surfaces
 - 1. Fins and irregularities on unexposed formed surfaces shall be smoothed.
- B. Top of Footing
 - 1. Surface on which other concrete will later be placed shall be struck off true at the surface indicated on the drawings or approved, as the concrete is being placed. As soon thereafter as the condition of the concrete permits and before it has hardened appreciably (normally within 2 hours after being deposited), all water, scum, laitance, and loose aggregate shall be removed from the surface by means of wire or bristle brooms in such manner as to leave the coarse aggregate slightly exposed and the surface clean.
 - 2. The Contractor shall take all necessary precautions to ensure that the surface prepared shall be kept free from storage piles, drippings, staining, or accumulation of substances which would adversely affect the concrete or the bond between layers of concrete and which cannot be adequately removed by the cleaning specified under “Bonding Concrete at Construction Joints”.
 - 3. Where the top surface of structural concrete or concrete fill is to be left in a finished condition, the concrete shall be brought monolithically to the finished grade, as indicated on the drawings or required; subsequent addition of a layer of mortar (“topping”) or concrete to bring the finished surface to the correct grade will not be permitted.
- C. Top of Wall
 - 1. The top of the wall shall be given a monolithic steel trowel finish. The finish shall be sufficiently worked to provide a smooth, hard, dense, impervious surface, free of defects.
- D. Exposed Faces of the Wall
 - 1. The faces of the wall which will be exposed shall be given a rubbed finish.

3.10 BROOMED FINISH

- A. Surfaces to be given broomed finish shall first be given a steel-trowel finish. Immediately after troweling, the surface shall be lightly brushed in one direction with a hair broom to produce a nonslip surface of uniformly good appearance.

3.11 WOOD-FLOAT FINISH

- A. Surfaces to be given a wood-float finish shall be finished by tamping with special tools to force aggregates away from the surface, and screeding with straight edges to bring the surface to the required line.
- B. As soon after screeding as the condition of the concrete permits and before it has hardened appreciably, all water, film, and foreign material, which may work into the surface, shall be removed by means of lutes. Rough finishing shall be done with straight edges and darbies. Machine floating if used, shall not be started until the surface will support the float adequately without digging in and/or bringing excess fines to the surface. At such time, a minimum of machine and/or hand floating with a wood float shall be employed to bring the finish to a true and uniform surface with no coarse aggregate visible.
- C. Under no circumstances will sprinkling with water or dusting with cement be permitted during finishing of the slab.

3.12 STEEL-TROWEL FINISH

- A. Surfaces to be given a steel-trowel finish shall first be given a wood-float finish. This shall be followed by hand troweling with steel trowels to bring the surface to a uniform, smooth, hard, impervious surface free from marks and blemishes. Troweling shall not be started until all water has disappeared from the surface. Over-troweling shall be avoided. Dusting with dry cement or other mixtures or sprinkling with water will not be permitted in finishing.

3.13 RUBBED FINISH

- A. Immediately after the forms have been stripped, all fins and other projections shall be carefully removed by use of a hammer or other suitable means, and imperfections shall be repaired as hereinbefore specified under "Trimming and Repairs". While the surface is still damp, a thin coat of cement slurry of medium consistency shall be applied by means of bristle brushes to provide a bonding coat within pits and minor blemishes in the parent concrete; the coating of large areas of the surface with this slurry shall be avoided.
- B. Before the slurry has dried or changed color, a dry (almost crumbly) grout composed of 1 volume of cement to 1-1/2 volumes of masonry sand shall be applied. The sand shall have a fineness modulus of approximately 2.25 and comply with the gradation requirements of the ASTM Standard Specifications for Aggregate for Masonry Mortar, Designation C144.
- C. The grout shall be uniformly applied by means of damp pads of burlap and shall

be well scrubbed into the pits, etc., to provide a dense mortar in such imperfections. The mortar shall be allowed to harden for one or two hours, depending on the weather. In hot, dry weather the surface shall be kept damp by means of a fine fog spray during the hardening period.

- D. When the grout has hardened sufficiently therefor but before it becomes so hard as to be difficult to remove, excess grout shall be scraped from the surface of the parent concrete by the edge of a steel trowel, without removing the grout from the imperfections. Thereafter the surface shall be allowed to dry thoroughly. If the Owner/Engineer determines that the surface does not present a uniformly smooth, clean surface of even texture and appearance, the surface shall be treated and rubbed to obtain a satisfactory finish.
- E. If rubbing is required, the surface should be wetted with clean water and rubbed with a No. 16 carborundum brick or other abrasive of equal quality until even and smooth and of uniform appearance, without applying any cement or other coating. If additional finishing is necessary it shall be obtained by a thorough rubbing with a No. 10 carborundum brick or other abrasive of equal quality. When approved by the Owner/Engineer, rubbing may be performed by use of satisfactory power tools and equipment. The Owner shall be the sole judge of the amount of rubbing required.

3.14 FIELD QUALITY CONTROL

- A. Section 01400 - Quality Requirements: Testing and Inspection Services.
- B. Field inspection and testing will be performed in accordance with ACI 301 and under provisions of Section 01400.
- C. Submit proposed mix design of each class of concrete to Engineer for review prior to commencement of Work.
- D. The ready-mixed concrete manufacturer shall furnish, from an independent testing laboratory and through the Contractor, appropriate certificates of tests, materials, proportions, mixing, and strengths. Such certificates shall have an effective date not more than 6 months prior to the time when the concrete will be used and shall be furnished to the Engineer at least 7 days before the time of use. No ready-mixed concrete shall be used before the Engineer has given his approval thereof.
- E. The quantity of concrete to be mixed or delivered in any one batch shall not exceed the rated capacity of the mixer or agitator as stated on the nameplate for the type of mixer in use.

- F. At the time of delivery of each load of concrete, the Engineer shall be given a slip stating the actual quantity of each ingredient in that load. No admixtures shall be added to the load until delivery at the job site. Temperature of the concrete at the time of mixing shall not exceed 150° F. Concrete delivered in outdoor temperatures lower than 40° F. shall arrive at the work having a temperature of not less than 60° F. nor greater than 90° F.
- G. Attention is directed to the importance of dispatching trucks from the batching plant so that they shall arrive at the site of the work just before the concrete is required, thus avoiding excessive mixing of concrete while waiting or delays in placing successive layers of concrete in the forms. Concrete shall be discharged into forms within 1-1/2 hours after water was first added to the mix, and shall be mixed at least 5 minutes after all water has been added.
- H. No water shall be added after one-half hour from when water was first added to the mix.
- I. Tests of cement and aggregates may be performed to ensure conformance with specified requirements.
- J. The Contractor shall provide all necessary equipment for field-testing the concrete including but not limited to cylinder molds and slump cone.
- K. Concrete Cylinders:
 - 1. The Contractor shall notify a laboratory designated by the Engineer, sufficiently in advance of the work, of intention to place concrete so that arrangements can be made for taking concrete cylinders for concrete testing by the laboratory when directed by the Engineer. Certified laboratory personnel only shall take and store concrete cylinders, in accordance with proper practices, and deliver them in a timely manner to the testing laboratory. Cylinders shall be taken at the beginning, middle and end of discharge of each batch chosen for testing.
 - 2. All costs associated with this work, including but not limited to taking, storing, delivering test cylinders, and performing compression tests, shall be paid by the Owner.

END OF SECTION

APPENDIX

General Notes

Figure 1

GENERAL NOTES

1. The Contractor shall obtain all necessary permits for the work. The Contractor is responsible for conforming to all permits as an integral part of his work. Fees for Town permits are waived.
2. The Contractor shall notify Dig-Safe prior to the start of construction and shall comply with all regulations.
3. The Contractor shall verify the location of underground utilities with utility owners and shall comply with their requirements for protection of utilities.
4. The Contractor shall immediately repair any damage to existing utilities resulting from his work at no expense to the Owner.
5. The Contractor shall immediately repair any damage to adjacent structures resulting from his work at no expense to the Owner.
6. Care shall be taken to prevent damage to vegetation intended to remain.
7. The Contractor shall not restrict traffic circulation in the project area, including nearby roads.
8. All landscaping, driveway, sidewalk or roadway surfaces, paved or gravel, removed or damaged by work under this contract shall be restored to a condition at least equal to that existing prior to the start of work.
9. Tracked equipment shall **not** be used on pavement or sidewalks.
10. All backfill shall be mechanically tamped; no jetting shall be allowed.
11. The Contractor shall handle groundwater, where encountered, in an approved manner.
12. The Contractor shall provide telephone numbers of responsible personnel of his organization whose duty it shall be to take immediate action to correct unsafe or hazardous conditions. Such persons shall be available 24 hours per day to correct such conditions.
13. The Contractor is responsible for the method of removing concrete, debris, unsuitable material, etc. from the work site.
14. Spills by the Contractor of any hazardous material must be reported and remedied immediately by the Contractor, to the satisfaction of the Engineer, at no cost to the Owner.
15. Construction equipment left at the work site during off hours shall be stored safely outside of resource areas.

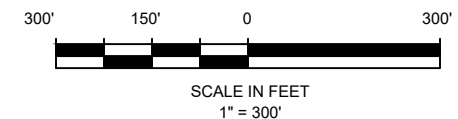
16. The staging area for the work is located on Duxbury Beach Reservation property and is shown on Figure 1.
17. A 25-foot-wide construction vehicle access route is available for use from September 15 through March 31 (see Figure 1). Should the Contractor use this route he will be responsible for restoring the dune and snow fencing to pre-construction conditions. There will be no additional compensation for this work. However, planting of Cape American Beach Grass in this access area will be paid for under pay Item 12, whether the Contractor uses this access or not.
18. The seawall maintenance easement is fifteen feet landward of the existing seawall to thirty feet seaward of the existing seawall.
19. Property owners will be responsible for removing all improvements (decks, brick/paver patios, stairs, etc. within the maintenance easement prior to the start of work. Concrete patios, walks and walls within the maintenance easement, removed by the Contractor, will be paid for under Item 2 – Remove & Dispose of Existing Concrete.
20. All areas within the maintenance easement on the landward side of the seawall shall be restored by the contractor to pre-construction conditions. This does not include improvements within the easement, which will be the responsibility of the property owners as noted in General Note 19. For example, if the area within the easement is sand or gravel it shall be restored to sand or gravel; if the area within the easement is grass, it shall be restored with four inches of loam and seeded. The Bidders shall make allowance for this work in Bid Items 3 and 4.
21. No beach sand or cobble shall be removed from the worksite. All beach sand and cobble shall be backfilled around the new seawall and graded to match adjacent areas.
22. Material excavated from the landward side of the seawall that is not deemed unsuitable, may be used for general backfill on the landward side of the seawall
23. According to design drawings and demolition of the Phase I seawall, there is no reinforcing steel within the existing seawall and the existing seawall is not pile-supported. However, the section of seawall from Sta. 32+96 to 33+53 has a different cross section and there does appear to be reinforcing steel and steel tiebacks in this section (see photos Sheet 6).
24. Police details are not anticipated to be required. Should police details be required, the Owner will pay for details directly.
25. Upon award of the Contract, the Owner/Engineer will provide CAD files to the Contractor. The Contractor is responsible for establishing survey control.

FIGURE 1



NOTES:

1. BASE MAP IS MassGIS 2023 ORTHOPHOTOS.
2. RED LINE WORK AND TEXT WAS FOR PHASE I WORK BUT WILL ALSO BE UTILIZED FOR PHASE II. GREEN LINE WORK AND TEXT IS ADDITIONAL ACCESS FOR PHASE II.
3. MAIN PROJECT ACCESS TO THE BEACH IS THROUGH THE OCEAN ROAD NORTH OPENING.
4. MARSH LANE AND CABLE AVENUE ACCESS WAYS (IF USED): REMOVE A PORTION OF THE EXISTING SEAWALL TO PROVIDE FOR MACHINE ACCESS OR CONSTRUCT A SAND AND COBBLE RAMP OVER THE EXISTING WALL AS AN ALTERNATIVE.
5. MACHINE ACCESS FROM OCEAN ROAD SOUTH AND 25-FT. WIDE CONSTRUCTION VEHICLE ACCESS ROUTE WOULD BE RESTRICTED TO SEPTEMBER 15 THROUGH MARCH 31.



LATEST REVISION: 7/23/24

DEPARTMENT OF PUBLIC WORKS
DUXBURY, MASSACHUSETTS

**DUXBURY SEAWALLS
ACCESS LOCATION PLAN**

DATE: 9/19/18

SCALE: 1" = 300'

PGB ENGINEERING, LLC
MARSHFIELD, MASSACHUSETTS