DPW ENGINEERING DIVISION

TOWN OF LEXINGTON, MASSACHUSETTS

TOWN OF LEXINGTON, MASSACHUSETTS

HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS
CONTRACT #26-42

February 12, 2026

TOWN OF LEXINGTON, MASSACHUSETTS

INDEX SHEET

CONTRACT #26-42

THE TOWN OF LEXINGTON, MASSACHUSETTS
INVITES PROPOSALS
HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS CONTRACT #26-42

The Town of Lexington, Massachusetts, through its Town Manager, will receive bids for the Hartwell Ave over Kiln Brook Bridge Repairs Contract #26-42, until **12:00 P.M., Local Time, Thursday, February 12, 2026** at the Town Office Building, 1625 Massachusetts Avenue, Procurement Office, Third Floor, Lexington, Massachusetts. A payment bond and performance bond of not less than the amount of the contract, with satisfactory surety, for faithfully doing the work will be required.

Plans and specifications that include the required bid forms can be viewed as PDF and ordered for printing at www.accentblueprints.com. A copy fee is charged for printed copies. They can be picked up at Accent Printing, 99 Chelmsford Rd, N. Billerica, MA 01862 (978-362-8038.) Copies can be shipped on order upon payment of handling and mailing fee.

The proposal must be filled out and signed as directed therein, sealed in an envelope addressed to the Town Manager, Lexington, Massachusetts, endorsed with the name and address of the bidder, and marked "Hartwell Ave over Kiln Brook Bridge Repairs", and left with either a bid bond in accordance with Chapter 30, Section 39M or a certified treasurer's or cashier's check issued by a responsible bank, for 5 percent of the bid for the proposed work payable to the Town of Lexington, Massachusetts, before **12:00 P.M., Local Time**, **Thursday, February 12, 2026.** This check to be the property of said Town if the Bidder fails to execute the contract and satisfactory bond within ten (10) days after the contract may have been awarded to him.

Attention is called to the fact that State Prevailing Wage Rates are established for the project as set forth in the contract documents.

Proposals filled out and left, with check or bid bond, as above directed and no others, will, at the above-named hour, be publicly opened and read at the Select Board Meeting Room located at The Town Office Building (1625 Massachusetts Avenue).

Sealed bids will be accepted at The Town Office Building, 1625 Massachusetts Ave., Lexington, MA 02420 until **12:00 pm on Thursday February 12, 2026**. Specific delivery instructions are as follows:

- Bids sent via mail or courier should be addressed to Elizabeth Mancini, Purchasing Director, 1625 Massachusetts Ave, Lexington, MA 02420.
- Bids that are hand-delivered should be deposited in the black lock-box, labeled ‘Procurement,’ located outside the Comptroller’s Office within the Town Office Building.

The undersigned reserves the right to reject any or all proposals, or to accept the proposal they deem best for the Town.

The bidder shall start the work under the contract within thirty (30) calendar days excluding Saturdays, Sundays, and Holidays, after the date of the contract.

No proposal may be withdrawn within thirty (30) days after the opening of bids.

All pre-bid questions concerning the contract documents and the work contained therein must be submitted in writing to, and received by, John Livsey P.E., Town Engineer, 201 Bedford Street, Lexington, MA 02420, before **Monday, February 2, 2026.**

To bid on this project, Contractors must be prequalified in accordance with 700 CMR 14.00, Prequalification of Contractors and Subcontractors. Only bids submitted by contractors on the official prequalification contractor list or waiver list will be considered for award. Prequalification of Contractors by MassDOT. MassDOT prequalification of contractors, with the class of work as Bridge-Construction, for the project with an estimated value of $375,000 will be required. Documents will be available to any individual or firm. The Town of Lexington reserves the right to reject any and all bids if it be in the public interest to do so.

TOWN OF LEXINGTON,
MASSACHUSETTS
Elizabeth Mancini
Chief Procurement Officer
781-698-4628

TOWN OF LEXINGTON, MASSACHUSETTS

INSTRUCTIONS TO BIDDERS

1. **Receipt of Bids**

The Town may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities in or reject any and all bids. Any bid may be withdrawn prior to the above-mentioned time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw his/her bid for a period of 30 days, excluding Saturdays, Sundays, and legal holidays after actual date of the opening thereof.

2. Preparation of Bid

Each bid shall be submitted on the forms attached to these documents. The bid forms shall not be removed and submitted separately from the other documents. All blank spaces for bid prices must be filled in with the unit price for the item or the lump sum for which the proposal is made. Bidders must bid on each item. All entries in the entire proposal must be made clearly, and prices must be written in both words and figures in the spaces provided.

3. Bid Submission

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted, and the name and number of the Contract for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as follows:

Bid Documents
Town of Lexington-Procurement Office
HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS CONTRACT #26-42
1625 Massachusetts Ave.
Lexington, MA 02420

Sealed bids will be accepted at The Town Office Building, 1625 Massachusetts Ave., Lexington, MA 02420 until 12:00 pm on Thursday, February 12, 2026. Specific delivery instructions are as follows:

- **Bids sent via mail or courier should be addressed to Elizabeth Mancini, Purchasing Director, 1625 Massachusetts Ave, Lexington, MA 02420.**

- **Bids NOT sent via mail or courier should be hand-delivered to the Procurement Lock-Box, located** top floor (outside the Comptroller's Office) Town Office Building, 1625 Massachusetts Ave, Lexington, MA 02420. The Lock-Box will be checked for bids at the specific due date and time.

It is the sole responsibility of each bidder to ensure timely receipt to the delivery location. Late proposals will not be accepted.

All interested parties are invited to attend; bids will be opened publicly and read aloud.

4. Bid Security

Every bid submitted by contractors shall be accompanied by a bid deposit in the form of a Bid Bond or cash, certified check, treasurer's or cashier's check, or a bid bond issued by a responsible bank or trust company and made payable to the Town of Lexington. The amount of the bid deposit shall be 5% of the amount of the bid. All security except those of the three lowest responsible and eligible bidders will be returned within five days, Saturdays, Sundays, and legal holidays excluded, after opening of the proposal. All bid securities will be returned on the execution of the contract or if no award is made within 30 days, excluding Saturdays, Sundays, and legal holidays, after the actual date of the opening thereof, unless forfeited under the conditions herein stipulated.

In case a party to whom a contract is awarded shall fail or neglect to execute the contract and furnish the satisfactory bond in the time specified, the Town may determine the bidder has abandoned the contract and thereupon the proposal and acceptance shall be null and void, and the bid security accompanying the proposal shall be forfeited to the Town as liquidation damages for such failure or neglect and indemnify the Town for any loss which may be sustained by failure of the bidder to execute the contract and furnish the bonds as aforesaid, provided that, in case of death, disability, or other unforeseen circumstances affecting the bidder, such bid security may be returned to him/her. After execution of the contract and acceptance of the bonds by the Town, the bid security accompanying the proposal of the successful bidder will be returned.

5. Time of Completion

The bidder must agree to commence work within the time specified in the contract documents, and to fully complete the project no later than November 15, 2026.

6. Performance and Payment Bonds

A bond (performance bond) in the sum of the total amount (100%) of the Contract by the successful bidder and an additional bond in equal amount covering the payment for all labor and materials (payment bond) used in the work will be required. These bonds must be provided by a surety company that is listed with the Commonwealth of Massachusetts Approved Surety List. These bonds will be required at the execution of the contract. Attorneys-in-fact who sign contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

7. OSHA ten certification

All persons employed at the worksite must have successfully completed at least ten hours of an OSHA certified construction safety and health training. The ‘Certificate of OSHA training of personnel’ form attached in the contract must be signed and proof of training provided along with the first certified payroll.

8. Laws and Regulations

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

9. Withdrawal of Bids

Except as hereinafter expressly provided, a bidder may not withdraw his bid until after thirty, (30) consecutive calendar days after the actual date of opening of Bids.

Upon proper written request and identification, Bids may be withdrawn only as follows:

1. At any time prior to the designated time for the opening of Bids.

2. Death or serious injury of a principal.

3. With the approval of the Town.

4. At any time after the expiration of the period during which withdrawal is prohibited provided the bid has not been accepted by the Town.

10. Execution of Contract

The party to whom the contract is awarded will be required to execute the contract and furnish the bonds duly executed with a satisfactory surety company within five days, excluding Saturdays, Sundays, and legal holidays, of the date of the mailing of the notice to the bidder according to the address given by him, that the contract is ready for execution.

11. Obligation of Bidder

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the drawings and contract documents, including all referenced documents. The failure or omission of any bidder to receive or examine any form, instrument, or document shall in no way relieve any bidder from the obligation in respect to his bid.

11. Omissions, Discrepancies, Interpretations and Addenda

Should a bidder find discrepancies in, or omissions from, the drawings or contract documents, or should he/she have questions as to the interpretation of the plans or contract documents he/she shall submit such in writing to the Director of Public Works at least ten days before the date herein set for the submission of bids. Bid addendum will be posted at www.accentblueprints.com about five days before the submission of bids. Signed copies of all addenda shall be included with the bid. Omission of the signed addendum shall be cause for rejections of the bid.

12. Record of Address

Prospective bidders shall at the time the deposit is made and plans and specifications are secured, place on file with the Director of Public Works their address, and are required to make any changes necessary to ensure that the record is accurate, complete, and up to date.

13. Massachusetts Sales and Use Tax

Materials purchased for permanent installation in the work will be exempt from the Massachusetts Sales and Use tax. Each bidder shall take this exemption into account in calculating his/her bid for the work.

14. State Tax Affidavit

Prospective bidders are required to certify that all state tax returns have been filed and all state taxes have been paid in order to be eligible to enter into a contract with the Town on this project. The form in section 0500 is to be used for this purpose and is to be completed and returned as part of the bid and proposal.

15. Prevailing Wage Rates

Prevailing rates for wages for work performed under this Contract will be as predetermined by the Commissioner of Labor and Industries of the Commonwealth of Massachusetts in accordance with the provisions of Sections 26 to 27D, inclusive, of c.149 of M.G.L. A schedule of the prevailing wages is included in Prevailing Wage Rates Section 0300.

16. Sub-bids

No sub bids will be sought in connection with this Contract.

17. Bid Deposit

A bid deposit is not required to receive bids as they are distributed electronically. This DOES NOT exempt bidders from providing 5% bid security described in item 4 above.

TOWN OF LEXINGTON
PREVAILING WAGE RATES

A schedule of Prevailing Wage Rates as determined by the Department of Labor Standards under the provisions of Massachusetts General Laws, Chapter 149, Section 26 and 27, as amended, apply to this project.

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

MAURA HEALY
Governor
KIM DRISCOLL
Lt. Governor

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

LAUREN JONES
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority:	Lexington - Department of Public Works	**City/Town:**	LEXINGTON
Contract Number:	Contract #26-42		
Description of Work:	The proposed bridge repairs include bur are not limited to timber pile jacking, timber pile cross bracing replacement, removing and replacing utility supports, railing and end post repairs and replacement		
Job Location:	Hartwell Ave over Kiln Brook, Lexington, MA		

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.05	$15.41	$21.78	$0.00	$0.00	$79.24
	6/1/2026	$43.05	$15.41	$21.78	$0.00	$0.00	$80.24
	8/1/2026	$43.05	$15.91	$21.78	$0.00	$0.00	$80.74
	12/1/2026	$43.05	$15.91	$23.52	$0.00	$0.00	$82.48
(3 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$41.12	$15.41	$21.78	$0.00	$0.00	$78.31
	6/1/2026	$43.12	$15.41	$21.78	$0.00	$0.00	$80.31
	8/1/2026	$43.12	$15.91	$21.78	$0.00	$0.00	$80.81
	12/1/2026	$43.12	$15.91	$23.52	$0.00	$0.00	$82.55
(4 & 5 AXLE) DRIVER - EQUIPMENT TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.24	$15.41	$21.78	$0.00	$0.00	$79.43
	6/1/2026	$43.24	$15.41	$21.78	$0.00	$0.00	$80.43
	8/1/2026	$43.24	$15.91	$21.78	$0.00	$0.00	$80.93
	12/1/2026	$43.24	$15.91	$23.52	$0.00	$0.00	$82.67
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1) For apprentice rates see "Apprentice- PILE DRIVER"	1/1/2024	$117.16	$10.08	$11.62	$12.67	$0.00	$151.53
AIR TRACK OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.97	$10.15	$9.50	$9.11	$0.00	$70.73
	6/1/2026	$43.41	$10.15	$9.50	$9.11	$0.00	$72.17
	12/1/2026	$44.85	$10.15	$9.50	$9.11	$0.00	$73.61
	6/1/2027	$46.30	$10.15	$9.50	$9.11	$0.00	$75.06
	12/1/2027	$47.75	$10.15	$9.50	$9.11	$0.00	$76.51
	6/1/2028	$49.25	$10.15	$9.50	$9.11	$0.00	$78.01
	12/1/2028	$50.75	$10.15	$9.50	$9.11	$0.00	$79.51
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.97	$10.15	$9.50	$9.21	$0.00	$70.83
	6/1/2026	$43.41	$10.15	$9.50	$9.21	$0.00	$72.27
	12/1/2026	$44.85	$10.15	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/1/2025	$44.80	$14.50	$4.30	$6.75	$0.00	$70.35
ASPHALT RAKER LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	12/1/2025	$41.97	$10.15	$9.50	$9.11	$0.00	$70.73
LABORERS	6/1/2026	$43.41	$10.15	$9.50	$9.11	$0.00	$72.17
LABORERS - ZONE 2	12/1/2026	$44.85	$10.15	$9.50	$9.11	$0.00	$73.61
	6/1/2027	$46.30	$10.15	$9.50	$9.11	$0.00	$75.06
	12/1/2027	$47.75	$10.15	$9.50	$9.11	$0.00	$76.51
	6/1/2028	$49.25	$10.15	$9.50	$9.11	$0.00	$78.01
	12/1/2028	$50.75	$10.15	$9.50	$9.11	$0.00	$79.51
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	12/1/2025	$41.97	$10.15	$9.50	$9.21	$0.00	$70.83
LABORERS	6/1/2026	$43.41	$10.15	$9.50	$9.21	$0.00	$72.27
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$44.85	$10.15	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
BOILER MAKER	1/1/2024	$48.12	$7.07	$14.60	$6.00	$0.00	$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER

Effective Date: 1/1/2024

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: BOILER MAKER							
Effective Date: 1/1/2024							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
7 / 90.00		$43.31	$7.07	$12.88	$5.40	$0.00	$68.66
8 / 95.00		$45.71	$7.07	$13.62	$5.70	$0.00	$72.10
Apprentice to Journeyworker Ratio: 1:4							
BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (WALTHAM)	8/1/2025	$67.95	$11.49	$15.57	$8.02	$0.00	$103.03
	2/1/2026	$69.30	$11.49	$15.57	$8.02	$0.00	$104.38
	8/1/2026	$71.50	$11.49	$15.57	$8.02	$0.00	$106.58
	2/1/2027	$72.90	$11.49	$15.57	$8.02	$0.00	$107.98
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)							
Effective Date: 8/1/2025							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
1 / 50.00		$33.98	$11.49	$15.57	$8.02	$0.00	$69.06
2 / 60.00		$40.77	$11.49	$15.57	$8.02	$0.00	$75.85
3 / 70.00		$47.57	$11.49	$15.57	$8.02	$0.00	$82.65
4 / 80.00		$54.36	$11.49	$15.57	$8.02	$0.00	$89.44
5 / 90.00		$61.16	$11.49	$15.57	$8.02	$0.00	$96.24
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)							
Effective Date: 2/1/2026							
Step / Percent		**Apprentice Base Wage**	**Health**	**Pension**	**Annuity**	**Supplemental Unemployment**	**Total Rate**
1 / 50.00		$34.65	$11.49	$15.57	$8.02	$0.00	$69.73
2 / 60.00		$41.58	$11.49	$15.57	$8.02	$0.00	$76.66
3 / 70.00		$48.51	$11.49	$15.57	$8.02	$0.00	$83.59
4 / 80.00		$55.44	$11.49	$15.57	$8.02	$0.00	$90.52
5 / 90.00		$62.37	$11.49	$15.57	$8.02	$0.00	$97.45
Apprentice to Journeyworker Ratio: 1:5							
BULLDOZER/GRADER/SCRAPER OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	12/1/2025	$49.85	$10.15	$9.50	$9.80	$0.00	$79.30
	6/1/2026	$51.40	$10.15	$9.50	$9.80	$0.00	$80.85
	12/1/2026	$52.90	$10.15	$9.50	$9.80	$0.00	$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN	12/1/2025	$49.03	$10.15	$9.50	$9.80	$0.00	$78.48
LABORERS	6/1/2026	$50.58	$10.15	$9.50	$9.80	$0.00	$80.03
LABORERS - FOUNDATION AND MARINE	12/1/2026	$52.08	$10.15	$9.50	$9.80	$0.00	$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
CARPENTER	9/1/2025	$50.35	$10.33	$11.47	$8.50	$0.00	$80.65
CARPENTERS	3/1/2026	$51.60	$10.33	$11.47	$8.50	$0.00	$81.90
CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2026	$52.85	$10.33	$11.47	$8.50	$0.00	$83.15
	3/1/2027	$54.10	$10.33	$11.47	$8.50	$0.00	$84.40

Apprentice: CARPENTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
2	45.00	$22.66	$10.33	$0.00	$1.73	$0.00	$34.72
3	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
4	55.00	$27.69	$10.33	$0.00	$3.40	$0.00	$41.42
5	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
6	70.00	$35.25	$10.33	$11.41	$5.10	$0.00	$62.09
7	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85
8	80.00	$40.28	$10.33	$11.44	$6.80	$0.00	$68.85

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
2	45.00	$23.22	$10.33	$0.00	$1.73	$0.00	$35.28
3	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
4	55.00	$28.38	$10.33	$0.00	$3.40	$0.00	$42.11
5	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
6	70.00	$36.12	$10.33	$11.41	$5.10	$0.00	$62.96
7	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CARPENTER WOOD FRAME	10/1/2025	$32.91	$7.10	$4.47	$2.20	$0.00	$46.68
CARPENTERS	10/1/2026	$34.21	$7.10	$4.47	$2.20	$0.00	$47.98
CARPENTERS -ZONE 2 (Wood Frame)							

All Aspects of New Wood Frame Work

Apprentice: CARPENTER

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	80.00	$41.28	$10.33	$11.44	$6.80	$0.00	$69.85

Apprentice to Journeyworker Ratio: 1:5

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$16.46	$7.02	$0.00	$0.00	$0.00	$23.48
2	50.00	$16.46	$7.02	$0.00	$0.00	$0.00	$23.48
3	55.00	$18.10	$7.02	$0.00	$2.00	$0.00	$27.12
4	55.00	$18.10	$7.02	$0.00	$2.20	$0.00	$27.32
5	70.00	$23.04	$7.02	$4.47	$2.20	$0.00	$36.73
6	70.00	$23.04	$7.02	$4.47	$2.20	$0.00	$36.73
7	80.00	$26.33	$7.02	$4.47	$2.20	$0.00	$40.02
8	80.00	$26.33	$7.02	$4.47	$2.20	$0.00	$40.02

Apprentice: CARPENTER WOOD FRAME

Effective Date: 10/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$17.11	$7.10	$0.00	$0.00	$0.00	$24.21
2	50.00	$17.11	$7.10	$0.00	$0.00	$0.00	$24.21
3	55.00	$18.82	$7.10	$0.00	$2.20	$0.00	$28.12
4	55.00	$18.82	$7.10	$0.00	$2.20	$0.00	$28.12
5	70.00	$23.95	$7.10	$4.47	$2.20	$0.00	$37.72
6	70.00	$23.95	$7.10	$4.47	$2.20	$0.00	$37.72
7	80.00	$27.37	$7.10	$4.47	$2.20	$0.00	$41.14
8	80.00	$27.37	$7.10	$4.47	$2.20	$0.00	$41.14

Apprentice to Journeyworker Ratio: 1:5

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.62	$13.35	$16.43	$0.00	$0.00	$56.40
2	60.00	$31.94	$13.35	$16.43	$7.78	$1.80	$71.30
3	65.00	$34.61	$13.35	$16.43	$7.78	$1.80	$73.97
4	70.00	$37.27	$13.35	$16.43	$7.78	$1.80	$76.63
5	75.00	$39.93	$13.35	$16.43	$7.78	$1.80	$79.29
6	80.00	$42.59	$13.35	$16.43	$7.78	$1.80	$81.95
7	90.00	$47.92	$13.35	$16.43	$0.00	$0.00	$77.70

Apprentice: CEMENT MASONRY/PLASTERING

Effective Date: 7/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$27.25	$13.35	$16.43	$0.00	$0.00	$57.03
2	60.00	$32.69	$13.35	$16.43	$7.78	$1.80	$72.05
3	65.00	$35.42	$13.35	$16.43	$7.78	$1.80	$74.78
4	70.00	$38.14	$13.35	$16.43	$7.78	$1.80	$77.50
5	75.00	$40.87	$13.35	$16.43	$7.78	$1.80	$80.23
6	80.00	$43.59	$13.35	$16.43	$7.78	$1.80	$82.95
7	90.00	$49.04	$13.35	$0.00	$7.78	$0.00	$70.17

Apprentice to Journeyworker Ratio: 1:5

CHAIN SAW OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$60.48	$16.05	$13.25	$3.25	$0.00	$93.03
	6/1/2026	$61.81	$16.05	$13.25	$3.25	$0.00	$94.36
	12/1/2026	$63.29	$16.05	$13.25	$3.25	$0.00	$95.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
COMPRESSOR OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DELEADER (BRIDGE) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.60	$0.00	$94.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: DELEADER (BRIDGE)

Effective Date: 1/1/2026

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

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN LABORERS LABORERS - ZONE 2	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: BURNERS LABORERS LABORERS - ZONE 2	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER LABORERS LABORERS - ZONE 2	12/1/2025	$49.75	$10.15	$9.50	$9.65	$0.00	$79.05
	6/1/2026	$51.30	$10.15	$9.50	$9.65	$0.00	$80.60
	12/7/2026	$52.80	$10.15	$9.50	$9.65	$0.00	$82.10
	6/7/2027	$54.40	$10.15	$9.50	$9.65	$0.00	$83.70
	12/6/2027	$56.00	$10.15	$9.50	$9.65	$0.00	$85.30
	6/5/2028	$57.68	$10.15	$9.50	$9.65	$0.00	$86.98
	12/4/2028	$59.35	$10.15	$9.50	$9.65	$0.00	$88.65

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$49.50	$10.15	$9.50	$9.65	$0.00	$78.80
	6/1/2026	$51.05	$10.15	$9.50	$9.65	$0.00	$80.35
	12/7/2026	$52.55	$10.15	$9.50	$9.65	$0.00	$81.85
	6/7/2027	$54.15	$10.15	$9.50	$9.65	$0.00	$83.45
	12/6/2027	$55.75	$10.15	$9.50	$9.65	$0.00	$85.05
	6/5/2028	$57.43	$10.15	$9.50	$9.65	$0.00	$86.73
	12/4/2028	$59.10	$10.15	$9.50	$9.65	$0.00	$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER LABORERS LABORERS - ZONE 2	12/1/2025	$48.75	$10.15	$9.50	$9.65	$0.00	$78.05
	6/1/2026	$50.30	$10.15	$9.50	$9.65	$0.00	$79.60
	12/7/2026	$51.80	$10.15	$9.50	$9.65	$0.00	$81.10
	6/7/2027	$53.40	$10.15	$9.50	$9.65	$0.00	$82.70
	12/6/2027	$55.00	$10.15	$9.50	$9.65	$0.00	$84.30
	6/5/2028	$56.68	$10.15	$9.50	$9.65	$0.00	$85.98
	12/4/2028	$58.35	$10.15	$9.50	$9.65	$0.00	$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$78.11	$10.08	$11.62	$10.04	$0.00	$109.85
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A $69.83, 3A $91.79,4A $102.14 Total Rate							
DIVER TENDER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A $54.20, 3A $73.93,4A $82.05 Total Rate							
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$83.69	$10.08	$11.62	$12.67	$0.00	$118.06
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$117.16	$10.08	$11.62	$12.67	$0.00	$151.53
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction) DRAWBRIDGE - SEIU LOCAL 888 DRAWBRIDGE - SEIU LOCAL 888	7/1/2020	$26.77	$6.67	$3.93	$0.00	$0.16	$37.53
ELECTRICIAN ELECTRICIANS LOCAL 103 ELECTRICIANS LOCAL 103	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

Apprentice: ELECTRICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
2	40.00	$26.47	$13.00	$0.79	$0.00	$0.00	$40.26
3	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
4	45.00	$29.78	$13.00	$13.27	$3.92	$0.00	$59.97
5	50.00	$33.09	$13.00	$13.37	$4.36	$0.00	$63.82
6	55.00	$36.39	$13.00	$13.47	$4.80	$0.00	$67.66
7	60.00	$39.70	$13.00	$13.57	$5.23	$0.00	$71.50
8	65.00	$43.01	$13.00	$13.67	$5.67	$0.00	$75.35
9	70.00	$46.32	$13.00	$13.77	$6.10	$0.00	$79.19
10	75.00	$49.63	$13.00	$13.87	$6.54	$0.00	$83.04

Apprentice: ELECTRICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
2	40.00	$26.74	$13.00	$0.80	$0.00	$0.00	$40.54
3	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
4	45.00	$30.09	$13.00	$13.53	$4.05	$0.00	$60.67
5	50.00	$33.43	$13.00	$13.63	$4.50	$0.00	$64.56
6	55.00	$36.77	$13.00	$13.73	$4.95	$0.00	$68.45
7	60.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
8	65.00	$43.46	$13.00	$13.93	$5.85	$0.00	$76.24
9	70.00	$46.80	$13.00	$14.03	$6.30	$0.00	$80.13
10	75.00	$50.15	$13.00	$14.13	$6.75	$0.00	$84.03

Apprentice Notes

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Apprentice to Journeyworker Ratio: 2:3

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

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2026

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

Apprentice: ELEVATOR CONSTRUCTOR

Effective Date: 1/1/2027

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$40.28	$0.00	$0.00	$0.00	$0.00	$40.28
2	55.00	$44.30	$16.48	$11.16	$11.00	$0.00	$82.94
3	65.00	$52.36	$16.48	$11.16	$11.00	$0.00	$91.00
4	70.00	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
5	80.00	$64.44	$16.48	$11.16	$11.00	$0.00	$103.08

Apprentice to Journeyworker Ratio: 1:1

ELEVATOR CONSTRUCTOR HELPER ELEVATOR CONSTRUCTORS LOCAL 4 ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	$54.08	$16.38	$11.06	$10.07	$0.00	$91.59
	1/1/2027	$56.39	$16.48	$11.16	$11.00	$0.00	$95.03
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$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 OPERATING ENGINEERS LOCAL 4	11/1/2025	$53.56	$16.05	$13.25	$3.25	$0.00	$86.11
	5/1/2026	$55.00	$16.05	$13.25	$3.25	$0.00	$87.55
	11/1/2026	$56.29	$16.05	$13.25	$3.25	$0.00	$88.84
	5/1/2027	$57.72	$16.05	$13.25	$3.25	$0.00	$90.27
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	11/1/2025	$55.17	$16.05	$13.25	$3.25	$0.00	$87.72
	5/1/2026	$56.62	$16.05	$13.25	$3.25	$0.00	$89.17
	11/1/2026	$57.92	$16.05	$13.25	$3.25	$0.00	$90.47
	5/1/2027	$59.37	$16.05	$13.25	$3.25	$0.00	$91.92
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	11/1/2025	$26.03	$16.05	$13.25	$3.25	$0.00	$58.58
	5/1/2026	$26.88	$16.05	$13.25	$3.25	$0.00	$59.43
	11/1/2026	$27.64	$16.05	$13.25	$3.25	$0.00	$60.19
	5/1/2027	$28.49	$16.05	$13.25	$3.25	$0.00	$61.04

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	$66.17	$13.00	$14.37	$9.00	$0.00	$102.54
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
/ COMMISSIONING	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	12/1/2025	$47.69	$16.05	$13.25	$3.25	$0.00	$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	$48.75	$16.05	$13.25	$3.25	$0.00	$81.30
OPERATING ENGINEERS LOCAL 4	12/1/2026	$49.93	$16.05	$13.25	$3.25	$0.00	$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	12/1/2025	$28.09	$10.15	$9.50	$9.21	$0.00	$56.95
LABORERS	6/1/2026	$29.21	$10.15	$9.50	$9.21	$0.00	$58.07
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$29.21	$10.15	$9.50	$9.21	$0.00	$58.07
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FLOORCOVERER	9/1/2025	$57.74	$10.33	$11.47	$8.80	$0.00	$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	$59.24	$10.33	$11.47	$8.80	$0.00	$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	$60.74	$10.33	$11.47	$8.80	$0.00	$91.34
	3/1/2027	$62.24	$10.33	$11.47	$8.80	$0.00	$92.84

Apprentice: FLOORCOVERER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
2	45.00	$25.98	$10.33	$0.00	$1.76	$0.00	$38.07
3	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
4	55.00	$31.76	$10.33	$0.00	$3.52	$0.00	$45.61
5	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
6	70.00	$40.42	$10.33	$11.47	$5.28	$0.00	$67.50
7	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03
8	80.00	$46.19	$10.33	$11.47	$7.04	$0.00	$75.03

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: FLOORCOVERER

Effective Date: 3/1/2026

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

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

FORK LIFT/CHERRY PICKER	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
OPERATING ENGINEERS LOCAL 4	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	1/1/2026	$49.06	$10.35	$12.00	$12.60	$0.00	$84.01
GLAZIERS LOCAL 35							
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2	55.00	$26.98	$10.35	$0.00	$6.88	$0.00	$44.21
3	60.00	$29.44	$10.35	$0.00	$7.50	$0.00	$47.29
4	65.00	$31.89	$10.35	$0.00	$8.13	$0.00	$50.37
5	70.00	$34.34	$10.35	$12.00	$8.75	$0.00	$65.44
6	75.00	$36.80	$10.35	$12.00	$9.38	$0.00	$68.53
7	80.00	$39.25	$10.35	$12.00	$10.00	$0.00	$71.60
8	90.00	$44.15	$10.35	$12.00	$11.25	$0.00	$77.75

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HOISTING ENGINEER/CRANES/GRADALLS	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$32.88	$0.00	$0.00	$0.00	$0.00	$32.88
2	60.00	$35.87	$16.05	$13.25	$3.25	$0.00	$68.42
3	65.00	$38.86	$16.05	$13.25	$3.25	$0.00	$71.41
4	70.00	$41.85	$16.05	$13.25	$3.25	$0.00	$74.40
5	75.00	$44.84	$16.05	$13.25	$3.25	$0.00	$77.39
6	80.00	$47.82	$16.05	$13.25	$3.25	$0.00	$80.37
7	85.00	$50.81	$16.05	$13.25	$3.25	$0.00	$83.36
8	90.00	$53.80	$16.05	$13.25	$3.25	$0.00	$86.35

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$33.32	$0.00	$0.00	$0.00	$0.00	$33.32
2	60.00	$36.35	$16.05	$13.25	$3.25	$0.00	$68.90
3	65.00	$39.38	$16.05	$13.25	$3.25	$0.00	$71.93
4	70.00	$42.41	$16.50	$13.25	$3.25	$0.00	$75.41
5	75.00	$45.44	$16.50	$13.25	$3.25	$0.00	$78.44
6	80.00	$48.46	$16.50	$13.25	$3.25	$0.00	$81.46
7	85.00	$51.49	$16.50	$13.25	$3.25	$0.00	$84.49
8	90.00	$54.52	$16.50	$13.25	$3.25	$0.00	$87.52

Apprentice to Journeyworker Ratio: 1:6

HVAC (DUCTWORK)	8/1/2025	$60.98	$14.91	$18.74	$9.53	$2.98	$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	$62.93	$14.91	$18.74	$9.53	$2.98	$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

For apprentice rates see "Apprentice- SHEET METAL WORKER"

HVAC (ELECTRICAL CONTROLS)	9/1/2025	$66.17	$13.00	$14.37	$8.72	$0.00	$102.26
ELECTRICIANS LOCAL 103	3/1/2026	$66.86	$13.00	$14.64	$9.00	$0.00	$103.50
ELECTRICIANS LOCAL 103	9/1/2026	$68.78	$13.00	$14.69	$9.00	$0.00	$105.47
	3/1/2027	$69.97	$13.00	$14.73	$9.00	$0.00	$106.70
	9/1/2027	$71.88	$13.00	$14.79	$9.00	$0.00	$108.67
	3/1/2028	$73.08	$13.00	$14.82	$9.00	$0.00	$109.90

For apprentice rates see "Apprentice- ELECTRICIAN"

HVAC (TESTING AND BALANCING - AIR)	8/1/2025	$60.98	$14.91	$18.74	$9.53	$2.98	$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	$62.93	$14.91	$18.74	$9.53	$2.98	$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

For apprentice rates see "Apprentice- SHEET METAL WORKER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC (TESTING AND BALANCING -WATER) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
HYDRAULIC DRILLS LABORERS LABORERS - ZONE 2	12/1/2025	$41.97	$10.15	$9.50	$9.11	$0.00	$70.73
	6/1/2026	$43.41	$10.15	$9.50	$9.11	$0.00	$72.17
	12/1/2026	$44.85	$10.15	$9.50	$9.11	$0.00	$73.61
	6/1/2027	$46.30	$10.15	$9.50	$9.11	$0.00	$75.06
	12/1/2027	$47.75	$10.15	$9.50	$9.11	$0.00	$76.51
	6/1/2028	$49.25	$10.15	$9.50	$9.11	$0.00	$78.01
	12/1/2028	$50.75	$10.15	$9.50	$9.11	$0.00	$79.51
For apprentice rates see "Apprentice- LABORER"							
HYDRAULIC DRILLS (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.97	$10.15	$9.50	$9.21	$0.00	$70.83
	6/1/2026	$43.41	$10.15	$9.50	$9.21	$0.00	$72.27
	12/1/2026	$44.85	$10.15	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
INSULATOR (PIPES & TANKS) HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	9/1/2025	$60.34	$14.75	$9.52	$10.09	$0.00	$94.70
	9/1/2026	$63.76	$14.75	$9.52	$10.09	$0.00	$98.12

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$30.17	$14.75	$9.27	$5.05	$0.00	$59.24
2	60.00	$36.20	$14.75	$9.32	$6.05	$0.00	$66.32
3	70.00	$42.24	$14.75	$9.37	$7.06	$0.00	$73.42
4	80.00	$48.27	$14.75	$9.42	$8.07	$0.00	$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$31.88	$14.75	$9.27	$5.05	$0.00	$60.95
2	60.00	$38.26	$14.75	$9.32	$6.05	$0.00	$68.38
3	70.00	$44.63	$14.75	$9.37	$7.06	$0.00	$75.81
4	80.00	$51.01	$14.75	$9.42	$8.07	$0.00	$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER	9/16/2025	$57.87	$9.05	$12.75	$14.50	$0.00	$94.17

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (BOSTON AREA)							

Apprentice: IRONWORKER/WELDER

Effective Date: 9/16/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$34.72	$9.05	$12.75	$4.50	$0.00	$61.02
2	75.00	$43.40	$9.05	$12.75	$4.50	$0.00	$69.70
3	85.00	$49.19	$9.05	$12.75	$4.50	$0.00	$75.49
4	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
5	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
6	0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Apprentice to Journeyworker Ratio: 1:4

JACKHAMMER & PAVING BREAKER OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76

Apprentice: LABORER

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.03	$10.15	$9.50	$9.11	$0.00	$53.79
2	70.00	$29.20	$10.15	$9.50	$9.11	$0.00	$57.96
3	80.00	$33.38	$10.15	$9.50	$9.11	$0.00	$62.14
4	90.00	$37.55	$10.15	$9.50	$9.11	$0.00	$66.31

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.60	$10.15	$9.50	$9.11	$0.00	$54.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: LABORER

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	70.00	$29.86	$10.15	$9.50	$9.11	$0.00	$58.62
3	80.00	$34.13	$10.15	$9.50	$9.11	$0.00	$62.89
4	90.00	$38.39	$10.15	$9.50	$9.11	$0.00	$67.15

Apprentice to Journeyworker Ratio: 1:5

LABORER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.22	$10.15	$9.50	$9.21	$0.00	$70.08
	6/1/2026	$42.66	$10.15	$9.50	$9.21	$0.00	$71.52
	12/1/2026	$44.10	$10.15	$9.50	$9.21	$0.00	$72.96

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 12/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.03	$10.15	$9.50	$9.21	$0.00	$53.89
2	70.00	$29.20	$10.15	$9.50	$9.21	$0.00	$58.06
3	80.00	$33.38	$10.15	$9.50	$9.21	$0.00	$62.24
4	90.00	$37.55	$10.15	$9.50	$9.21	$0.00	$66.41

Apprentice: LABORER (HEAVY & HIGHWAY)

Effective Date: 6/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	$25.60	$10.15	$9.50	$9.21	$0.00	$54.46
2	70.00	$29.86	$10.15	$9.50	$9.21	$0.00	$58.72
3	80.00	$34.13	$10.15	$9.50	$9.21	$0.00	$62.99
4	90.00	$38.39	$10.15	$9.50	$9.10	$0.00	$67.14

Apprentice to Journeyworker Ratio: 1:5

LABORER: CARPENTER TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76

For apprentice rates see "Apprentice- LABORER"

LABORER: CEMENT FINISHER TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 2	12/1/2025	$41.31	$10.15	$9.50	$9.65	$0.00	$70.61
	6/1/2026	$42.75	$10.15	$9.50	$9.65	$0.00	$72.05
	12/7/2026	$44.19	$10.15	$9.50	$9.65	$0.00	$73.49
	6/7/2027	$45.64	$10.15	$9.50	$9.65	$0.00	$74.94
	12/6/2027	$47.09	$10.15	$9.50	$9.65	$0.00	$76.39
	6/5/2028	$48.59	$10.15	$9.50	$9.65	$0.00	$77.89
	12/4/2028	$50.09	$10.15	$9.50	$9.65	$0.00	$79.39
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 2	12/1/2025	$41.22	$10.15	$9.50	$9.11	$0.00	$69.98
	6/1/2026	$42.66	$10.15	$9.50	$9.11	$0.00	$71.42
	12/1/2026	$44.10	$10.15	$9.50	$9.11	$0.00	$72.86
	6/1/2027	$45.55	$10.15	$9.50	$9.11	$0.00	$74.31
	12/1/2027	$47.00	$10.15	$9.50	$9.11	$0.00	$75.76
	6/1/2028	$48.50	$10.15	$9.50	$9.11	$0.00	$77.26
	12/1/2028	$50.00	$10.15	$9.50	$9.11	$0.00	$78.76
This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
LASER BEAM OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
MARBLE & TILE FINISHERS BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2025	$52.08	$11.49	$15.57	$6.05	$0.00	$85.19
	2/1/2026	$53.16	$11.49	$15.57	$6.05	$0.00	$86.27
	8/1/2026	$54.92	$11.49	$15.57	$6.05	$0.00	$88.03
	2/1/2027	$56.04	$11.49	$15.57	$6.05	$0.00	$89.15

Apprentice: MARBLE & TILE FINISHERS

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.04	$11.49	$15.57	$6.05	$0.00	$59.15
2	60.00	$31.25	$11.49	$15.57	$6.05	$0.00	$64.36
3	70.00	$36.46	$11.49	$15.57	$6.05	$0.00	$69.57
4	80.00	$41.66	$11.49	$15.57	$6.05	$0.00	$74.77
5	90.00	$46.87	$11.49	$15.57	$6.05	$0.00	$79.98

Apprentice: MARBLE & TILE FINISHERS

Effective Date: 2/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.58	$11.49	$15.57	$6.05	$0.00	$59.69
2	60.00	$31.90	$11.49	$15.57	$6.05	$0.00	$65.01
3	70.00	$37.21	$11.49	$15.57	$6.05	$0.00	$70.32
4	80.00	$42.53	$11.49	$15.57	$6.05	$0.00	$75.64
5	90.00	$47.84	$11.49	$15.57	$6.05	$0.00	$80.95

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2025	$67.97	$11.49	$15.57	$7.99	$0.00	$103.02
	2/1/2026	$69.32	$11.49	$15.57	$7.99	$0.00	$104.37
	8/1/2026	$71.52	$11.49	$15.57	$7.99	$0.00	$106.57
	2/1/2027	$72.92	$11.49	$15.57	$7.99	$0.00	$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 8/1/2025

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$33.99	$11.49	$15.57	$7.99	$0.00	$69.04
2	60.00	$40.78	$11.49	$15.57	$7.99	$0.00	$75.83
3	70.00	$47.58	$11.49	$15.57	$7.99	$0.00	$82.63
4	80.00	$54.38	$11.49	$15.57	$7.99	$0.00	$89.43
5	90.00	$61.17	$11.49	$15.57	$7.99	$0.00	$96.22

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH

Effective Date: 2/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$34.66	$11.49	$15.57	$7.99	$0.00	$69.71
2	60.00	$41.59	$11.49	$15.57	$7.99	$0.00	$76.64
3	70.00	$48.52	$11.49	$15.57	$7.99	$0.00	$83.57
4	80.00	$55.46	$11.49	$15.57	$7.99	$0.00	$90.51
5	90.00	$62.39	$11.49	$15.57	$7.99	$0.00	$97.44

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MECHANICS MAINTENANCE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
MILLWRIGHT (Zone 1) MILLWRIGHTS LOCAL 1121 MILLWRIGHTS LOCAL 1121 - Zone 1	1/5/2026	$52.97	$10.08	$11.47	$10.25	$0.00	$84.77

Apprentice: MILLWRIGHT (Zone 1)

Effective Date: 1/5/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	$29.13	$10.08	$0.00	$5.64	$0.00	$44.85
2	65.00	$34.43	$10.08	$0.00	$6.66	$0.00	$51.17
3	75.00	$39.73	$10.08	$11.47	$7.69	$0.00	$68.97
4	85.00	$45.02	$10.08	$11.47	$8.71	$0.00	$75.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice Notes

Step 1&2 Appr. indentured after 1/6/2020 receive no pension,

Apprentice to Journeyworker Ratio: 1:4

MORTAR MIXER LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
OILER (OTHER THAN TRUCK CRANES,GRADALLS) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$25.68	$16.05	$13.25	$3.25	$0.00	$58.23
	6/1/2026	$26.27	$16.05	$13.25	$3.25	$0.00	$58.82
	12/1/2026	$26.94	$16.05	$13.25	$3.25	$0.00	$59.49
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OILER (TRUCK CRANES, GRADALLS) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$31.65	$16.05	$13.25	$3.25	$0.00	$64.20
	6/1/2026	$32.37	$16.05	$13.25	$3.25	$0.00	$64.92
	12/1/2026	$33.17	$16.05	$13.25	$3.25	$0.00	$65.72
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
OTHER POWER DRIVEN EQUIPMENT - CLASS II OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PAINTER (BRIDGES/TANKS) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$59.56	$10.35	$12.00	$12.50	$0.00	$94.41

Apprentice: PAINTER (BRIDGES/TANKS)

Effective Date: 1/1/2026

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

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	1/1/2026	$50.46	$10.35	$12.00	$12.60	$0.00	$85.41

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used. PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$25.23	$10.35	$0.00	$0.00	$0.00	$35.58
2	55.00	$27.75	$10.35	$0.00	$6.93	$0.00	$45.03
3	60.00	$30.28	$10.35	$0.00	$7.56	$0.00	$48.19
4	65.00	$32.80	$10.35	$0.00	$8.19	$0.00	$51.34
5	70.00	$35.32	$10.35	$12.00	$8.82	$0.00	$66.49
6	75.00	$37.85	$10.35	$12.00	$9.45	$0.00	$69.65
7	80.00	$40.37	$10.35	$12.00	$10.08	$0.00	$72.80
8	90.00	$45.41	$10.35	$12.00	$11.34	$0.00	$79.10

Apprentice to Journeyworker Ratio: 1:1

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

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$24.26	$10.35	$0.00	$0.00	$0.00	$34.61
2	55.00	$26.69	$10.35	$0.00	$6.93	$0.00	$43.97
3	60.00	$29.11	$10.35	$0.00	$7.56	$0.00	$47.02
4	65.00	$31.54	$10.35	$0.00	$8.19	$0.00	$50.08
5	70.00	$33.96	$10.35	$12.00	$8.82	$0.00	$65.13
6	75.00	$36.39	$10.35	$12.00	$9.45	$0.00	$68.19
7	80.00	$38.82	$10.35	$12.00	$10.08	$0.00	$71.25
8	90.00	$43.67	$10.35	$12.00	$11.34	$0.00	$77.36

Apprentice to Journeyworker Ratio: 1:1

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

Apprentice: PAINTER / TAPER (BRUSH, NEW) *

Effective Date: 1/1/2026

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
1 / 50.00		$24.53	$10.35	$0.00	$0.00	$0.00	$34.88
2 / 55.00		$26.98	$10.35	$0.00	$6.93	$0.00	$44.26
3 / 60.00		$29.44	$10.35	$0.00	$7.56	$0.00	$47.35
4 / 65.00		$31.89	$10.35	$0.00	$8.19	$0.00	$50.43
5 / 70.00		$34.34	$10.35	$12.00	$8.82	$0.00	$65.51
6 / 75.00		$36.80	$10.35	$12.00	$9.45	$0.00	$68.60
7 / 80.00		$39.25	$10.35	$12.00	$10.08	$0.00	$71.68
8 / 90.00		$44.15	$10.35	$12.00	$11.34	$0.00	$77.84
Apprentice to Journeyworker Ratio: 1:1							
PAINTER / TAPER (BRUSH, REPAINT) PAINTERS LOCAL 35 PAINTERS LOCAL 35 - ZONE 2	1/1/2026	$47.12	$10.35	$12.00	$12.60	$0.00	$82.07
Apprentice: PAINTER / TAPER (BRUSH, REPAINT)							
Effective Date: 1/1/2026							
Step / Percent		**Apprentice Base Wage**					
1 / 50.00		$23.56	$10.35	$0.00	$0.00	$0.00	$33.91
2 / 55.00		$25.92	$10.35	$0.00	$6.93	$0.00	$43.20
3 / 60.00		$28.27	$10.35	$0.00	$7.56	$0.00	$46.18
4 / 65.00		$30.63	$10.35	$0.00	$8.19	$0.00	$49.17
5 / 70.00		$32.98	$10.35	$12.00	$8.82	$0.00	$64.15
6 / 75.00		$35.34	$10.35	$12.00	$9.45	$0.00	$67.14
7 / 80.00		$37.70	$10.35	$12.00	$10.08	$0.00	$70.13
8 / 90.00		$42.41	$10.35	$12.00	$11.34	$0.00	$76.10
Apprentice to Journeyworker Ratio: 1:1							
PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	12/1/2025	$41.22	$10.15	$9.50	$9.21	$0.00	$70.08
LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	$42.66	$10.15	$9.50	$9.21	$0.00	$71.52
	12/1/2026	$44.10	$10.15	$9.50	$9.21	$0.00	$72.96
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)							
PANEL & PICKUP TRUCKS DRIVER	12/1/2025	$41.88	$15.41	$21.78	$0.00	$0.00	$79.07
TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	$42.88	$15.41	$21.78	$0.00	$0.00	$80.07
	8/1/2026	$42.88	$15.91	$21.78	$0.00	$0.00	$80.57
	12/1/2026	$42.88	$15.91	$23.52	$0.00	$0.00	$82.31
PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16
For apprentice rates see "Apprentice- PILE DRIVER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PILE DRIVER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	$55.79	$10.08	$11.62	$12.67	$0.00	$90.16

Apprentice: PILE DRIVER

Effective Date: 8/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$25.11	$10.08	$0.00	$2.53	$0.00	$37.72
2	55.00	$30.68	$10.08	$0.00	$5.07	$0.00	$45.83
3	70.00	$39.05	$10.08	$11.62	$7.60	$0.00	$68.35
4	80.00	$44.63	$10.08	$11.62	$10.14	$0.00	$76.47

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58

Apprentice: PIPEFITTER & STEAMFITTER

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	$27.63	$13.45	$13.75	$9.30	$0.00	$64.13
2	45.00	$31.09	$13.45	$13.75	$9.30	$0.00	$67.59
3	60.00	$41.45	$13.45	$13.75	$9.30	$0.00	$77.95
4	70.00	$48.36	$13.45	$13.75	$9.30	$0.00	$84.86
5	80.00	$55.26	$13.45	$13.75	$9.30	$0.00	$91.76

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21

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

PLUMBERS & GASFITTERS PLUMBERS & GASFITTERS LOCAL 12 PLUMBERS & GASFITTERS LOCAL 12	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/28/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.11	$14.32	$4.61	$2.80	$0.00	$46.84
2	40.00	$28.70	$14.32	$5.22	$3.20	$0.00	$51.44
3	55.00	$39.46	$14.32	$7.07	$4.40	$0.00	$65.25
4	65.00	$46.63	$14.32	$8.30	$5.20	$0.00	$74.45
5	75.00	$53.81	$14.32	$9.53	$6.00	$0.00	$83.66

Apprentice: PLUMBERS & GASFITTERS

Effective Date: 3/2/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.86	$14.32	$4.61	$2.80	$0.00	$47.59
2	40.00	$29.56	$14.32	$5.22	$3.20	$0.00	$52.30
3	55.00	$40.64	$14.32	$7.07	$4.40	$0.00	$66.43
4	65.00	$48.03	$14.32	$8.30	$5.20	$0.00	$75.85
5	75.00	$55.42	$14.32	$9.53	$6.00	$0.00	$85.27

Apprentice to Journeyworker Ratio: 1:2

PNEUMATIC CONTROLS (TEMP.) PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	9/1/2025	$69.08	$13.45	$13.75	$9.30	$0.00	$105.58
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	12/1/2025	$42.22	$10.15	$9.50	$9.11	$0.00	$70.98

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS LABORERS - ZONE 2	6/1/2026	$43.66	$10.15	$9.50	$9.11	$0.00	$72.42
	12/1/2026	$45.10	$10.15	$9.50	$9.11	$0.00	$73.86
	6/1/2027	$46.55	$10.15	$9.50	$9.11	$0.00	$75.31
	12/1/2027	$48.00	$10.15	$9.50	$9.11	$0.00	$76.76
	6/1/2028	$49.50	$10.15	$9.50	$9.11	$0.00	$78.26
	12/1/2028	$51.00	$10.15	$9.50	$9.11	$0.00	$79.76
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	$42.22	$9.90	$9.50	$9.21	$0.00	$70.83
	6/1/2026	$43.66	$9.90	$9.50	$9.21	$0.00	$72.27
	12/1/2026	$45.10	$9.90	$9.50	$9.21	$0.00	$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$37.97	$16.05	$13.25	$3.25	$0.00	$70.52
	6/1/2026	$38.83	$16.05	$13.25	$3.25	$0.00	$71.38
	12/1/2026	$39.78	$16.05	$13.25	$3.25	$0.00	$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY MIX CONCRETE DRIVERS after 4/30/12 (Drivers Hired After 4/30/2012) TEAMSTERS 25 (Suburban) - Aggregate TEAMSTERS 25 (Suburban) - Aggregate	8/1/2022	$30.40	$11.91	$15.25	$0.00	$0.00	$57.56
READY-MIX CONCRETE DRIVER TEAMSTERS 25 (Suburban) - Aggregate TEAMSTERS 25 (Suburban) - Aggregate	8/1/2022	$30.50	$11.91	$15.25	$0.00	$0.00	$57.66
RECLAIMERS OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS LABORERS - ZONE 2	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ROLLER/SPREADER/MULCHING MACHINE	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg)	8/1/2025	$53.53	$13.28	$12.67	$9.03	$0.00	$88.51
ROOFERS LOCAL 33	2/1/2026	$54.78	$13.28	$12.67	$9.03	$0.00	$89.76
ROOFERS LOCAL 33							

Apprentice: ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg)

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$26.77	$13.28	$6.52	$9.03	$0.00	$55.60
2	60.00	$32.12	$13.28	$12.67	$9.03	$0.00	$67.10
3	65.00	$34.79	$13.28	$12.67	$9.03	$0.00	$69.77
4	75.00	$40.15	$13.28	$12.67	$9.03	$0.00	$75.13
5	85.00	$45.50	$13.28	$12.67	$9.03	$0.00	$80.48

Apprentice: ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg)

Effective Date: 2/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$27.39	$13.28	$6.52	$9.03	$0.00	$56.22
2	60.00	$32.87	$13.28	$12.67	$9.03	$0.00	$67.85
3	65.00	$35.61	$13.28	$12.67	$9.03	$0.00	$70.59
4	75.00	$41.09	$13.28	$12.67	$9.03	$0.00	$76.07
5	85.00	$46.56	$13.28	$12.67	$9.03	$0.00	$81.54

Apprentice Notes

** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE	8/1/2025	$53.78	$13.28	$12.67	$9.03	$0.00	$88.76
ROOFERS LOCAL 33	2/1/2026	$55.03	$13.28	$12.67	$9.03	$0.00	$90.01
ROOFERS LOCAL 33							

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER	8/1/2025	$60.98	$14.91	$18.74	$9.53	$2.98	$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	$62.93	$14.91	$18.74	$9.53	$2.98	$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

Apprentice: SHEETMETAL WORKER

Effective Date: 8/1/2025

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

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: SHEETMETAL WORKER

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	$25.61	$14.91	$6.13	$0.00	$0.00	$46.65
2	42.00	$25.61	$14.91	$6.13	$0.00	$0.00	$46.65
3	47.00	$28.66	$14.91	$11.01	$1.25	$1.62	$57.45
4	47.00	$28.66	$14.91	$11.01	$1.25	$1.62	$57.45
5	52.00	$31.71	$14.91	$11.74	$1.50	$1.74	$61.60
6	52.00	$31.71	$14.91	$11.74	$1.75	$1.75	$61.86
7	60.00	$36.59	$14.91	$12.90	$2.00	$1.93	$68.33
8	65.00	$39.64	$14.91	$13.63	$2.25	$2.04	$72.47
9	75.00	$45.74	$14.91	$15.09	$2.75	$2.28	$80.77
10	85.00	$51.83	$14.91	$16.55	$2.75	$2.49	$88.53

Apprentice: SHEETMETAL WORKER

Effective Date: 2/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	$26.43	$14.91	$6.19	$0.00	$0.00	$47.53
2	42.00	$26.43	$14.91	$6.19	$0.00	$0.00	$47.53
3	47.00	$29.58	$14.91	$10.93	$1.25	$1.62	$58.29
4	47.00	$29.58	$14.91	$10.93	$1.25	$1.62	$58.29
5	52.00	$32.72	$14.91	$11.66	$1.50	$1.74	$62.53
6	52.00	$32.72	$14.91	$11.66	$1.75	$1.75	$62.79
7	60.00	$37.76	$14.91	$12.84	$2.00	$1.93	$69.44
8	65.00	$40.90	$14.91	$13.58	$2.25	$2.04	$73.68
9	75.00	$47.20	$14.91	$15.06	$2.75	$2.28	$82.20
10	85.00	$53.49	$14.91	$16.53	$2.75	$2.49	$90.17

Apprentice to Journeyworker Ratio: 1:4

SPECIALIZED EARTH MOVING EQUIP < 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.34	$15.41	$21.78	$0.00	$0.00	$79.53
	6/1/2026	$43.34	$15.41	$21.78	$0.00	$0.00	$80.53
	8/1/2026	$43.34	$15.91	$21.78	$0.00	$0.00	$81.03
	12/1/2026	$43.34	$15.91	$23.52	$0.00	$0.00	$82.77
SPECIALIZED EARTH MOVING EQUIP > 35 TONS TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	12/1/2025	$42.63	$15.41	$21.78	$0.00	$0.00	$79.82
	6/1/2026	$43.63	$15.41	$21.78	$0.00	$0.00	$80.82
	8/1/2026	$43.63	$15.91	$21.78	$0.00	$0.00	$81.32
	12/1/2026	$43.63	$15.91	$23.52	$0.00	$0.00	$83.06
SPRINKLER FITTER SPRINKLER FITTERS LOCAL 550 SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1	1/1/2026	$72.05	$13.45	$7.45	$18.25	$0.00	$111.20

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: SPRINKLER FITTER

Effective Date: 1/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	$25.22	$13.45	$13.84	$0.00	$0.00	$52.51
2	40.00	$28.82	$13.45	$14.75	$0.00	$0.00	$57.02
3	45.00	$32.42	$13.45	$15.67	$0.00	$0.00	$61.54
4	50.00	$36.03	$13.45	$16.57	$0.00	$0.00	$66.05
5	55.00	$39.63	$13.45	$17.49	$0.00	$0.00	$70.57
6	60.00	$43.23	$13.45	$18.40	$0.00	$0.00	$75.08
7	65.00	$46.83	$13.45	$19.32	$0.00	$0.00	$79.60
8	70.00	$50.44	$13.45	$20.22	$0.00	$0.00	$84.11
9	75.00	$54.04	$13.45	$21.15	$0.00	$0.00	$88.64
10	80.00	$57.64	$13.45	$22.05	$0.00	$0.00	$93.14

Apprentice Notes

Apprentice entered prior 9/30/10:

Apprentice to Journeyworker Ratio: 1:3

STEAM BOILER OPERATOR	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

TELECOMMUNICATION TECHNICIAN	9/1/2025	$52.94	$13.00	$13.97	$6.98	$0.00	$86.89
TELECOMMUNICATION TECHNICIAN	3/1/2026	$53.49	$13.00	$14.23	$7.20	$0.00	$87.92
ELECTRICIANS LOCAL 103	9/1/2026	$55.02	$13.00	$14.28	$7.20	$0.00	$89.50
ELECTRICIANS LOCAL 103	3/1/2027	$55.98	$13.00	$14.31	$7.20	$0.00	$90.49
	9/1/2027	$57.50	$13.00	$14.36	$7.20	$0.00	$92.06
	3/1/2028	$58.46	$13.00	$14.38	$7.20	$0.00	$93.04

For apprentice rates and ratios see "Apprentice- ELECTRICIAN"

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
2	45.00	$23.82	$13.00	$0.71	$0.00	$0.00	$37.53
3	50.00	$26.47	$13.00	$13.17	$3.49	$0.00	$56.13
4	50.00	$26.47	$13.00	$13.17	$3.49	$0.00	$56.13

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	55.00	$29.12	$13.00	$13.25	$3.84	$0.00	$59.21
6	60.00	$31.76	$13.00	$13.33	$4.19	$0.00	$62.28
7	65.00	$34.41	$13.00	$13.41	$4.54	$0.00	$65.36
8	70.00	$37.06	$13.00	$13.49	$4.89	$0.00	$68.44
9	75.00	$39.71	$13.00	$13.57	$5.24	$0.00	$71.52
10	80.00	$42.35	$13.00	$13.65	$5.58	$0.00	$74.58

Apprentice: TELECOMMUNICATION TECHNICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
2	45.00	$24.07	$13.00	$0.72	$0.00	$0.00	$37.79
3	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
4	50.00	$26.75	$13.00	$13.43	$3.60	$0.00	$56.78
5	55.00	$29.42	$13.00	$13.51	$3.96	$0.00	$59.89
6	60.00	$32.09	$13.00	$13.59	$4.32	$0.00	$63.00
7	65.00	$34.77	$13.00	$13.67	$4.68	$0.00	$66.12
8	70.00	$37.44	$13.00	$13.75	$5.04	$0.00	$69.23
9	75.00	$40.12	$13.00	$13.83	$5.40	$0.00	$72.35
10	80.00	$42.79	$13.00	$13.91	$5.76	$0.00	$75.46

Apprentice to Journeyworker Ratio: 1:1

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
TERRAZZO FINISHERS BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2025	$66.89	$11.49	$15.57	$8.02	$0.00	$101.97
	2/1/2026	$68.24	$11.49	$15.57	$8.02	$0.00	$103.32
	8/1/2026	$70.44	$11.49	$15.57	$8.02	$0.00	$105.52
	2/1/2027	$71.84	$11.49	$15.57	$8.02	$0.00	$106.92

Apprentice: TERRAZZO FINISHERS

Effective Date: 8/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$33.45	$11.49	$15.57	$8.02	$0.00	$68.53
2	60.00	$40.13	$11.49	$15.57	$8.02	$0.00	$75.21
3	70.00	$46.82	$11.49	$15.57	$8.02	$0.00	$81.90
4	80.00	$53.51	$11.49	$15.57	$8.02	$0.00	$88.59
5	90.00	$60.20	$11.49	$15.57	$8.02	$0.00	$95.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Apprentice: TERRAZZO FINISHERS

Effective Date: 2/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	$34.12	$11.49	$15.57	$8.02	$0.00	$69.20
2	60.00	$40.94	$11.49	$15.57	$8.02	$0.00	$76.02
3	70.00	$47.77	$11.49	$15.57	$8.02	$0.00	$82.85
4	80.00	$54.59	$11.49	$15.57	$8.02	$0.00	$89.67
5	90.00	$61.42	$11.49	$15.57	$8.02	$0.00	$96.50

Apprentice to Journeyworker Ratio: 1:5

TEST BORING DRILLER	12/1/2025	$52.70	$10.15	$9.50	$9.80	$0.00	$82.15
LABORERS	6/1/2026	$54.25	$10.15	$9.50	$9.80	$0.00	$83.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$55.75	$10.15	$9.50	$9.80	$0.00	$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	12/1/2025	$48.82	$10.15	$9.50	$9.80	$0.00	$78.27
LABORERS	6/1/2026	$50.37	$10.15	$9.50	$9.80	$0.00	$79.82
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.87	$10.15	$9.50	$9.80	$0.00	$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER	12/1/2025	$48.70	$10.15	$9.50	$9.80	$0.00	$78.15
LABORERS	6/1/2026	$50.25	$10.15	$9.50	$9.80	$0.00	$79.70
LABORERS - FOUNDATION AND MARINE	12/1/2026	$51.75	$10.15	$9.50	$9.80	$0.00	$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	12/1/2025	$58.62	$16.05	$13.25	$3.25	$0.00	$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	$59.90	$16.05	$13.25	$3.25	$0.00	$92.45
OPERATING ENGINEERS LOCAL 4	12/1/2026	$61.34	$16.05	$13.25	$3.25	$0.00	$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	12/1/2025	$42.92	$15.41	$21.78	$0.00	$0.00	$80.11
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$43.92	$15.41	$21.78	$0.00	$0.00	$81.11
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2026	$43.92	$15.91	$21.78	$0.00	$0.00	$81.61
	12/1/2026	$43.92	$15.91	$23.52	$0.00	$0.00	$83.35
TUNNEL WORK - COMPRESSED AIR	12/1/2025	$60.93	$10.15	$9.50	$10.25	$0.00	$90.83
LABORERS	6/1/2026	$62.48	$10.15	$9.50	$10.25	$0.00	$92.38
LABORERS (COMPRESSED AIR)	12/1/2026	$63.98	$10.15	$9.50	$10.25	$0.00	$93.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	12/1/2025	$62.93	$10.15	$9.50	$10.25	$0.00	$92.83
LABORERS	6/1/2026	$64.48	$10.15	$9.50	$10.25	$0.00	$94.38
LABORERS (COMPRESSED AIR)	12/1/2026	$65.98	$10.15	$9.50	$10.25	$0.00	$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR	12/1/2025	$53.00	$10.15	$9.50	$10.25	$0.00	$82.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	6/1/2026	$54.55	$10.15	$9.50	$10.25	$0.00	$84.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$56.05	$10.15	$9.50	$10.25	$0.00	$85.95
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE)	12/1/2025	$55.00	$10.15	$9.50	$10.25	$0.00	$84.90
LABORERS	6/1/2026	$56.55	$10.15	$9.50	$10.25	$0.00	$86.45
LABORERS (FREE AIR TUNNEL)	12/1/2026	$58.05	$10.15	$9.50	$10.25	$0.00	$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	12/1/2025	$42.34	$15.41	$21.78	$0.00	$0.00	$79.53
TEAMSTERS JOINT COUNCIL NO. 10	6/1/2026	$43.34	$15.41	$21.78	$0.00	$0.00	$80.53
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2026	$43.34	$15.91	$21.78	$0.00	$0.00	$81.03
	12/1/2026	$43.34	$15.91	$23.52	$0.00	$0.00	$82.77
WAGON DRILL OPERATOR	12/1/2025	$41.47	$10.15	$9.50	$9.11	$0.00	$70.23
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.11	$0.00	$71.67
LABORERS - ZONE 2	12/1/2026	$44.35	$10.15	$9.50	$9.11	$0.00	$73.11
	6/1/2027	$45.80	$10.15	$9.50	$9.11	$0.00	$74.56
	12/1/2027	$47.25	$10.15	$9.50	$9.11	$0.00	$76.01
	6/1/2028	$48.75	$10.15	$9.50	$9.11	$0.00	$77.51
	12/1/2028	$50.25	$10.15	$9.50	$9.11	$0.00	$79.01
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY)	12/1/2025	$41.47	$10.15	$9.50	$9.21	$0.00	$70.33
LABORERS	6/1/2026	$42.91	$10.15	$9.50	$9.21	$0.00	$71.77
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2026	$44.35	$10.15	$9.50	$9.21	$0.00	$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR	12/1/2025	$59.28	$16.05	$13.25	$3.25	$0.00	$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	$60.58	$16.05	$13.25	$3.25	$0.00	$93.13
OPERATING ENGINEERS LOCAL 4	12/1/2026	$62.03	$16.05	$13.25	$3.25	$0.00	$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER	9/1/2025	$71.74	$14.32	$12.61	$8.00	$0.00	$106.67
PLUMBERS & GASFITTERS LOCAL 12	3/2/2026	$73.89	$14.32	$12.61	$8.00	$0.00	$108.82
PLUMBERS & GASFITTERS LOCAL 12	8/31/2026	$76.04	$14.32	$12.61	$8.00	$0.00	$110.97
	3/1/2027	$78.19	$14.32	$12.61	$8.00	$0.00	$113.12
	8/30/2027	$80.34	$14.32	$12.61	$8.00	$0.00	$115.27
	2/2/2028	$82.54	$14.32	$12.61	$8.00	$0.00	$117.47
	9/4/2028	$84.74	$14.32	$12.61	$8.00	$0.00	$119.67
	3/5/2029	$86.94	$14.32	$12.61	$8.00	$0.00	$121.87
	9/3/2029	$89.14	$14.32	$12.61	$8.00	$0.00	$124.07
	3/4/2030	$91.09	$14.32	$12.61	$8.00	$0.00	$126.02
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Additional Apprentice Information

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

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

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

LOCATION AND SCOPE OF WORK

HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS CONTRACT #26-42

1. DESCRIPTION OF THE PROJECT

The work for this project includes, but is not limited to, existing timber pile jacketing and repairs, timber pile cross-bracing replacements, removing and replacing utility supports, approach railing repair, bridge railing reconstruction and repairs, bridge railing end post reconstruction and repairs and other related miscellaneous work.

2. LOCATION OF PROJECT

The work is to be performed at the Hartwell Ave over Kiln Brook crossing and approach roadway in the Town of Lexington.

3. SCOPE OF WORK

The work under this contract consists of furnishing all necessary labor, materials, equipment and services to complete bridge and traffic safety improvements as described herein under the HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS CONTRACT #26-42. The work includes but is not limited to, existing timber pile jacketing and repairs, timber pile cross-bracing replacements, removing and replacing utility supports, approach railing repair, bridge railing reconstruction and repairs, bridge railing end post reconstruction and repairs and other related miscellaneous work at the Hartwell Ave over Kiln Brook crossing, and all incidental work necessary to complete the work as shown on the plans or described herein.

All work done under this contract shall be in conformance with:

- The Commonwealth of Massachusetts Department of Transportation Highway Division **Standard Specifications for Highways and Bridges, 2025 Edition** (replacing the 2024 Edition as referenced in Engineering Directive E-25-0033/12/2025). Mass.gov
- The current AASHTO LRFD Bridge Design Specifications, **10th Edition (2024)**, for all applicable LRFD bridge design work. AASHTO Journal
- The MassDOT Bridge Manual — **Hundredth Anniversary Edition**, Parts I, II & III, effective June 1, 2024, including the January 2025 revisions as applicable. Mass.gov+1
- Building Code Requirements for Structural Concrete, **ACI CODE-318-25**, or later editions. American Concrete Institute+1
- The **11th Edition of the Manual on Uniform Traffic Control Devices (MUTCD), December 2023**, effective for Federal standard traffic control devices, with implementation and adoption dates per applicable Federal and State requirements. MUTCD+1
- The Massachusetts Amendments to the MUTCD, **November 2022 edition**. Mass.gov+1
- The January 2025 MassDOT Construction Standard Details, or any updated standard details issued since then.
- The latest edition of the American Water Works Association (AWWA) standard for the installation of ductile iron water mains and their appurtenances.
- The latest “Standard Drawings for Signs and Supports” (signage support details).
- The latest Public Rights of Way Accessibility Guidelines (PROWAG) for pedestrian facilities.
- The plans, these special provisions, and any attached construction details.

The following is the anticipated scope of work based on the construction shown on the plans. The engineer has the authority to adjust these as they see fit:

- Use of the services at the town's composting facility can be negotiated directly with the Environmental Services Division. Please contact Robert M. Beaudoin, Superintendent of Environmental Services, at 781-274-8334. For leasing of space, receiving of material, and purchasing of loam and gravel. The contract makes no guarantee that services of this facility will be available.
- The hours of operation will be restricted to a normal eight-hour day (7:00 AM to 3:00 PM) Monday through Friday. Modifications to this schedule will be discussed on a case-by-case basis with the resident engineer. All work will be suspended by 5:00 PM, per Town by-law **§ 80-4 Prohibition of excessive or unwarranted noise**.
- **The contractor will provide all required work zone and detour signs and barricades.**
- **It is the responsibility of the General Contractor to obtain a staging area**

PROPOSAL TO
TOWN OF LEXINGTON, MASSACHUSETTS

HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS CONTRACT #26-42

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals. The undersigned further certifies that the only persons or parties interested in this proposal as principals are as stated, that he/she has carefully examined the Information for Bidders, Contract, Specifications, Contract Drawings, all as prepared by the office of the Town Engineer; that he/she has informed himself/herself fully in regard to all conditions pertaining to the work and the place where it is to be done, and from them the undersigned makes this Proposal. These prices shall cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part.

If written notice of the acceptance of this bid is mailed, or otherwise delivered to the undersigned within 30 days, excluding Saturdays, Sundays, and legal holidays, after the date of opening the bid, the undersigned will within five days, excluding Saturdays, Sundays, and legal holidays, after the date of such notification, execute and deliver a Contract in the form attached thereto, together with a performance bond, and payment bond, each of a surety company qualified to do business under the laws of the State and furnished by a company satisfactory to the Town. The premiums for these bonds shall be paid by the General Contractor and shall be included in the Contract price. The Undersigned further agrees that the bid security accompanying this Proposal shall become the property of the Town, if the bidder fails to execute the Contract as stated above.

The undersigned hereby agrees to commence work under this Contract within 10 working days of the execution of the Contract. The bidder acknowledges receipt of the following addenda numbered:

_____

_____

_____

In accordance with the above understanding, the undersigned proposes to do all of the work, furnish all of the materials, and complete the work in its entirety in the manner and under the conditions required at the prices listed as follows:

I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all state tax returns and paid all state taxes required under law.

_____

Signature of Individual* By: Corporate Office or
Corporate Name (Mandatory, if Applicable)
(Mandatory)

_____

Social Security # ** (Voluntary) or Federal
Identification Number

* Approval of a contract or other agreement will not be granted unless this certification clause is signed by the applicant.

** Your social security number will be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Bidders who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended. This request is made under the authority of Mass. G.L. c. 62C s. 49A.

BID FORM CONTINUE

ITEM	QUANTITY	ITEMS AND UNIT PRICES	UNIT PRICES ($)	AMOUNT ($)
102.511	3	TREE PROTECTION – ARMORING & PRUNING AT PER EACH		
127.101	2	REINFORCED CONCRETE EXCAVATION FOR BRIDGE RAIL AT PER CUBIC YARD		
184.1	1	DISPOSAL OF TREATED WOOD PRODUCTS AT PER TON		
628.315	1	TEMPORARY IMPACT ATTENUATOR, REDIRECTIVE, TL-3 AT PER EACH		
628.4	1	TEMPORARY IMPACT ATTENUATOR, REMOVE AND RESET AT PER EACH		
630.01	1	END POST TURNBUCKLE REPAIR AT PER LUMP SUM		
748.	1	MOBILIZATION AT PER LUMP SUM		
755.45	1	WETLAND RESTORATION AT PER LUMP SUM		
767.122	12	SEDIMENT BARRIER – COIR LOG AT PER LINEAR FOOT		

PAGE SUBTOTAL: _____

BID FORM CONTINUE

ITEM	QUANTITY	ITEMS AND UNIT PRICES	UNIT PRICES ($)	AMOUNT ($)
789.67	5	SWEET PEPPERBUSH (CLETHRA ANIFOLIA) 2-3 FEET AT PER EACH		
852.	200	SAFETY SIGNING FOR TRAFFIC MANAGEMENT AT PER SQUARE FOOT		
853.21	350	TEMPORARY BARRIER REMOVED AND RESET AT PER LINEAR FOOT		
853.33	350	TEMPORARY BARRIER – LIMITED DEFLECTION (TL-3) AT PER LINEAR FOOT		
859.	28	REFLECTORIZED DRUM AT PER DAY		
859.1	120	REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS AT PER DAY		
905.2	2	5000 PSI, 3/8 INCH, 710 HP CEMENT CONCRETE AT PER CUBIC YARD		
910.	120	STEEL REINFORCEMENT FOR STRUCTURES AT PER POUND		
912.	10	DRILLING AND GROUTING DOWELS AT PER EACH		

PAGE SUBTOTAL: _____

BID FORM CONTINUE

ITEM	QUANTITY	ITEMS AND UNIT PRICES	UNIT PRICES ($)	AMOUNT ($)
941.99	6	TREATED TIMBER PILE REPAIRS AT PER EACH		
955.	0.5	TREATED TIMBER AT PER THOUSAND BOARD FEET		
960.01	4800	STRUCTURAL STEEL FOR UTILITY SUPPORTS (GALVANIZED) AT PER POUND		
964.3	425	ELASTOMERIC PROTECTIVE COATING AT PER SQUARE FOOT		
983.3	2	RIPRAP REMOVED AND RELAID AT PER CUBIC YARD		
999.1	1	POLICE SERVICES AT THIRTY THOUSAND ALLOWANCE	$30,000	$30,000

PAGE SUBTOTAL: _____

TOTAL BID PRICE _____

DATE

(Name of general Bidder)

SEAL (if Bid by a Corporation

(Title)

ATTEST

(Business Address)

(City and State)

NOTE: If the General Bidder is a corporation, indicate State of corporation under signature and affix corporate seal; if a partnership, give full name and residential address of all partners; and if an individual gives residential address if different from business

(Telephone number)

TOWN OF LEXINGTON
HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS CONTRACT #26-42

THIS AGREEMENT, made the _____day of _____, 20____, by and between the Town of Lexington, Massachusetts acting through its Town Manager, hereinafter called the Town and

_____

_____

_____

with legal address and principal place of business at

_____

_____

_____

hereinafter called the Contractor.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Town, the Contractor hereby agrees with the Town to commence HARTWELL AVE OVER KILN BROOK RIDGE REPAIR CONTRACT #26-42, hereinafter called the project, for the consideration set forth in the proposal and all extra work in connection therewith, under the terms as stated in the conditions of the contract; and at his/her own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the proposal, the specifications, and drawings prepared therefor and as enumerated on the table of contents sheet, all of which are made a part hereof and collectively evidence and constitute the contract.

The Contractor hereby agrees to commence work under this contract within ten working days of the execution of this contract and to fully complete the project within the time specified in section 0200 of these contract documents.

The Town agrees to pay the Contractor for the performance of the Contract, subject to additions and deductions; and to make Payments on account thereof as provided in the Specifications of the contract.

WITNESS WHEREOF: the parties to these presents have executed this Contract in the year and day first above mentioned.

BY: _____

Steve Bartha, Town Manager
For the Town of Lexington, MA

CONTRACTOR:

BY: _____

As required by Chapter 693 of the Acts of 1964 (M.G.L. Chapter 44, Section 31C), this is to certify that the Town has an appropriation which is adequate to cover the cost of the contract.

Date: Signed

Town Accountant

The Certificate shall be signed by the Auditor or Accountant or other Officer of the Town of Lexington, Massachusetts having similar duties and the Official Title noted below the Signature.

Note: If the Bidder to whom the Contract is awarded is a Corporation, a Certificate of Vote giving the officer the right to sign the Contract must accompany the executed Contract. The form on page 0600-3 can be used for this purpose.

CERTIFICATE OF VOTE
(Corporations Only)

At a duty authorized meeting of the Board of Director of the _____
Name of Corporation

_____ Held by _____ It was VOTED, That
Date

_____ _____
Name Officer

of this company, be and hereby is authorized to execute contracts and bonds in the name and on behalf of said company, and affix its corporate seal hereto; and such execution of any contract or obligation in this company's name on its behalf by such officer under seal of the company, shall be valid and binding upon this company.

I hereby certify that I am the clerk of the above-named corporation and that

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

_____ _____
Date Clerk

Corporate Seal

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS,
that_____
having a usual place of business in
_____
As PRINCIPAL,
and_____
a corporation duly organized and existing under the laws of
_____
and authorized to do business in the Commonwealth of Massachusetts as SURETY, are hereby held and firmly bound unto the Town of Lexington, Massachusetts in the sum of
_____
($_____) to be paid the said Town of Lexington, Massachusetts for which payment, well and truly to be made, we hereby bind ourselves, jointly and severally, firmly by these presents.

WHEREAS, The said principal has made a contract with the said Town of Lexington, Massachusetts bearing date _____day of _____, 20____, in accordance with drawings and specifications prepared therefor, which contract is hereto annexed, the terms of which are herein referred to and hereby made a part of these presents; and

WHEREAS, The said surety has examined the said contract, its agreements, terms, covenants and conditions, and the plans referred to herein, and assents thereto.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH, That if the above bounden, its heirs, executors, administrators, successors and assigns, shall in all things stand to and abide by, and well and truly keep and perform, the covenants, conditions, and agreements in the said contract and any alterations thereof made as therein provided, on its or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify its officers and agents, as therein stipulated.

Then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

AND the said surety for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work performed thereunder or the specifications accompanying the same shall in anywise affect its obligations on this bond and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

IN WITNESS WHEREOF, The principal has caused these presents to be signed in its name and behalf and its corporate seal to be here to affixed by _____

its _____, and_____

its _____, thereto duly authorized, and the said surety has caused these presents to be signed in its name and behalf and its corporate seal to be hereto affixed by ...

_____

its _____, and_____

its _____, thereto duly authorized at

_____, on this _____ day of _____

two thousand and _____.

PRINCIPAL	SURETY
_____(Seal)	_____(Seal)
_____(Seal)	_____(Seal)
_____	_____
Signed and sealed in the presence of	

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That _____
having a usual place of business in _____
As PRINCIPAL, and _____
a corporation duly organized and existing under the laws of _____ and authorized to do business in the Commonwealth of Massachusetts as SURETY, are hereby held and firmly bound unto the Town of Lexington, Massachusetts in the sum of _____
_____($_____) to be paid the said
Town of Lexington, Massachusetts for which payment, well and truly to be made, we hereby bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, The said principal has made a contract with the said Town of Lexington, Massachusetts bearing date _____day of _____, 20___, for the completion of _____ in accordance with drawings and specifications prepared therefor, which contract is hereto annexed, the terms of which are herein referred to and hereby made a part of these presents; and

WHEREAS, The said surety has examined the said contract, its agreements, terms, covenants and conditions, and the plans referred to herein, and assents thereto.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden, its heirs, executors, administrators, successors and assigns, shall pay for all labor performed or furnished, for all materials used or employed in the work and for the rental of appliances and equipment employed in the carrying out of said contract, and shall indemnify and save harmless the said Town of Lexington, Massachusetts its officers and agents as therein stipulated.

Then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

AND the said surety for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work performed here-under or the specifications accompanying the same shall in anyway affect its obligations on this bond and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

This bond is made for the use and benefit of all persons, firms, and corporations who may furnish any material or perform any labor for or on account of said contract, or rent or hire out any appliances and equipment used or employed in the execution of said contract, and they and each of them are hereby made obligees hereunder the same as if their own proper respective names were written herein as such, and they and/or each of them may proceed or sue hereon.

IN WITNESS WHEREOF, The principal has caused these presents to be signed in its name and behalf and its corporate seal to be here to affixed by _____
its _____ , and _____

its _____, thereto duly authorized, and the said surety has caused these

presents to be signed in its name and behalf and its corporate seal to be hereto affixed by ...

_____

its _____ , and _____

its _____ , thereto duly authorized at

_____ , on this _____ day of _____

two thousand and _____,

PRINCIPAL	SURETY
_____(Seal)	_____(Seal)
_____(Seal)	_____(Seal)
_____	_____

Signed and sealed in the presence of

CERTIFICATE OF GOOD FAITH

The undersigned 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 word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

Signature: _____

Date:_____

CERTIFICATE OF OSHA TRAINING OF PERSONNEL

The undersigned certifies that all persons they employ at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration (OSHA) that is at least ten (10) hours in duration at the time the employee begins work and shall furnish documentation of successful completion of said course with the first certified payroll report for each employee.

Signature:_____

Date:_____

SPECIAL PROVISIONS

SCOPE OF WORK

All work under this Contract shall be done in conformance with the *2025 Standard Specifications for Highways and Bridges*, the *2017 Construction Standard Details*, the *Traffic Management Plans and Detail Drawings*, *MassDOT Work Zone Safety Temporary Traffic Control*, the *1990 Standard Drawings for Signs and Supports*; the 2*015 Overhead Signal Structure and Foundation Standard Drawings, the 2009 Manual on Uniform Traffic Control Devices (MUTCD) with Revisions 1, 2, and 3 and the November 2022 Massachusetts Amendments to the MUTCD*; the *1968 Standard Drawings for Traffic Signals and Highway Lighting*; *The American Standard for Nursery Stock*; the Plans and these Special Provisions.

The proposed bridge repairs at the Hartwell Ave over Kiln Brook crossing include, but are not limited to, existing timber pile jacketing and repairs, timber pile cross-bracing replacements, removing and replacing utility supports, approach railing repair, bridge railing reconstruction and repairs, bridge railing end post reconstruction and repairs and other related miscellaneous work.

MATERIAL TESTING

The Contractor shall obtain the services of a qualified material testing company to provide in-situ compaction and other material testing (including cast-in-place concrete) as ordered by the Engineer. No separate payment will be made, and all costs associated with material testing shall be considered incidental to various contract items. All material testing shall be performed in accordance with the relevant MassDOT Specifications.

MOBILIZATION

The unit bid price for Mobilization (Item 748.) shall not exceed 3% of the contract bid total, exclusive of this item. Failure to observe this requirement could result in rejection of the bid.

EQUIVALENT POLICY

Any reference as to a specific type or manufacturer in these specifications is for identification purposes only. Equivalent products will be considered. In the event demonstrations or specifications on equivalent products are required, it will be at the vendor's expense. The Town of Lexington will have the sole discretion on whether or not a product is considered an equivalent.

DESIGNER/PROJECT MANAGER

DESIGNER
TEC, Inc.
Kasey Burke, P.E.
978-794-1792

PROTECTION OF UNDERGROUND FACILITIES

The Contractor's attention is directed to the necessity of making his own investigation in order to assure that no damage to existing structures, drainage lines, etcetera, will occur.

The Contractor shall notify Massachusetts DIG SAFE and procure a Dig Safe Number for each location prior to disturbing existing ground in any way. The telephone number of the Dig Safe Call Center is 811 or 1-888-344-7233.

The Contractor shall also contact Hanscom Air Force Base to mark out any utilities they have in the project location.

The Contractor shall also contact Lexington Department of Public Works Operations at (781) 247-8300 for municipal mark-outs.

This project includes removing and replacing utility supports on the bridge. The contractor is responsible for coordinating all temporary support or relocation of utilities as required. Refer to Item 960.01 for additional information related to this work.

NOTICE TO OWNERS OF UTILITIES (Supplementing Subsection 7.13)

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

A list of public and private utilities can be found on the MassDOT Highway Division website at:

https://hwy.massdot.state.ma.us/webapps/utilities/select.asp → District 4 → (LEXINGTON), and then locate the utility.

CONTRACTOR FIELD VERIFICATIONS

All existing bridge dimensions shown throughout the Contract Documents are based on existing bridge plans or survey of visible elements. The Contractor shall confirm existing bridge dimensions and details in the field prior to ordering materials. The Contractor shall notify the Engineer immediately if any existing bridge dimensions vary from what is shown on the bridge plans. All costs associated with field verification of existing dimensions shall be considered incidental to the Contract.

DEFINED TERMS (Supplementing Subsection 1.03)

Throughout the MassDOT Standard and Supplemental Specifications, wherever the term “the Department” appears it shall be replaced with the “Owner”, which term shall be defined to mean the Town of Lexington, acting through its Department of Public Works.

ITEM 102.511 TREE PROTECTION – ARMORING AND PRUNING EACH

GENERAL

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

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

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

REFERENCES

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

MATERIALS

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

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

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

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

METHODS OF WORK

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

Care shall be taken to avoid damage to the bark during installation and removal of armoring. Trunk armoring shall be maintained such that it is effective for as long as required or replaced when materials are found to be damaged or ineffective, as determined by the Engineer. Replacement, if

required, shall be incidental to the work. Armoring shall be removed immediately upon completion of work activities adjacent to the protected tree(s).

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

ITEM 102.511 (Continued):

DAMAGES OR LOSS

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

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

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

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

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

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

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

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

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

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

ITEM 127.101 REINFORCED CONCRETE EXCAVATION FOR BRIDGE RAIL **CUBIC YARD**

GENERAL

The work shall include the selective excavation necessary to complete repairs to the existing concrete bridge rails as shown on the Plans and as directed by the Engineer.

The Contractor shall utilize construction methods as to not damage any existing reinforcing steel scheduled to remain. Any reinforcing scheduled to remain that is damaged by the Contractor shall be replaced in kind at the Contractor's expense.

Prior to beginning excavation, the Contractor shall devise, provide and maintain a protective shielding system to prevent excavated concrete, debris, or other materials from entering the waterway.

The Contractor will not be paid for the excavation of any concrete beyond the limits described under this item and approved by the Engineer.

The Town of Lexington does not guarantee or represent that the existing bridge materials will actually coincide with any descriptions contained herein or represented on plans. The Contractor must satisfy himself/herself by his/her own investigation and research regarding all conditions and materials affecting the work to be done.

METHODS

Inspection of Concrete Surfaces:

The Contractor will mark out the areas of the concrete for removal as shown on Plans, and the Engineer will verify the proposed excavation areas prior to excavation.

Removal of Deteriorated Concrete:

A detailed work plan prepared and stamped by a registered Professional Engineer in the state of Massachusetts shall be submitted to the Engineer for approval. The plans shall include at minimum, proposed equipment, methods of removal, schedule of operations, etc. The excavation of concrete shall be accomplished by hand tools or light chipping hammers weighing not more than 15 pounds. Heavy impact tools shall not be used unless approved by the Engineer. Fillets at inside corners of intersecting limit lines shall be carefully removed.

Removal tools shall not be placed in direct contact with reinforcing steel. Any sound reinforcing steel damaged during the concrete removal operations for patch areas shall be repaired or replaced by the Contractor at Contractor's expense as directed by the Engineer. New reinforcing bars shall be lapped to the existing reinforcing bars with a minimum lap splice length as indicated on the Plans, or as directed by the Engineer.

The Contractor shall use caution to prevent any damage to the existing portions of the bridge structure to remain. Any damage to existing structure to remain due to the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at his/her expense.

ITEM 127.101 (Continued):

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

The work described under this Item shall be paid for at the Contract Unit Price per CUBIC YARD of reinforced concrete excavated for Item 127.101.

This shall include all labor, equipment, materials, and incidentals, as described.

ITEM 184.1 DISPOSAL OF TREATED WOOD PRODUCTS TON

GENERAL

The work under this item shall include the transportation and disposal of all treated existing wood product as directed by the Engineer.

The timber components of the existing structure are suspected to be treated with creosote, pentachlorophenol and/or CCA. This item shall include all costs for sampling, laboratory testing, loading, transportation and disposal of the treated wood. The Contractor is required to submit disposal manifests to the Engineer prior to the completion of the project. All aspects of this Item are to be completed in accordance with state and federal regulations.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Measurement and payment will be by the weight, in tons, of treated timber transported and accepted at a licensed facility. The work shall be considered full compensation for all labor, tools, equipment, materials, testing, loading, transportation, approvals, and permits necessary for the completion of the work.

ITEM 630.01 END POST TURNBUCKLE REPAIR LUMP SUM

GENERAL

This work shall consist of furnishing and installing all components required to repair the existing wire rope end post turnbuckle connections, as shown on the Plans and as directed by the Engineer. The work includes headed bolts, galvanized turnbuckles, new wire rope sections, connection hardware and anchor plate to splice into the existing intact wire rope system.

MATERIALS

- Headed Bolts: ¾" diameter, ASTM F1554 Grade 55, hot-dip galvanized.
- Turnbuckle: ¾" diameter galvanized steel, forged, with one threaded eye end for wire rope connection.
- Wire Rope: ¾" diameter, 6x19 IWRC, hot-dip galvanized, matching existing system. Final size and strand pattern to be verified in field.
- Wire Rope Clips: ¾" galvanized forged U-bolt clips, installed per manufacturer's instructions and OSHA/MassDOT requirements.
- Anchor Plate: 16" x 4" x 3/8", fabricated from AASHTO M270 Grade 36 or Grade 50, hot-dip galvanized in accordance with MassDOT M7.10.0 after all fabrication, cutting, and drilling are complete.

All materials shall conform to applicable sections of the MassDOT Standard Specifications and the latest MassDOT Qualified Construction Materials List.

CONSTRUCTION METHODS

The Contractor shall install ¾-inch hot-dip galvanized threaded bolts into the proposed anchor plate shown on the Plans. Each head shall be tack welded to the back side of the anchor plate.

Each anchor shall be threaded into a ¾-inch galvanized steel turnbuckle with an eye end, which shall be positioned to allow the wire rope to pass through. New galvanized wire rope shall be looped through each eye and secured using two wire rope clips per connection, installed per the manufacturer's torque and spacing requirements.

New wire rope shall be spliced to the closest intact section of the existing wire rope by overlapping the wires and securing the connection with two additional wire rope clips per splice. The Contractor shall verify the existing rope diameter and condition in the field prior to installation.

The completed wire rope system shall be tensioned to match the existing conditions at the other bridge corners and reviewed by the Engineer.

All work shall be conducted to avoid interference with existing hardware. Any embedded anchor plates or rods shall be removed during partial demolition of the end post as indicated on the Plans. The Contractor shall also take all necessary precautions to prevent tools, debris, or materials from entering the adjacent waterway during construction. The Contractor is responsible for determining appropriate methods for environmental protection, subject to Engineer approval.

ITEM 630.01 (Continued):

The Contractor shall field-verify the size and condition of the existing wire rope system prior to performing the work. Any discrepancies between the existing field conditions and the Plans shall be reported to the Engineer prior to proceeding.

All operations shall be performed in a manner that prevents debris, concrete dust, or dislodged materials from entering the adjacent waterway. The Contractor shall determine and implement the appropriate means and methods for this protection, subject to the review and approval of the Engineer.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 630.01 shall be measured and paid for at the LUMP SUM price, which price shall include all labor, material, equipment and incidental costs required to complete the work**.**

ITEM 755.45 WETLAND RESTORATION LUMP SUM

DESCRIPTION

The work under this item shall conform to the relevant provisions of Subsections 120, 751, 765, 767, and 771 of the Standard Specifications and the following:

The work under this item shall include all labor and furnishing of materials to complete the work specified herein to protect and restore existing inland wetland areas that will be temporarily impacted as shown on the drawings and as required by the Engineer.

Restoration Area shall be constructed to meet the requirements of all associated permits and certifications, including relevant performance standards of the Massachusetts Wetlands Protection Act (MGL C. 131, s40), Section 401 Water Quality Certification, and Section 404, U.S. Army Corps of Engineers General Permit.

SUBMITTALS – DOCUMENTS

Request for Final Acceptance: As specified below, a letter requesting Final Acceptance of the work and the site conditions shall be submitted to the Engineer.

Request for Certificate of Compliance (Partial or Full): If applicable, request for a Certificate of Compliance shall be submitted to the Engineer for distribution to appropriate regulatory agencies as specified below.

ASSOCIATED ITEMS AND MATERIALS

Seed Mix

Required submittals include:

- Certificate of Materials from the supplier shall be submitted and approved 30 days prior to ordering seed. Seed species listed on the certificate shall include ecotype region (i.e., *Asclepias incarnata*, PA Ecotype).

- Seed tag from the bag of seed used shall be submitted to the Engineer at the time of seeding. Seed tag shall include ecotype region and species, guaranteed percentages of purity, weed content and germination of the seed, and the net weight. Seed tag shall match the Certificate of Materials, include the name of the supplier, and date material was sent.

- Bill of lading or a notarized Certificate of Compliance from the Supplier serving as proof of purchase shall be submitted if requested by the Engineer. Document shall include date of sale, quantity, lot number, and address of Supplier. This shall match the seed tag. Notary shall not work for either the contractor or seed supplier.

Seed Mix shall be 765.554 Wetland Mix – Seasonally Flooded.

Fertilizers shall not be used.

ITEM 755.45 (Continued):

Plants

Plant material shall conform to the applicable requirements of Subsection 771, PLANTING TREES, SHRUBS AND GROUNDCOVER, of the Standard Specifications and as amended below.

Plant Certifications shall be submitted at the time of delivery and shall conform to the Standard Specifications. Plants shall be native species, not cultivars. To the extent possible, plants shall originate from the applicable EPA Level III Ecoregion. The nursery source shall certify the provenance or origin of all plants.

Plant species and sizes to be included in the Restoration Area shall be as specified on the Resource Area Impact plan.

Requests for substitutions shall be submitted in writing to the Engineer for review by the MassDOT Landscape Architect, and, if required, the relevant regulatory agency at least thirty (30) days prior to planting. All proposed substitutes shall be in conformance with the requirements herein and suitable for the site conditions.

Transplanting and plant material collected from the wild is prohibited unless approved in writing by the Engineer. Plants shall be selected from certified nurseries.

Dead and failing plants shall be replaced per the requirements of Subsection 771 of the Standard Specifications.

Water

The Contractor shall provide water and all equipment required at no extra cost. Water shall be suitable for irrigation and free from ingredients harmful to plants and wildlife. Water from the adjacent water bodies or waterways shall not be utilized. It is the Contractor's responsibility to correct injury or damage due to the lack of water, too much water, or use of contaminated water.

CONSTRUCTION METHODS & SEQUENCE

Restoration Upon Completion of Construction Work

Seeding with Mulch
Upon approval of prepared soil, area shall be seeded. Seeding shall be hand broadcast with straw mulch applied per the Standard Specifications and per the manufacturer’s directions. Hydromulch shall be straw or wood fiber only and shall be per the manufacturer’s recommendations.

Seed tags shall be submitted at time of seeding.

Planting

Planting shall conform to SECTION 771 PLANTING TREES, SHRUBS AND GROUNDCOVER of the Division I Standard Specifications and as amended below.

Planting Season is May 15-June 15 and September 1-November 1 unless otherwise specified in applicable permit conditions.

ITEM 755.45 (Continued):

Restoration Area shall be planted in the dry. Plants shall be placed according to the planting details and within the range of target elevations and at the spacing shown on the Plans or, if spacing is not indicated on the Plans, at the direction of the Wetland Specialist or the MassDOT Landscape Architect. Unless otherwise noted on the Plans, final plant locations shall be determined on site and located with regard to expected hydrology, plant growth characteristics, habitat desired, and water protection.

Plant material shall be installed as soon as possible after delivery. Plants stored on-site prior to installation shall be stored in the shade and watered twice daily up until time of installation. Plants showing signs of stress or compromised health may be rejected by the Engineer and shall be replaced at the Contractor's expense.

Plants shall be watered as necessary to maintain healthy establishment. Plants that fail by September 1 after spring planting or by June 1 after fall planting shall be replaced at the Contractor's expense.

Plant material shall be furnished and installed as indicated including all labor, materials, plants, equipment, incidentals, re-setting of plants (frost heaves, etc), irrigation, re-planting and clean up.

If previously approved species are not available at the time of planting, the MassDOT Landscape Architect will propose substitutions relative to species, size, and quantities. Substitutions shall then be approved by the regulating authority if necessary. Provisions shall be made for a growth warranty as described below or as required by permits.

PLANT AND SEED ESTABLISHMENT

Plants shall be watered as necessary to maintain healthy establishment. Plants that fail by September 1 after spring planting or by May 15 after fall planting shall be replaced within the immediate or next planting period and at the Contractor's expense.

Seeding that fails to establish according to the conditions of acceptance below shall be over-seeded as required by the Engineer. Washouts and channels shall be repaired and stabilized prior to overseeding. Excessive weed growth shall be pulled out by the roots or, with approval from the Engineer, cut prior to over-seeding. Soil repair and weed control are incidental to this item.

FINAL ACCEPTANCE OF WORK

Following one full growing season, the Contractor shall submit a Request for Final Acceptance. Submittal shall include a brief narrative of conditions. Upon receiving the Request, the Engineer and regulatory representative (if required) shall assess the Restoration Area. Final Acceptance will initiate the start of the Monitoring Period (if required).

The following conditions shall be inspected and approved for acceptance and payment:

- Hydrology is functioning as intended.
- The desired seeded species are establishing well and cover 100 percent of the restoration area, excluding areas of open water, large boulders or planned bare soil.
- No sediments have entered the wetland.
- Adjacent slopes are stabilized with desirable vegetation.
- Planted woody and herbaceous species (if included) meet specifications and are establishing well.
- There are no visible invasive plants.

ITEM 755.45 (Continued):

If the restoration work is not approved, MassDOT will issue a rejection letter requiring corrective action. All costs associated with corrective measures and plant replacement shall be incidental to this item with no additional compensation. Work not approved shall be addressed by the Contractor at no extra cost.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 755.45 will be paid for at the Contract unit price per Lump Sum, which price shall include all labor, materials, compost and amendments, seed, mulch, equipment, submittals, maintenance, grading, and incidental costs necessary to complete the work as required.

Payment shall be as follows:

- 50% upon completion of soil preparation, planting, and seeding
- 50% upon Final Acceptance or approval of the Engineer

Sediment Control Barrier will be paid under Item 767.121
Plants will be paid under the respective items.

ITEM 767.122 SEDIMENT BARRIER - COIR LOG FOOT

GENERAL

The work under this item shall conform to the relevant provisions of Subsections 101, 120, 170, and 751 of the Standard Specifications and the following:

Sediment Barrier - Coir Log shall be used in wet locations where the barrier will not require removal; when barrier is placed immediately adjacent to existing wetlands; as a check dam in swales; in locations as shown on the Drawings; and/or in locations required by the Engineer.

Permits, Codes and Regulations: The Contractor shall comply with all rules, regulations, laws and ordinances of the City/Town and State, and all other authorities having jurisdiction over the Project site. All labor, materials, equipment, and services necessary to make the work comply with such requirements shall be provided by the Contractor without additional cost to the Department.

MATERIALS

Coir Log: Coir Log shall be biodegradable coir fiber cylindrical bundles. Inner core shall be 100 percent unsorted, well-cleaned, coir fiber uniformly distributed along the length of the log. The stuffed density of the coir fiber shall be a minimum of 9 pounds per cubic foot.

Outer netting shall be constructed from a minimum 3-ply high strength coir bristle twine. The netting shall have 2-inch by 2-inch rhombic openings with hand-knotted junctions. The average breaking strength of the coir twine shall be a minimum of 80 pounds. Production tolerance for all the above parameters shall not exceed plus or minus 10 percent.

Coir log diameter shall be sized as shown on the drawings. Typical lengths are supplied in 10 foot or 20-foot increments. Coir logs or coir netting may not be cut to decrease length and shall maintain the physical properties as supplied by the Manufacturer.

Notched Wood Stakes: Stakes shall be oak or southern pine with dimensions as shown on the Drawings. Stakes shall be free from knots and other defects which would cause splitting and shall have a downward-angled notch as shown in the drawing.

Coconut Fiber Cord: Coconut fiber cord shall be two-ply braided cord with a breaking strength of 80 pounds, minimum 0.25-inch diameter.

Delivery, Storage and Handling: Protect materials from deterioration during delivery and while stored at site.

CONSTRUCTION METHODS

General: Prior to initial placement of the coir log sediment barrier, the Contractor and the Engineer shall review locations specified on the plans and adjust placement, if required, to ensure that the coir log positioning and configuration will provide maximum sediment capture. Coir log sediment barrier(s) shall be in place prior to excavation work and no work shall take place outside the coir log barrier(s).

ITEM 767.122 (Continued):

Installation: Coir logs shall be staked and secured as shown on the Drawings, as specified herein, and/or as recommended by the Manufacturer. The Contractor shall remove all underlying vegetation or debris to ensure that each coir log is securely in contact with soil, such that there is no flow beneath the log.

When used as a check dam barrier in a swale, the coir log shall be centered in the low point of the swale, perpendicular to the flow, with ends extending upslope. The log check dam barrier shall extend such that the log top elevation at the center of the swale is lower than the lowest elevation at the end log, to ensure that sediment-laden runoff will flow either through or over the coir log but not around it. The coir log check dam barrier shall have length such that no seams occur in the swale.

Notched wood stakes shall be driven parallel on both sides of the coir log at a typical spacing of 5 feet on center, unless site conditions warrant a closer spacing distance to ensure logs are firmly secured to the underlying soil. Stakes shall not extend more than 1 foot beyond the top of the log. Coir twine shall lash the logs to notched stakes in a cross-lashing fashion between stakes, throughout the length of the log barrier.

When utilizing multiple logs for sediment control, each coir log shall be laced together end-to-end (creating a seam) with coir twine to create a continuous length. End-to-end lacing may be completed before or after placement, to facilitate handling.

Maintenance:

The contractor shall inspect the sediment barrier in accordance with relevant permits. At a minimum, barriers shall be inspected at least once every 7 calendar days and after a rain event resulting in 0.25 inches or more of rainfall. The Contractor shall be responsible for ensuring that an effective barrier is in place and working effectively for all phases of the Contract. Under no condition shall sediment be allowed to accumulate more than 4 inches above the original ground line.

If a breach or other failure of the barrier occurs, the barrier shall be immediately restored. Repair shall include replacement of entire defective segments or for short breaches, revetment with additional coir logs, set directly adjacent to the downslope side of the breech. Revetment coir logs must overlap breech by a minimum of 2 feet on each side. The Engineer must approve breech repair means and methods as well as outcome.

If the coir log sediment barrier is damaged by equipment or undergoes a significant washout or other major failure, the Contractor shall replace the component in its entirety, at the discretion and approval of the Engineer. Any delay in maintaining the barrier shall be cause to immediately suspend the work as provided for in Subsection 8.09: Delay and Suspension of Work.

Disposition/Removal**:** For naturalized areas, coir logs and wooden stakes may be left in place to decompose on-site. For areas where, in the determination of the Engineer, aesthetics are a concern, logs, errant coir fiber material, and stakes may require removal.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 767.122 Sediment Barrier - Coir Log will be measured for payment by the FOOT, complete in place and will be paid for at the Contract unit price per FOOT, which price shall include all labor, materials, equipment, and incidental costs required to complete the work.

No separate payment will be made for coir log(s) follow-up maintenance and repairs, or disposal (if required), but all costs in connection therewith shall be included in the Contract unit price bid.

ITEM 853.33 **TEMPORARY BARRIER LIMITED DEFLECTION (TL-3)** **FOOT**

The work under this item shall conform to the relevant provisions of Subsection 850 of the Standard Specifications and shall consist of furnishing, installing, maintaining and final removal of limited deflection TL-3 temporary barrier systems for channelization of traffic and/or work zone protection. Limited deflection temporary barrier systems shall have a maximum dynamic deflection of 24 inches or less and shall be used in areas where the available clear area behind the barrier system is 24 inches or less.

The Contractor shall use a temporary barrier system that is listed on the Qualified Traffic Control Equipment List.

The Contractor may submit alternate materials to the Engineer for approval if the limited deflection temporary barrier system meets the following criteria:

1. The system has been tested by an independent laboratory that is accredited by FHWA to crash test roadside hardware;
2. The system meets the minimum requirements of the AASHTO *Manual on Assessing Safety Hardware* (MASH) at Test Level (TL) 3 or higher; and
3. The system has a federal-aid eligibility letter from FHWA.

Copies of the testing results and the federal-aid eligibility letter shall be submitted and approved by the Engineer prior to procurement of an alternate temporary barrier system.

The Contractor shall supply shop drawings to confirm the available clear area behind the barrier equals or exceeds the maximum dynamic deflection of MASH Test 3-11 during testing procedures taken at an independent laboratory that is accredited by FHWA to crash test roadside hardware.

Delineators shall be installed on all limited deflection temporary barrier systems in conformance with the relevant provisions of Subsection 850.69 and shall be incidental to the temporary barrier systems.

Temporary impact attenuators that are listed on the Qualified Traffic Control Equipment List shall be used whenever a blunt end of the limited deflection temporary barrier system is facing traffic within the clear zone unless it is protected by a second barrier system or secured to a separate barrier system or bridge railing by a method approved by the manufacturer.

CONSTRUCTION METHODS

Limited deflection temporary barrier systems shall be placed in line with the drawings. Installation shall be per the manufacturer's specifications, details, and the approved shop drawings.

The Contractor shall not place any breaks in the limited deflection temporary barrier system that will result in sections that are shorter than the stated minimum length-of-need (LON) under MASH Test 3-11. Exceptions shall be allowed for gate systems or changeable length segments placed over expansion joints if those barrier segment types have been tested and meet the minimum requirements of MASH Test 3-11 with the adjoining limited deflection barrier system.

Within the LON section, limited deflection temporary barrier systems shall only be placed on paved surfaces unless otherwise tested and certified under MASH TL-3 for those conditions.

Damage to the pavement surface caused by the limited deflection temporary barrier during installation while in service and/or during removal shall be repaired as directed by the Engineer at the Contractor's expense.

Limited deflection temporary barrier systems that require anchorage systems shall conform with the relevant provisions of Subsection 850.70.

METHOD OF MEASUREMENT

Item 853.33 Temporary Barrier Limited Deflection (TL-3) will be measured for payment by the Foot, in place.

BASIS OF PAYMENT

Item 853.33 Temporary Barrier Limited Deflection (TL-3) will be paid for at the Contract unit price per Foot of limited deflection temporary barrier installed in place, including all incidental items. This price shall include the cost of furnishing, installing, maintaining and final removal of all limited deflection temporary barrier systems.

For limited deflection temporary barrier systems that require anchorage systems, the cost of furnishing and installing the anchorage and hardware and the restoration of pavement surfaces or adjacent permanent barrier systems to facilitate anchorage shall be considered incidental to the cost of the item. Payment for limited deflection temporary barrier removed and reset will be made under Item 853.21.

ITEM 859.1 REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS DAY

The work under this Item shall conform the relevant provisions of Subsection 850 of the Standard Specifications and the following:

Work under this Item consists of furnishing, installing, maintaining in proper operating conditions, and removing reflectorized drums, and any necessary ballast, equipped with sequential flashing warning lights.

MATERIALS

Reflectorized drums shall be listed on the MassDOT Qualified Traffic Control Equipment List. Reflective sheeting on drums shall meet or exceed ASTM D4956 Type VIII. All drums shall be maintained in a satisfactory manner including the removal of oils, dirt, and debris that may cause reduced retro reflectivity.

The Contractor shall use one of the following sequential flashing warning light systems unless otherwise approved by the Engineer:

1. Empco-Lite LWCSD.
2. pi-Lit® Sequential Barricade-Style Lamp; or
3. Unipart Dorman SynchroGUIDE.

Sequential flashing warning lights shall be secured to reflectorized drums per the light manufacturer's specifications.

CONSTRUCTION METHODS

The first ten drums in any merging or shifting taper shall be equipped with sequential flashing warning lights. These lights shall be operating, at a minimum, between dusk and dawn when the taper is deployed.

The successive flashing of the sequential warning lights shall occur from the upstream end of the merging or shifting taper to the downstream end of the taper in order to identify the desired vehicle path. Each warning light in the sequence shall be flashed at a rate of not less than 55, nor more than 75 times per minute.

Warning lights shall be powered off when drums are not deployed in a taper.

METHOD OF MEASUREMENT

Item 859.1 Reflectorized Drums with Sequential Flashing Warning Lights, a group of ten (10) reflectorized drums with sequential flashing warning lights is considered one (1) unit, will be measured by the Day. Each period of up to 24 hours during which this unit is in use will be measured as one day regardless of the number of times that the drums are positioned, repositioned, removed, or returned to service.

BASIS OF PAYMENT

Item 859.1 Reflectorized Drums with Sequential Flashing Warning Lights will be paid for at the Contract unit price per Day, which shall include full compensation for furnishing, positioning, repositioning, and removing the group of ten (10) drums as directed by the Engineer.

ITEM 912. DRILLING AND GROUTING DOWELS EACH

GENERAL

The work under this Item shall consist of drilling and grouting holes in the existing bridge deck and endpost of Bridge No. L-10-016 for the installation of the end post concrete repairs as shown on the Plans, or as required by the Engineer.

MATERIALS

The grout to be used for these dowels shall be a non-shrink cementitious mortar. Grouting material used to perform this work shall be listed on the MassDOT Qualified Construction Materials List. The minimum required compressive strength of the grout at 28 days shall be 6000psi.

The steel dowels shall meet the requirements of AASHTO M31 (ASTM A615) Grade 60 reinforcement. All steel reinforcement dowels shall be epoxy coated. Steel dowels shall be incidental to the work under this Item.

CONSTRUCTION METHODS

All dowel holes shall be drilled in accordance with the methods specified by the grout manufacturer. If drill requirements are not stated, all dowel holes shall be air drilled provided that a minimum edge distance of 4" is observed. Should, in the Engineer's opinion, air drilling be inappropriate due to questionable strength of the existing concrete or insufficient edge distance, the dowel holes shall be diamond core drilled. The inner surfaces of diamond core drilled dowel holes shall be scored to develop sufficient keying action. The method of scoring of the dowel hole's inner surfaces shall be subject to the approval of the Engineer.

The depth of the drilled dowel holes shall be as shown on the Plans, except that the depth of drilled hole shall be modified as required to comply with the minimum depth of hole specified in the product literature of the cementitious mortar by the Contractor to develop the full yield strength of the reinforcing bars. Dowel hole diameter shall be per the grout manufacturer's recommendations for each size dowel unless stated otherwise on the Plans. The holes shall be blown clear of any debris and shall have the approval of the Engineer prior to the placement of any grout material.

The drilling operation shall be performed without damage to the portions of the structure that are to remain in place. The Contractor shall take care to avoid drilling through the existing reinforcing present in the bridge deck. The Contractor shall perform non-destructive testing such as pachometer testing to locate existing reinforcing and layout their dowels to avoid conflict. If during the drilling operation the Contractor hits existing rebar that is reasonably believed to be existing reinforcing, the Contractor shall abandon the drill hole and relocate the dowel layout as required by the Engineer. Any abandoned drill holes shall be repaired as required by the Engineer. Any damage to any existing portions of the structure that are to remain in place shall be repaired to a condition equal to or better than existing condition prior to the beginning of the Contractor's operations and shall be repaired at the Contractor's expense.

The Contractor shall follow the recommendations of the manufacturer for mixing and placing the grout material prior to the placement of the dowels. The Contractor shall, at a minimum, adhere to the latest version of ACI 318 code requirements and manufacturer requirements regarding minimum and maximum temperatures while placing the grout. Any excessive grout around the hole after placement of the dowel shall be struck off smooth while the grout is still fresh. Grout shall not be applied if it is raining or snowing, or if such conditions appear to be imminent.

Pullout testing shall be performed on a minimum of one dowel per batch of grout used. Pullout test loads shall be as required by the manufacturer.

SUBMITTALS

Prior to the commencement of any work under this item, the Contractor shall submit to the Engineer for review and approval a submittal containing the grout manufacturer's literature completely describing the products to be utilized including: product data sheet and appropriate material safety data sheets. The grout shall be delivered with clearly marked, legible and intact labels. The labels shall be sufficient for verification with the approved data sheets. The Contractor shall also include details of the testing equipment used and locations of the test dowels.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 912. shall be measured for payment by EACH drilled and grouted hole regardless of depth, length or size of dowels accepted by the Engineer, complete in place. Price shall include all labor, testing, materials, equipment, and incidental costs required to complete the work.

No separate payment will be made for the furnishing, supply, and installation of dowels, but all costs in connection therewith shall be included in the Contract unit price bid.

The Contractor shall have no claim for any variations in the diameter of the hole, the method of drilling the hole, or the type of grout used in anchoring the proposed dowels.

ITEM 941.99 TREATED TIMBER PILE REPAIRS EACH

GENERAL

This Item describes the repair and restoration of submerged marine timber piles by encapsulating with fiberglass reinforced plastic (FRP) repair sleeves and filling with a pump-able epoxy resin mortar. The piles scheduled for repair shall be as noted within the Plans, however, all timber piles shall be inspected for damage and repaired as determined by the Engineer. The Contractor shall verify the limits of each pile repair and the Engineer shall approve these limits to ensure the piles are being repaired to the extent necessary.

If existing timber cross bracing interferes with the limits of pile repairs, remove the bracing and dispose in accordance with Item 184.1. No timber cross bracing shall be reused once removed from the piles, unless approved by the Engineer. The materials, labor and all incidentals associated with the installation of any new timber cross bracing (including all fasteners and hardware) shall be included in the bid price for Item 955.

The Contractor shall implement appropriate measures to prevent construction debris, materials, or waste from entering the brook during pile repair operations. The means and methods of protection shall be determined by the Contractor and submitted to the Engineer for approval prior to the start of work.

QUALITY ASSURANCE

Manufacturing qualifications: The manufacturer of the specified epoxy products shall be ISO 9001 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.

Contractor qualifications: Contractor shall be qualified in the field of marine timber pile repair and restoration with a successful track record of 5 years or more. Contractor shall maintain qualified personnel who have received product training by manufacturers' representatives.

Install materials in accordance with all safety and weather conditions required by manufacturers or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

DELIVERY, STORAGE, AND HANDLING

All materials must be delivered in original, unopened containers with the manufacturer’s name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.

Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use. Condition the specified epoxy resin mortar components as recommended by the manufacturer.

JOB CONDITIONS

Environmental Conditions: Conditions conducive to successful underwater installations and satisfactory to divers’ requirements will take overriding precedence when determining appropriate installation conditions. Do not mix epoxy mortar materials if components cannot be conditioned for a minimum 24 hours at a temperature range of 65-75ºF (18-24ºC). Consult with epoxy manufacturer’s technical service department if material conditions cannot be met. Do not install epoxy mortar if minimum application temperature (i.e. water temperature) is below 40ºF (4ºC).

Protection: Precautions should be taken to avoid damage to any finished areas near the work zone due to mixing and handling of specified materials. Precautions should also be taken to avoid contact with newly installed pile restoration assemblies to ensure that the epoxy mortar placed within the FRP repair sleeves cures in an undisturbed condition.

Generally, all manufacturer; s recommendations shall be strictly adhered to.

SUBMITTALS

All materials proposed for use shall be submitted to the Engineer for review and approval. Submittal shall include the manufacturer's actual literature (including Product Data Sheets and appropriate Material Safety Data Sheets) and the Contractor's detailed work plan describing how the pile repair system will be installed.

WARRANTY

The Contractor shall provide a written warranty from the manufacturer against defects of materials for a period of five (5) years, beginning with date of substantial completion of the project.

PRODUCTS

All products listed herein are considered to meet these specifications, however, the use of approved equivalent products is acceptable. Any and all products shall be submitted to the Engineer for review and approval. All products shall be used in strict accordance with all of the manufacturer's recommendations.

MANUFACTURERS

A. Sikadur 35, Hi-Mod LV LPL, as manufactured by Sika Corporation, Lyndhurst, New Jersey, is considered to conform to the requirements of this specification.

B. Sand ASTM C-404 as manufactured by U.S. Silica Company, Berkeley Springs, West Virginia, is considered to conform to the requirements of this specification.

C. Fiberglass Reinforced Polymer (FRP) Pile Repair Sleeves, as manufactured by Molded Fiber Glass (MFG) Construction Products Company, Independence, Kansas, are considered to conform to the requirements of this specification.

D. Epoxy Mortar Pump, Model D-35 as manufactured by Blastcrete Equipment Company, Anniston, Alabama, is considered to conform to the requirements of this specification.

MATERIALS

A. General – Epoxy Resin Mortar Material
   1. Component 'A' shall be a modified epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents. It shall not contain butyl glycidyl ether.

   2. Component 'B' shall be primarily a reaction product of a selected amine blend with an epoxy resin of the epichlorohydrin bisphenol A type containing suitable viscosity control agents and accelerators.

   3. Component 'C' shall be a clean, well-graded, non-reactive, moisture-free mix of oven dried crystalline silica and quartz aggregate having low absorption and high density. Aggregate must be approved for use by the Engineer.

4. The ratio of Component 'A' : Component 'B' shall be 2:1 by volume. The volume of each unit of mixed epoxy components shall be 3 gallons. To make the epoxy mortar, Component 'C' shall be slowly added and mixed with the initially mixed epoxy components at a rate of 100 lbs. (45.4 kg) of sand per 3 gallons of mixed epoxy.

B. General – Fiberglass Reinforced Polymer Pile Repair Sleeves
   1. Fiberglass reinforced polymer (FRP) pile repair sleeves shall be a one-piece sleeve, chemically resistant to acids, alkalis and most solvents, designed to be left in place after the epoxy mortar is placed and allowed to cure. The inside of the repair sleeve shall have a peel-away strip that reveals a textured surface, eliminating the need for mechanical surface preparation and enhancing the ability of the epoxy mortar to bond. The pile repair sleeve shall have a port for attachment of a pump hose that in turn allows delivery of the epoxy mortar to the inside of the sleeve. The pile repair sleeve shall have a slip joint closure for easy underwater assembly.

PERFORMANCE CRITERIA

A. Typical Properties of the mixed epoxy resin mortar at 73ºF (23ºC) and 50% relative humidity:
   1. Pot Life: Approximately 60 to 65 minutes
   2. Initial Viscosity: (Brookfield Viscometer, Spindle #2, Speed 100): Approx. 325 cps
   3. Color: Clear, amber

B. Typical Properties of the cured epoxy resin mortar at 73ºF (23ºC) and 50% relative humidity:
   1. Compressive Properties (ASTM D-695) at 28 days
      a. Compressive Strength: 8,600 psi (59.3 MPa)
      b. Compressive Modulus: 8.1×10^5 psi (5,600 MPa)

   2. Tensile Properties (ASTM D-638) at 14 days
      a. Tensile Strength: 840 psi (5.8 MPa)
      b. Elongation at Break: 0.3%
      c. Modulus of Elasticity: 7.6×10^5 psi (5,200 MPa)

   3. Flexural Properties (ASTM D-790) at 14 days
      a. Flexural Strength (Modulus of Rupture): 2,200 psi (15.2 MPa)
      b. Tangent Modulus of Elasticity in Bending: 9.5×10^5 psi (6,500 MPa)

   4. Shear Strength (ASTM D-732) at 14 days: 2,300 psi (15.8 MPa)

   5. Water Absorption (ASTM D-570) at 7 days (24 hour immersion, neat resin): 0.35%

   6. Bond Strength (ASTM C-882) Hardened Concrete to Hardened Concrete
      a. 2 day (moist cure, neat resin): 1,350 psi (9.3 MPa)
      b. 14 day (moist cure, neat resin): 2,000 psi (13.7 MPa)

   7. Heat Deflection Temperature (ASTM D-648) at 7 days: 129ºF (54ºC)

   8. The epoxy resin shall conform to ASTM C-881 and AASHTO M235.

SURFACE PREPARATION

Areas of timber pile to be repaired must be clean and sound. All loose and deteriorated wood shall be removed.

ITEM 941.99 (Continued)

FRP pile repair sleeve shall be prepared per the manufacturer's instructions prior to being lowered into the water and mounted around the timber pile. While still "open", seams of pile repair sleeve shall be coated with approved epoxy resin adhesive paste. Peel-away strip shall be removed to reveal clean, textured surface that will be contact mixed epoxy mortar. Divers shall mount and secure the properly prepared FRP pile repair sleeve around the timber pile.

MIXING AND APPLICATION

A. Pre-mix each component ('A' and 'B') immediately after opening can. Pour each pre-mixed component into an appropriate sized mortar mixer or with a Sika jiffy paddle at low speed (400 – 600 rpm) for 3 minutes until uniformly blended. The mixing ratio of 'A' to 'B' is 2:1 by volume. Slowly add 100 lbs (45.4 kg) for every 3 gallons of mixed epoxy resin. Mix an additional 3 to 5 minutes until uniform in consistency. Mix only the quantity that can be used within its pot life.

B. Placement Procedure: Pour the mixed epoxy mortar into the hopper that is attached to the pump machine (Blastcrete Equipment Company – Model D35). Attach the hose connected to the pump machine to the port of the mounted FRP pile repair sleeve. Begin pumping mixed epoxy resin mortar steadily into the port of the mounted FRP pile repair sleeve. Diver shall monitor effectiveness of epoxy resin mortar filling the FRP pile repair sleeve. If necessary, diver may stop the flow of epoxy resin mortar, remove the hose, plug the port, move the hose to the top, open end of the FRP pile repair sleeve and continue the filling procedure, taking care to fill the entire annular space between the timber pile and the FRP pile repair sleeve, from bottom to top.

C. Adhere to all limitations and cautions for the epoxy resin mortar in the manufacturer's current printed technical data sheet and literature.

CLEANING

The uncured epoxy resin mortar material can be cleaned from tools with an approved solvent. The cured epoxy resin mortar can only be removed mechanically.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 941.99 shall be measured for payment and paid for at the contract unit price per EACH timber pile repaired, complete in place, as directed by the Engineer. The price shall include all labor, materials, equipment and incidental costs required to complete the installation of the approved pile repair system, as specified herein.

ITEM 960.01 STRUCTURAL STEEL FOR UTILITY SUPPORTS POUND

GENERAL

Work under this item shall conform to the relevant provisions of MassDOT Standard Specification Item 960.01 – Structural Steel, except as modified herein to include utility support anchor installation as detailed on the Plans and in the following notes.

This work shall include furnishing and installing post-installed concrete anchors, structural steel framing, and hardware necessary to support existing utilities, in accordance with the Plans and as directed by the Engineer.

All steel shall be hot-dip galvanized per MassDOT M7.10.0 with faying surfaces meeting a Class C slip coefficient. All fabrication including cuts, welds, and/or drilled holes shall be completed prior to surface preparation and galvanizing. When grinding, drilling or any other operation produces steel turnings, filings, shavings, etc. the contractor shall completely clean all areas of all accumulation prior to the end of the work shift.

The Engineer shall provisionally accept the galvanized items before shipment to the jobsite but final acceptance of the coating system will occur after erection of the coated items, and after all required repairs and coating application has been completed.

The contractor shall be responsible for failure and damage of all applied coating. Failures include but are not limited to, visible corrosion, blistering, checking, cracking, or delamination (peeling) and loss of gloss and color of the coating system. Damage includes but is not limited to damage from installation or from external agents, such as scraping, vandalism, debris impacts, and collisions. The extent and method of repair must be approved by the Engineer.

Damaged galvanized surfaces shall be repaired in accordance with ASTM A780 “Repair of Hot Dip Galvanizing” section 4.2.2 Paints Containing Zinc Dust “High Zinc Dust Content”. The paint shall be applied to achieve a minimum dry film thickness of 3 mils and not more than 5 mils. Repair paint shall meet M7.04.11 and application shall be in accordance with the manufacturer’s recommendations.

MATERIALS

All bolts shall be ¾" diameter high-strength ASTM F3125 Grade A325.

All steel shall conform to AASHTO M270 Grade 50 and shall be hot-dip galvanized per MassDOT M7.10.0.

Post-installed concrete anchors shall be ASTM F1554 Grade 55 or better, sized for the expected loading conditions noted below or as indicated on the Plans.

Post-Installed Concrete Anchor systems may be adhesive or mechanical screw type anchors, and shall be submitted to the Engineer for approval. Anchors shall be adequate for temperatures between -30F and 120F, and shall meet or exceed the LRFD factored loads based on anchor type, spacing, and edge distance as shown on the Plans.

ITEM 960.01 (Continued)

CONSTRUCTION METHODS

Contractor shall coordinate with utility owners for temporary support or relocation of utilities as required. Utility layout shown on the Plans is based on assumed span dimensions. Contractor shall field-verify all conditions prior to fabrication. No additional compensation will be made for utility coordination or field verification.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Payment for this work shall be included under Item 960.01 No separate payment will be made for submittals, field verification, or coordination with utility owners, which shall be considered incidental to the work.

ITEM 964.3 ELASTOMERIC PROTECTIVE COATING SQUARE FOOT

GENERAL

The work to be done under this item shall consist of applying a minimum of two coats of an elastomeric acrylic protective coating to all bridge rail and posts.

A total dry film thickness (DFT) of 16 mils shall be required.

The acrylic protective coating shall be breathable, durable, flexible, and color retentive. It shall provide protection and be resistant to weathering, carbon dioxide, chlorides, UV light, wind driven rain, dirt pick up and mildew. It shall also bridge hairline cracks up to 1/32". The acrylic protective coating system shall be one of the following or an approved equal:

- SikaGard 550W Elastocolor by Sika Corp.
- Flexxide Elastomer by Carboline
- Colorlastic by ChemMasters

The proposed coating product shall be submitted to the Engineer for approval. The Contractor shall submit the proposed application procedures and Manufacturer's Product Data Sheet(s) that completely describe the product. The color of the coating(s) shall be AMS Standard 595 Colors – AMS-STD5263. Separate colors shall be required for concrete barriers/bridge parapets vs. other locations such as bridge substructure elements. Actual product samples shall be provided in one-quart cans for color testing/selection. A minimum of four (4) different color samples shall be required for each separate color required.

PREPARATION AND PROTECTION OF SURFACE

All vegetation growing adjacent to or within the limits of the concrete surfaces to be coated shall be removed and properly discarded. All debris adjacent to or within the limits of the concrete surfaces to be coated shall be removed and properly discarded.

All surfaces to be coated must be dry, clean, sound, and free of all contaminants that could interfere with adhesion of the coating. All loose material shall be removed. If directed by the Engineer, the contractor shall repair any holes and any spalled and damaged concrete prior to applying the coating. All concrete repair areas shall be cured for a minimum 28 days before coating.

Prior to application of the elastomeric coating, all surfaces shall be prepared by pressure washing to remove dirt, debris, efflorescence, loose material, and other contaminants that may interfere with coating adhesion. Pressure washing shall be performed using a minimum 3,000 psi pressure washer, taking care to avoid damaging sound concrete or adjacent elements. Surface preparation by pressure washing shall be considered incidental to this item. The protective coating shall not be applied until the surface is dry and the surface preparation has been approved by the Engineer. All concrete to be coated must be tested for the presence of moisture after the surface preparation has been completed and prior to application of coating. Testing shall be in accordance with ASTM D 4263.

APPLICATION

Application shall be done by airless sprayer or roller or a combination of both and in accordance with the manufacturer's recommendations. The use of a primer shall not be required unless stipulated for that particular coating by the manufacturer. A minimum of two coats shall be applied to achieve a total DFT of 16 mils. The recommended minimum wet film thickness (WFT) must be maintained during each application. The manufacturer's specified temperature and weather limitations for the application shall be strictly adhered to.

ITEMS 964.3 (Continued)

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 964.3 will be measured for payment by the SQUARE FOOT of all concrete surfaces to which the coating is to be applied per the contract plans and as directed by the Engineer.

The unit Contract Price shall include all labor, materials, tools, equipment, and incidental costs required to complete the work, including all preparation & protection of surfaces such as pressure washing.

The Contractor will also supply a wet/dry film thickness gauge for the use of the Engineer, and the cost of this device will be considered incidental to this Item. The Contractor will retain ownership of the gauge.

ITEM 983.3 RIPRAP REMOVED AND RELAID CUBIC YARD

GENERAL

The work to be done under this item shall conform to the relevant provision of Section 983. of the Standard Specifications, the Supplemental Specifications and the following.

The purpose of this Item is to clarify the disposition of the existing riprap in case the limits of timber pile repairs extend below the riprap and it must be disturbed in order to complete the repairs. The Contractor and the Engineer shall verify in field the limits of the timber pile repairs, which shall determine if this Item is necessary for payment.

EXCAVATION

The existing riprap comprising the north and south embankments of the Kiln Brook shall be carefully removed stockpiled for future use. The limits of riprap excavation shall not exceed 2 feet from the center of each pile, or the minimum of what may be required to install the approved pile repair system, whichever is less. The Contractor is responsible for determining the appropriate location of stockpiling the existing riprap. Any costs associated with stockpiling the riprap shall be considered incidental to this Item.

During excavation, the existing riprap shall be removed to the minimum depth that will facilitate the installation of the proposed timber pile repairs. The Engineer shall be notified when this excavation is completed and shall determine if the depth of removal is satisfactory.

INSTALLATION

After the installation of the proposed timber pile repairs, the stockpiled riprap shall be re-laid to rebuild the embankments. All riprap and subgrade materials disturbed during excavation shall be restored to meet pre-construction conditions. The slopes of the re-laid embankment shall gradually transition to meet the existing embankment at the limits of excavation. Any modifications to the existing riprap embankment to provide a gradual transition to existing conditions shall be considered incidental to this Item.

If during construction, including any time prior to final acceptance of the project by the Engineer, any previously disturbed riprap embankment exhibits signs of failure, the slope shall be repaired or replaced by the Contractor, as required by the Engineer, at no additional cost to the Town.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 983.3 shall be measured for payment and paid for at the contract unit price per CUBIC YARD of riprap stockpiled and re-laid, complete in place. The price shall include all labor, materials, equipment and incidental costs required to remove, stockpile, and re-lay the existing riprap as specified herein.

ITEM 999.1 **POLICE SERVICES** **ALLOWANCE**

GENERAL

The Contractor shall furnish police services required to direct traffic on existing roadways where traffic is maintained. The Contractor shall provide such police officers as may be deemed necessary by either the Engineer or the Town of Lexington for the direction and control of all traffic traveling within the project area. The police officers shall be obtained from the Lexington Police Department as applicable. The police officers shall be paid by the Contractor at the prevailing rate of wages established by the Town of Lexington. The Town of Lexington shall reimburse the Contractor for police services. The Contractor shall only pay the Detail rate. The surcharge rate shall not be reimbursed.

The services of uniformed police officers for the maintenance of traffic shall be used if required by Lexington Police Department (PD). The Contractor shall be responsible to contact the police department to arrange for a police detail at least 24 hours before the detail is needed. The Contractor shall be responsible to check and sign all police detail slips on a daily basis as they occur, noting the name of the officer, the municipal PD, the date and time the officer arrived and ended provision of the traffic detail. The actual payment to the PD will be made directly by the Contractor who will be reimbursed by the Town of Lexington by including proof of payment to the PD attached to the submitted pay request.

To cancel a scheduled Police Detail, the Contractor shall notify the PD a minimum of two hours prior to when the detail was to begin. The Contractor should note the name of the person at the PD who was contacted, along with the date and time of the cancellation. Failure to give at least a two-hour prior notice to the PD to cancel a scheduled police detail will result in the Contractor paying the four hour minimum uniformed officer(s) charge at the contracted police wage rate, with no compensation from the Town of Lexington.

Nothing contained herein shall be construed as relieving the Contractor of any of his/her responsibilities for protection of persons and property under the terms of the Contract.

ALLOWANCE OF POLICE SERVICES

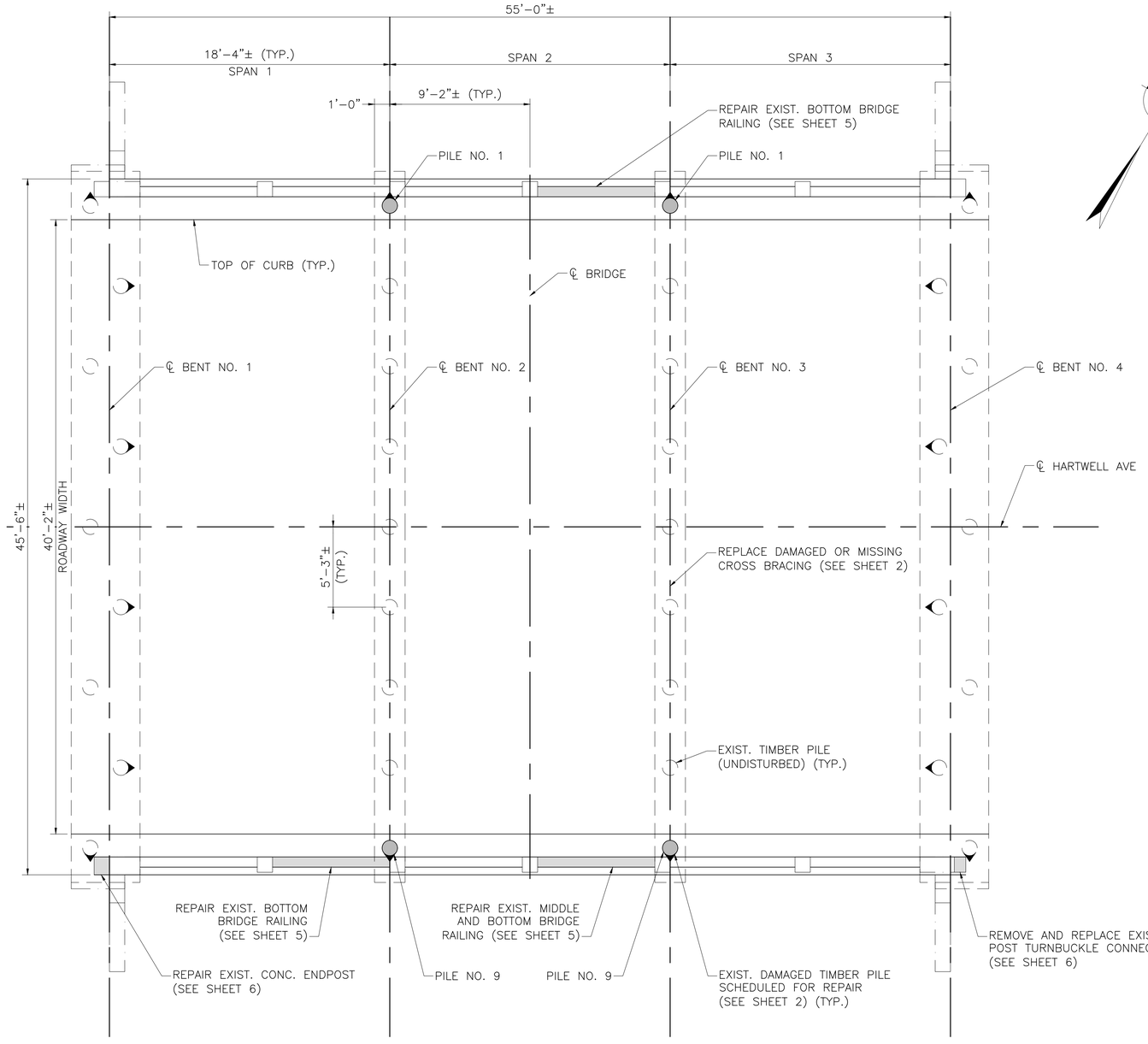
An allowance of $30,000 for Hartwell Ave Bridge Repairs for the furnishing of police services has been included in all bids. This allowance is determined by multiplying the number of hours estimated as necessary by the prevailing hourly rate of wages established for such services. The Contractor shall submit certified copies of itemized bills of services rendered for review and approval by the Engineer. Item 999.1 shall be measured for payment by the actual police details paid for directly by the Contractor submitted as part of pay requests, including proof of payment attached and reimbursed by the Town of Lexington at the actual cost of the police details. The allowance will be adjusted to the actual amount paid for authorized and approved police services as stipulated and shall include other payments due to any legal requirements of the State and Federal governments.

APPENDIX A

PROJECT PLANS

PLANS OF HARTWELL AVE OVER KILN BROOK BRIDGE REPAIRS
IN THE TOWN OF LEXINGTON, MIDDLESEX COUNTY

PREPARED BY TEC, INC.
10 SHEETS



NOTE:
HATCHED AREAS INDICATE CONCRETE REPAIR AREAS (SEE DETAILS SHEETS 5 & 6)

PILE AND BRIDGE RAIL REPAIR PLAN

SCALE: $\frac{1}{4}$" = 1'-0"

COMMONWEALTH OF MASSACHUSETTS
MassDOT, Highway Division
APPROVED UNDER PROVISIONS OF
MASS. GEN. LAWS CH 85 S 35

STATE BRIDGE ENGINEER — DATE 1/12/2026

LEXINGTON
HARTWELL AVE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	10
PROJECT FILE NO.	T1559		

PILE PLAN & NOTES

GENERAL PILE NOTES:
1. PILES ARE NUMBERED FROM WEST TO EAST. BENTS ARE NUMBERED FROM SOUTH TO NORTH.
2. EXISTING APPROACH SLAB NOT SHOWN FOR CLARITY.
3. PILES 1 AND 9 AT BENT 2 AND BENT 3 ARE TO BE REPAIRED PER DIRECTION BELOW.
4. THE PILE REPAIRS SHALL BE DESIGNED TO RESTORE THE ORIGINAL MINIMUM BEARING CAPACITY OF 18 TONS PER PILE.
5. CONTRACTOR SHALL REMOVE CROSS BRACING AS NEEDED TO PERFORM PILE JACKETING. UPON COMPLETION OF PILE JACKETING, CROSS BRACING SHALL BE IMMEDIATELY REPLACED PRIOR TO MOVING ON TO THE NEXT PILE OR NEXT BENT.
6. WATER ELEVATION BASED ON 10/17/24 FIELD VISIT.
7. INSTALLATION PROCEDURES OUTLINED BELOW ARE FOR SIKA FIBERGLASS REINFORCED PLASTIC (FRP) PILE REPAIR SLEEVES. IF AN EQUIVALENT PRODUCT IS USED, INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8. ALL ELEVATIONS REFERENCED ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER CLEAR ACCESS TO ALL BRIDGE ELEMENTS TO BE INSPECTED IN THE FIELD.

SUMMARY OF WORK:
1. REMOVE AND REPLACE EXISTING CROSS-BRACING AND INSTALL PILE REPAIR JACKETS FOR 4 PILES AT BENTS 2 AND 3.
2. ALL OTHER PILES SHALL BE INSPECTED FOR DAMAGE WITH THE ENGINEER AND REPAIRED AS REQUIRED.

TIMBER PILE REPAIR SEQUENCE:
1. SEQUENTIALLY REMOVE AND DISPOSE OF EXISTING CROSS-BRACING. PROPERLY DISPOSE OF CROSS-BRACING IN ACCORDANCE WITH THE SPECIFICATIONS.
2. IF REQUIRED, EXCAVATE MUD AND/OR RIPRAP AROUND PILE AS NEEDED TO ENABLE JACKET INSTALLATION. RESTORE ANY DISTURBANCES TO ORIGINAL CONDITION AFTER COMPLETING THE PILE WORK.
3. INSPECT EACH PILE PRIOR TO REPAIR AND REMOVE LOOSE AND UNSOUND PILE MATERIAL.
4. INSTALL SIKA FIBERGLASS REINFORCED PLASTIC (FRP) PILE REPAIR SLEEVES (OR EQUIVALENT) TO SPECIFIED PILES. FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS TO FACILITATE PROPER EPOXY INJECTION.
5. INJECT SIKADUR 35 HI-MOD LV LPL EPOXY MORTAR, OR EQUIVALENT, TO RESTORE ORIGINAL PILE CROSS SECTION. EPOXY MORTAR SHALL ACHIEVE A COMPRESSIVE STRENGTH OF 9,000 PSI.
6. ALL MANUFACTURER'S INSTALLATION RECOMMENDATIONS SHALL BE STRICTLY ADHERED TO DURING INSTALLATION OF FRP SLEEVES AND EPOXY MORTAR.
7. INSTALL NEW CROSS-BRACING, CROSS-BRACING LUMBER SHALL BE SOUTHERN YELLOW PINE #2 AND SHALL BE TREATED PER MASSDOT STANDARD SPECIFICATIONS SECTION M9.05.1. TIMBER SHALL BE AWPA CLASS UC4C GROUND CONTACT EXTREME DUTY (COMMODITY SPECIFICATION A ONLY).

TIMBER PILE REPAIR NOTES:
1. THE FOLLOWING NOTES ARE INTENDED TO PROVIDE A GENERAL REPRESENTATION OF THE TIMBER PILE REPAIR PROCESS. THESE NOTES MAY BE SUPERCEDED, MODIFIED, OR ADJUSTED BY THE REPAIR PROCEDURE RECOMMENDED BY THE PILE WRAP MANUFACTURER.
2. ALL PILE SURFACES WITHIN REPAIR AREA SHALL BE THOROUGHLY CLEANED OF ALL DETERIORATED PILE MATERIAL, OIL, GREASE, DEBRIS, AND DELETERIOUS MATERIAL THAT WOULD PREVENT PROPER BONDING. PREPARE PILE SURFACES USING WATER BLASTING OR OTHER APPROVED METHODS. JACKET PLACEMENT SHALL NOT PROCEED UNTIL PILE SURFACE PREPARATION HAS BEEN APPROVED BY THE ENGINEER.
3. SUBMERGED FIBERGLASS JACKETS SHALL BE INSTALLED BY CERTIFIED PROFESSIONAL DIVERS.
4. ALL JACKETS SHALL BE SEALED TO PREVENT EPOXY MORTAR LEAKAGE DURING CONSTRUCTION.
5. SPACERS AND ANY PUMPING PORTS (IF REQUIRED) SHALL BE FIELD INSTALLED.
6. PLACE BEAD OF EPOXY IN FEMALE PORTION OF TONGUE AND GROOVE INTERLOCKING JACKET JOINT.
7. JACKET SHALL BE OPENED AND PLACED AROUND THE PILE. ALLOW JACKET TO RETURN TO ORIGINAL SHAPE AND ENGAGE INTERLOCKING JOINT.
8. SET JACKET AT PROPER ELEVATION SO THAT A MINIMUM OF 2'-0" OF UNDAMAGED PILE IS LOCATED INSIDE JACKET ABOVE AND BELOW DAMAGED AREA OF PILE,
9. INSTALL BACKER ROD AT BOTTOM OF JACKET AND PUMP WITH APPROVED EPOXY MORTAR.
10. TOP OF REPAIR SHALL BE BEVELED TO PREVENT THE PONDING OF WATER AT THE TOP OF THE JACKET.

INDEX OF DRAWINGS

ANDREW J. SPURR CIVIL No. 56540 COMMONWEALTH OF MASSACHUSETTS PROFESSIONAL ENGINEER

TEC The Engineering Corp
TEC, Inc.
282 Merrimack St. 2nd Floor Lawrence, MA 01843 978-794-1792
311 Main Street 2nd Floor Worcester, MA 01608 508-868-5104
169 Ocean Blvd, Unit 3 PO Box 249 Hampton, NH 03842 603-601-8154
www.TheEngineeringCorp.com

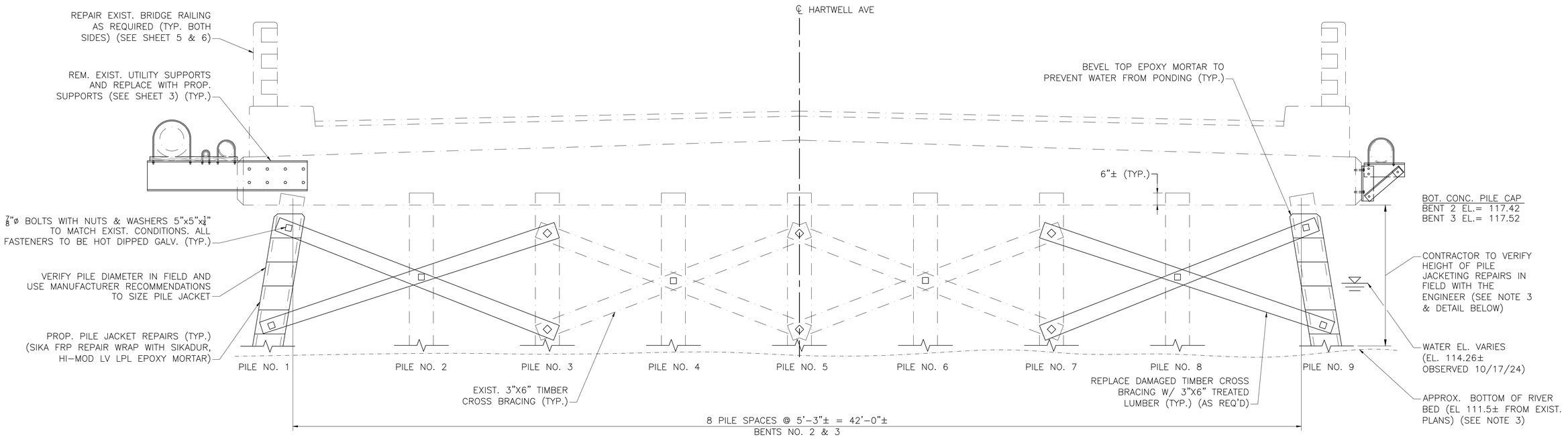
ISSUED FOR CONSTRUCTION

PROPOSED BRIDGE REPAIRS
LEXINGTON
HARTWELL AVE
OVER KILN BROOK
TOWN OF LEXINGTON
201 BEDFORD ROAD
LEXINGTON, MA 02420

LEXINGTON
HARTWELL AVE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	10
PROJECT FILE NO.	T1559		

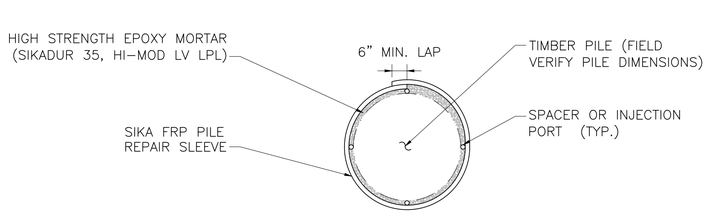
TRANSVERSE SECTION + PILE DETAILS



TRANSVERSE SECTION BENT #3 (LOOKING NORTH)

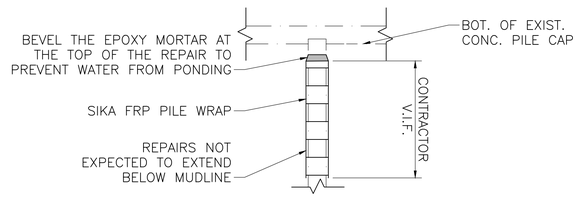
SCALE: ½" = 1'-0"

NOTES:
1. WHEN REPAIRING TIMBER CROSS BRACING, INSTALL RODS SNUG TIGHT THROUGH THE CENTER OF THE BRACING/PILE. MAINTAIN 6" MINIMUM CLEARANCE TO BRACING END.
2. ALL DIMENSIONS ARE TAKEN FROM THE EXISTING BRIDGE PLANS, ACTUAL DIMENSIONS ENCOUNTERED IN FIELD MAY VARY.
3. BASED ON THE AVAILABLE INSPECTION REPORTS, IT IS NOT BELIEVED THAT PILE DETERIORATION EXTENDS BELOW THE MUDLINE, HOWEVER THE CONTRACTOR SHALL CONFIRM THIS WITH THE ENGINEER AT THE TIME OF CONSTRUCTION, EXISTING RIPRAP STONES MAY REQUIRE ADJUSTMENT TO INSTALL PILE REPAIRS.



SCHEMATIC PILE JACKETING DETAIL

NOT TO SCALE



TIMBER PILE JACKETING DETAIL

NOT TO SCALE

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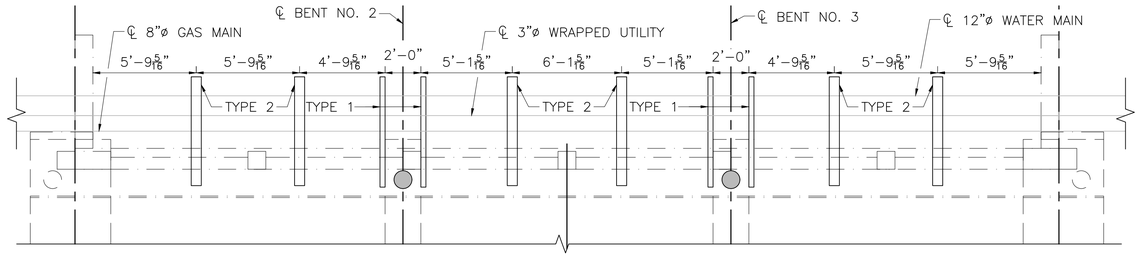
STATE BRIDGE ENGINEER — DATE 1/12/2026

LEXINGTON
HARTWELL AVE

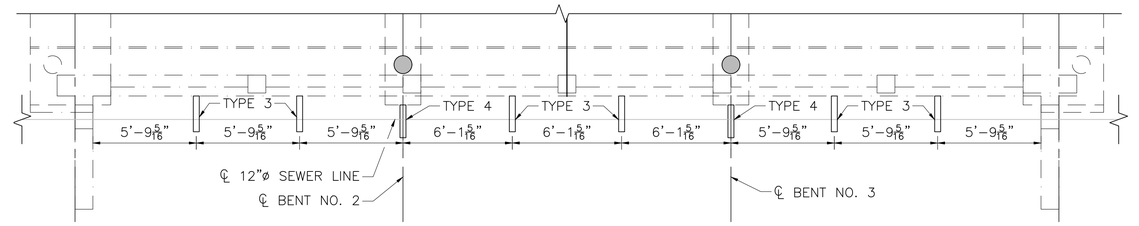
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	10
	PROJECT FILE NO. T1559		

UTILITY SUPPORT DETAILS (1 OF 2)



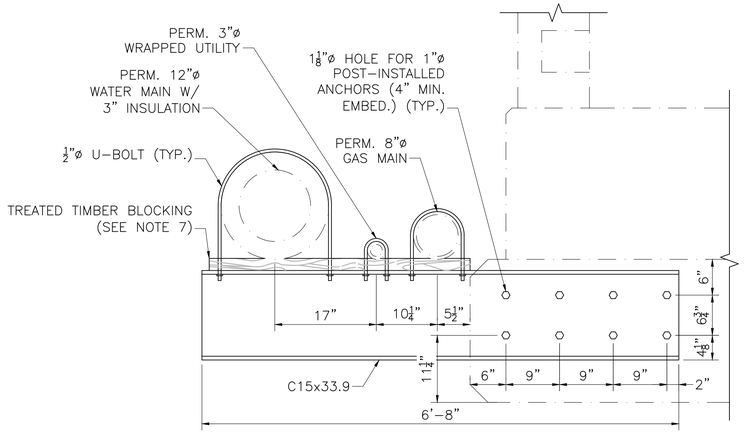
WEST UTILITY SUPPORT PLAN

SCALE: 1/4" = 1'–0"



EAST UTILITY SUPPORT PLAN

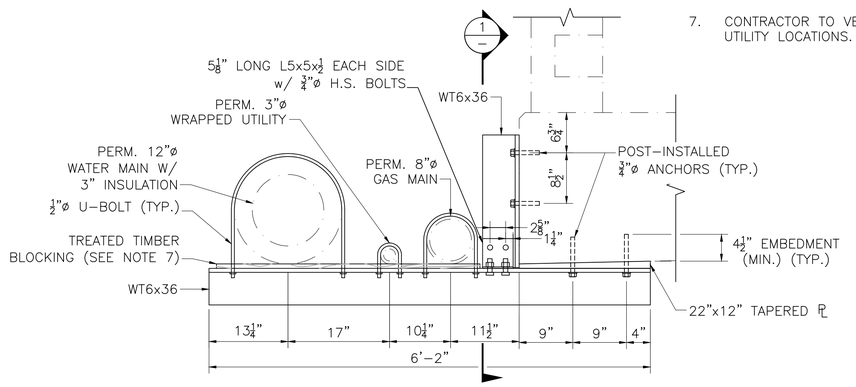
SCALE: 1/4" = 1'–0"



TYPE 1 – WEST UTILITY SUPPORT AT PIER CAP

SCALE: 1" = 1'–0"

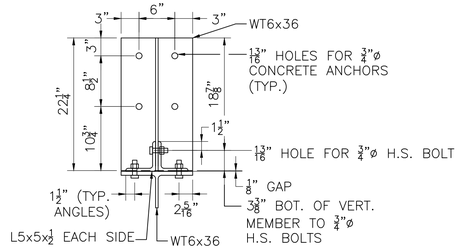
NOTE:
FOR TYPE 1 SUPPORTS, POST INSTALLED ANCHORS MAY BE MECHANICAL SCREW TYPE ANCHORS OR ADHESIVE ANCHORS.



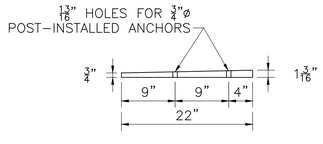
TYPE 2 – WEST UTILITY SUPPORT AT DECK

SCALE: 1" = 1'–0"

NOTE:
FOR TYPE 2 SUPPORTS, POST INSTALLED ANCHORS SHALL BE MECHANICAL SCREW TYPE ANCHORS. ADHESIVE ANCHORS SHALL NOT BE ALLOWED.

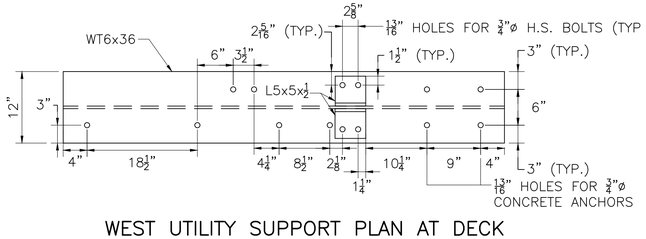


SECTION 1 / –
SCALE: 1" = 1'–0"



TAPERED PLATE DETAIL

SCALE: 1" = 1'–0"



WEST UTILITY SUPPORT PLAN AT DECK

SCALE: 1" = 1'–0"

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MassDOT, Highway Division
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STATE BRIDGE ENGINEER — DATE 1/12/2026

UTILITY SUPPORT NOTES:

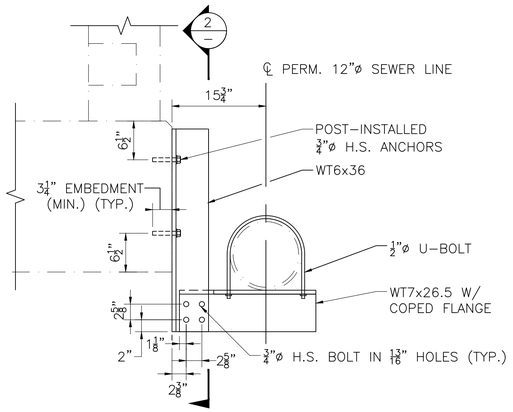
1. ALL BOLTS SHALL BE 3/4"ø HIGH STRENGTH ASTM F3125 GRADE A325 BOLTS.
2. ALL AASHTO M270 GRADE 50 STRUCTURAL STEEL FOR UTILITY SUPPORTS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH MASSDOT STANDARD SPEC M7.10.0.
3. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL STEEL AND HARDWARE FOR UTILITY SUPPORTS. CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS FOR TEMPORARY SUPPORT OR RELOCATION OF UTILITIES AS REQUIRED FOR INSTALLATION OF NEW SUPPORTS.
4. POST INSTALLED CONCRETE CONNECTIONS SHALL BE MADE WITH ASTM F1554 GRADE 55 ANCHORS OR BETTER.
5. POST INSTALLED ANCHORS CHOSEN BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL AND SHALL HAVE ADEQUATE CAPACITY (LRFD) FOR THE FACTORED LOADS PER ANCHOR THAT ARE PROVIDED BELOW FOR THE SPACING AND EDGE DISTANCES SHOWN ON THESE PLANS:
   - TYPE 1: MINIMUM SHEAR CAPACITY = 0.9 KIP
   - TYPE 2 VERTICAL: MINIMUM SHEAR CAPACITY = 2.65 KIP TOGETHER WITH SUSTAINED TENSION OF 0.50 KIP
   - TYPE 2 HORIZONTAL: MIN. SUSTAINED TENSILE CAPACITY = 2.0 KIPS
   - TYPE 3 & 4: MINIMUM SUSTAINED TENSILE CAPACITY = 0.7 KIPS TOGETHER WITH A MINIMUM SHEAR CAPACITY = 0.3 KIPS

   ADHESIVE ANCHORS MAY ONLY BE UTILIZED FOR THE TYPE 1 SUPPORT DETAIL.
6. UTILITY LAYOUT SHOWN IS BASED ON DESIGN FOR ASSUMED SPAN DIMENSIONS. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS FOR FINAL PLACEMENTS. TOTAL TRIBUTARY LENGTHS SHALL NOT EXCEED THE FOLLOWING:
   - TYPE 1: 3'–6"
   - TYPE 2: 6'–0"
   - TYPE 3 & 4: 6'–2"
7. CONTRACTOR TO VERIFY TIMBER BLOCKING DIMENSIONS REQUIRED TO MAINTAIN EXISTING UTILITY LOCATIONS. UTILITY LOCATIONS EXPECTED TO REMAIN UNCHANGED.

LEXINGTON
HARTWELL AVE

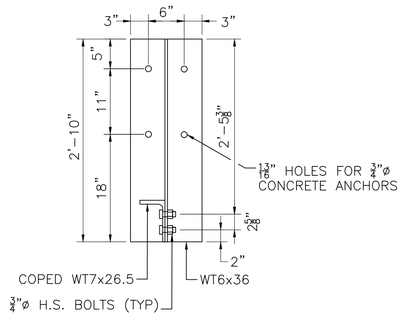
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	10
PROJECT FILE NO.	T1559		

UTILITY SUPPORT DETAILS (2 OF 2)



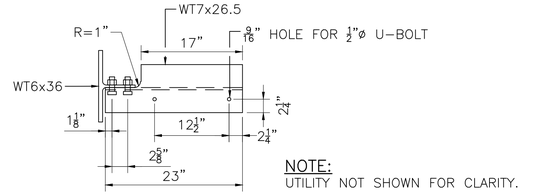
TYPE 3 – EAST UTILITY SUPPORT AT DECK

SCALE: 1" = 1'–0"



SECTION 2 / –

SCALE: 1" = 1'–0"

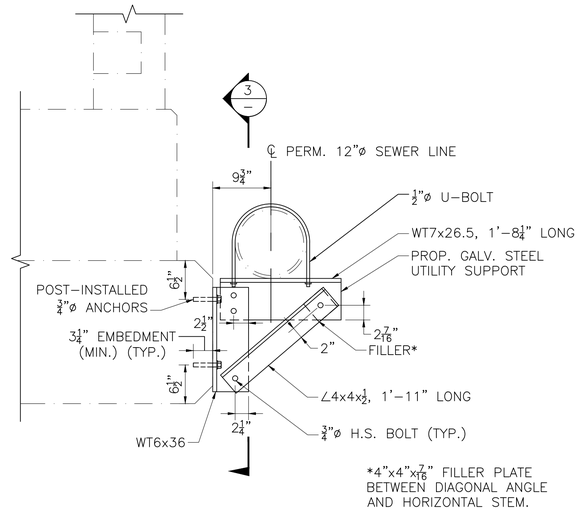


NOTE:
UTILITY NOT SHOWN FOR CLARITY.

EAST UTILITY SUPPORT PLAN AT DECK

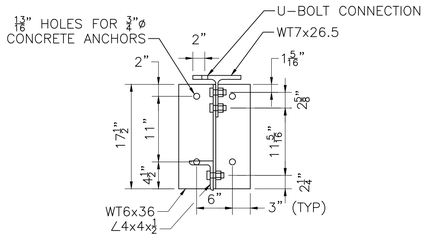
SCALE: 1" = 1'–0"

NOTE:
FOR TYPE 3 SUPPORTS, POST INSTALLED ANCHORS SHALL BE MECHANICAL SCREW TYPE ANCHORS. ADHESIVE ANCHORS SHALL NOT BE ALLOWED.



TYPE 4 – EAST UTILITY SUPPORT AT PIER CAP

SCALE: 1" = 1'–0"



SECTION 3 / –

SCALE: 1" = 1'–0"

NOTE:
FOR TYPE 4 SUPPORTS, POST INSTALLED ANCHORS SHALL BE MECHANICAL SCREW TYPE ANCHORS. ADHESIVE ANCHORS SHALL NOT BE ALLOWED.

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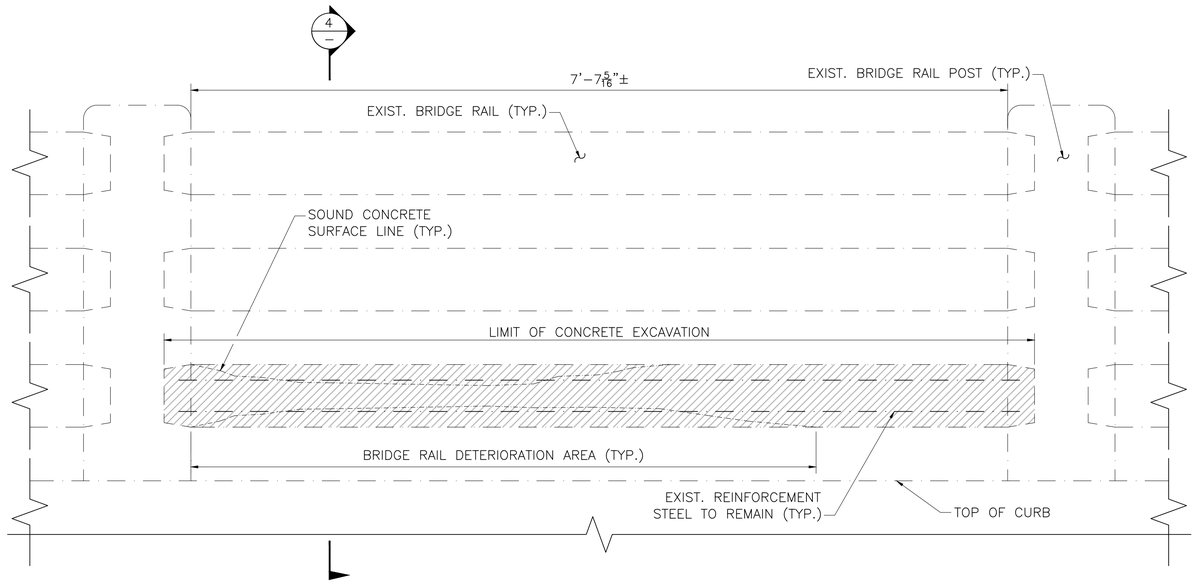
STATE BRIDGE ENGINEER — DATE 1/12/2026

LEXINGTON
HARTWELL AVE

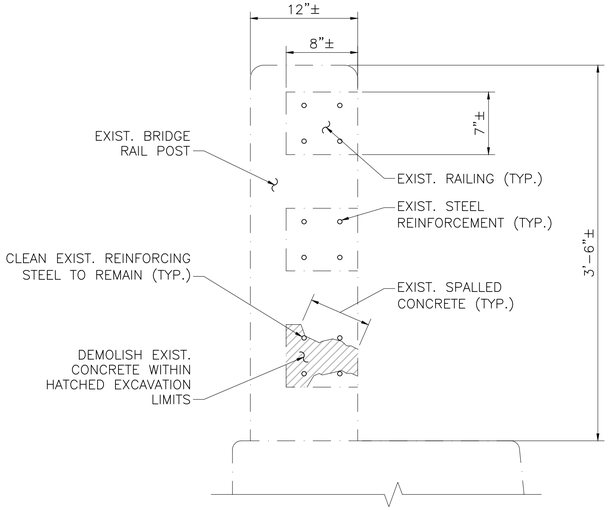
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	5	10
PROJECT FILE NO.	T1559		

RAILING REPAIR DETAILS (1 OF 3)



EXISTING BRIDGE RAIL ELEVATION

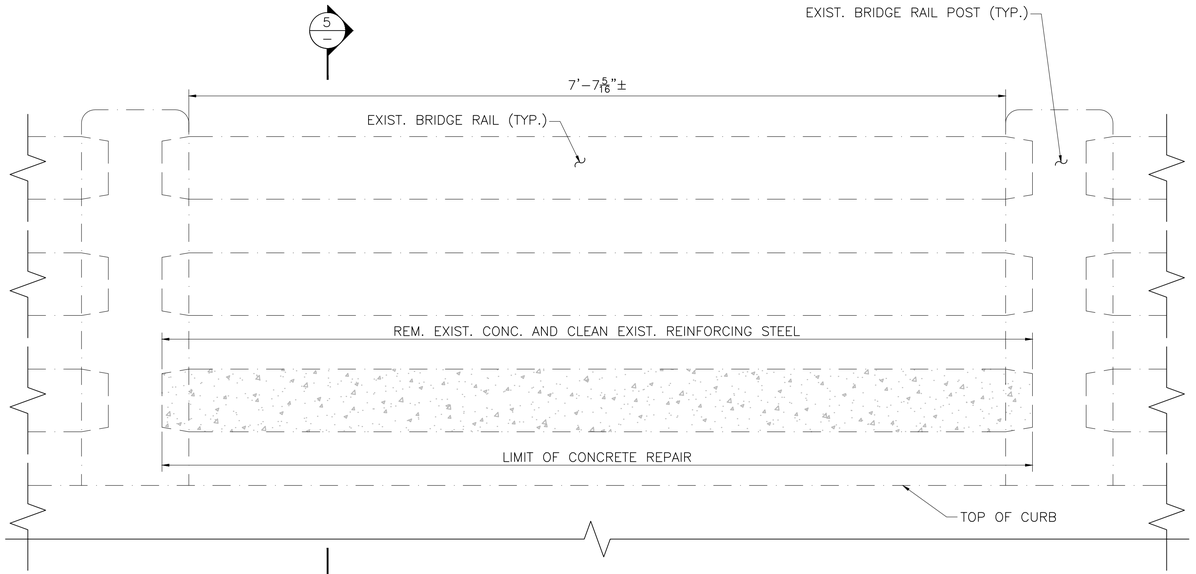
SCALE: 1½" = 1'–0"



SECTION 4 / – SCALE: 1½" = 1'–0"

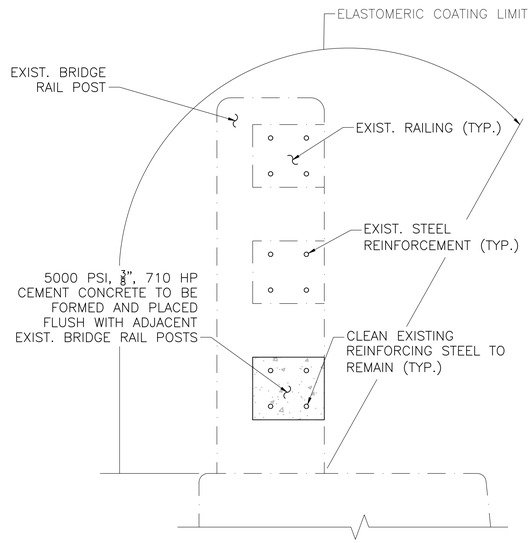
BRIDGE RAIL REPAIR NOTES:

1. CONDITION OF WEST SIDE BRIDGE RAIL REPAIR AREA SHOWN IN DETAILS. REPAIRS ON EAST BRIDGE RAIL SIMILAR.
2. SPALLED, DELAMINATED, OR DETERIORATED CONCRETE BRIDGE RAIL AREAS SHALL BE REPAIRED USING 5000 PSI ⅜", 710 HP CEMENT CONCRETE.
3. ALL DETERIORATED OR DELAMINATED CONCRETE SECTIONS OF BRIDGE RAIL SHALL BE REMOVED TO A MINIMUM OF 1" BEYOND EXISTING REINFORCEMENT STEEL AND THE LIMITS NOTED IN THE DETAILS.
4. THE SURFACE OF BRIDGE RAIL REPAIRS SHALL BE FINISHED FLUSH WITH THE ADJACENT BRIDGE RAIL POST SURFACE.
5. ALL EXISTING REINFORCING STEEL AND CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH REPAIR CONCRETE SHALL BE CLEANED IN ORDER TO REMOVE ALL RUST, OIL, AND DEBRIS THAT IS NOT TIGHTLY ADHERED, FOLLOWED BY APPLICATION OF COMPRESSED AIR TO REMOVE ALL DUST. EXISTING CONCRETE SURFACES THAT WILL BE IN CONTACT WITH REPAIR CONCRETE SHALL BE PRE–WETTED FOR A MINIMUM OF 24 HOURS USING POTABLE WATER IN ORDER TO ACHIEVE A SATURATED SURFACE DRY CONDITION IMMEDIATELY PRIOR TO PLACEMENT OF REPAIR CONCRETE.
6. NEW STEEL REINFORCEMENT SHALL BE PLACED TO SUPPLEMENT EXISTING REINFORCING THAT HAS A SECTION LOSS OF 25% OR MORE OF THE ORIGINAL CROSS SECTION AREA OR HAS BROKEN, AS DETERMINED BY THE ENGINEER. NEW REINFORCEMENT SHALL EXTEND 30 DIAMETERS IN EACH DIRECTION FROM WHERE THE SECTION LOSS OR BREAK ENDS. THE LIMITS OF REPAIR SHALL BE MODIFIED TO MEET THE REINFORCEMENT STEEL LAP SPLICE REQUIREMENTS. NEW REINFORCING STEEL SHALL BE PLACED AT THE SAME LEVEL ALONGSIDE THE EXISTING DETERIORATED OR BROKEN REINFORCING STEEL. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE EXISTING DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
7. POWER WASH, DRY, AND APPLY ELASTOMERIC COATING TO BARRIER IN ACCORDANCE WITH SPECIAL PROVISIONS.



PROPOSED BRIDGE RAIL ELEVATION

SCALE: 1½" = 1'–0"



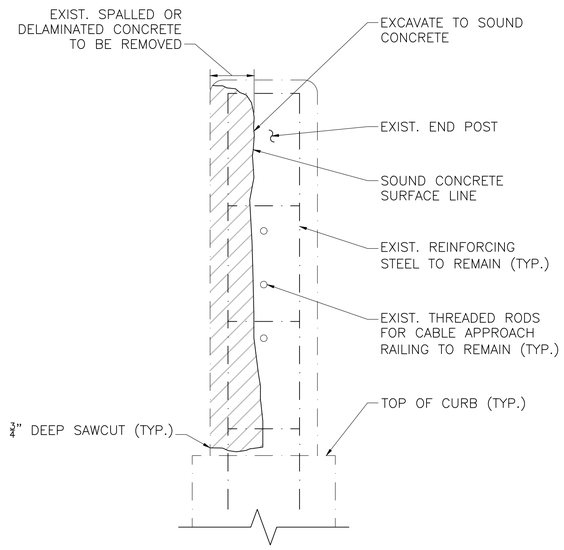
SECTION 5 / – SCALE: 1½" = 1'–0"

COMMONWEALTH OF MASSACHUSETTS
MassDOT, Highway Division
APPROVED UNDER PROVISIONS OF
MASS. GEN. LAWS CH 85 S 35

STATE BRIDGE ENGINEER — DATE 1/12/2026

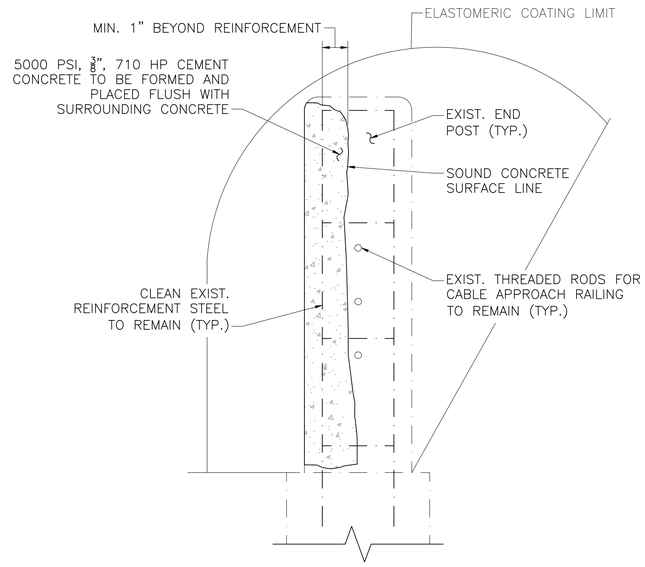
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	10
PROJECT FILE NO.	T1559		

RAILING REPAIR DETAILS (2 OF 3)



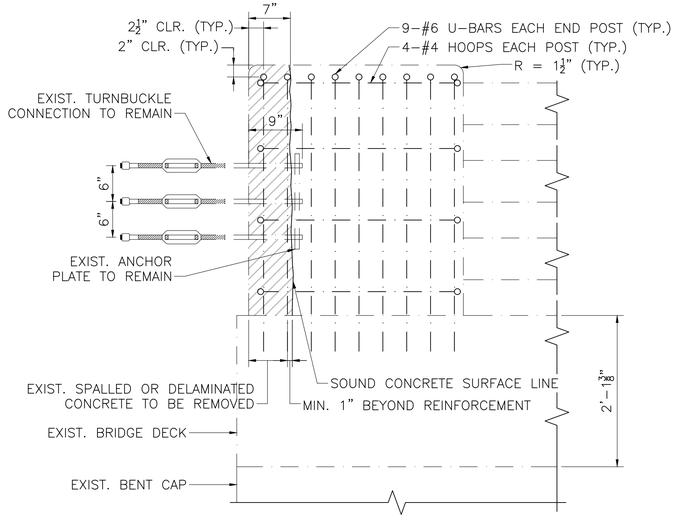
END POST DETERIORATION SECTION

SCALE: 1½" = 1'–0"



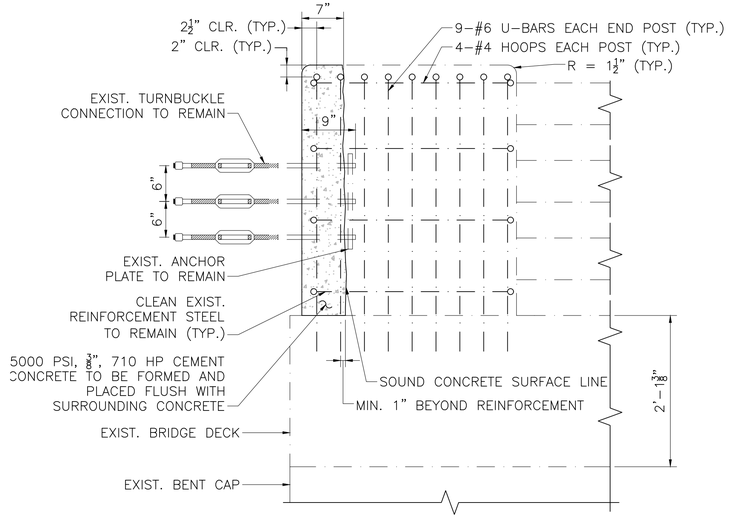
END POST REPAIR SECTION

SCALE: 1½" = 1'–0"



SOUTHWEST END POST
DETERIORATION ELEVATION

SCALE: 1" = 1'–0"



SOUTHWEST END POST
REPAIR ELEVATION

SCALE: 1" = 1'–0"

END POST REPAIR NOTES:

1. SPALLED, DELAMINATED, OR DETERIORATED CONCRETE BRIDGE RAIL AREAS SHALL BE REPAIRED USING 5000 PSI, ⅜", 710 HP CEMENT CONCRETE.
2. ALL DETERIORATED OR DELAMINATED CONCRETE SECTIONS OF BRIDGE RAIL SHALL BE REMOVED TO THE LIMITS NOTED IN THE DETAILS.
3. ALL EXISTING REINFORCING STEEL AND CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH REPAIR CONCRETE SHALL BE CLEANED IN ORDER TO REMOVE ALL RUST, OIL, AND DEBRIS THAT IS NOT TIGHTLY ADHERED, FOLLOWED BY APPLICATION OF COMPRESSED AIR TO REMOVE ALL DUST. EXISTING CONCRETE SURFACES THAT WILL BE IN CONTACT WITH REPAIR CONCRETE SHALL BE PRE–WETTED FOR A MINIMUM OF 24 HOURS USING POTABLE WATER IN ORDER TO ACHIEVE A SATURATED SURFACE DRY CONDITION IMMEDIATELY PRIOR TO PLACEMENT OF REPAIR CONCRETE.
4. NEW STEEL REINFORCEMENT SHALL BE PLACED TO SUPPLEMENT EXISTING REINFORCING THAT HAS A SECTION LOSS OF 25% OR MORE OF THE ORIGINAL CROSS SECTION AREA OR HAS BROKEN, AS DETERMINED BY THE ENGINEER. NEW REINFORCEMENT SHALL EXTEND 30 DIAMETERS IN EACH DIRECTION FROM WHERE THE SECTION LOSS OR BREAK ENDS. THE LIMITS OF REPAIR SHALL BE MODIFIED TO MEET THE REINFORCEMENT STEEL LAP SPLICE REQUIREMENTS. NEW REINFORCING STEEL SHALL BE PLACED AT THE SAME LEVEL OF ALONGSIDE THE EXISTING DETERIORATED OR BROKEN REINFORCING STEEL. IN LIEU OF SUPPLEMENTING A BAR ADJACENT TO A DETERIORATED BAR, THE CONTRACTOR MAY CUT OUT THE EXISTING DETERIORATED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT.
5. POWER WASH, DRY, AND APPLY ELASTOMERIC COATING TO BARRIER IN ACCORDANCE WITH SPECIAL PROVISIONS.
6. REPAIRS SHALL NOT INTERFERE WITH OR DISTURB THE APPROACH ROAD ANCHOR ASSEMBLY, INCLUDING ANY TURNBUCKLES, ANCHOR RODS, OR THE INTERNAL STEEL PLATE WITHIN THE END POST. ALL COMPONENTS SHALL REMAIN IN PLACE AND FUNCTIONAL THROUGHOUT THE REPAIR.

COMMONWEALTH OF MASSACHUSETTS
MassDOT, Highway Division
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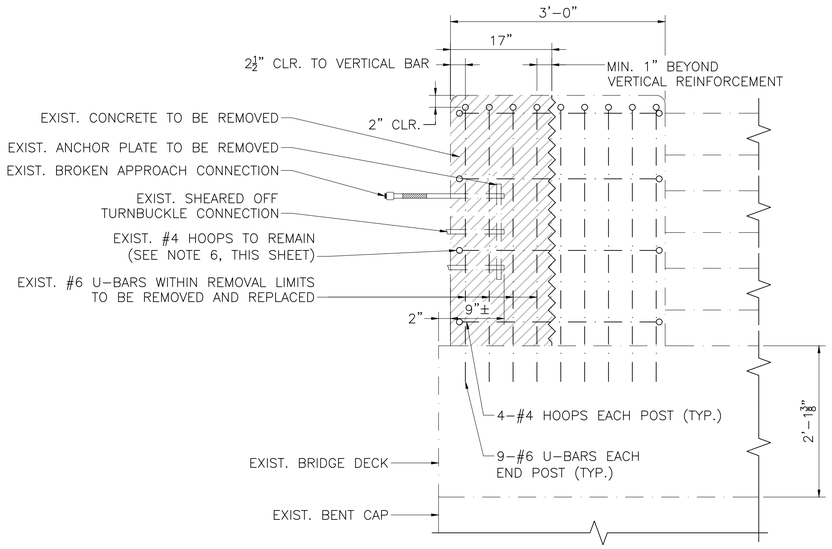
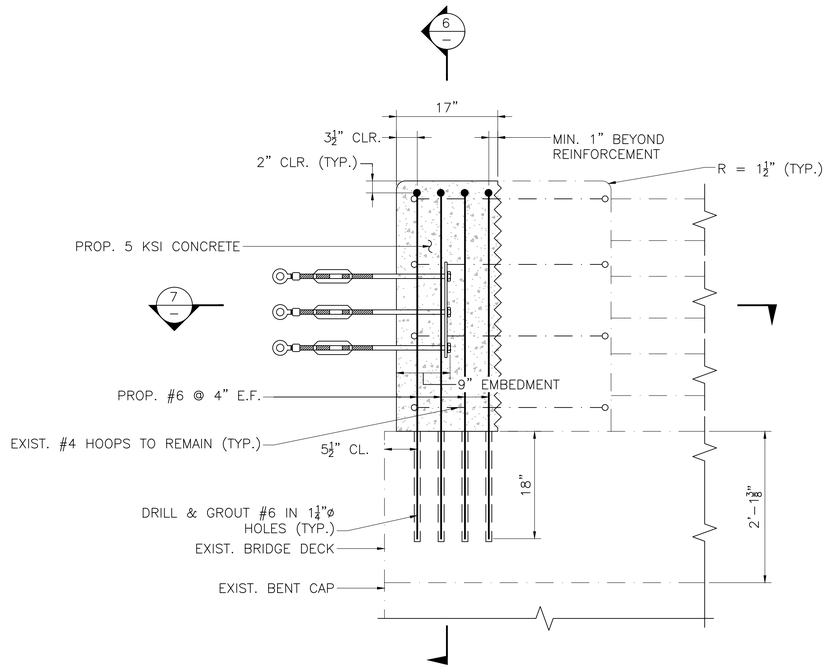
MASS. GEN. LAWS CH 85 S 35

STATE BRIDGE ENGINEER — DATE: 1/12/2026



SOUTHEAST END POST CONCRETE REMOVAL LIMITS

SCALE: 1" = 1'–0"



SOUTHEAST END POST CONCRETE REPAIR LIMITS

SCALE: 1" = 1'–0"

LEXINGTON
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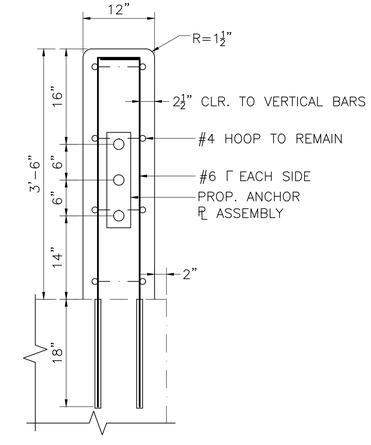
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	7	10
PROJECT FILE NO.	T1559		

RAILING REPAIR DETAILS (3 OF 3)

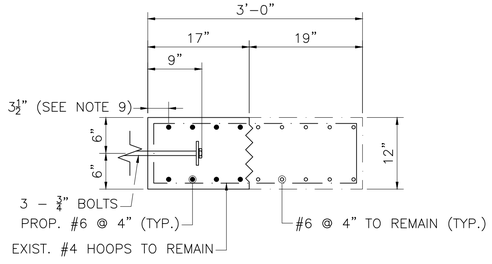
END POST TURNBUCKLE REPAIR NOTES – SOUTHEAST APPROACH:

1. ALL REPLACEMENT BOLTS FOR REATTACHMENT OF APPROACH CONNECTIONS SHALL BE ¾"ø ASTM F1554 GRADE 55 HEADED BOLTS. PROVIDE A MINIMUM EMBEDMENT DEPTH OF 9" AS NOTED. ALL NEW THREADED ANCHOR BOLTS SHALL BE HOT DIP GALVANIZED.
2. REPLACE MISSING OR DAMAGED WIRE ROPE AT APPROACH WITH NEW WIRE ROPE MATCHING THE EXISTING CONDITIONS. VERIFY DIAMETER. STRANDING, AND CONFIGURATION PRIOR TO FABRICATION.
3. SPLICE NEW WIRE ROPE TO EXISTING INTACT SECTIONS USING ¾" GALVANIZED FORGED WIRE ROPE CLIPS, INSTALLED IN ACCORDANCE TO MANUFACTURERS INSTRUCTIONS.
4. TERMINATE WIRE ROPE THROUGH TURNBUCKLE EYE USING A GALVANIZED FORGED WIRE ROPE CLIP. MAINTAIN A MINIMUM BEND RADIUS OF 4½" AT TURNBACK.
5. THE CONTRACTOR SHALL UTILIZE DEMOLITION METHODS TO PROTECT EXISTING REINFORCING STEEL THAT IS SCHEDULED TO REMAIN FROM DAMAGE.
6. CAREFUL DEMOLITION OF THE CONCRETE SHALL BE COMPLETED TO RETAIN EXITING HORIZONTAL BARS. SHOULD THE BARS BE DAMAGED DURING DEMOLITION, THEY SHALL BE REPLACED AT THE SAME SIZE AND SPACING AS THE EXISTING BARS. NEW BARS SHALL BE DRILLED AND GROUTED INTO THE EXISTING CONCRETE TO REMAIN WITH A MINIMUM EMBEDMENT OF 12". BARS SHALL BE OFFSET INWARD SUCH THAT EXISTING REINFORCEMENT IN CONCRETE REGIONS TO REMAIN IS NOT DAMAGED DURING DRILLING OPERATIONS. THE ENGINEER SHALL BE CONSULTED FOR DIRECTION IF MORE THAN 20% OF THE HORIZONTAL BARS ARE DAMAGED.
7. EXISTING REBAR TO REMAIN SHALL BE CLEANED AND INSPECTED PRIOR TO PLACEMENT OF NEW CONCRETE. BARS THAT ARE DAMAGED OR THAT EXPERIENCED MORE THAT 25% SECTION LOSS SHALL BE REPLACED.
8. THE CONCRETE SURFACE TO REMAIN SHALL BE CLEANED OF ALL DUST AND DEBRIS AND PREPARED TO A SATURATED SURFACE DRY CONDITION PRIOR TO PROPOSED CONCRETE PLACEMENT.
9. PROP. #6 VERTICAL BARS SHALL BE OFFSET A MINIMUM OF 1⅛" FROM, BUT AS NEAR AS POSSIBLE TO, THE EXISTING BARS TO ALLOW DRILL HOLES TO AVOID EXISTING VERTICAL BARS THAT WILL REMAIN IN THE DECK. DIMENSIONS SHOWN ARE BASED ON ASSUMPTIONS OF EXISTING BAR LOCATIONS FROM THE EXISTING PLANS AND SHALL BE ADJUSTED AS NEEDED BASED ON FIELD LOCATED PLACEMENT OF EXISTING BARS.
10. ALL CONCRETE SHALL BE 5000 PSI, ⅜", 710 HP CEMENT CONCRETE.



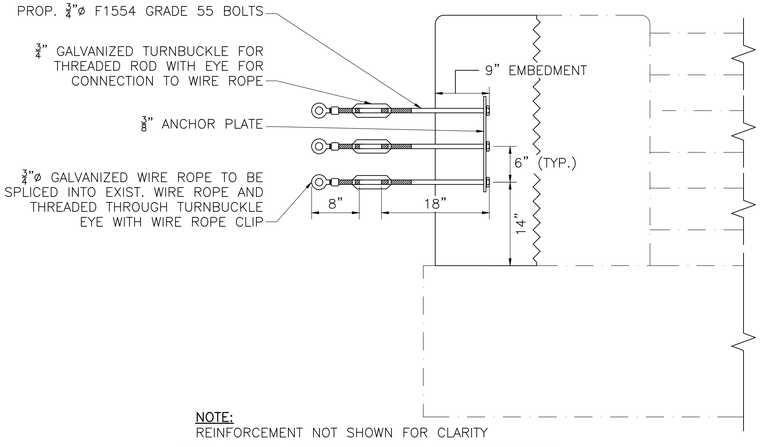
SECTION 6 –

SCALE: 1" = 1'–0"



SECTION 7 –

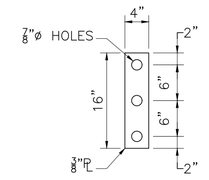
SCALE: 1" = 1'–0"



NOTE:
REINFORCEMENT NOT SHOWN FOR CLARITY

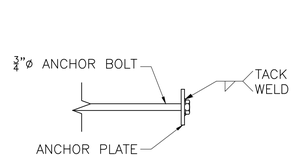
END POST TURNBUCKLE CONNECTION

SCALE: 1" = 1'–0"



ANCHOR PLATE DETAIL

SCALE: 1" = 1'–0"



ANCHOR BOLT DETAIL

SCALE: 1½" = 1'–0"

COMMONWEALTH OF MASSACHUSETTS
MassDOT, Highway Division
APPROVED UNDER PROVISIONS OF
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STATE BRIDGE ENGINEER — 1/12/2026 DATE

1. TEMPORARY TRAFFIC CONTROL LAYOUTS ARE AN ASSUMPTION BASED ON THE NOTED WORK BUT ADDITIONAL OR SLIGHTLY MODIFIED SET-UPS MAY BE USED BY THE CONTRACTOR WITH APPROVAL FROM MASSDOT AND THE ENGINEER.
2. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
3. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS AT THE DISCRETION OF THE CONTRACTOR.
4. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
5. TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
6. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR THE "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
7. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
10. ALL DRUMS AND/OR CONES SHALL BE SET AT 20' O.C. MAXIMUM UNLESS OTHERWISE NOTED OR ADJUSTED BY THE ENGINEER.
11. THE FIRST TEN (10) DRUMS OF ALL TAPERS SHALL INCLUDE REFLECTORIZED DRUMS WITH SEQUENTIAL LIGHTS.
12. MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN ON THE PLANS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PAVEMENT MARKINGS BETWEEN THE POINT OF TAPERS ON EACH END OF THE WORK ZONE FOLLOWING THE COMPLETION OF WORK AS NEEDED AND AT THE DISCRETION OF THE TOWN AND/OR ENGINEER.

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TAPER TYPE	TAPER LENGTH
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FEET MIN, 100 FEET MAX
DOWNSTREAM TAPER	50 FEET MIN., 100 FEET MAX (PER LANE)
TANGENT LENGTH	AT LEAST 2L

SPEED LIMIT	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = WS^2/60$
45 MPH OR GREATER	$L = WS$

WHERE: L = TAPER LENGTH IN FEET

W = WIDTH OF OFFSET IN FEET

S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

BUFFER SPACING

SPEED (MPH)	DISTANCE (FEET)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

BUFFER SPACING NOTES:

1. SPEED NOTED EQUALED TO POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED.

TEMPORARY TRAFFIC CONTROL LEGEND

- WORK ZONE
- DIRECTION OF TRAVEL
- SIGN
- POLICE DETAIL
- TRAFFIC SIGNAL
- ARROW BOARD
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- REFLECTORIZED DRUM W/ SEQUENTIAL FLASHING LIGHTS
- CONSTRUCTION BARRIER
- CONSTRUCTION BARRIER W/ REFLECTORS OR WARNING LIGHTS
- TYPE III BARRICADES
- IMPACT ATTENUATOR
- WORK VEHICLE
- TRUCK MOUNTED ANTTENUATOR
- PORTABLE TRAFFIC SIGNAL W/ MAST ARM
- TEMPORARY TRAFFIC SIGNAL POST
- SIGNAL HOUSING
- PEDESTRIAN SIGNAL HOUSING
- PEDESTRIAN PUSH BUTTON
- PREEMPT RECEIVER
- PREEMPT STROBE
- VIDEO DETECTION CAMERA

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS			
	A	B	C	D
URBAN (30MPH OR LESS)	100 FEET	100 FEET	100 FEET	100 FEET
URBAN (35MPH OR GREATER)	350 FEET	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET	500 FEET
EXPRESSWAY/FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET	500 FEET

SIGN SPACING NOTES:

1. ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING
2. THE "A" DIMENSION SHOULD BE MEASURED FROM THE START OF THE TRAVEL LANE RESTRICTION OR THE SHOULDER / BREAKDOWN LANE RESTRICTION, WHICHEVER IS APPLICABLE.
3. THE "D" DIMENSION SHOULD BE THE DISTANCE FOLLOWING THE TERMINATION OF THE WORK ZONE TO THE PLACEMENT OF THE MA-R2-10e "END WORK ZONE - DOUBLE FINES END" SIGN.
4. MA-R2-10a SIGNS SHALL BE PLACED HALFWAY BETWEEN THE SECOND AND THIRD SIGNS NOTED ABOVE.
5. SIGN SPACING MAY NEED TO BE INCREASED IF ADDITIONAL SIGNS ARE REQUIRED PER THE DETAIL / TYPICAL SETUP FIGURES.

TEMPORARY TRAFFIC CONTROL LEGEND

- WORK ZONE
- SIGN
- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- REFLECTORIZED DRUM W/ SEQUENTIAL FLASHING LIGHTS
- DIRECTION OF TRAVEL
- TEMP IMPACT ATTENUATOR
- CONSTRUCTION BARRIER WITH REFLECTORS

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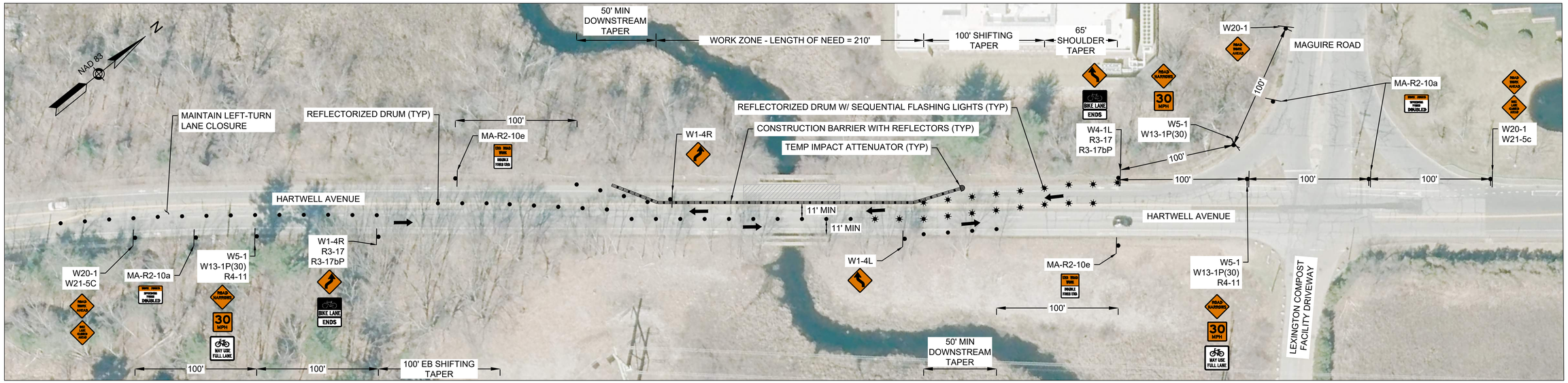
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	10
PROJECT FILE NO.	T1559		

TTCP (2 OF 3)



PHASE 1 - HALF ROAD SOUTHERLY CLOSURE WITH BICYCLE LANE CLOSURE

SCALE: 1" = 40'

0 40 100 160

SCALE: 1" = 40'

PHASE 2 - HALF ROAD NORTHERLY CLOSURE WITH BICYCLE LANE CLOSURE

SCALE: 1" = 40'

0 40 100 160

SCALE: 1" = 40'

LEXINGTON
HARTWELL AVE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	10
PROJECT FILE NO.	T1559		

TTCP (3 OF 3)

TRAFFIC SIGN SUMMARY - BRIDGE L-10-016 TTCP

IDENTIFICATION NUMBER	SIZE OF SIGN (INCHES)		LEGEND	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			NUMBER OF SUPPORTS REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACKGROUND	LEGEND	BORDER			
MA-R2-10a	48	36	WORK ZONES / SPEEDING FINES DOUBLED	(1)			3	FLUORESCENT ORANGE / WHITE	BLACK	BLACK	3	12.00	36.00
MA-R2-10e	36	48	END ROAD WORK / DOUBLE FINES END				2	FLUORESCENT ORANGE / WHITE	BLACK	BLACK	2	12.00	24.00
R3-17	24	18	BIKE LANE	(2)			2	WHITE	BLACK	BLACK	0 1 W/ W1-4L 1 W/ W1-4R	3.00	6.00
R3-17bP	24	9	ENDS				2	WHITE	BLACK	BLACK	0 1 W/ W1-4L 1 W/ W1-4R	1.50	3.00
R4-11	30	30	MAY USE FULL LANE				2	WHITE	BLACK	BLACK	0 2 W/ W5-1	6.25	12.50
W1-4L	24	24					2	FLUORESCENT ORANGE	BLACK	BLACK	2	4.00	8.00
W1-4R	24	24					2	FLUORESCENT ORANGE	BLACK	BLACK	2	4.00	8.00
W5-1	36	36	ROAD NARROWS				3	FLUORESCENT ORANGE	BLACK	BLACK	3	9.00	27.00
W13-1P	18	18	30 MPH				3	FLUORESCENT ORANGE	BLACK	BLACK	0 3 W/ W5-1	2.25	6.75
W20-1	36	36	ROAD WORK AHEAD				3	FLUORESCENT ORANGE	BLACK	BLACK	3	9.00	27.00
W21-5C	36	36	BIKE LANE CLOSED AHEAD				2	FLUORESCENT ORANGE	BLACK	BLACK	0 2 W/ W20-1	9.00	18.00

SIGN SUMMARY NOTES:

1. MASSDOT STANDARD SIGNS.
2. CONTRACTOR SHALL FURNISH SIGNS CONSISTENT WITH 2009 MANUAL ON UNIFORN TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OR LATEST EDITION). SEE MANUAL FOR TEXT AND DIMENSIONS.

APPENDIX B

WETLAND CHARCTERIZATION REPORT

PREPARED BY HANCOCK ASSOCIATES
DATED 03/17/2025
26 SHEETS

Client: TEC, Robert Niccoli, PE
Wetland Delineation Report
Hancock Project #: 28316
Address: Hartwell Avenue, Lexington, MA
Date: March 17, 2025

In execution of TEC Contract (T1559), a Wetland Professional in Training (WPIT) field delineated all jurisdictional wetlands within 100-feet of the Hartwell Avenue bridge over Kiln Brook in Lexington, MA. Based on this delineation, Bordering Vegetated Wetlands (BVW) and Inland Bank associated with perennial Kiln Brook were identified and delineated.

The following report summarizes the findings of this delineation, which was conducted on March 20, 2025, in accordance with MassDEP wetland delineation standards.

Bordering Vegetated Wetlands (BVW)

In accordance with the MA WPA implementing regulations set forth under 310 CMR 10.55 and the utilization of the methodology described within (1) "*BVW: Bordering Vegetated Wetlands Delineation Criteria and Methodology*," issued March 1, 1995; and (2) "*Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act: A handbook*," produced by the Massachusetts Department of Environmental Protection, date March 1995., Hancock Associates staff delineated the following Bordering Vegetated Wetlands (BVW), which are defined under 310 CMR 10.55(2)(a) as, "*freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps, and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants*". The limit of BVW is further defined as *"the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants shall include but not necessarily be limited to those plant species identified in the Act. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Services, U.S. Department of the Interior, 1988) or Plants Exhibiting Physiological or Morphological Adaptations to Life in the Saturated or Inundated Conditions"*.

BVW was delineated to the extent that it would broadcast associated buffer zones toward the limits of proposed work on the roadway. The delineation was performed based on analyzing vegetation, soil conditions within the first 20 inches of the surface and wetland hydrologic indicators within the first 12 inches of the surface. The wetlands contained vegetation composition that comprises a dominance of wetland indicator plant species. Other notable characteristics were the presence of drainage patterns, sphagnum moss, pockets of inundation, water-stained leaves, shallow root systems, low-lying land, and dark mucky surface soils.

BVW was delineated with two (2) flag series, identified as Series A and B, as follows:

A-series Wetland

The A series wetland is a freshwater emergent wetland located downslope to the east of Hartwell Avenue. This wetland broadcasts a 100-foot buffer zone in accordance with the WPA and the Town of Lexington Wetland Protection Code and associated Rules. Under local bylaw, there shall be a strip of 50 feet from the specified resource area remaining undisturbed. The limit of BVW associated with the A-series wetland was demarcated with two (2) series of wetland flags labeled A100 through A103 and A200 through A203.

Within the existing wetland area were dominant wetland indicator plant species such as, cat-tail (*Typha latifolia,* OBL), tussock sedge (*Carex stricta,* OBL), purple loosestrife (*Lythrum salicaria*, OBL), soft rush (*Juncus effusus,* OBL), sensitive fern (*Onoclea sensibilis,* FACW), red osier dogwood (*Swida sericea,* FACW), poison ivy (*Toxicodendron radicans,* FAC), glossy buckthorn (*Frangula alnus*, FAC), common wrinkle-leaved goldenrod (*Solidago rugosa,* FAC), sweet pepperbush (*Clethra alnifolia,* FAC), and red maple (*Acer rubrum*, FAC). This wetland contains sparsely vegetated areas at the toe of slope that appear to have been altered. Along the edge of the wetland flags, there is a steep grade up to the roadside (Hartwell Avenue) that is sparsely vegetated on this side of the roadway.

B-series Wetland

The B series wetland is a freshwater emergent wetland located downslope to the west of Hartwell Avenue. This wetland connects to the A-series Wetland via one (1) culvert connection located between B100 and B200. This wetland broadcasts a 100-foot buffer zone in accordance with the WPA and the Town of Lexington Wetland Protection Code and associated Rules. Under local bylaw, there shall be a strip of 50 feet from the specified resource area remaining undisturbed. The limit of BVW associated with the B-series wetland was demarcated with two (2) series of wetland flags labeled B100 through B104 and B200 through B203.

Dominant wetland indicator plant species within the BVW included cat-tail (*Typha latifolia,* OBL), tussock sedge (*Carex stricta,* OBL), highbush blueberry (*Vaccinium corymbosum,* FACW), sensitive fern (*Onoclea sensibilis,* FACW), red osier dogwood (*Swida sericea,* FACW), common reed (*Phragmites australis,* FACW), cinnamon fern (*Osmundastrum cinnamomeum,* FACW), speckled alder (*Alnus incana,* FACW),poison ivy (*Toxicodendron radicans,* FAC), glossy buckthorn (*Frangula alnus*, FAC), sweet pepperbush (*Clethra alnifolia,* FAC), and red maple (*Acer rubrum,* FAC). Hydric soils were observed as well as hydrologic indicators including shallow root systems, sphagnum moss, water-stained leaves, drainage patterns, and mucky surface soils. Up-gradient of the wetland flags is a small strip of vegetation along the roadside (Hartwell Avenue).

<u>Inland Bank</u>

As defined in 310 CMR 10.54 (2)(a) &(c), a Bank is "*... the portion of the land surface that normally abuts and confines a waterbody*." This land surface "*... may be partially or totally vegetated, or it may be comprised of exposed soil, gravel, or stone*." "*The upper boundary of a Bank is delineated as the first observable break in the slope or the mean annual flood level, whichever is lower.*" Bank is present between a perennial river, lake, or pond and the adjacent

BVW or upland and within intermittent streams. The USGS perennial, Kiln Brook, was observed to flow in a westerly direction through a manmade culvert under Hartwell Avenue.

Bank was delineated with two (2) sets of parallel flag series labeled as MAHW100 and MAHW200 with MAHW300 and MAHW400 on the opposite side of Hartwell Avenue as follows:

MAHW100 and MAHW200 series

The MAHW100 series runs along the bank of the brook parallel to the MAHW200 series and was delineated to the extent that it broadcasts onto the area of proposed work on Site. The limit of the bank was demarcated with two (2) series of flags, labeled MAHW (100 through 102) and MAHW (200 through 204). The limit of the bank has an associated 100-foot Inner Riparian Zone (INZ) and a 200-foot Riverfront Area (RFA) under the WPA and under the Town of Lexington Wetland Protection Code and associated Rules.

MAHW300 and MAHW400 series

The MAHW300 series runs along the bank of the brook parallel to the MAHW400 series and was delineated to the extent that it broadcasts onto the area of proposed work on Site. The limit of the bank was demarcated with two (2) series of flags, labeled MAHW (300 through 304) and MAHW (400 through 403). The limit of the bank has an associated 100-foot Inner Riparian Zone (INZ) and a 200-foot Riverfront Area (RFA) under the WPA and under the Town of Lexington Wetland Protection Code and associated Rules.

<u>Bordering Land Subject to Flooding (BLSF)</u>

According to 310 CMR 10.57, "*Bordering Land Subject to Flooding is an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds, or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland."*

According to the FEMA map 25017C0382F (effective 07/06/2016) there are portions of the Site within special flood zone AE with elevations ranging from 118.51 feet to 119.9 feet. This area is associated with the jurisdictional wetland resource area, BLSF.

Buffer Zone and Setback Zones

Buffer Zone is defined in 310 CRM 10.04 as *"that area of land extending 100 feet horizontally outward from the boundary of any area specified in 310 CMR 10.02(1)(a)."* Buffer Zone within the subject areas of interest is associated with BVW.

Per the Town of Lexington Wetland Protection Code and associated Rules, "*the Commission may require permanent markers at the 25-foot setback line, or to delineate other areas that are not to be disturbed in the future*" and "*where the Buffer Zone has been previously altered within 50 feet of the associated Protected Resource Area, new development shall be located landward of existing development, away from the Protected Resource Area. If the previous development includes a structure with a footprint of more than 250 square feet and, because of the size or shape of the lot, it is impracticable to confine a replacement of or addition to that structure to an area outside the 50-foot buffer, that replacement or addition may create a setback of less than 50 feet from the Protected Resource Area, provided (1) that the proposed setback is no less*

than that from the part of the existing structure that is closest to the Protected Resource Area and (2) that the new construction does not increase the amount of impervious surface within the 50-foot buffer or that, by the application of mitigation measures beyond those normally required by applicable performance standards, the proposed project will result in a net improvement to the capacity of the Buffer Zone to protect the interests set forth in the Lexington Code for Wetland Protection."

Work within the Buffer Zones to BVW and Inland Bank falls under the jurisdiction of both the MA WPA and the Town of Lexington Wetland Protection Code and associated Rules. BVW and Inland Bank have a 100-foot Buffer Zone horizontally off the limits of resource area. Proposed projects within these areas must adhere to certain regulatory performance standards.

As requested, two (2) sets of data forms have been filled out accordingly and attached to this report.

If you have any questions regarding the delineation, please contact me at cwhite@hancockassociates.com or 978-777-3050 ext. 406.

Caitlin White, WPIT
Project Wetland Scientist
Hancock Associates

Attachments:

A – Figures

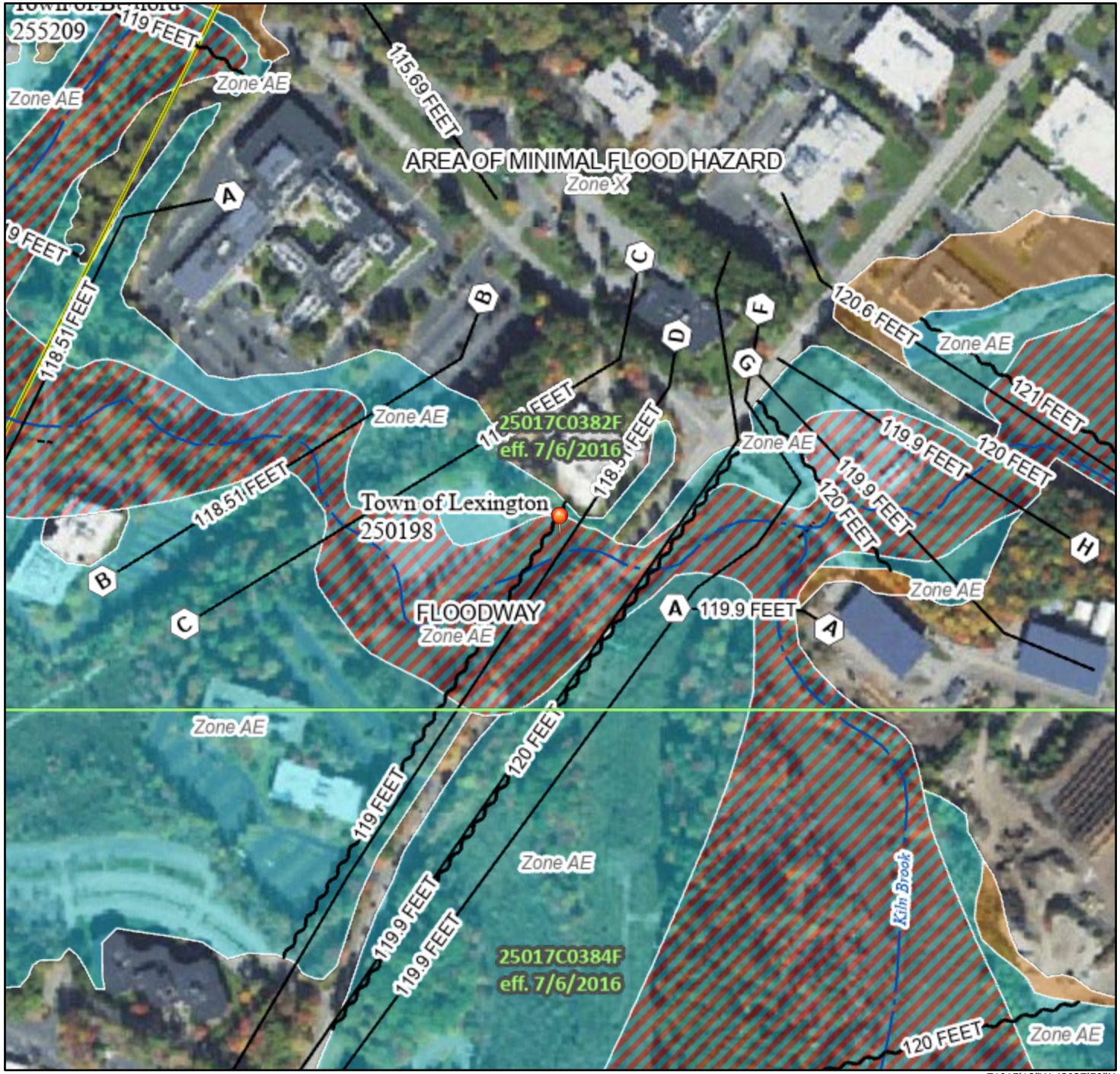
B – Data Forms

Attachment A – Figures

National Flood Hazard Layer FIRMette

FEMA

71°15'55"W 42°28'25"N



71°15'18"W 42°27'59"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/19/2025 at 2:17 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Map Scale: 1:814 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 24, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
32B	Wareham loamy fine sand, 0 to 5 percent slopes	0.0	1.6%
52A	Freetown muck, 0 to 1 percent slopes	1.0	98.4%
Totals for Area of Interest		**1.1**	**100.0%**

Attachment B – Data Forms

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFA101

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of year? Yes [✔] No [ ] (If no, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? (If yes, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes [✔] No [ ]	**Is the Sampled Area within a Wetland?** **Yes [✔] No [ ]**
Hydric Soils criterion met?	Yes [✔] No [ ]	
Wetlands hydrology present?	Yes [✔] No [ ]	

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the wetland side of WFA101

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [✔]	No [ ]	Depth (inches) 2.00
Water Table Present?	Yes [✔]	No [ ]	Depth (inches) -1.00
Saturation Present (including capillary fringe)?	Yes [✔]	No [ ]	Depth (inches) -1.00

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
[✔] Water-stained leaves	[ ] Hydrological records	[✔] Direct observation of inundation
[ ] Evidence of aquatic fauna	[✔] Free water in a soil test hole	[✔] Drainage patterns
[ ] Iron deposits	[✔] Saturated soil	[ ] Drift lines
[ ] Algal mats or crusts	[ ] Water marks	[ ] Scoured areas
[ ] Oxidized rhizospheres/pore linings	[ ] Moss trim lines	[ ] Sediment deposits
[ ] Thin muck surfaces	[ ] Presence of reduced iron	[ ] Surface soil cracks
[ ] Plants with air-filled tissue (aerenchyma)	[ ] Woody plants with adventitious roots	[ ] Sparsely vegetated concave surface
[ ] Plants with polymorphic leaves	[ ] Trees with shallow root systems	[✔] Microtopographic relief
[ ] Plants with floating leaves	[ ] Woody plants with enlarged lenticels	[✔] Geographic position (depression, toe of slope, fringing lowland
[ ] Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. sweet pepperbush	Clethra alnifolia	FAC	10.5	Yes	Yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

10.5 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. flat-top goldenrod	Euthamia graminifolia	FAC	3.0	No	Yes
2. common wrinkle leaved goldenrod	Solidago rugosa	FAC	3.0	No	Yes
3. purple loosestrife	Lythrum salicaria	OBL	3.0	No	Yes
4. tussock sedge	Carex stricta	OBL	10.5	Yes	Yes
5. cat-tail	Typha latifolia	OBL	3.0	No	Yes
6. soft rush	Juncus effusus	OBL	3.0	No	Yes
7.					
8.					
9.					
10.					
11.					
12.					

25.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 15'				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☑
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species?
	2	2		Yes ☐ No ☐
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	20	X 1	=19.50
	FACW species	0	X 2	= 0.00
	FAC species	16	X 3	=49.50
	FACU species	0	X 4	= 0.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 36		(B)69
Prevalence Index		B/A = 1.92		Is the Prevalence Index ≤ 3.0? Yes ☑ No ☐
Wetland vegetation criterion met?	**Yes** ☑	**No** ☐		

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFA101

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-4"	10YR 2/1	100.00					FSL	
4-18"	10YR 5/1	100.00					FSL	Became mucky and saturated

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☑ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks: Water table was about an inch below the surface

Hydric Soils criterion met? **Yes** ☑ **No** ☐

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFA101

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: NA

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ✔ No ☐ (If no, explain in Remarks)

Are Vegetation ☐, Soil ☐ , or Hydrology ☐ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation ☐, Soil ☐ , or Hydrology ☐ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes ☐ No ✔	**Is the Sampled Area within a Wetland?**	**Yes** ☐ **No** ✔
Hydric Soils criterion met?	Yes ☐ No ✔		
Wetlands hydrology present?	Yes ☐ No ✔		

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the upland side of WFA101

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes ☐	No ✔	Depth (inches)_____
Water Table Present?	Yes ☐	No ✔	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes ☐	No ✔	Depth (inches)_____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
☐ Water-stained leaves	☐ Hydrological records	☐ Direct observation of inundation
☐ Evidence of aquatic fauna	☐ Free water in a soil test hole	☐ Drainage patterns
☐ Iron deposits	☐ Saturated soil	☐ Drift lines
☐ Algal mats or crusts	☐ Water marks	☐ Scoured areas
☐ Oxidized rhizospheres/pore linings	☐ Moss trim lines	☐ Sediment deposits
☐ Thin muck surfaces	☐ Presence of reduced iron	☐ Surface soil cracks
☐ Plants with air-filled tissue (aerenchyma)	☐ Woody plants with adventitious roots	☐ Sparsely vegetated concave surface
☐ Plants with polymorphic leaves	☐ Trees with shallow root systems	☐ Microtopographic relief
☐ Plants with floating leaves	☐ Woody plants with enlarged lenticels	☐ Geographic position (depression, toe of slope, fringing lowland
☐ Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. kentucky blue grass	Poa pratensis	FACU	3.0	Yes	No
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

3.0 = Total Cover

VEGETATION – continued.

Woody Vine Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW? Yes ☐ No ☑

Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?
	1	0	Yes ☑ No ☑

Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	0	X 2	=0.00
	FAC species	0	X 3	=0.00
	FACU species	10	X 4	=42.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 10.5		(B)42
Prevalence Index		B/A = 4.00		Is the Prevalence Index ≤ 3.0? Yes ☐ No ☑

Wetland vegetation criterion met? Yes ☐ No ☑

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFA101

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-8"	10YR 2/2	100.00					FSL	
8-20"	10YR 5/4	100.00					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☐ **No** ☑

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFB102

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of year? Yes [✔] No [ ] (If no, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? (If yes, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes [✔] No [ ]	**Is the Sampled Area within a Wetland?** **Yes** [✔] **No** [ ]
Hydric Soils criterion met?	Yes [✔] No [ ]	
Wetlands hydrology present?	Yes [✔] No [ ]	

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the wetland side of WFB102

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)
Water Table Present?	Yes [✔]	No [ ]	Depth (inches) -4.00
Saturation Present (including capillary fringe)?	Yes [✔]	No [ ]	Depth (inches) -2.00

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
[✔] Water-stained leaves	[ ] Hydrological records	[✔] Direct observation of inundation
[ ] Evidence of aquatic fauna	[✔] Free water in a soil test hole	[ ] Drainage patterns
[ ] Iron deposits	[✔] Saturated soil	[ ] Drift lines
[ ] Algal mats or crusts	[ ] Water marks	[ ] Scoured areas
[ ] Oxidized rhizospheres/pore linings	[ ] Moss trim lines	[ ] Sediment deposits
[ ] Thin muck surfaces	[ ] Presence of reduced iron	[ ] Surface soil cracks
[ ] Plants with air-filled tissue (aerenchyma)	[ ] Woody plants with adventitious roots	[ ] Sparsely vegetated concave surface
[ ] Plants with polymorphic leaves	[✔] Trees with shallow root systems	[ ] Microtopographic relief
[ ] Plants with floating leaves	[ ] Woody plants with enlarged lenticels	[ ] Geographic position (depression, toe of slope, fringing lowland
[ ] Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. red maple	Acer rubrum	FAC	3.0	Yes	Yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

3.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. glossy buckthorn	Frangula alnus	FAC	20.5	Yes	Yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

20.5 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. cinnamon fern	Osmundastrum cinnamomeum	FACW	10.5	Yes	Yes
2. poison ivy	Toxicodendron radicans	FAC	3.0	No	Yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

13.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW? Yes ☐ No ☑

Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?
	3	3	Yes ☑ No ☐

Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	10	X 2	= 21.00
	FAC species	26	X 3	= 79.50
	FACU species	0	X 4	= 0.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 37		(B) 100.5
	Prevalence Index	B/A = 2.72		Is the Prevalence Index ≤ 3.0? Yes ☑ No ☐

Wetland vegetation criterion met? Yes ☑ No ☐

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFB102

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-10"	10YR 2/1	100.00					FSL	
10"+	10YR 5/3	100.00					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☑ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☑ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks: Water table was about 4" below surface after percolating.

Hydric Soils criterion met? **Yes** ☑ **No** ☐

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFB102

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of year? Yes [✔] No [ ] (If no, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? (If yes, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes [ ] No [✔]	**Is the Sampled Area within a Wetland?**	**Yes** [ ] **No** [✔]
Hydric Soils criterion met?	Yes [ ] No [✔]		
Wetlands hydrology present?	Yes [ ] No [✔]		

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the upland side of WFB102

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)_____
Water Table Present?	Yes [ ]	No [✔]	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes [ ]	No [✔]	Depth (inches)_____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
[ ] Water-stained leaves	[ ] Hydrological records	[ ] Direct observation of inundation
[ ] Evidence of aquatic fauna	[ ] Free water in a soil test hole	[ ] Drainage patterns
[ ] Iron deposits	[ ] Saturated soil	[ ] Drift lines
[ ] Algal mats or crusts	[ ] Water marks	[ ] Scoured areas
[ ] Oxidized rhizospheres/pore linings	[ ] Moss trim lines	[ ] Sediment deposits
[ ] Thin muck surfaces	[ ] Presence of reduced iron	[ ] Surface soil cracks
[ ] Plants with air-filled tissue (aerenchyma)	[ ] Woody plants with adventitious roots	[ ] Sparsely vegetated concave surface
[ ] Plants with polymorphic leaves	[ ] Trees with shallow root systems	[ ] Microtopographic relief
[ ] Plants with floating leaves	[ ] Woody plants with enlarged lenticels	[ ] Geographic position (depression, toe of slope, fringing lowland
[ ] Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. kentucky blue grass	Poa pratensis	FACU	10.5	Yes	No
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

10.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 15'				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☑
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species?
	1	0		Yes ☑ No ☑
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	0	X 2	=0.00
	FAC species	0	X 3	=0.00
	FACU species	10	X 4	=42.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 10.5		(B)42
Prevalence Index		B/A = 4.00		Is the Prevalence Index ≤ 3.0? Yes ☐ No ☑
Wetland vegetation criterion met?		**Yes** ☐ **No** ☑		

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFB102

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-10"	10YR 5/4	100.00					FSL	
10"+	10YR 5/6	100.00					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☐ **No** ☑

APPENDIX C

ENVIRONMENTAL PERMITS:

NOTICE OF INTENT

ORDER OF CONDITIONS

AND

SELF-VERIFICATION NOTIFICATION

Notice of Intent

TEC Project File No. T1559

Bridge Rehabilitation

Hartwell Ave over Kiln Brook

Prepared for **Town of Lexington**
Department of Public Works
1625 Massachusetts Avenue
Lexington, MA 02420

Prepared by **TEC, Inc.**
282 Merrimack Street, 2nd Floor
Lawrence, MA 01843

September 18, 2025

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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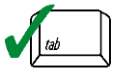
Lexington
City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

Hartwell Avenue	Lexington	02421
a. Street Address	b. City/Town	c. Zip Code

Latitude and Longitude:

42.469733	-71.259609
d. Latitude	e. Longitude

N/A - Public Right-Of-Way	N/A - Public Right-Of-Way
f. Assessors Map/Plat Number	g. Parcel /Lot Number

2. Applicant:

John	Livsey
a. First Name	b. Last Name

Town of Lexington Engineering Dept
c. Organization

201 Bedford Street
d. Street Address

Lexington	MA	02420
e. City/Town	f. State	g. Zip Code

781-274-8300	781-274-8392	
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name	b. Last Name

Town of Lexington
c. Organization

1625 Massachusetts Avenue
d. Street Address

Lexington	MA	02420
e. City/Town	f. State	g. Zip Code

781-862-0500		
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

Kasey	Burke
a. First Name	b. Last Name

TEC, Inc.
c. Company

282 Merrimack Street
d. Street Address

Lawrence	MA	01843
e. City/Town	f. State	g. Zip Code

978-794-1792		kburke@theengineeringcorp.com
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

N/A	N/A	N/A
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid

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A. General Information (continued)

6. General Project Description:

Bridge rehabilitation and repair including pile jacketing of four piles, removal and replacement of the existing utility brackets, patching spalls on the existing concrete bridge rail, and reconnecting the steel cable to the end posts.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☒ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☐ No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

10.53(3)(i) maintenace, repair and improvement of bridges
2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Middlesex County
a. County

b. Certificate # (if registered land)

N/A
c. Book

N/A
d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☒ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☒ Bank	126 (1. linear feet)	126 (2. linear feet)
b. ☒ Bordering Vegetated Wetland	125 (temp) (1. square feet)	125 (restored) (2. square feet)
c. ☒ Land Under Waterbodies and Waterways	153 (1. square feet) 0 (3. cubic yards dredged)	153 (2. square feet)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☒ Bordering Land Subject to Flooding	229 (temp) (1. square feet) 0 (3. cubic feet of flood storage lost)	229 (restored) (2. square feet) 0 (4. cubic feet replaced)
e. ☐ Isolated Land Subject to Flooding	(1. square feet) (2. cubic feet of flood storage lost)	(3. cubic feet replaced)
f. ☒ Riverfront Area	Kiln Brook (1. Name of Waterway (if available) - **specify coastal or inland**)	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☒ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 5400 square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
340	340	0

5. Has an alternatives analysis been done and is it attached to this NOI? ☒ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☒ Yes ☐ No

3. ☐ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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Provided by MassDEP:

MassDEP File Number

Document Transaction Number

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City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

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C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

   a. ☐ Yes ☒ No

   If yes, include proof of mailing or hand delivery of NOI to:

   Natural Heritage and Endangered Species Program
   Division of Fisheries and Wildlife
   1 Rabbit Hill Road
   Westborough, MA 01581

   b. Date of map

   If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

   c. Submit Supplemental Information for Endangered Species Review*

      1. ☐ Percentage/acreage of property to be altered:

         (a) within wetland Resource Area _____ percentage/acreage

         (b) outside Resource Area _____ percentage/acreage

      2. ☐ Assessor's Map or right-of-way plan of site

2. ☒ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

   (a) ☒ Project description (including description of impacts outside of wetland resource area & buffer zone)

   (b) ☒ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review).
Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

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C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review).
Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☒ Not applicable – project is in inland resource area only b. ☐ Yes ☐ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Bourne to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

North Shore - Plymouth to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

c. ☐ Is this an aquaculture project? d. ☐ Yes ☐ No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).

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C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☒ A portion of the site constitutes redevelopment

      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:

      1. ☐ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

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D. Additional Information (cont'd)

3. ☒ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Hartwell Avenue Bridge Rehabilitation
a. Plan Title

TEC, Inc
b. Prepared By

Kasey Burke
c. Signed and Stamped by

d. Final Revision Date

e. Scale

Resource Area Impact Plan
f. Additional Plan or Document Title

9/18/25
g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☐ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☒ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payor name on check: First Name

7. Payor name on check: Last Name

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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant

2. Date 9/22/25

3. Signature of Property Owner (if different)

4. Date

Kasey Burke

5. Signature of Representative (if any)

6. Date 9/22/25

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

1 NARRATIVE

INTRODUCTION AND PURPOSE

The Town of Lexington is proposing bridge rehabilitation at Hartwell Ave over Kiln Brook, hereby referred to as "the bridge" to extend the life of the existing structure. The recent bridge inspection identified structural deficiencies such as deterioration of the timber piles and spalling of the concrete rails. The project proposes rehabilitation to extend the life of the bridge and restore vehicular safety features.

EXISTING CONDITIONS

Constructed in 1959, the Hartwell Ave bridge consists of a three span continuous concrete slab supported by concrete abutments and two timber pile bents. The bridge provides an out-to-out width of 45.5 feet and carries a bike lane and three vehicular lanes of Hartwell Ave, approximately 40 feet wide. There have been no previous modifications to the existing superstructure or substructure. Steel utility supports carry utilities along both sides of the bridge. The west utilities include an 8" gas main, a 14" water main, and a 3" wrapped utility. A 12" diameter sewer main is located at the east side of the bridge. The area surrounding the bridge is composed of wetlands.

The recent bridge inspection identified deterioration of the timber piles in the form of vertical cracks and freeze-thaw damage. The report also identified spalling and exposed reinforcing of the bridge rail and cables missing or loose from the posts.

PROPOSED IMPROVEMENTS

The intent of the proposed improvements is to rehabilitate the bridge to prevent further deterioration of the timber piles. The project also proposes to repair the bridge rail and replace utility brackets. There are no proposed improvements to the superstructure, roadway, or grading around the bridge.

The proposed rehabilitation includes pile jacketing of piles 1 and 9 at bents 2 and 3 (piles numbering can be found on the construction plans). The cross bracing will be removed and replaced at each rehabbed pile. The pile jacketing is proposed as Sika fiberglass reinforced plastic (FRP) pile repair sleeves.

Access to the underside of the bridge and transportation of materials will occur via barge. The barge will be hand launched at the access path proposed on the Resource Area Impact Plan. The access path is proposed as 12 feet wide, located at the southeastern embankment within Town of Lexington property. The access path will require clearing approximately three 12" trees and various shrubs. Grading is not permitted within the path. The Contractor shall provide temporary matting as necessary to provide slope stabilization and secure footing for the barge entry and removal. Resource areas and embankment will be restored after the bridge rehabilitation is completed.

MASSACHUSETTS STREAM CROSSING STANDARDS

The proposed rehabilitation does not alter the structure in such a way that would affect the bridge's present compliance with the Massachusetts Stream Crossing Standards. The superstructure, concrete abutments, stone slopes, and majority of the timber piles are proposed to remain unchanged. Temporary impacts to the streambed will be restored to existing conditions and will not affect Standard 5.

RESOURCE AREAS

Resource areas on or adjacent to the project site were delineated and flagged by Hancock Associates (HA) on March 20, 2025. Delineated resource areas include Bordering Vegetated Wetland, Inland Bank, Riverfront Area, and Bordering Land Subject to Flooding. Resource Areas are described in greater detail below.

BORDERING VEGETATED WETLANDS

Bordering vegetated wetland (BVW) is located surrounding all sides of Kiln Brook. Two flag series were delineated, identified as series A and B.

The A series BVW is located along the upstream banks of Kiln Brook, delineated by flags WF#A100 through WF#A103 south of Kiln Brook and WF#A200 through WF#A203 north of Kiln Brook. The proposed impact to the A series BVW totals 217 SF of temporary disturbance to launch the barge.

The B series BVW is located along the downstream banks of Kiln Brook, delineated by flags WF#B100 through WF#B104 south of Kiln Brook and WF#B200 through WF#B203 north of Kiln Brook. There are no proposed impacts to the B series BVW.

RIVERFRONT AREA

Kiln Brook is designated as a perennial stream by USGS, and has an associated 200-foot Riverfront Area. The Riverfront Area within the limit of work is previously altered for the installation of the existing bridge. The Riverfront Area extends from the limits of the mean annual high water and was delineated by flags WF#MAHW100 through WF#MAHW102 at the southeastern bank, WF#MAHW200 through WF#MAHW204 at the northeastern bank, WF#MAHW300 through WF#MAHW304 at the southwestern bank, and WF#MAHW400 through WF#MAHW401 at the northwestern bank. All flags are associated with Kiln Brook.

Due to the nature of the project, the entirety of the proposed work is located within the 200-foot Riverfront Area. The project proposes approximately 340 SF of temporary disturbance to launch the barge.

INLAND BANK

The limits of the Inland Bank boundary were determined to be coincidental with the upstream Riverfront Area described above. NRCS identifies the existing bank consisting of Freetown muck soils surrounding the Kiln Brook crossing. A 100-foot buffer zone extends from the Bank.

The proposed impacts to the Inland Bank are due to the temporary disturbances of launching the barge and worker access beneath the bridge for pile jacketing. The barge will be launched by hand, limiting the access to foot traffic.

The Bank at the proposed barge launch site is a natural vegetated embankment. Proposed impacts in this section of Bank include 12 LF of temporary impacts. The Bank beneath the bridge consists of a man-made armored stone embankment with little to no vegetation. This area of Bank is unlikely to see tangible damage from the proposed foot traffic, however it has been quantified in an effort to be conservative. Approximately 114 LF of armored Bank is located within the limit of bridge rehabilitation. Temporary impacts to the Bank total 126 LF.

LAND UNDER WATER

Land located below the mean annual low water (MLW) level is considered LUW. The boundary of LUW was not capable of being delineated at the time of inspection by HA due to water flowing above the MLW.

The proposed impact to the Land Under Water is due to the temporary disturbances of installing pile jackets in 4 locations. Based on the available inspection reports, it is not believed that pile deterioration extends below the mudline. Installing the pile jackets may require the adjustment of the surrounding top layer of riprap. Stones will be relocated and replaced by hand as necessary. Approximately 156 SF will be temporarily impacted by the bridge rehabilitation.

BORDERING LAND SUBJECT TO FLOODING

FEMA flood maps of the project site identify Kiln Brook as a regulatory floodway. Zone AE is also located within the project area. Zone AE considered the area up to the limits of a 100-year flood elevation, ranging from elevation 118.5 feet west (downstream) of the

crossing to 119.9 feet east (upstream) of the crossing. The proposed project will not affect grading or flood storage. No BLSF impacts are proposed.

CONSTRUCTION SEQUENCE

The following sequence is a general overview of the proposed project; however, this may be modified based on input from the Conservation Commission (ConCom).

1. Obtain Order of Conditions from ConCom, and secure all needed permitting.
2. Pre-construction meeting with ConCom agent, the Engineer, and the Town.
3. Establish lane and pedestrian route closure and signage.
4. Install erosion control barriers, floating silt fence, temporary tree protection, and silt sacks downgradient of proposed construction area.
5. Perform general site prep and minor clearing as necessary at the access path.
6. Launch the barge.
7. Install pile jackets, remove and replace existing utility brackets, and repair bridge rail.
8. Remove the barge from the water.
9. Restore disturbances to Land Under Water, Bank, and Bordering Vegetated Wetland.
10. Remove road work signs and re-open the path to pedestrian traffic.
11. Perform final inspection and address punch list items.
12. Final acceptance by the Town.
13. Obtain Certificate of Compliance from ConCom.
14. Remove erosion control barriers, floating silt fence, temporary tree protection, and silt sacks.

MITIGATION

The proposed work is to be conducted in the dry season, with construction proposed to begin in June. Prior to construction, erosion control and sedimentation barriers will be installed between the project area and resource areas to establish a limit-of-work. A floating silt fence is proposed to be installed at the downstream mouth of the bridge to catch any debris that inadvertently falls into the stream. See attached construction and resource management plans for the location and detail of the erosion control barriers.

While conducting the above-mentioned improvements a portion of the surrounding resource areas will be temporarily impacted. The temporarily affected areas consist of minor clearing and temporary foot traffic access. A definitive limit of work will be established with erosion control barriers to prevent any additional resource area impacts.

BORDERING VEGETATED WETLANDS

All temporary impacts to resource areas will be monitored and fully restored to pre-construction conditions or better once construction is completed. Wetland seed mix, three (3) red maples (Acer Rubrum), and three (3) sweet pepperbush (Clethra Alnifolia) are proposed within the impacted BVW at the barge launch site. Both plant species are

native to the A-series wetland. Erosion control barriers will not be removed until the site is completely stabilized.

INLAND BANK

The Bank at the proposed barge launch site will be restored using coir log as necessary. The stone Bank beneath the bridge is unlikely to see tangible damage from the proposed foot traffic. Should the stone embankment be disturbed during repairs, it will be restored to pre-construction conditions.

LAND UNDER WATER

The Land Under Water impacts at the 4 locations of pile repair are expected to be limited to adjusting riprap within a 3-foot radius of each pile. The riprap will be restored to pre-construction conditions.

ALTERNATIVE ANALYSIS

The following alternatives were considered during the development of the proposed design:

Alternative 1 – No-Build
The no-build option is not feasible for this project, as the bridge would continue to deteriorate, shortening the life of the structure. The timber piles, concrete rail, and utility brackets would continue to remain structurally deficient. This is not the preferred alternative.

Alternative 2 – Bridge Rehabilitation
Alternative 2 consists of bridge rehabilitation as proposed above. Pile jacketing would be installed on the piles that show the most deterioration, the concrete bridge rail would be repaired, and the utility brackets would be replaced. Alternative 2 is the preferred alternative.

Alternative 3 – Near Future Bridge Replacement
Alternative 3 consists of taking no action to the existing bridge and installing a replacement structure upon signs of failure. This would entail allowing the timber piles to continue to deteriorate, shortening the life span of the bridge, and requiring a replacement structure in the near future. This is not the preferred alternative.

STORMWATER MANAGEMENT

Regulatory Compliance
The proposed improvements do not increase impervious area or modify Hartwell Ave. The project will not increase the peak of surface runoff to Kiln Brook or the Hartwell Ave drainage system. The Massachusetts Stormwater Standards do not apply to this project.

Impaired Waters and TMDLs
The stormwater within the project limits will continue to discharge to Kiln Brook and surrounding Bordering Vegetated Wetlands. Kiln Brook is classified as a Category 4a Integrated Water in the MassDEP Year 2022 integrated List of Waters, also known as the 303(d) list. Waterbodies are listed in Category 4a if all pollutants contributing to their impairment are addressed by one or more EPA-approved TMDLs.

The Hartwell Ave crossing is located within the MA83-10 section of Kiln Brook, defined "outlet unnamed pond (in Pine Meadows Country Club), Lexington, to confluence with Shawsheen River, Bedford", 1.50 miles long. The impairment listed for this waterway is Fecal Coliform. The proposed project will have no effect on the existing TMDL.

CONCLUSION

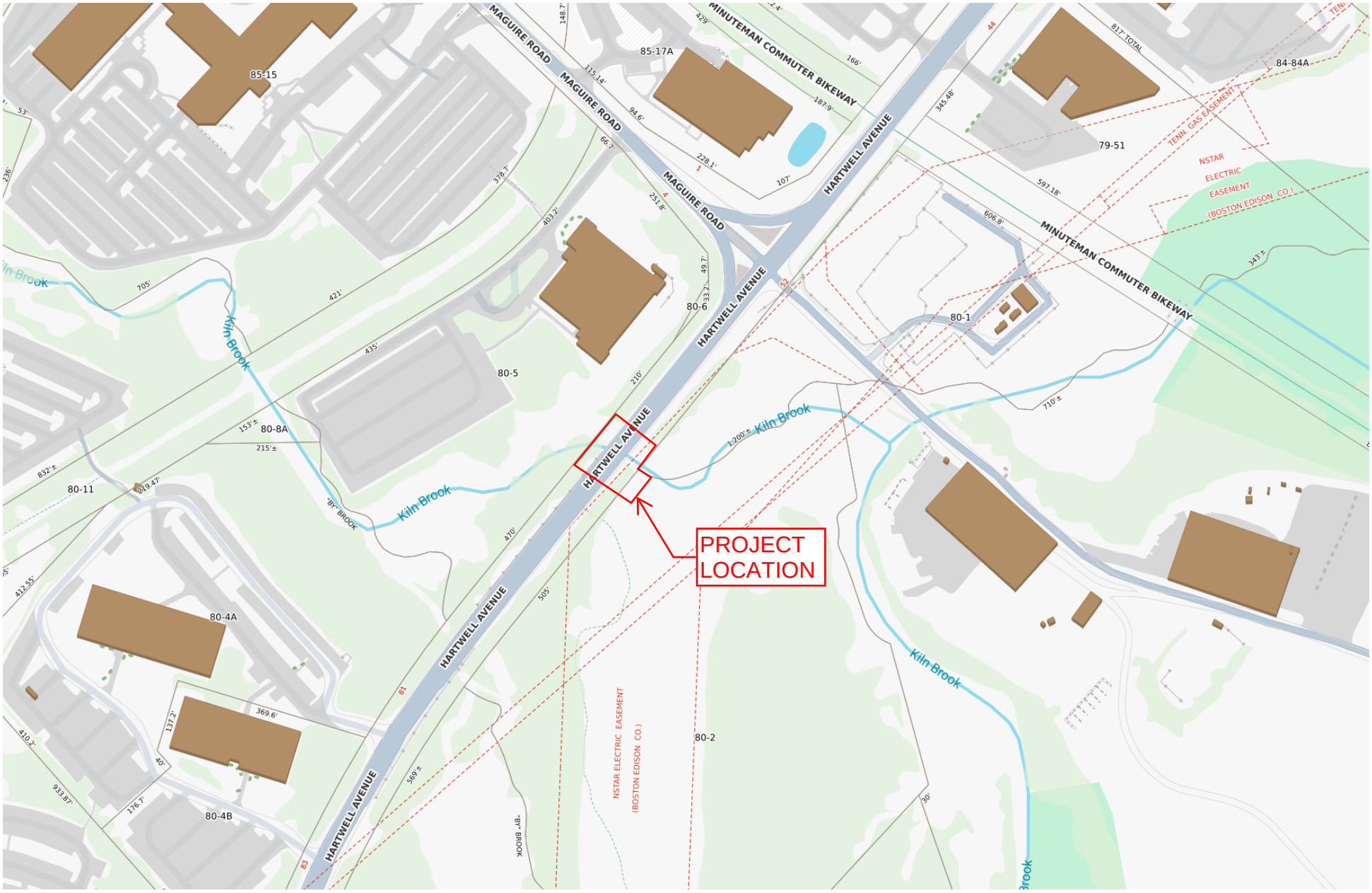
The proposed structure rehabilitation at Hartwell Ave over Kiln Brook will extend the life of the bridge, repair utilities, and restore vehicular safety features. The project includes pile jacketing of four timber piles, replacement of utility brackets, and repair of concrete bridge rail. The proposed project improves public safety and limits impacts on wetland resource areas.

The Applicant requests that the Conservation Commission find that the project as described in this Notice of Intent application successfully upholds the interest of the Wetlands Protection Act and local bylaws, and subsequently issues an Order of Conditions for the proposed project.

2 SUPPORTING MAPS AND DATA

Bridge Rehabilitation Project

Hartwell Ave over Kiln Brook



Hartwell Ave over Kiln Brook

Areas of Critical Environmental Concern ACECs

N/A

Outstanding Resource Waters

- ACEC
- Cape Cod National Seashore
- Protected Shoreline
- Public Water Supply Watershed N/A
- Retired Public Water Supply
- Scenic/Protected River
- Wildlife Refuge

Zone IIs

N/A

Property Tax Parcels

NHESP Priority Habitats of Rare Species

N/A

NHESP Estimated Habitats of Rare Wildlife

N/A

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Massachusetts State Plane Mainland Zone (FIPS zone 2001). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base Map information shown on this FIRM was derived from digital orthophotography. Base map files were provided in digital format by Massachusetts Geographic Information Systems (MassGIS). Aerial photography is dated 2008 or 2009.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

Based on updated topographic information, this map reflects more detailed and up-to-date **stream channel configurations and floodplain delineations** than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for Shawsheen River in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

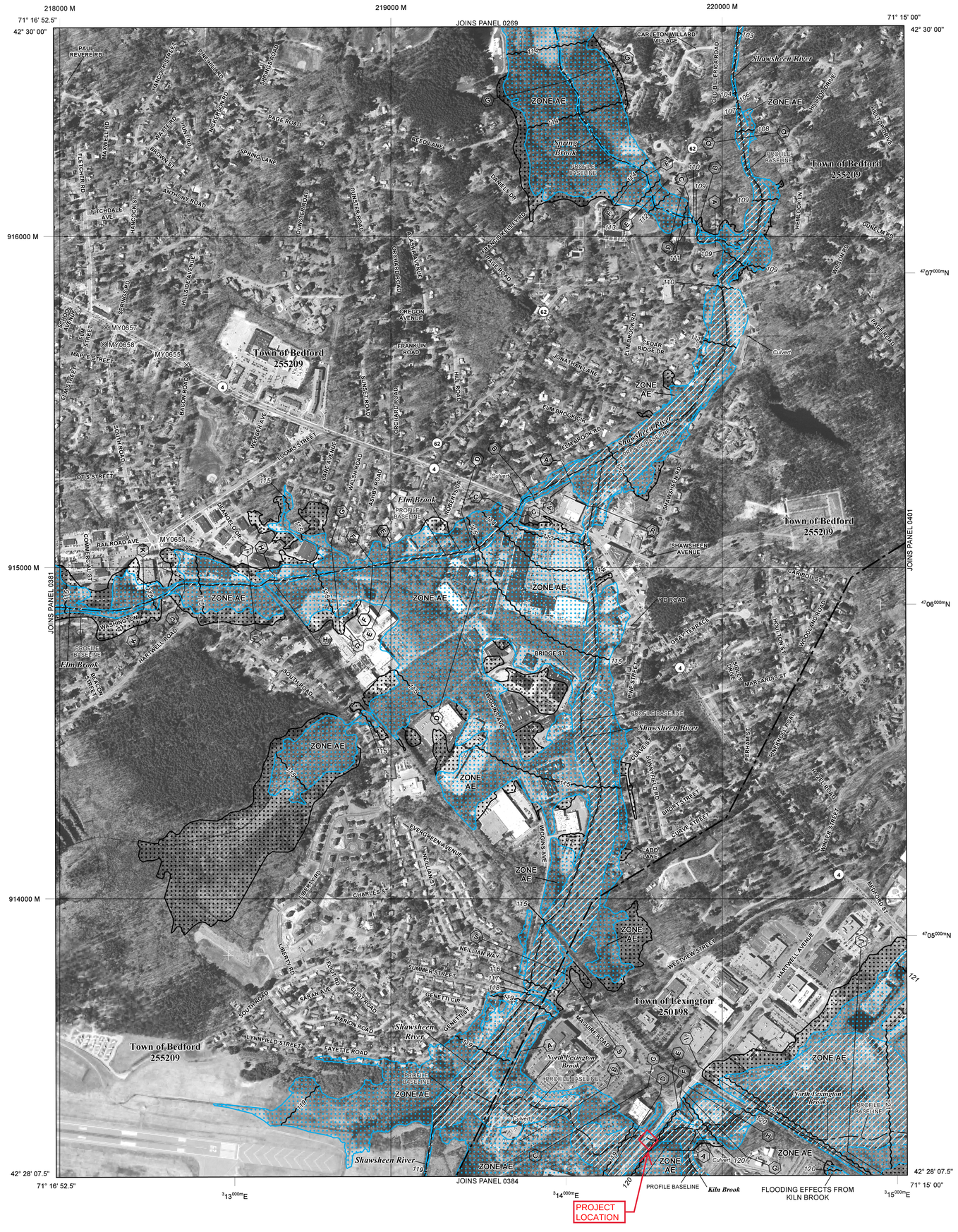
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.

Only coastal structures that are certified to provide protection from the 1-percent-annual chance flood are shown on this panel. However, all structures taken into consideration for the purpose of coastal flood hazard analysis and mapping are present in the DFIRM database in S_Gen_Struct.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Limit of Moderate Wave Action
- Limit of Moderate Wave Action coincident with Zone Break
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

- A / A — Cross section line
- 23 / 23 — Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 4989000 M — 1000-meter grid: Massachusetts State Plane Mainland Zone (FIPS Zone 2001), Lambert Conformal Conic projection
- 4706000mN — 1000-meter Universal Transverse Mercator tick values, zone 19N
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 4, 2010

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
July 6, 2016 - to change Base Flood Elevations and Special Flood Hazard Areas, to change zone designations, to update the effects of wave action, to update corporate limits, to add roads and road names, to incorporate previously issued Letters of Map Revision and to modify Coastal Barrier Resource System units.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'
250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0382F

FIRM

FLOOD INSURANCE RATE MAP

MIDDLESEX COUNTY, MASSACHUSETTS
(ALL JURISDICTIONS)

PANEL 382 OF 656
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BEDFORD, TOWN OF	255209	0382	F
LEXINGTON, TOWN OF	250198	0382	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
25017C0382F
MAP REVISED
JULY 6, 2016

Federal Emergency Management Agency

National Flood Hazard Layer FIRMette

FEMA

71°15'53"W 42°28'24"N

71°15'15"W 42°27'58"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/15/2025 at 1:50 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

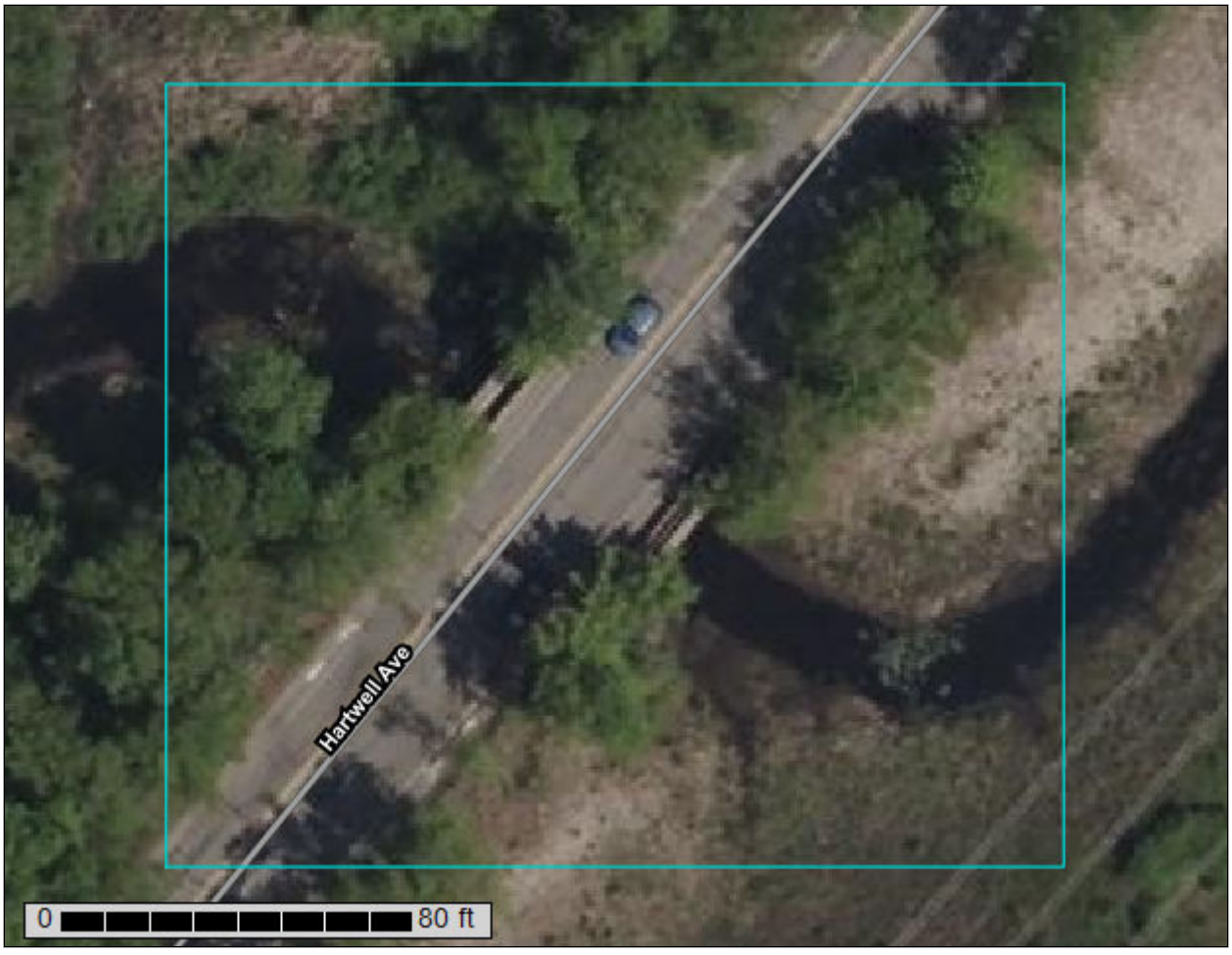
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Middlesex County, Massachusetts



April 15, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:459 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 5 10 20 30

Feet: 0 20 40 80 120

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 24, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
52A	Freetown muck, 0 to 1 percent slopes	0.8	100.0%
Totals for Area of Interest		**0.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Middlesex County, Massachusetts

52A—Freetown muck, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2t2q9
Elevation: 0 to 1,110 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Freetown and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Freetown

Setting

Landform: Depressions, depressions, swamps, kettles, marshes, bogs
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Highly decomposed organic material

Typical profile

Oe - 0 to 2 inches: mucky peat
Oa - 2 to 79 inches: muck

Properties and qualities

Slope: 0 to 1 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Rare
Frequency of ponding: Frequent
Available water supply, 0 to 60 inches: Very high (about 19.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: F144AY043MA - Acidic Organic Wetlands
Hydric soil rating: Yes

Minor Components

Whitman

Percent of map unit: 5 percent
Landform: Drainageways, depressions

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Swansea

Percent of map unit: 5 percent
Landform: Bogs, swamps, marshes, depressions, depressions, kettles
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Scarboro

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope, tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

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3 WETLAND DELINEATION REPORT

Client: TEC, Robert Niccoli, PE
Wetland Delineation Report
Hancock Project #: 28316
Address: Hartwell Avenue, Lexington, MA
Date: March 17, 2025

In execution of TEC Contract (T1559), a Wetland Professional in Training (WPIT) field delineated all jurisdictional wetlands within 100-feet of the Hartwell Avenue bridge over Kiln Brook in Lexington, MA. Based on this delineation, Bordering Vegetated Wetlands (BVW) and Inland Bank associated with perennial Kiln Brook were identified and delineated.

The following report summarizes the findings of this delineation, which was conducted on March 20, 2025, in accordance with MassDEP wetland delineation standards.

Bordering Vegetated Wetlands (BVW)

In accordance with the MA WPA implementing regulations set forth under 310 CMR 10.55 and the utilization of the methodology described within (1) "*BVW: Bordering Vegetated Wetlands Delineation Criteria and Methodology*," issued March 1, 1995; and (2) "*Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act: A handbook*," produced by the Massachusetts Department of Environmental Protection, date March 1995., Hancock Associates staff delineated the following Bordering Vegetated Wetlands (BVW), which are defined under 310 CMR 10.55(2)(a) as, "*freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps, and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants*". The limit of BVW is further defined as *"the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants shall include but not necessarily be limited to those plant species identified in the Act. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Services, U.S. Department of the Interior, 1988) or Plants Exhibiting Physiological or Morphological Adaptations to Life in the Saturated or Inundated Conditions"*.

BVW was delineated to the extent that it would broadcast associated buffer zones toward the limits of proposed work on the roadway. The delineation was performed based on analyzing vegetation, soil conditions within the first 20 inches of the surface and wetland hydrologic indicators within the first 12 inches of the surface. The wetlands contained vegetation composition that comprises a dominance of wetland indicator plant species. Other notable characteristics were the presence of drainage patterns, sphagnum moss, pockets of inundation, water-stained leaves, shallow root systems, low-lying land, and dark mucky surface soils.

BVW was delineated with two (2) flag series, identified as Series A and B, as follows:

A-series Wetland

The A series wetland is a freshwater emergent wetland located downslope to the east of Hartwell Avenue. This wetland broadcasts a 100-foot buffer zone in accordance with the WPA and the Town of Lexington Wetland Protection Code and associated Rules. Under local bylaw, there shall be a strip of 50 feet from the specified resource area remaining undisturbed. The limit of BVW associated with the A-series wetland was demarcated with two (2) series of wetland flags labeled A100 through A103 and A200 through A203.

Within the existing wetland area were dominant wetland indicator plant species such as, cat-tail (*Typha latifolia,* OBL), tussock sedge (*Carex stricta,* OBL), purple loosestrife (*Lythrum salicaria*, OBL), soft rush (*Juncus effusus,* OBL), sensitive fern (*Onoclea sensibilis,* FACW), red osier dogwood (*Swida sericea,* FACW), poison ivy (*Toxicodendron radicans,* FAC), glossy buckthorn (*Frangula alnus*, FAC), common wrinkle-leaved goldenrod (*Solidago rugosa,* FAC), sweet pepperbush (*Clethra alnifolia,* FAC), and red maple (*Acer rubrum*, FAC). This wetland contains sparsely vegetated areas at the toe of slope that appear to have been altered. Along the edge of the wetland flags, there is a steep grade up to the roadside (Hartwell Avenue) that is sparsely vegetated on this side of the roadway.

B-series Wetland

The B series wetland is a freshwater emergent wetland located downslope to the west of Hartwell Avenue. This wetland connects to the A-series Wetland via one (1) culvert connection located between B100 and B200. This wetland broadcasts a 100-foot buffer zone in accordance with the WPA and the Town of Lexington Wetland Protection Code and associated Rules. Under local bylaw, there shall be a strip of 50 feet from the specified resource area remaining undisturbed. The limit of BVW associated with the B-series wetland was demarcated with two (2) series of wetland flags labeled B100 through B104 and B200 through B203.

Dominant wetland indicator plant species within the BVW included cat-tail (*Typha latifolia,* OBL), tussock sedge (*Carex stricta,* OBL), highbush blueberry (*Vaccinium corymbosum,* FACW), sensitive fern (*Onoclea sensibilis,* FACW), red osier dogwood (*Swida sericea,* FACW), common reed (*Phragmites australis,* FACW), cinnamon fern (*Osmundastrum cinnamomeum,* FACW), speckled alder (*Alnus incana,* FACW),poison ivy (*Toxicodendron radicans,* FAC), glossy buckthorn (*Frangula alnus*, FAC), sweet pepperbush (*Clethra alnifolia,* FAC), and red maple (*Acer rubrum,* FAC). Hydric soils were observed as well as hydrologic indicators including shallow root systems, sphagnum moss, water-stained leaves, drainage patterns, and mucky surface soils. Up-gradient of the wetland flags is a small strip of vegetation along the roadside (Hartwell Avenue).

<u>Inland Bank</u>

As defined in 310 CMR 10.54 (2)(a) &(c), a Bank is "*... the portion of the land surface that normally abuts and confines a waterbody*." This land surface "*... may be partially or totally vegetated, or it may be comprised of exposed soil, gravel, or stone*." "*The upper boundary of a Bank is delineated as the first observable break in the slope or the mean annual flood level, whichever is lower.*" Bank is present between a perennial river, lake, or pond and the adjacent

BVW or upland and within intermittent streams. The USGS perennial, Kiln Brook, was observed to flow in a westerly direction through a manmade culvert under Hartwell Avenue.

Bank was delineated with two (2) sets of parallel flag series labeled as MAHW100 and MAHW200 with MAHW300 and MAHW400 on the opposite side of Hartwell Avenue as follows:

MAHW100 and MAHW200 series

The MAHW100 series runs along the bank of the brook parallel to the MAHW200 series and was delineated to the extent that it broadcasts onto the area of proposed work on Site. The limit of the bank was demarcated with two (2) series of flags, labeled MAHW (100 through 102) and MAHW (200 through 204). The limit of the bank has an associated 100-foot Inner Riparian Zone (INZ) and a 200-foot Riverfront Area (RFA) under the WPA and under the Town of Lexington Wetland Protection Code and associated Rules.

MAHW300 and MAHW400 series

The MAHW300 series runs along the bank of the brook parallel to the MAHW400 series and was delineated to the extent that it broadcasts onto the area of proposed work on Site. The limit of the bank was demarcated with two (2) series of flags, labeled MAHW (300 through 304) and MAHW (400 through 403). The limit of the bank has an associated 100-foot Inner Riparian Zone (INZ) and a 200-foot Riverfront Area (RFA) under the WPA and under the Town of Lexington Wetland Protection Code and associated Rules.

<u>Bordering Land Subject to Flooding (BLSF)</u>

According to 310 CMR 10.57, "*Bordering Land Subject to Flooding is an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds, or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland."*

According to the FEMA map 25017C0382F (effective 07/06/2016) there are portions of the Site within special flood zone AE with elevations ranging from 118.51 feet to 119.9 feet. This area is associated with the jurisdictional wetland resource area, BLSF.

Buffer Zone and Setback Zones

Buffer Zone is defined in 310 CRM 10.04 as *"that area of land extending 100 feet horizontally outward from the boundary of any area specified in 310 CMR 10.02(1)(a)."* Buffer Zone within the subject areas of interest is associated with BVW.

Per the Town of Lexington Wetland Protection Code and associated Rules, "*the Commission may require permanent markers at the 25-foot setback line, or to delineate other areas that are not to be disturbed in the future*" and "*where the Buffer Zone has been previously altered within 50 feet of the associated Protected Resource Area, new development shall be located landward of existing development, away from the Protected Resource Area. If the previous development includes a structure with a footprint of more than 250 square feet and, because of the size or shape of the lot, it is impracticable to confine a replacement of or addition to that structure to an area outside the 50-foot buffer, that replacement or addition may create a setback of less than 50 feet from the Protected Resource Area, provided (1) that the proposed setback is no less*

than that from the part of the existing structure that is closest to the Protected Resource Area and (2) that the new construction does not increase the amount of impervious surface within the 50-foot buffer or that, by the application of mitigation measures beyond those normally required by applicable performance standards, the proposed project will result in a net improvement to the capacity of the Buffer Zone to protect the interests set forth in the Lexington Code for Wetland Protection."

Work within the Buffer Zones to BVW and Inland Bank falls under the jurisdiction of both the MA WPA and the Town of Lexington Wetland Protection Code and associated Rules. BVW and Inland Bank have a 100-foot Buffer Zone horizontally off the limits of resource area. Proposed projects within these areas must adhere to certain regulatory performance standards.

As requested, two (2) sets of data forms have been filled out accordingly and attached to this report.

If you have any questions regarding the delineation, please contact me at cwhite@hancockassociates.com or 978-777-3050 ext. 406.

Caitlin White, WPIT
Project Wetland Scientist
Hancock Associates

Attachments:

A – Figures

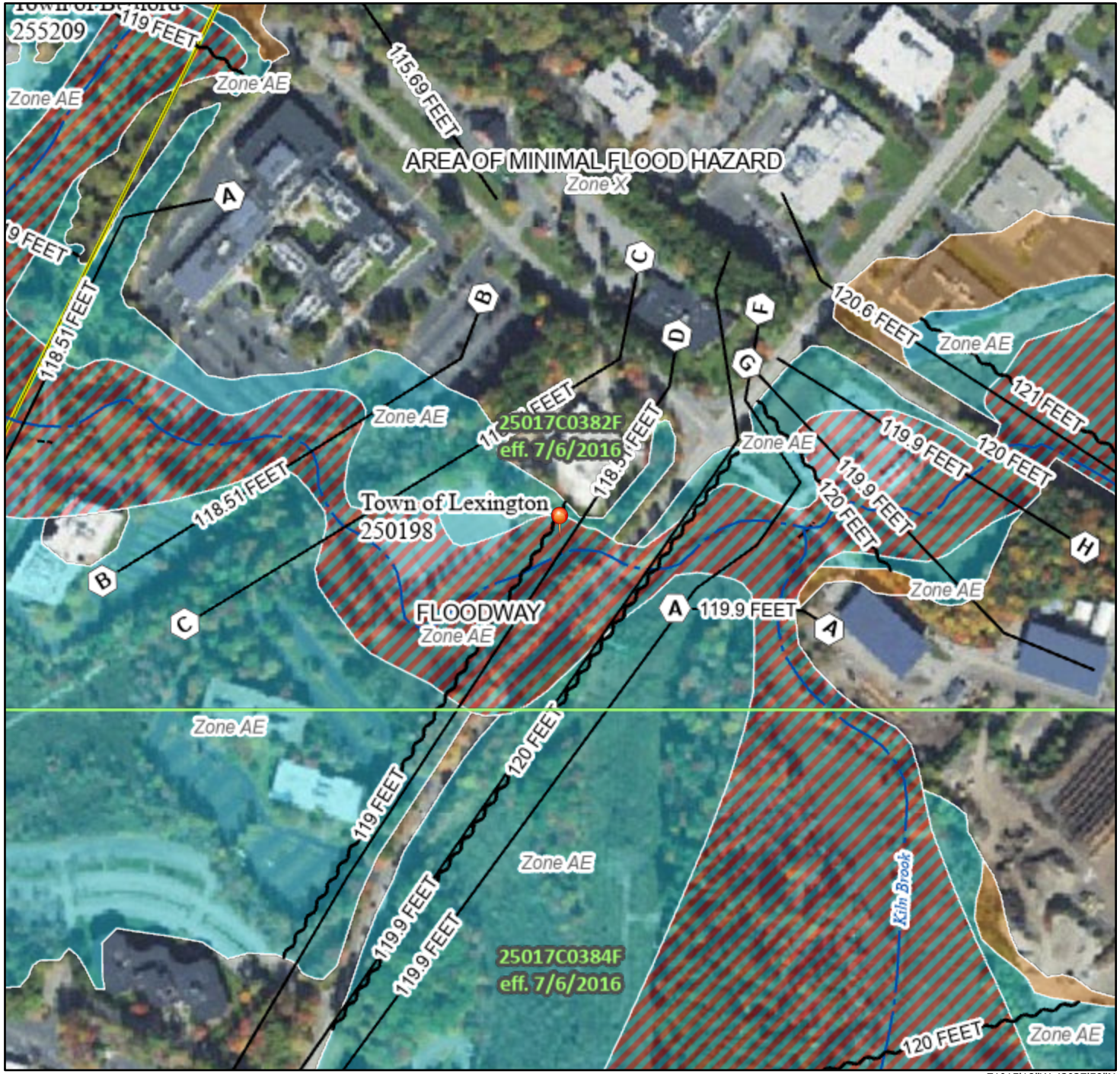
B – Data Forms

Attachment A – Figures

National Flood Hazard Layer FIRMette

FEMA

71°15'55"W 42°28'25"N



71°15'18"W 42°27'59"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/19/2025 at 2:17 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Map Scale: 1:814 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 35 70 140 210

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
Survey Area Data: Version 24, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
32B	Wareham loamy fine sand, 0 to 5 percent slopes	0.0	1.6%
52A	Freetown muck, 0 to 1 percent slopes	1.0	98.4%
Totals for Area of Interest		**1.1**	**100.0%**

Attachment B – Data Forms

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFA101

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of year? Yes [✔] No [ ] (If no, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? (If yes, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes [✔] No [ ]	**Is the Sampled Area within a Wetland?** **Yes [✔] No [ ]**
Hydric Soils criterion met?	Yes [✔] No [ ]	
Wetlands hydrology present?	Yes [✔] No [ ]	

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the wetland side of WFA101

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [✔]	No [ ]	Depth (inches) 2.00
Water Table Present?	Yes [✔]	No [ ]	Depth (inches) -1.00
Saturation Present (including capillary fringe)?	Yes [✔]	No [ ]	Depth (inches) -1.00

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
[✔] Water-stained leaves	[ ] Hydrological records	[✔] Direct observation of inundation
[ ] Evidence of aquatic fauna	[✔] Free water in a soil test hole	[✔] Drainage patterns
[ ] Iron deposits	[✔] Saturated soil	[ ] Drift lines
[ ] Algal mats or crusts	[ ] Water marks	[ ] Scoured areas
[ ] Oxidized rhizospheres/pore linings	[ ] Moss trim lines	[ ] Sediment deposits
[ ] Thin muck surfaces	[ ] Presence of reduced iron	[ ] Surface soil cracks
[ ] Plants with air-filled tissue (aerenchyma)	[ ] Woody plants with adventitious roots	[ ] Sparsely vegetated concave surface
[ ] Plants with polymorphic leaves	[ ] Trees with shallow root systems	[✔] Microtopographic relief
[ ] Plants with floating leaves	[ ] Woody plants with enlarged lenticels	[✔] Geographic position (depression, toe of slope, fringing lowland
[ ] Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. sweet pepperbush	Clethra alnifolia	FAC	10.5	Yes	Yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

10.5 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. flat-top goldenrod	Euthamia graminifolia	FAC	3.0	No	Yes
2. common wrinkle leaved goldenrod	Solidago rugosa	FAC	3.0	No	Yes
3. purple loosestrife	Lythrum salicaria	OBL	3.0	No	Yes
4. tussock sedge	Carex stricta	OBL	10.5	Yes	Yes
5. cat-tail	Typha latifolia	OBL	3.0	No	Yes
6. soft rush	Juncus effusus	OBL	3.0	No	Yes
7.					
8.					
9.					
10.					
11.					
12.					

25.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 15'				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☑
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species?
	2	2		Yes ☐ No ☐
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	20	X 1	=19.50
	FACW species	0	X 2	= 0.00
	FAC species	16	X 3	=49.50
	FACU species	0	X 4	= 0.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 36		(B)69
Prevalence Index		B/A = 1.92		Is the Prevalence Index ≤ 3.0? Yes ☑ No ☐
Wetland vegetation criterion met?	**Yes** ☑	**No** ☐		

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFA101

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-4"	10YR 2/1	100.00					FSL	
4-18"	10YR 5/1	100.00					FSL	Became mucky and saturated

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☑ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks: Water table was about an inch below the surface

Hydric Soils criterion met? **Yes** ☑ **No** ☐

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFA101

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: NA

Are climatic/hydrologic conditions on the site typical for this time of year? Yes ✔ No ☐ (If no, explain in Remarks)

Are Vegetation ☐, Soil ☐ , or Hydrology ☐ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation ☐, Soil ☐ , or Hydrology ☐ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes ☐ No ✔	**Is the Sampled Area within a Wetland?**	**Yes** ☐ **No** ✔
Hydric Soils criterion met?	Yes ☐ No ✔		
Wetlands hydrology present?	Yes ☐ No ✔		

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the upland side of WFA101

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes ☐	No ✔	Depth (inches)_____
Water Table Present?	Yes ☐	No ✔	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes ☐	No ✔	Depth (inches)_____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
☐ Water-stained leaves	☐ Hydrological records	☐ Direct observation of inundation
☐ Evidence of aquatic fauna	☐ Free water in a soil test hole	☐ Drainage patterns
☐ Iron deposits	☐ Saturated soil	☐ Drift lines
☐ Algal mats or crusts	☐ Water marks	☐ Scoured areas
☐ Oxidized rhizospheres/pore linings	☐ Moss trim lines	☐ Sediment deposits
☐ Thin muck surfaces	☐ Presence of reduced iron	☐ Surface soil cracks
☐ Plants with air-filled tissue (aerenchyma)	☐ Woody plants with adventitious roots	☐ Sparsely vegetated concave surface
☐ Plants with polymorphic leaves	☐ Trees with shallow root systems	☐ Microtopographic relief
☐ Plants with floating leaves	☐ Woody plants with enlarged lenticels	☐ Geographic position (depression, toe of slope, fringing lowland
☐ Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. kentucky blue grass	Poa pratensis	FACU	3.0	Yes	No
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

3.0 = Total Cover

VEGETATION – continued.

Woody Vine Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW? Yes ☐ No ☑

Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?
	1	0	Yes ☑ No ☑

Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	0	X 2	=0.00
	FAC species	0	X 3	=0.00
	FACU species	10	X 4	=42.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 10.5		(B)42
Prevalence Index		B/A = 4.00		Is the Prevalence Index ≤ 3.0? Yes ☐ No ☑

Wetland vegetation criterion met? Yes ☐ No ☑

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFA101

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-8"	10YR 2/2	100.00					FSL	
8-20"	10YR 5/4	100.00					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☐ **No** ☑

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFB102

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of year? Yes [✔] No [ ] (If no, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? (If yes, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes [✔] No [ ]	**Is the Sampled Area within a Wetland?** **Yes** [✔] **No** [ ]
Hydric Soils criterion met?	Yes [✔] No [ ]	
Wetlands hydrology present?	Yes [✔] No [ ]	

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the wetland side of WFB102

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)
Water Table Present?	Yes [✔]	No [ ]	Depth (inches) -4.00
Saturation Present (including capillary fringe)?	Yes [✔]	No [ ]	Depth (inches) -2.00

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
[✔] Water-stained leaves	[ ] Hydrological records	[✔] Direct observation of inundation
[ ] Evidence of aquatic fauna	[✔] Free water in a soil test hole	[ ] Drainage patterns
[ ] Iron deposits	[✔] Saturated soil	[ ] Drift lines
[ ] Algal mats or crusts	[ ] Water marks	[ ] Scoured areas
[ ] Oxidized rhizospheres/pore linings	[ ] Moss trim lines	[ ] Sediment deposits
[ ] Thin muck surfaces	[ ] Presence of reduced iron	[ ] Surface soil cracks
[ ] Plants with air-filled tissue (aerenchyma)	[ ] Woody plants with adventitious roots	[ ] Sparsely vegetated concave surface
[ ] Plants with polymorphic leaves	[✔] Trees with shallow root systems	[ ] Microtopographic relief
[ ] Plants with floating leaves	[ ] Woody plants with enlarged lenticels	[ ] Geographic position (depression, toe of slope, fringing lowland
[ ] Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Form Revised July 2023

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. red maple	Acer rubrum	FAC	3.0	Yes	Yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

3.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. glossy buckthorn	Frangula alnus	FAC	20.5	Yes	Yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

20.5 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. cinnamon fern	Osmundastrum cinnamomeum	FACW	10.5	Yes	Yes
2. poison ivy	Toxicodendron radicans	FAC	3.0	No	Yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

13.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW? Yes ☐ No ☑

Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species?
	3	3	Yes ☑ No ☐

Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	10	X 2	= 21.00
	FAC species	26	X 3	= 79.50
	FACU species	0	X 4	= 0.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 37		(B) 100.5
	Prevalence Index	B/A = 2.72		Is the Prevalence Index ≤ 3.0? Yes ☑ No ☐

Wetland vegetation criterion met? Yes ☑ No ☐

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFB102

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-10"	10YR 2/1	100.00					FSL	
10"+	10YR 5/3	100.00					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☑ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☑ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks: Water table was about 4" below surface after percolating.

Hydric Soils criterion met? **Yes** ☑ **No** ☐

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Hartwell Avenue City/Town: Lexington Sampling Date: 03/20/25

Applicant/Owner: TEC Sampling Point or Zone: WFB102

Investigator(s): Caitlin White, WPIT Latitude / Longitude:

Soil Map Unit Name: 52A, Freetown muck NWI or DEP Classification: PEM1E

Are climatic/hydrologic conditions on the site typical for this time of year? Yes [✔] No [ ] (If no, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? (If yes, explain in Remarks)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes [ ] No [✔]	**Is the Sampled Area within a Wetland?**	**Yes** [ ] **No** [✔]
Hydric Soils criterion met?	Yes [ ] No [✔]		
Wetlands hydrology present?	Yes [ ] No [✔]		

Remarks, Photo Details, Flagging, etc.:
Data plot was taken on the upland side of WFB102

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes [ ]	No [✔]	Depth (inches)_____
Water Table Present?	Yes [ ]	No [✔]	Depth (inches)_____
Saturation Present (including capillary fringe)?	Yes [ ]	No [✔]	Depth (inches)_____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
[ ] Water-stained leaves	[ ] Hydrological records	[ ] Direct observation of inundation
[ ] Evidence of aquatic fauna	[ ] Free water in a soil test hole	[ ] Drainage patterns
[ ] Iron deposits	[ ] Saturated soil	[ ] Drift lines
[ ] Algal mats or crusts	[ ] Water marks	[ ] Scoured areas
[ ] Oxidized rhizospheres/pore linings	[ ] Moss trim lines	[ ] Sediment deposits
[ ] Thin muck surfaces	[ ] Presence of reduced iron	[ ] Surface soil cracks
[ ] Plants with air-filled tissue (aerenchyma)	[ ] Woody plants with adventitious roots	[ ] Sparsely vegetated concave surface
[ ] Plants with polymorphic leaves	[ ] Trees with shallow root systems	[ ] Microtopographic relief
[ ] Plants with floating leaves	[ ] Woody plants with enlarged lenticels	[ ] Geographic position (depression, toe of slope, fringing lowland
[ ] Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

Tree Stratum Plot size 30'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

0.0 = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. kentucky blue grass	Poa pratensis	FACU	10.5	Yes	No
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

10.5 = Total Cover

VEGETATION – continued.

Woody Vine Stratum	Plot size 15'				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1.					
2.					
3.					
4.					
			0.0 = Total Cover		

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?				Yes ☐ No ☑
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species?
	1	0		Yes ☑ No ☑
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0.00
	FACW species	0	X 2	=0.00
	FAC species	0	X 3	=0.00
	FACU species	10	X 4	=42.00
	UPL species	0	X 5	= 0.00
	Column Totals	(A) 10.5		(B)42
Prevalence Index		B/A = 4.00		Is the Prevalence Index ≤ 3.0? Yes ☐ No ☑
Wetland vegetation criterion met?		**Yes** ☐ **No** ☑		

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point WFB102

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
0-10"	10YR 5/4	100.00					FSL	
10"+	10YR 5/6	100.00					FSL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8)	☐ 2 cm Muck (A10)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3)
☐ Black Histic (A3)	☐ Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12)
☐ Hydrogen Sulfide (A4)	☐ Depleted Matrix (F3)	☐ Mesic Spodic (A17)
☐ Stratified Layers (A5)	☐ Redox Dark Surface (F6)	☐ Red Parent Material (F21)
☐ Depleted Below Dark Surface (A11)	☐ Depleted Dark Surface (F7)	☐ Very Shallow Dark Surface (F22)
☐ Thick Dark Surface (A12)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		
☐ Sandy Gleyed Matrix (S4)		
☐ Sandy Redox (S5)		☐ Other (Include Explanation in Remarks)
☐ Stripped Matrix (S6)		
☐ Dark Surface (S7)		

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? **Yes** ☐ **No** ☑

4 PHOTO LOG

282 Merrimack Street, 2nd Floor
Lawrence, MA 01843
978.794.1792

TheEngineeringCorp.com
Create | Design | Innovate

PHOTO LOG – Photos taken on October 17, 2024

Figure 1 – North approach. Photo taken facing southeast.

Figure 2 – Upstream. Photo taken facing east.

PHOTO LOG – Photos taken on October 17, 2024

Figure 3 – Downstream. Photo taken facing southwest.

Figure 4 – Status of piers and south riprap slope. Photo taken facing east (upstream).

PHOTO LOG – Photos taken on October 17, 2024

Figure 5 – Status of piers and south riprap slope. Photo taken facing southwest (downstream).

Figure 6 – Status of piers and north riprap slope. Photo taken facing southwest (downstream).

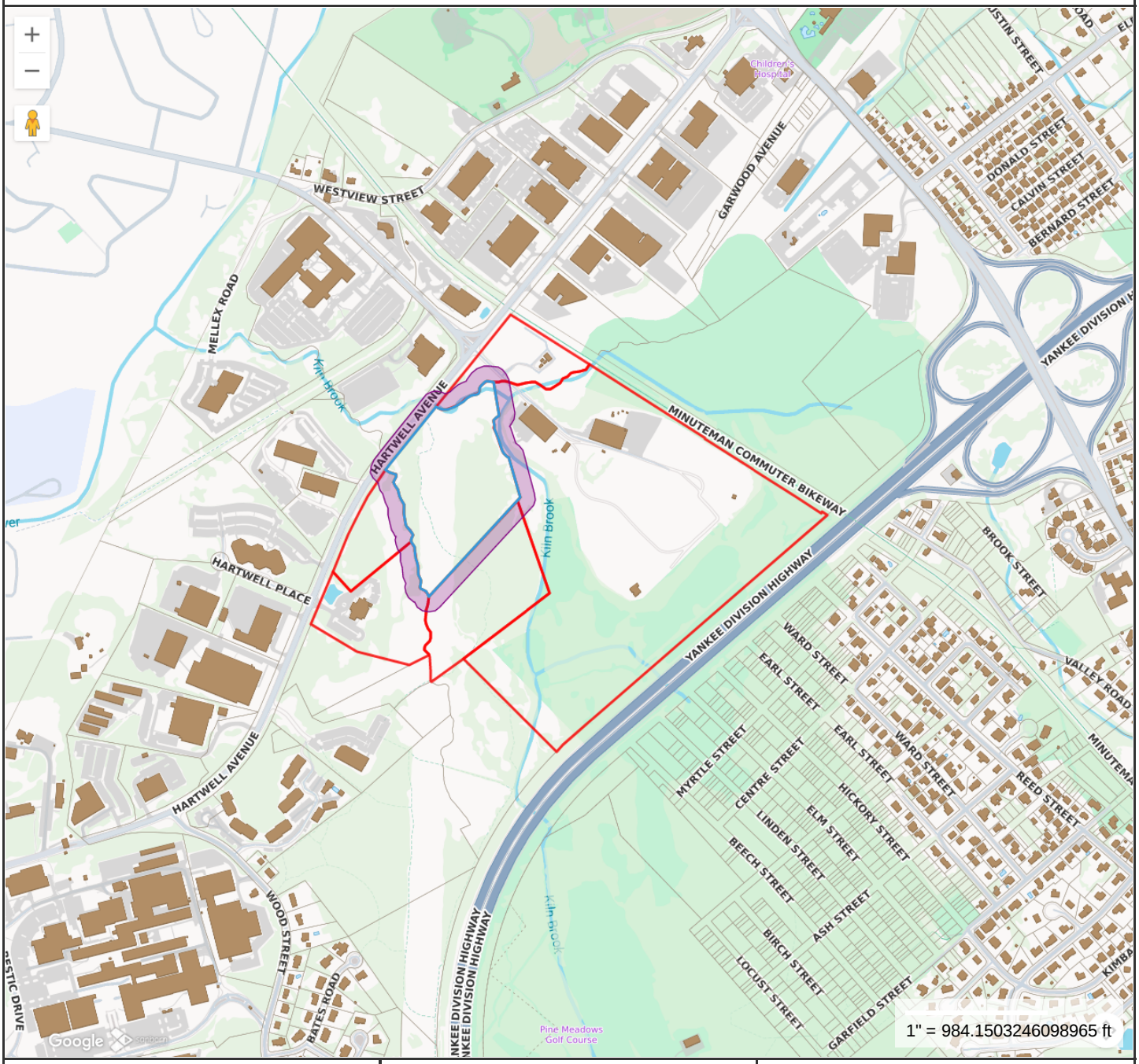
PHOTO LOG – Photos taken on October 17, 2024

Figure 7 – Status of piers and north riprap slope. Photo taken facing east (upstream).

Figure 8 – Location of proposed barge entry at northeast bank. Photo taken facing northeast (upstream).

5 ABUTTERS INFORMATION

0 HARTWELL AVE



Property Information

Property ID	80-2
Location	HARTWELL AVE
Owner	TOWN OF LEXINGTON

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town of Lexington, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated on a daily basis
Data updated on a daily basis

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

Town of Lexington, MA Abutters Report

100ft. Abutters of Property 80-2
at HARTWELL AVE

Please be aware that the abutters list reflects mailing address for the real estate tax bills as requested by the property owners. Mortgage companies, banks and other financial institutions may be receiving the notification and not the homeowner as required. Please be sure you are complying with notification requirements. Property data updated on a daily basis.

Abutter	Street Address	Account No.	Tax Bill Address
79-50 TOWN OF LEXINGTON	HARTWELL AVE	11226	TOWN OF LEXINGTON 1625 MASS AVE LEXINGTON, MA 02420
73-8 TOWN OF LEXINGTON	HARTWELL AVE	10492	TOWN OF LEXINGTON 1625 MASSACHUSETTS AVE LEXINGTON, MA 02420
80-3 TOWN OF LEXINGTON - CONSERVATION	HARTWELL AVE	11234	TOWN OF LEXINGTON - CONSERVATION 1625 MASSACHUSETTS AVE LEXINGTON, MA 02420
73-9A HARTWELL HOSPITALITY LLC	94 HARTWELL AVE	10499	HARTWELL HOSPITALITY LLC 440 BEDFORD ST LEXINGTON, MA 02420
80-1 BOSTON EDISON COMPANY	52 HARTWELL AVE	11232	BOSTON EDISON COMPANY PO BOX 270 HARTFORD, CT 06141

79-50
TOWN OF LEXINGTON
1625 MASS AVE
LEXINGTON, MA 02420

73-8
TOWN OF LEXINGTON
1625 MASSACHUSETTS AVE
LEXINGTON, MA 02420

80-3
TOWN OF LEXINGTON - CONSERVATION
1625 MASSACHUSETTS AVE
LEXINGTON, MA 02420

73-9A
HARTWELL HOSPITALITY LLC
440 BEDFORD ST
LEXINGTON, MA 02420

80-1
BOSTON EDISON COMPANY
PO BOX 270
HARTFORD, CT 06141

SUPPLEMENTAL ABUTTER INFORMATION

ABUTTER	STREET ADDRESS	TAX BILL ADDRESS
80-5	4 MAGUIRE ROAD	MAGUIRE ROAD MA LLC
MAGUIRE ROAD MA LLC		255 WASHINGTON STREET STE 270
		NEWTON, MA 024558

80-5
MAGUIRE ROAD MA LLC
255 WASHINGTON STREET STE 270
NEWTON, MA 02458

LEGEND

- TEMP BVW IMPACTS 125 SF
- TEMP LUW IMPACTS 153 SF
- TEMP BANK IMPACT 126 LF
- BLSF (ELEV 118.5' to 119.9')
- DELINEATED RESOURCE AREA
- BUFFER TO BVW
- LIMIT OF WORK

PROPOSED PLANTING SUMMARY TABLE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	3	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24" - 36"	5' ON CENTER
	3	ACER RUBRUM	RED MAPLE	MIN 6'	10' ON CENTER

PLANTING NOTES:

1. CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
2. FINAL LOCATION OF ALL PLANT MATERIAL WILL BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.
3. ALL PLANT MATERIAL WILL HAVE TAGS INDICATING COMMON NAME, BOTANICAL NAME & SIZE.
4. PLANTING SOIL OR LOAM SHALL BE APPLIED TO ALL DISTURBED AREAS AND SEEDED WITH THE CORRESPONDING SEED MIX PER THE APPLICABLE DETAIL.
5. IMPORTED SOIL SHALL CONSIST OF EQUAL PARTS ORGANIC MATTER (LEAF COMPOST IS PREFERRED) AND CLEAN LOAM OR ORGANIC RICH LOAM WITH A MINIMUM 20% ORGANIC CARBON BY DRY WEIGHT. SURVEYING OF SUBGRADES AND FINISHED ELEVATIONS SHOULD BE CONDUCTED FREQUENTLY DURING CONSTRUCTION. CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED. THEY SHOULD BE TRANSPORTED IN VEHICLES THAT HAVE BEEN WASHED SO THAT NO EXOTIC/INVASIVE SEEDS FROM OTHER SITES GET MIXED IN WITH THEM.
6. SHRUBS SHOULD BE PLANTED IN A RANDOM PATTERN OR IN CLUSTERS TO MIMIC NATURAL CONDITIONS.
7. TRUCKS THAT HAVE PREVIOUSLY BEEN ON OTHER SITES SHOULD BE WASHED PRIOR TO INTRODUCTION TO THE RESTORATION SITE SO THAT MUD/DIRT WITH EXOTIC/INVASIVE SEEDS IS NOT INADVERTENTLY BROUGHT TO THE RESTORATION SITE.
8. ALL PLANTING SHOULD OCCUR AT THE BEGINNING OR END OF THE GROWING SEASON. FALL PLANTINGS SHOULD BE DONE BEFORE THE FIRST FROST, BUT NO LATER THAN NOVEMBER 15.
9. PROPOSED PLANTING SPECIES ARE NATIVE TO THE EXISTING A-SERIES WETLAND, AS IDENTIFIED IN THE WETLAND CHARACTERIZATION REPORT BY HANCOCK ASSOCIATES DATED MARCH 17, 2025.

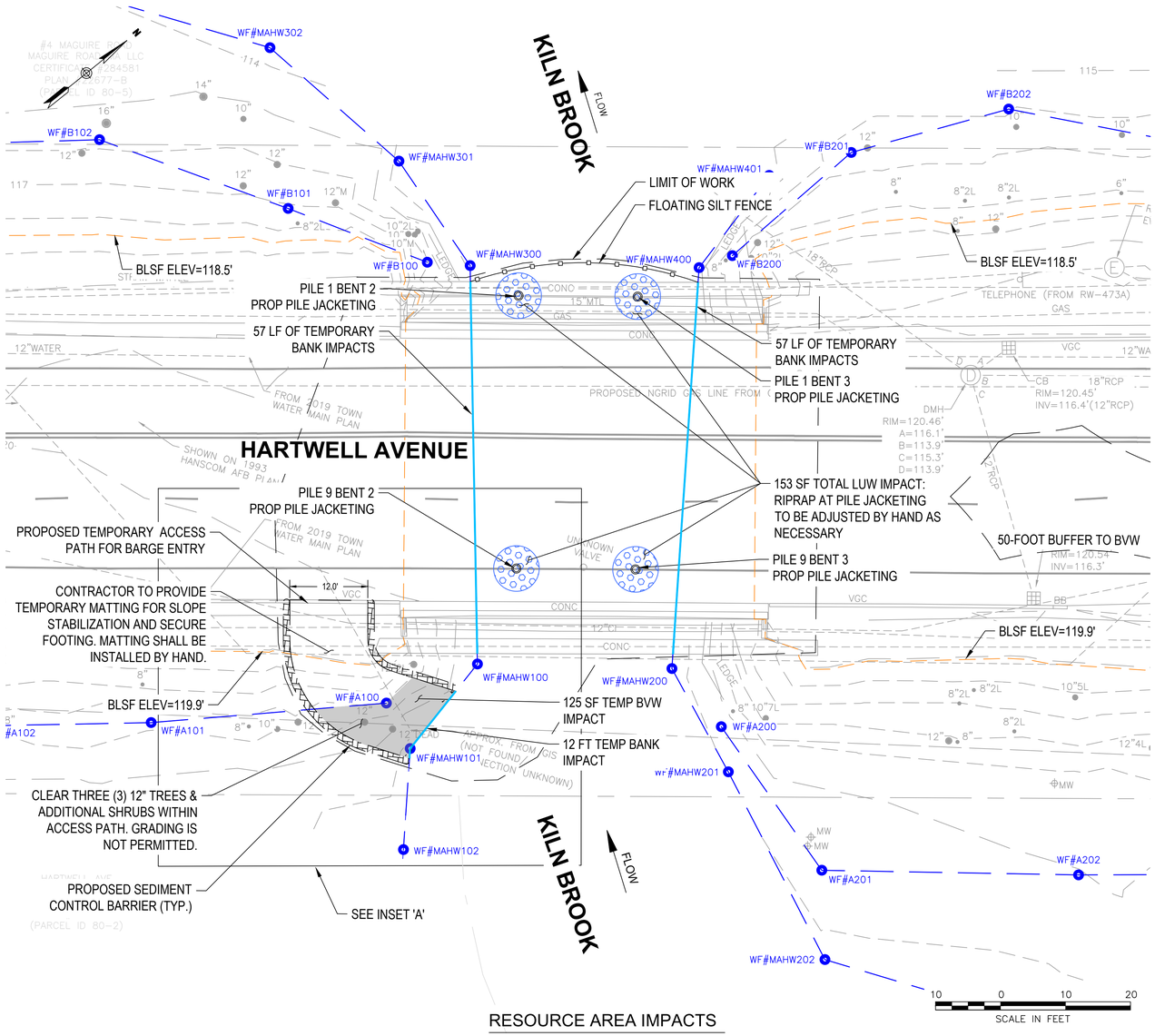
IMPACT NOTES:

1. THE ENTIRETY OF THE LIMIT OF WORK IS WITHIN THE 100-FOOT BUFFER TO BVW AND 200-FOOT RIVERFRONT AREA.
2. AREAS OF TEMPORARY RESOURCE AREA IMPACT ARE TO BE RESTORED TO ORIGINAL CONDITION.
3. EARTHWORK WITHIN THE PROPOSED TEMPORARY ACCESS PATH SHALL BE LIMITED TO PLANTING. GRADING IS NOT PERMITTED.
4. BASED ON THE AVAILABLE INSPECTION REPORTS, IT IS NOT BELIEVED THAT PILE DETERIORATION EXTENDS BEYOND THE MUDLINE. THE CONTRACTOR SHALL CONFIRM THIS WITH THE ENGINEER AT THE TIME OF CONSTRUCTION. EXISTING RIPRAP STONES MAY REQUIRE ADJUSTMENT TO INSTALL PILE REPAIRS.
5. WORK BENEATH THE BRIDGE IS NOT EXPECTED TO ALTER THE EXISTING STONE RIPRAP BANKS, HOWEVER THE IMPACT HAS BEEN QUANTIFIED IN AN EFFORT TO BE CONSERVATIVE.

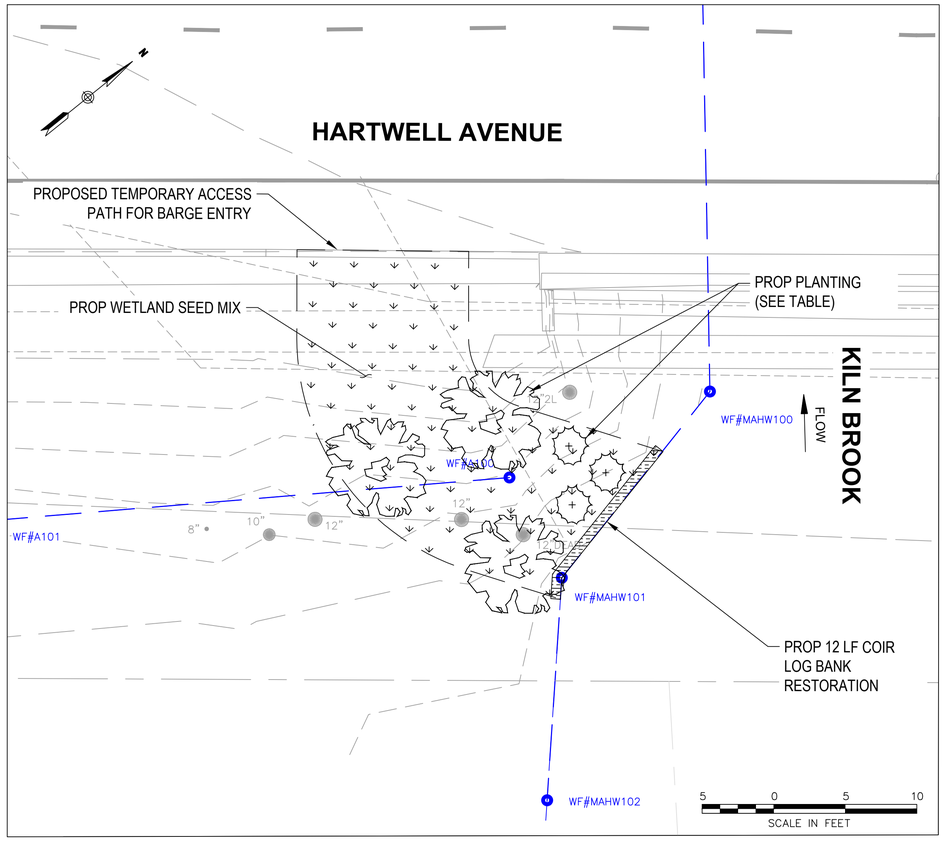
LEXINGTON
HARTWELL AVE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	2
PROJECT FILE NO.	T1559		

RESOURCE AREA IMPACT PLAN (1 OF 2)



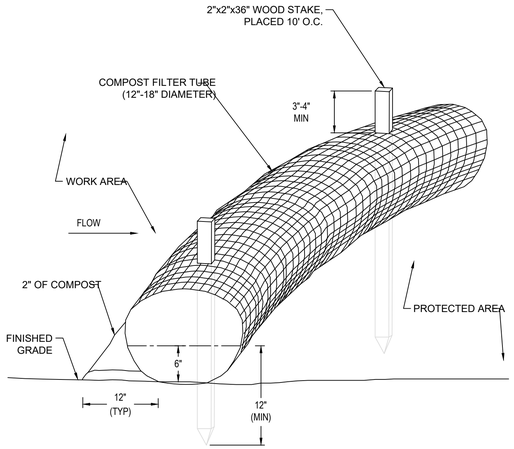
RESOURCE AREA IMPACTS
SCALE: 1" = 10'

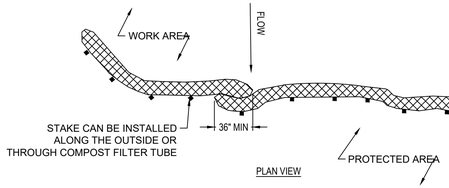


INSET 'A'
RESOURCE AREA RESTORATION
SCALE: 1" = 5'

COMMONWEALTH OF MASSACHUSETTS
KASEY PROVOST
CIVIL
No. 58048
PROFESSIONAL ENGINEER
9/23/25

RESOURCE AREA IMPACT PLAN FINAL.DWG Plotted on 23-Sep-2025 2:24 PM





PLAN VIEW

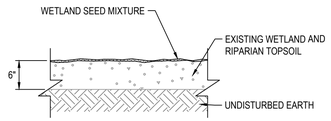
NOTES:

1. CONFIGURE TUBES AROUND EXISTING FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF. TUBES SHALL BE PLACED PERPENDICULARLY TO STORMWATER FLOW WHERE POSSIBLE.
2. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
3. TUBES MAY BE SLEEVED OR PROVIDED A 3 FEET MINIMUM OVERLAP AT THE ENDS OF THE TUBE FOR A CONTINUOUS BARRIER.
4. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
5. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY CONCRETE OR CINDER BLOCKS CAN BE USED BEHIND TUBES UP TO 5 FT. APART OR AS REQUIRED TO SECURE TUBES IN PLACE. DO NOT PUNCTURE TUBES WITH STAKES.
6. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
7. UPON COMPLETION OF PROJECT, ALL TUBES USED FOR EROSION CONTROL SHALL BE REMOVED FROM PROJECT LIMITS, OR DETERMINED BY THE ENGINEER, CAN BE DISPERSED ON SITE.

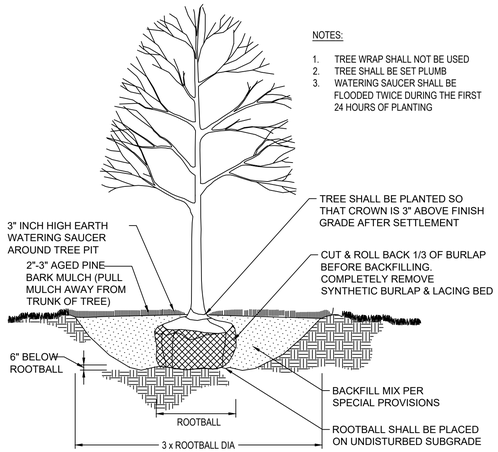
COMPOST FILTER TUBE
N.T.S.

NOTES:

1. GRASS SEED SHALL BE SPREAD DURING THE GROWING SEASON AT THE RATE OF TWENTY (20) POUNDS PER ACRE. IT SHALL BE A WETLAND SEED SEASONALLY FLOODED MIX WITH SPECIES NATIVE TO THE NEW ENGLAND REGION. IT SHALL BE PROPERLY WATERED. A GUARANTY PERIOD OF ONE (1) YEAR FROM FULL GROWTH SHALL BE HONORED BY THE CONTRACTOR.



WETLAND SEED
N.T.S.



NOTES:

1. TREE WRAP SHALL NOT BE USED
2. TREE SHALL BE SET PLUMB
3. WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS OF PLANTING

TREE SHALL BE PLANTED SO THAT CROWN IS 3" ABOVE FINISH GRADE AFTER SETTLEMENT

CUT & ROLL BACK 1/3 OF BURLAP BEFORE BACKFILLING. COMPLETELY REMOVE SYNTHETIC BURLAP & LACING BED

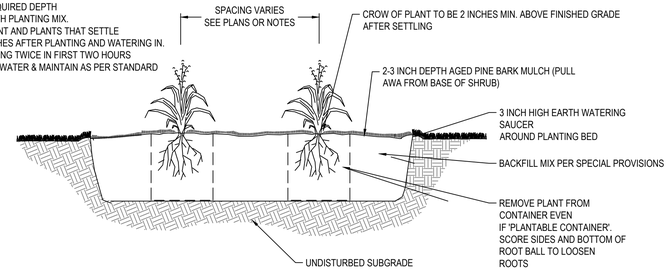
BACKFILL MIX PER SPECIAL PROVISIONS

ROOTBALL SHALL BE PLACED ON UNDISTURBED SUBGRADE

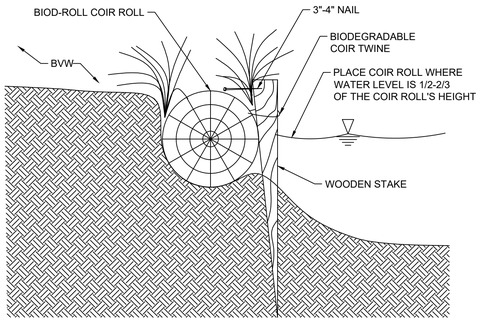
DECIDUOUS TREE PLANTING
N.T.S.

NOTE:

1. EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH PLANTING MIX.
2. RAISE AND REPLANT AND PLANTS THAT SETTLE MORE THAN 3 INCHES AFTER PLANTING AND WATERING IN.
3. WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS.



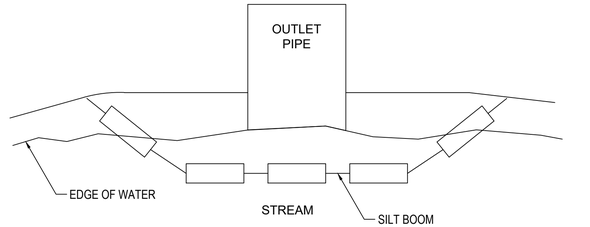
PERENNIAL PLANTING
N.T.S



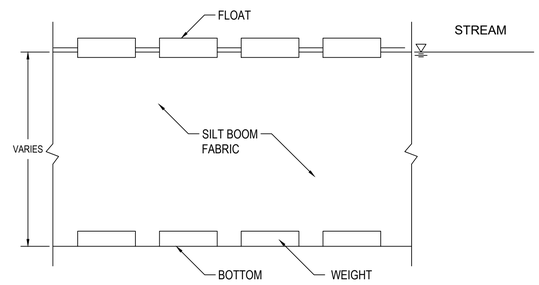
NOTES:

1. CLEAR AREA OF ANY DEBRIS, TREES, ROCKS OR LARGE OBSTRUCTIONS PRIOR TO INSTALLATION.
2. LOGS ARE PLACED IN A SMALL PRE-DUG TRENCH ALONG STREAM BANK.
3. COIR LOGS ARE CONSTRUCTED FROM CYLINDER/ROUND SHAPE COIR NETTING PACKED WITH BIODEGRADABLE COIR FIBER.
4. LOGS ARE SECURED INTO POSITION USING WOODEN STAKES, COIR TWINE AND A NAIL.
5. ADJACENT LOGS ARE TIED TOGETHER END TO END USING COIR TWINE.

COIR GREEN LOGS
N.T.S.



PLAN



PROFILE

FLOATING SILT FENCE
N.T.S.

COMMONWEALTH OF MASSACHUSETTS
KASEY PROVOST
CIVIL
No. 58048
PROFESSIONAL ENGINEER
9/23/25

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:
201-1371
MassDEP File #
CNOI-25-24
Lexington Bylaw #
Lexington
City/Town

A. General Information

Please note: this form has been modified with added space to accommodate the Registry of Deeds Requirements

1. From: Lexington
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

John
a. First Name

Livsey
b. Last Name

Town of Lexington Engineering Dept.
c. Organization

201 Bedford Street
d. Mailing Address

Lexington
e. City/Town

MA
f. State

02420
g. Zip Code

4. Property Owner (if different from applicant):

a. First Name

b. Last Name

Town of Lexington
c. Organization

1625 Massachusetts Avenue
d. Mailing Address

Lexington
e. City/Town

MA
f. State

02420
g. Zip Code

5. Project Location:

0 Hartwell Ave, Public Right-Of-Way
a. Street Address

Lexington
b. City/Town

Right-Of-Way
c. Assessors Map/Plat Number

Right-Of-Way
d. Parcel/Lot Number

Latitude and Longitude, if known: 42.469733
d. Latitude

-71.259609
e. Longitude

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
   Middlesex
   a. County
   b. Certificate Number (if registered land)
   c. Book
   d. Page

7. Dates: 9/23/2025 (a. Date Notice of Intent Filed) 10/14/2025 (b. Date Public Hearing Closed) 11/26/2025 (c. Date of Issuance)

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
   Site Plans Issued for Construction
   a. Plan Title
   TEC, Inc.
   b. Prepared By
   c. Signed and Stamped by
   9/23/2025
   d. Final Revision Date
   As noted
   e. Scale
   See attached Final Plans and Documents Section on Page 10-1
   f. Additional Plan or Document Title
   g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

   Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

a. ☒ Public Water Supply b. ☐ Land Containing Shellfish c. ☒ Prevention of Pollution
d. ☒ Private Water Supply e. ☒ Fisheries f. ☒ Protection of Wildlife Habitat
g. ☒ Groundwater Supply h. ☒ Storm Damage Prevention i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.

B. Findings (cont.)

Denied because:

b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**

c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**

3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) _____ a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. ☒ Bank	12 (temp) a. linear feet	12 (temp) b. linear feet	12 c. linear feet	12 d. linear feet
5. ☒ Bordering Vegetated Wetland	125 (temp) a. square feet	125 (temp) b. square feet	125 (restored) c. square feet	125 (restored) d. square feet
6. ☒ Land Under Waterbodies and Waterways	153 (temp) a. square feet	153 (temp) b. square feet	153 c. square feet	153 d. square feet
	e. c/y dredged	f. c/y dredged		
7. ☒ Bordering Land Subject to Flooding	229 (temp) a. square feet	229 (temp) b. square feet	229 (restored) c. square feet	229 (restored) d. square feet
Cubic Feet Flood Storage	0 e. cubic feet	0 f. cubic feet	0 g. cubic feet	0 h. cubic feet
8. ☐ Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. ☒ Riverfront Area	340 a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	340 c. square feet	340 d. square feet	340 e. square feet	340 f. square feet
Sq ft between 100-200 ft	0 g. square feet	0 h. square feet	0 i. square feet	0 j. square feet

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. ☐ Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. ☐ Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. ☐ Coastal Beaches	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
14. ☐ Coastal Dunes	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
15. ☐ Coastal Banks	a. linear feet	b. linear feet		
16. ☐ Rocky Intertidal Shores	a. square feet	b. square feet		
17. ☐ Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. ☐ Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. ☐ Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. ☐ Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. ☐ Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		
22. ☐ Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet

B. Findings (cont.)

* **#23**. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. ☐ Restoration/Enhancement *:

a. square feet of BVW | b. square feet of salt marsh

24. ☐ Stream Crossing(s):

a. number of new stream crossings | b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   a. The work is a maintenance dredging project as provided for in the Act; or
   b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
   c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on _____ unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.

C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.

10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number 201-1371 / CNOI-25-24"

11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.

12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.

13. The work shall conform to the plans and special conditions referenced in this order.

14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.

15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

19. The work associated with this Order (the "Project")
    (1) ☒ is subject to the Massachusetts Stormwater Standards
    (2) ☐ is NOT subject to the Massachusetts Stormwater Standards

    If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

    a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

    b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:

    i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;

    ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;

    iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement) for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(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.

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

g) The responsible party shall:
1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

See attached Rationale for Decision and Special Conditions beginning on Page 10-1 of 10

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.

D. Findings Under Municipal Wetlands Bylaw or Ordinance

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

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

   a. ☐ that the proposed work 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 of Conditions is issued.

   b. ☒ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

   Lexington Wetland Protection Code (1. Municipal Ordinance or Bylaw) c. 130 (2. Citation)

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

   The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

See attached Narrative, Findings, Rationale for Decision and Additional Special Conditions beginning on Page 10-8 of 10.

SECTION A, No. 8 FINAL PLANS/DOCUMENTS (in addition to Section A, No. 8 on page 2 of 12 of WPA Form 5): The following documents are hereby incorporated into this Order, except that the following pages shall control where they differ:

WPA Form 3 – Notice of Intent; Locus: Public Right-of-Way, 0 Hartwell Ave, Lexington, Mass.; Prepared for: John Livsey, Town of Lexington Engineering Department; Property Owner: Town of Lexington; Prepared by: Kasey Burke, TEC, Inc.; Date: 9/22/2025

Notice of Intent: Bridge Rehabilitation Hartwell Ave over Kiln Brook; Locus: Public Right-of-Way, 0 Hartwell Ave, Lexington, Mass.; Prepared for: Town of Lexington Department of Public Works; Prepared by: TEC, Inc.; Date: 9/18/2025

Wetland Delineation Report: Hancock Project #: 208316; Locus: Public Right-of-Way, 0 Hartwell Ave, Lexington, Mass.; Prepared for: Robert Niccoli, PE, TEC; Prepared by: Caitlin White, WPIT, Hancock Associates; Date: 3/17/2025

Site Plans Issued for Construction: Sheet 1, Pile Plan & Notes", Sheet 2, "Transverse Section + Pile Details", Sheet 3, "Utility Support Details (1 of 2)", Sheet 4, "Utility Support Details (2 of 2)", Sheet 5, "Railing Repair Details (1 of 2)", Sheet 6, "Railing Repair Details (2 of 2)", Sheet 7, "TTCP (1 of 3)", Sheet 8, "TTCP (2 of 3)", and Sheet 9, "TTCP (3 of 3)"; Locus: Hartwell Ave over Kiln Brook, Lexington, Mass.; Prepared for: Town of Lexington; Prepared by: TEC, Inc.; Scale: ½" = 1'-0", ¼" = 1'-0", 1" = 1'-0", 1 ½" = 1'-0" and 1" = 40'; Date: 9/23/2025

Resource Area Impact Plan: Sheet 1, "Resource Area Impact Plan (1 of 2), and Sheet 2, "Resource Area Impact Plan (2 of 2); Locus: Hartwell Ave, Lexington, Mass.; Prepared for: Town of Lexington; Prepared by: Kasey Provost, Signed and Stamped by: Kasey Provost, Civil PE No. 58048; Scale: 1" = 5', 1" = 10', and not to scale; Date: 9/23/2025

Photo Log; Locus: Public Right-of-Way, 0 Hartwell Ave, Lexington, Mass.; Prepared by: TEC The Engineering Corp; Date: 10/17/2024

RATIONALE FOR DECISION: The Wetlands Protection Act, M.G.L. C. 131, S.40

The Project Site is the Hartwell Avenue Right-of-Way located at Kiln Brook bridge crossing identified as 0 Hartwell Ave. The bridge was constructed in 1959 and consists of a span (45.5 feet span by 40 feet wide) comprised of three continuous concrete slabs supported by concrete abutments and two timber pile bents. Steel utility supports carry utilities along both sides of the bridge span (12-inch diameter sewer main on the east side and 8-inch diameter gas, 14-inch diameter water, and 3-inch diameter wrapped utility on the west side.) A recent bridge inspection identified deterioration concerns, including vertical cracks and freeze-thaw damage of the timber piles and missing and loose rail and cable posts and utility supports.

The Notice of Intent was filed with the Conservation Commission on September 23, 2025 under the Wetlands Protection Act (M.G.L. c. 131, s. 40) and the Code of the Town of Lexington for Wetlands Protection (c.130) by the applicant, John Livsey, Town of Lexington Engineering,

for Kiln Brook bridge rehabilitation activities, within Bordering Vegetated Wetlands, Inland Bank, Land Under Water, Bordering Land Subject to Flooding, 200-foot Riverfront Area, and 100-foot Buffer Zone, located at the Kiln Brook Bridge Crossing at Hartwell Avenue. Legal Notice of the Public Hearing was published on the Town of Lexington website on Thursday, October 2, 2025. The Public Hearing was opened and closed on Tuesday, October 14, 2025.

Hancock Associates (HA) conducted a site evaluation on March 20, 2025, to identify, evaluate, delineate and confirm the extent of wetland resource areas within 100 feet of the Hartwell Avenue Kiln Brook bridge as part of this Notice of Intent application. The extent of Wetland Resource Areas was determined through observations of existing plant communities and hydrologic indicators, including hydric soils, in accordance with the Act, its implementing Regulations, and the Bylaw. Based on these methods, HA determined that the Wetland Resource Areas associated with the site include Bordering Vegetated Wetlands (BVW) and Inland Bank associated with the Kiln Brook. The BVW boundary was delineated by HA into four wetland boundaries within two series: Boundary A series to the easterly side of the Hartwell Ave bridge was delineated with wetland flags A100 to A103 and A200 to A203 and B series to the westerly side of the Hartwell Ave bridge was delineated with wetland flags B100 to B103 and B200 to B203 as shown on the surveyed referenced Site Plan. The Inland Bank, or Mean Annual High Water, was also delineated into four boundaries: the MAHW boundary was delineated to the easterly side of the bridge with MAHW boundary flags 100 to 102 and flags 200 to 204 and to the westerly side of the bridge with MAHW boundary flags 300 to 304 and 400 to 403 as shown on the surveyed referenced Site Plan. However, the Conservation Commission is only confirming the accuracy of the following flags for this project on the easterly side of the bridge along the southerly side of the Kiln Brook as follows: Wetland flags A100 to 101 and MAHW flags 100 to 101.

Based on the Federal Emergency Management Agency Flood Insurance Rate Map for the Town of Lexington, Map No. 25017C0382G, revised 7/8/2025, the Special Flood Hazard Zone was determined to be at elevation 119.9 to the easterly side of the bridge along the Kiln Brook. Accordingly, the project site falls within Bordering Land Subject to Flooding at and below elevation 119.9.

According to the 15th Edition of the Massachusetts Natural Heritage Atlas (effective August 1, 2021) published by the Natural Heritage & Endangered Species Program (NHESP), no areas of Priority Habitats of Rare Species and Estimated Habitat of Rare Wildlife, or Certified or Potential Vernal Pools exist on the site.

The intent of the proposed project is to rehabilitate the bridge to prevent further deterioration of the timber piles in the foreseeable future until a final Hartwell Avenue Improvement Plan Design is vetted and decided by the Town. Associated activities include repairing the missing and loose bridge cable rails and posts and replacing deteriorated utility brackets running along the bridge span. There are no proposed improvements to the superstructure, roadway, or grading around the bridge under this proposed project.

The proposed rehabilitation includes pile jacketing of timber piles 1 and 9 at bents 2 and 3 for a total of four (per the timber piles numbering on the construction plans). The cross bracing will be

removed and replaced at each rehabbed timber pile. The pile jacketing is proposed as Sika fiberglass reinforced plastic (FRP) pile repair sleeves.

If necessary to complete the proposed project, access to the underside of the bridge and transportation of materials will occur via a barge. The barge will be hand launched along the temporary access path as proposed on the Resource Area Impact Plan. The temporary access path is proposed to be 12 feet wide, located along the southeastern embankment within Town of Lexington property. The access path will require cutting approximately three 12" trees and various shrubs. Stumps and roots of trees and shrubs will remain in the ground and grading and filling will not be necessary, or permitted, to provide access along the path. The Contractor shall provide temporary matting as necessary to provide slope stabilization and secure footing for the barge entry and removal. Resource areas and embankment will be restored with native wetland tree, shrub and seed species after the bridge rehabilitation is completed.

The proposed rehabilitation does not alter the structure in such a way that would affect the bridge's present compliance with the Massachusetts Stream Crossing Standards. The superstructure, concrete abutments, stone slopes, and majority of the timber piles are proposed to remain unchanged. Temporary impacts to Land Under Water, the stream bed, will be restored to existing conditions.

The Stormwater Management regulations within 310 CMR 10.00 adopted by MA DEP in January of 2008 are applicable and the proposed bridge rehabilitation activities comply with the associated performance standards.

Additional mitigation measures proposed for the project involve installation of comprehensive erosion and sedimentation control and pollution prevention devices, including compost filled sediment filter tubes, floating silt curtain, temporary access stabilization matting to prevent erosion, sedimentation, and pollution from proposed activities from migrating towards wetland resource areas subject to protection under the State Act or protected resource areas under the local code or into the town drainage system and ultimately to the wetland resource areas. Time of year implementation restrictions to conduct during dry, low flow conditions. Limit of work and tree protection measures will also be employed on site to limit soil disturbance and tree damage for trees to remain on site during and post project. Bank stabilization with coir log and native wetland tree, shrub and seed species restoration plantings in the area of the disturbed wetlands and bank to provide the barge access path.

The proposed project and the proposed significant mitigation measures listed above conform to the performance standards specified in the Act and its implementing Regulations (310 CMR 10.00). Therefore, the proposed work can be conditioned to protect the interests of the Act. The Commission approves the proposed project under the Act subject to the following special conditions:

LIST OF SPECIAL CONDITIONS - M.G.L. c.131, s.40:

21. All work shall conform to the Notice of Intent, the above-referenced plans and supporting documentation unless otherwise specified in this Order.

22. A copy of this Order, as well as construction plans, shall be on site at the start of and during any site work for contractors to use as reference. The property owner(s) and any successor(s) in title shall inform all contractors and subcontractors of the conditions and provisions of this Order concerning their work. This Order of Conditions and referenced Plans shall be included in all construction contracts, subcontracts and construction related documents dealing with the proposed work and shall supersede any conflicting contract requirements.

23. Copies of all obtainable permits, variances, and approvals, as required under the Act and set forth under 10.05 (4) (e), shall be submitted to the Commission prior to commencing any work on the site.

24. In conjunction with the transfer of interest or control of any part of the site, the applicant and/or property owner shall provide a copy of this Order, the approved plan and any approved amendments to the Order to any broker, potential buyer or lessee of the property. If the lot is sold before the Certificate of Compliance is issued, an affidavit acknowledging an understanding of this Order and agreeing to comply with this Order shall be signed by the buyer and submitted to the Commission.

25. Prior to commencing proposed project activities, the following conditions shall be complying:

    a. Record the Final Order of Conditions in the Middlesex South Registry of Deeds within the chain of title of the affected property pursuant to General Condition 9 and return the Recording Information Form (page 12 of 12 of this Order) to Lexington Conservation Commission showing the Registry Stamp with the Instrument Number, Book, Page and date of the recording.

    b. Post the DEP/CNOI No. sign (said sign shall not be affixed to a living tree) required by General Condition 10 of this Order until a Certificate of Compliance is issued.

    c. Survey and install erosion and sedimentation control measures, comprised of at least bio-degradable natural cotton fiber 12-inch silt sock filled with compost (i.e. Sediment Filtermitt™ or Filtrexx Natural plus or other similar type bio-degradable silt sock filled with compost barrier device), catch basin silt sacks with overflow weir, and downstream floating silt curtain as shown on the approved referenced plan and/or as directed by the conservation staff to serve as the erosion and sedimentation control measures.

    d. Demarcate the temporary limit of work boundary to serve as the visual work limits and to protect wetland and buffer zone and abutting lands to remain undisturbed during the project activities.

e. Install industry standard tree protection around any trees within the limit-of-work and along the limit-of work boundary that could get damaged by equipment while completing the project activities.

f. Demarcate the construction equipment and materials staging, laydown, and storage area outside wetland resource areas for conservation staff review and approval during the pre-construction meeting.

g. Submit the following information in writing to the Conservation Office: 1) a signed statement by the general contractor that they have received, read and understand the Order of Conditions and that they and their sub-contractors agree to fully comply with the Order; 2) the names, addresses, and day and night numbers of the project supervisor/manager, the project engineer and the erosion control monitor (if different than the project engineer) who will be responsible for ensuring on-site compliance with this Order and approved plans, 3) The name, addresses, and day and night numbers of the project wetland scientist who will be responsible for overseeing and monitoring any wetland and buffer zone activities and certifying the native plant restoration area compliance for the Certificate of Compliance, and 4) a construction schedule detailing the sequence of site work task estimated timeline of completion, and

h. Schedule a pre-commencement site meeting with the Conservation Staff after above conditions 25 a through g have been completed, and the required paperwork has been uploaded to the Opengov Conservation Record (CNOI-25-24) and erosion and sedimentation control and pollution prevention measures have been implemented for the project scope for the purpose of reviewing and inspecting and verifying the requirements of the Order of Conditions and compliance. The applicant, owner, the project supervisor/manager, the project engineer and the project wetland scientist who will be responsible for ensuring on-site compliance with this Order shall attend this pre-commencement site meeting.

26. The following conditions shall be complied with to protect the wetland resource areas:

a. All wetland resource area impacts shall be temporary and minor in nature and conducted in accordance with the approved construction sequence and site construction plans.

b. A qualified professional civil engineer (PE), Certified Professional in Erosion and Sediment Control (CPESC), or wetland scientist, who shall be approved by the Conservation Commission, shall be designated to act as an erosion control monitor and to oversee compliance with this Order of Conditions at the site. The erosion control monitor shall be responsible for any emergency placement of erosion controls and regular inspection or replacement of erosion and sedimentation control devices. The name and phone number of the erosion control monitor must be provided to the Commission in the event that this person has to be contacted, due to an emergency at the site, during any 24-hour period, including weekends [and holidays]. This person shall be given authority to stop construction for noncompliance with this Order of Conditions, especially in regards to erosion control and wetland protection purposes. The erosion control monitor will be

required to inspect all such erosion control devices and to oversee the cleaning and the proper disposal of waste products. Cleaning shall include removal of any entrapped silt and sediment.

c. Rehabilitation activities shall be conducted during the dry season with drought-like conditions and little or no stream flow and periods of no forecasted rain, or during dry drought-like low stream flow conditions in the late fall or winter months (when weather conditions are expected to be drier with colder freezing temperatures and less rain precipitation resulting in lower stream flows).

d. The only non-foot traffic access within vegetated wetland resource areas shall be the proposed barge access via the specified and detailed access path, no greater than 12 feet wide. Only the identified trees and shrubs shall be cut, leaving stumps and roots in place, to allow for placement of the flexible stabilizer mat and minimal soil disturbance.

e. To prevent potential pollution risks from concrete or epoxy washout, create a designated washout containment area, lined with impermeable material located away from streams, wetlands, and storm drains, for capturing and allowing all washout concrete or epoxy residue to harden inside the containment area before proper disposal off site.

f. An adequate emergency supply of pollution prevention measures, such as surplus compost filter socks, washout containment materials, and spill containment materials, shall always be available for emergency or routine replacement and shall include materials to repair or replace erosion and sedimentation devices, or any other pollution prevention devices planned for use during construction.

g. If any unforeseen problems occur during construction that affect any of the interests of the Act or the Lexington Wetland Protection Code, upon discovery, the owner(s) shall notify the Commission. An immediate meeting shall be held between the Commission, the applicant, the engineer, the contractor, and other concerned parties to determine the corrective measures to be employed. The applicant shall then act to correct the problems using the corrective measures agreed upon.

h. As soon as possible, all disturbed areas shall be permanently stabilized after disturbance by native trees, shrubs, and seed mix or other vegetative measures acceptable to the Commission. The disturbed stream bank along the barge access path shall be stabilized with coir logs while the path disturbed soils shall be held in place by natural fiber erosion control matting and restoration native species in accordance with the restoration plan.

i. If deemed necessary to conduct dewatering activities for the bridge repairs, the Conservation Commission, or their designee, shall approve the dewatering methods, device specifications and placement location prior to commencing any dewatering activities.

j. The construction site shall be maintained and clean. Construction refuse, debris, and trash shall be contained within a dumpster, located greater than 200 feet from the stream bank and 100 feet from the wetland boundary (or other location as approved by conservation staff during the pre-construction meeting) and shall be disposed of promptly and properly. Disposal records (bills of lading, manifests, receipts) of all

materials removed from the site shall be kept and shall be made available to the Conservation Commission upon request.

k. Equipment, materials, and fuel storage, stockpiling, and refueling operations shall be situated in a visibly designated upland area at a horizontal distance located greater than 200 feet from the stream bank and 100 feet from the wetland boundary (or other location as approved by conservation staff during the pre-construction meeting).

l. Silt Sacks with emergency overflow weirs shall be secured under any catch basin grates that may receive stormwater runoff from the project work area to prevent sediment and debris from entering the drainage system before the ground is stabilized and the construction and restoration work is completed.

m. Any sediment tracked from the site onto the paved surfaces shall be swept from these surfaces daily and at the end of each workday to prevent sediment from washing to the drainage system and wetland resource areas.

n. Dust shall be minimized, controlled, and managed on site in accordance with accepted industry standards. A plan for minimizing, controlling, and managing shall be prepared and implemented during the construction activities and available upon request. At a minimum, the plan shall include measures to limit soil disturbance and how to prevent dust from entering the air.

27. For the protection of the resource areas, the following conditions shall continue in perpetuity and shall not expire with the issuance of a Certificate of Compliance:

a. During and after work on this project, there shall be no discharge or spillage of fuel, oil, or other pollutants into any part of the site governed by this Order. The applicant shall take all reasonable precautions to prevent the release of pollutants by ignorance, accident, or vandalism. Any such discharge or spillage of fuel, oil, or other pollutants shall be reported immediately to the Lexington Fire Department and the Conservation Office;

b. The use of chemical fertilizers, pesticides, herbicides and sodium-based products, except as conditioned in the Order or as expressly approved in writing by the Conservation Commission upon receipt of a written request accompanied by applicable specifications, is prohibited within areas subject to protection, including within 200 feet of the stream bank and/or 100 feet of the wetland boundary, to reduce the impact of these products on the resource areas when transported by stormwater or by leaching through the soil; and

c. A copy of these continuing conditions shall be included with the closing documents of all sales of the property.

28. The request for a Certificate of Compliance required by General Condition 12 (on DEP WPA Form 5 page 6 of 13) shall require a 21-day notice to the Commission. Accompanying the request for a Certificate of Compliance shall be the following:

a. A written statement by the professional engineer, including dates of field inspection(s) during the bridge rehabilitation activities and certifying compliance with this Order of Conditions and its approved referenced plans and clearly outlining in writing any deviations from the approved plan that exist.

b. A final written native species restoration area monitoring report after the completion of at least three full growing season years (March through October), accompanied by representative pre and post photos and native tree, shrub, and seed species detailed straight native species inventory receipts and survivability tallies, prepared by the professional wetland scientist, including dates of field inspection(s) to oversee planting of the straight native tree, shrub and seed species and follow up monitoring dates for the minimum three complete annual growing season periods (March through October), certifying compliance with this Order of Conditions and its approved referenced Restoration Plan and clearly outlining in writing any deviations from the approved plans that exist.

29. The Commission designates the Conservation Director as its administrative agent with full powers to act on its behalf in administering and enforcing this Order, except the Director shall not approve changes to the Order or approved plan (See General Condition 13) or issue Certificates of Compliance.

NARRATIVE FOR THE CODE OF THE TOWN OF LEXINGTON, CHAPTER 130

The Lexington Conservation Commission has conducted an on-site inspection, has reviewed the Notice of Intent, the submitted information, and the public hearing testimony and has determined that the area in which the work is proposed is significant to the following values of the Code of the Town of Lexington, Chapter 130:

Flood control	Water Pollution	Groundwater
Storm Damage Prevention	Erosion control	Aquatic life and Wildlife
Public or Private Water Supply	Surrounding Land, Homes or Buildings	
Other Water Damage Prevention	Streams, Ponds, or other Bodies of Water	
Recreation		

Paragraphs 1, 2, 3, 4, 5, 7, 9, 12, 13, 14, 15, 16, 17, 18, and 19 under the **General Conditions** outlined on pages 5-5, 6, and 7 of 13 above, and all Documents, Findings and Special Conditions outlined on pages 10-1 thru 10-8 above shall be included in this Order pursuant to the Code of the Town of Lexington, Chapter 130, and shall also include the following Findings, Rationale for Decision, and Additional Special Conditions:

FINDINGS

D-4. The 100-foot buffer zone from Bordering Vegetated Wetlands (BVW) and from Bordering Land Subject to Flooding is a protected resource area as defined in the Code of the Town of Lexington, Chapter 130 ("the Code"), Section 130-8 (C) (4) "Land Bordering thereon".

D-5. The Commission finds that the proposed bridge rehabilitation activities result in temporary wetland resource area impacts and is the alternative with the lowest impacts. Due to the nature of the activity as an in place repair of deteriorated components of an existing bridge, the project conforms with Section 5 - Performance Standards pursuant to the Rules adopted by the Lexington Conservation Commission pursuant to Bylaws Article XXXII and as it has been amended to the Code of the Town of Lexington, Chapter 130 ("the Rules").

RATIONALE FOR DECISION: Lexington Code, C. 130

To protect the interests identified in the Code, the Lexington Conservation Commission requires that projects meet nine (9) additional Performance Standards under Section 5 of the Rules in addition to meeting the Performance Standards outlined in the Act. This project has met the Performance Standards as follows:

The project involves in-situ repairs of deteriorated components of an existing bridge, resulting in minimal temporary wetland resource area impacts. To prevent and mitigate for any potential adverse impacts, comprehensive erosion and sedimentation controls and a limit of work boundary will be installed within the project area, access within wetland resource areas will be limited to foot traffic or by a barge along the specified access path, and native restoration wetland species will be planted along the disturbed access path and monitored for least three annual full growing season (March through October) periods for survivability.

Since the applicant has met the Performance Standards, and has proposed the enumerated significant mitigation measures, the proposed work can be conditioned to protect the interests of the Code. The Commission approves the proposed project under the Code subject to the following additional conditions:

LIST OF SPECIAL CONDITIONS relating to Lexington Wetland Protection Code C. 130 (See Section D. No.3 on WPA Form 5, Page 10 of 12):

D(3)a. The applicant, owner, or project manager shall include the BL number (CNOI-25-24) on the DEP sign as required by General Condition 9 of this Order.

D(3)c. The proposed Native Plant Restoration Plan shall be implemented and monitored for success for at least three annual full growing seasons (March through October) after the completion of implementing the restoration activities under the supervision of the project professional wetland scientist in accordance with the Notice of Intent and approved referenced plan and as further conditioned herein. Native species per the approved referenced tree, shrub, and seed mix list specifications shall be planted within the areas. All species shall be the straight native variety and shall not be landscape cultivars. Evidence of the straight native species, including tree, shrub, and seed, shall be provided to the Commission in the form of the invoice or receipt detailing the native variety and size, height, and quantity. The Conservation Commission,

or designee, shall approve any substitutions of plant species. In addition, before and after restoration representative photos of the restoration area shall be taken and submitted to the Commission with the Certificate of Compliance request.

D(3)e. The project professional wetland scientist shall monitor the Restoration Area for at least three full complete growing seasons, March through October, after native species and seed mix installed for successful native shrub and plant survivability and shall provide written certification of the restoration area success after three full complete growing seasons of monitoring to accompany the final full Request for Certificate of Compliance to the Lexington Conservation Commission.

D(3)f. For the protection of the resource areas, the following conditions shall continue in perpetuity and shall not expire with the issuance of a Certificate of Compliance:

i. No additional impervious surfaces shall be permitted on the lot without the approval of the Commission. Any proposal to exceed the proposed impervious areas shall at a minimum require plans for full mitigation of any additional stormwater runoff impacts and shall be considered a departure from the plans referenced in this Order. This will require that a Notice of Intent be filed under the wetland laws applicable at the time.

ii. No new drains shall be installed that discharge above or below the ground into the Protected Resource Areas, the 100-foot buffer zone or that connects to the on- site stormwater management system, or the town drainage system without the prior written consent of the Lexington Conservation Commission.

iii. The wetland resource areas shall remain natural and unmaintained, except to allow for invasive species management, native species installation, and hazard tree management with the express written permission of the Conservation Commission and shall be allowed to grow as a diverse natural community of native tree, shrub, and plant species.

iv. A copy of these continuing conditions shall be included with the closing documents of all sales of the property.

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

11-26-2025
1. Date of Issuance

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

4
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.

Signature	Kevin Beuttell Printed Name
Signature	Ralph "Duke" Bitsko Printed Name
Signature	Alexandra Dohan Printed Name
Signature	Philip Hamilton Printed Name
Signature	Jason Hnatko Printed Name
Signature	Ruth Ladd Printed Name
Signature	Thomas Whelan Printed Name

☒ by hand delivery on
11/26/2025
Date

☐ by certified mail, return receipt requested, on
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

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Lexington
Conservation Commission

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

To:

Lexington
Conservation Commission

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

0 Hartwell Ave (Right-of-Way)
Project Location

201-1371, CNOI-25-24
MassDEP File Number/Lexington Bylaw Number

Has been recorded at the Registry of Deeds of:

Middlesex South
County

Book

Page

for:
Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant

U.S. Army Corps of Engineers (USACE)

SELF-VERIFICATION NOTIFICATION (SVN)

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332.

Principal Purpose This information will be used in evaluating activities under Self-Verification procedures within Massachusetts.

Routine Uses Routine uses will include: (1) Documenting compliance with the terms and conditions of the General Permit (GP) for activities that may require authorization pursuant to one or more of USACE's Regulatory authorities. (2) Records may be referred to other Federal, State, and local agencies for evaluation and enforcement purposes.

Disclosure Failure to fully comply and abide by the GP terms and conditions prior to commencing work and after completion project may result in formal enforcement action, up to and including monetary penalties and/or legal action, pursuant to 33 CFR Part 326.

Instructions The permittee must complete ALL required sections of this document before commencing USACE-regulated activities. A copy of this completed SVN must be kept on site during construction and be made available for review by USACE and other Federal, State, & Local regulatory authorities at any time. Within 30 days of initiating project construction, the permittee shall submit the completed SVN to USACE. The SVN shall be submitted to USACE as **ONE signed document** that includes project plans and documentation that supports each field (e.g., emails, letters, description, phone calls, surveys). Electronic submissions to the following address are strongly preferred: cenae-r-ma-sv@usace.army.mil. The email subject line shall contain the following: GP #, SVN, City/Town, and date submitted.

(ITEMS 1 THRU 3 TO BE FILLED BY USACE)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED

APPLICANT AND AGENT INFORMATION

4. APPLICANT'S NAME	7. AGENT'S ADDRESS:
First - John Middle - Last - Livsey	First - Andrew Middle - Last - Spurr
Company - Town of Lexington	Company - TEC, Inc
E-mail Address -	E-mail Address - aspurr@theengineeringcorp.com
5. APPLICANT'S ADDRESS:	8. AGENT'S ADDRESS:
Address- 201 Bedford Street	Address- 282 Merrimack Street 2nd Floor
City - Lexington State - MA Zip - 02420 Country -	City - Lawrence State - MA Zip - 0184 Country - U
6. APPLICANT'S PHONE NOs. w/AREA CODE	9. AGENTS PHONE NOs. w/AREA CODE
a. Residence b. Business 781-274-8300 c. Fax 781-274-8392	a. Residence b. Business 978794179 c. Fax

NAME, LOCATION, AND DESCRIPTION OF PROJECT SITE

10. PROJECT NAME OR TITLE
Proposed Bridge Rehabilitation - Hartwell Ave over Kiln Brook

11. FILE NUMBER(S) OF PREVIOUS USACE ACTIONS ON THE SITE (if applicable)	12. NAME OF WATERBODY
	Kiln Brook
13. PROJECT COORDINATES (in decimal degrees)	14. PROJECT STREET ADDRESS (if applicable)
Latitude: ◦N 42.469733 Longitude: ◦W -71.259609	Address Hartwell Ave
	City - Lexington State - MA Zip - 02420

ACTIVITY TYPE, PROJECT IMPACTS, AVOIDANCE & MINIMIZATION

15. GENERAL PERMIT ACTIVITIES (CHECK ALL THAT APPLY)

1 ☐	6 ☐	11 ☐	16 ☐	21 ☐
2 ☑	7 ☐	12 ☐	17 ☐	22 ☐
3 ☐	8 ☐	13 ☐	18 ☐	23 ☐
4 ☐	9 ☐	14 ☐	19 ☐	24 ☐
5 ☐	10 ☐	15 ☐	20 ☐	25 ☐

16. SUMMARY OF PROJECT IMPACTS (*see instructions*)

Area (square feet)	Length (linear feet)	Volume (cubic yards)	Duration
			N/A

17. PROJECT PLANS (BY CHECKING THE BOXES BELOW, YOU CERTIFY THESE ITEMS ARE COMPLETE) (*see instructions*)

- [x] a. Plans shall at least contain the following: Vicinity Map, Plan View, and Typical Cross Section View of the proposed activity.
- [x] b. All direct, indirect and secondary impacts from USACE regulated activities are shown on the project plans.
- [x] c. The size of the impact area for each activity (acre, square feet, linear feet) are shown on the project plans.
- [ ] d. For discharges of fill material (§404), the volume of fill material is identified on the project plans.
- [ ] e. The duration of each impact, permanent or temporary (X days), is identified on the project plans.
- [ ] f. Do activities with permanent impacts result in the loss of waters? If so, this is identified on the project plans.
- [x] g. All aquatic resources in the vicinity of the USACE regulated activities are delineated on the project plans.

18. AVOIDANCE & MINIMIZATION (BY CHECKING THE BOXES BELOW, YOU CERTIFY THESE CRITERIA ARE MET) (*see instructions*)

- [x] a. The project has been designed to avoid and minimize impacts to aquatic resources.
- [x] b. The footprint of activities in waters of the U.S. has been reduced to only what is necessary to achieve the overall project purpose.
- [x] c. All practicable measures have been taken to avoid and minimize impacts to aquatic resources through construction techniques and site access (e.g., Best Management Practices, Time of Year Restrictions).
- [x] d. All temporary impacts from USACE regulated activities will be restored upon completion of construction and the project area will be returned to pre-construction contours and conditions.

COMPLIANCE WITH FEDERAL REGULATIONS & SUPPLEMENTAL INFORMATION

19. DUE DILIGENCE (*see instructions*)

Complete the entries below to document compliance with the following Federal requirements. Construction may NOT begin if a PCN is/may be required, and you must contact USACE to determine permitting requirements. Documentation that demonstrates how the activity complies with each field below shall be submitted to the USACE as noted in the instructions block. See each General Condition (GC) in the GP for how to comply with each requirement.

a. State Historic Preservation Officer	Per Appendix A, SHPO was notified and they did not respond with concerns within 30 days.
b. Massachusetts BUAR	Per Appendix A, BUAR was notified and they did not respond with concerns within 30 days.
c. Tribal Historic Preservation Officers	The Tribe(s) were notified and they didn't respond with concerns within 30 days.
d. Endangered Species Act - NOAA	The activity is not located within the ESA-listed Species Range.
e. Endangered Species Act - USFWS	The activity is not located within the ESA-listed Species Range.
f. Northern Long Eared Bat (ESA)	The activity is not located within the NLEB Species Range.
g. Essential Fish Habitat	The project footprint does not contain EFH (see EFH definition in the MA GP).
h. Wild & Scenic Rivers	There are no WSR's within 0.25 miles of the project area.
i. 401 Water Quality Certification 401	The activity qualifies under the general 401 WQC for the 2023 MA GPs.
	401 WQC/OOC File Number: OOC issued: 401 issued:
j. Section 408 Permission	Not Required per GC 15a-f, no Federal Projects are within the project vicinity.
k. Coastal Zone	The project is not located within the coastal zone.
l. Construction Mats	N/A, the activity does not require the installation of construction mats.
m.Time of Year Restrictions	N/A, the project is not located in a waterbody that has TOY restrictions.
n. Vernal Pools	Per GC 28, the project is not located in a vernal pool.
o. Sediment & Erosion Controls	Per GC 25, the activity uses BMPs to avoid/minimize sedimentation & erosion.
p. Stream/Wetland Crossings	The activity complies with all applicable terms in GC 31.

20. AQUACULTURE ACTIVITIES - GP 18 (*see instructions*)

- [ ] a. If required, an Aquaculture Certification from the Massachusetts Division of Marine Fisheries was obtained prior to commencing work.
- [ ] b. Coordination with the U.S. Coast Guard pursuant to Private Aids to Navigation has occurred prior to commencing work.
- [ ] c. If required, a MEPA Certificate was obtained from the Massachusetts Environmental Protection Agency prior to commencing work. Not Required
- [x] d. The prospective permittee contacted local authorities (e.g. harbormaster, select board, shellfish constable) for authorization of their facility prior to commencing work.

21. ADDITIONAL INFORMATION/ATTACHMENTS (*see instructions*)

- [x] a. The project plans are enclosed in this SVN submittal (see block 17).
- [ ] b. The activity IS NOT funded through the Bipartisan Infrastructure Bill (also known as the Infrastructure Investment and Jobs Act).
- [x] c. All required state, local and federal approvals were acquired prior to starting construction in USACE jurisdiction.
- [x] d. After construction of the activity is completed, a complete Certificate of Compliance will be submitted to USACE.

22. IS THERE ANOTHER LEAD FEDERAL AGENCY:

- [ ] YES
- [x] NO

23. STATEMENT OF AUTHORIZATION *(see instructions)*

I certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE
	12-15-25		12/15/25

24. SIGNATURES *(see instructions)*

I hereby certify that the information in this Self-Verification Notification is complete and accurate. As the applicant or their duly authorized agent, I certify the activity was completed in accordance with the terms and conditions of the GP. This includes all applicable terms, general conditions, and activity-specific GP criteria. I agree to allow the duly authorized representatives of the Corps of Engineers Regulatory Program and other regulatory or advisory agencies to enter upon the premises of the project site at reasonable times to evaluate inspect and photograph site conditions. This consent to enter the property is superior to, takes precedence over, and waives any communication to the contrary. For example, if the property is posted as "no trespassing" this consent specifically supersedes and waives that prohibition and grants permission to enter the property despite such posting.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE
	12-15-25		12/15/25

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Instructions for Preparing a
Department of the Army
General Permit (GP) Self-Verification

Blocks 1 through 3. To be completed by the Corps of Engineers.

Block 4. Applicant' Name. Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the self-verification, please attach a sheet of paper with the necessary information marked Block 4.

Block 5. Address of Applicant. Please provide the full address of the party or parties responsible for the self-verification. If more space is needed, attach an extra sheet of paper marked Block 5.

Block 6. Applicant Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 7 through 9. To be completed, if you choose to have an agent.

Block 7. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 8 and 9. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where they can be reached during normal business hours.

Block 10. Proposed General Permit Activity Name or Title. Please provide a name identifying the proposed GP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

Block 11. File Number(s) of Previous USACE Actions on the Site Please provide any known USACE file number. If the activity does not have a known USACE file number, you may state N/A.

Block 12. Name of Waterbody. Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the GP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 13. Proposed Activity Coordinates. Please enter the latitude and longitude of where the proposed GP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 13.

Block 14. Proposed Activity Street Address. If the proposed activity is located at a site having a street address (not a box number), enter it in Block 14.

Block 15. General Permit Activity Type. Please select all GP activity types that apply to the proposed activity. A list of GP activity types can be found in Section III of the GP.

Block 16. Summary of Project Impacts. Please provide ALL proposed impacts, both temporary and permanent in duration, that are located in Waters of the United States. The area of impact shall be provided in square feet (SF). When applicable, impacts that result in conversion of stream bank or shoreline must also be identified in linear feet (LF). Dredging or the discharge of dredged or fill material shall also include the volume, cubic yards (CY), of material removed from or placed into Waters of the U.S. If more entries are required, please attach a table matching the desired format in Block 16.

Block 17. Project Plans. Please verify that items a-g are included in the project plans. Three types of illustrations are necessary to properly depict the proposed work. These illustrations or drawings are identified as a Vicinity Map, a Plan View (Aerial view) and a Cross Section Map. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings (longitudinal profile) should also be included. Plans must accurately depict the existing conditions and all aspects of the proposed activity located in waters of the U.S. Please submit one copy of all drawings formatted to print on 8½ x 11 inch or 11 x 17 inch plain white paper. Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross section). While illustrations need not be certified engineering sheets; they should be clear, accurate, contain all necessary information, and depict all proposed work. Each submission must also include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by USACE.

Block 18. Avoidance & Minimization. Please verify that items a-d have been implemented for the proposed activity.

Block 19. Due Diligence. Please complete all the fields and submit documentation to USACE to demonstrate compliance with the above requirements. This Documentation may include emails, letters, meeting notes, phone call log, project narrative, project plans, a species list from the NOAA Section 7 Mapper, a completed copy of the IPAC determination keys, etc. Documentation should be limited to what is necessary to demonstrate how the proposed activity meets each requirement. Refer to the MA GP, Appendix A, for specific guidance on the identification of previously identified historic properties and previously unidentified historic properties. Endangered Species: *The applicant must be designated as the non-federal representative for the purposes of Section 7 consultation to select the Rangewide D-Key options. Otherwise, the applicant shall select the following option when IPAC indicates the NLEB is present: "The activity IS located within the NLEB Species Range (PCN Required)."

Block 20. Aquaculture Activities. Please verify that items a-d have been obtained or completed prior to commencing work in waters of the U.S.

Block 21. Additional Information/Attachments. Please verify that items a-d have been completed prior to commencing work in waters of the U.S.

Block 22. Lead Federal Agency. Please identify if there is another lead federal agency involved with the proposed activity. Enter the lead federal agency name (e.g., the Federal Emergency Management Agency, FEMA) and the agency's designated person of contact for the activity.

Block 23. Statement of Authorization. The applicant shall sign this section for all activities. If an agent is to be employed, the agent shall sign this section.

Block 24. Signatures. The SVN must be signed by the person proposing to undertake the GP activity, and if applicable, the authorized party (agent) that prepared the SVN. The signature of the person proposing to undertake the GP activity shall be an affirmation that the party submitting the SVN possesses the requisite property rights to undertake the GP activity.

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Npmnmqcb `pgbec Pcf_`gjgr_rgml + F_prucjj ?tc mtcp Igjl @pmmi

Location / Address: F_prucjj ?tc mtcp Igjl @pmmi

City / Town: Jcvglerml

Project Proponent

Name: John Livsey, Town of Lexington

Address: 201 Bedford Street

City/Town/Zip/Telephone: Lexington, MA 02420 781-274-8392

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Army Corps of Engineers	Self Verification Notification (SVN)
MassDEP	Chapter 91

Project Description (narrative):
Rfc Rmul md Jcvglerml gq npmnmqgle `pgbec pcf_`gjgr_rgml glajsbgle ngjch_aicrgle* pcnj_agle srgjgrw `p_aicrq* _lb pcn_gpgle amlapcrc `pgbec p_gj, ? `_pec ugjj `cj_slafcb `w f_lb _rrfc lmprfc_qr `_li md rfc apmqqgle,

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.
The project proposes selective demolition of the concrete bridge rail and utility brackets. There are no structures or buildings proposed to be demolished.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

N/A

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

The proposed project includes repairs and improvements to the existing bridge. See attached plans.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.
No historical properties are known to exist. The bridge was constructed in 1959.

What is the total acreage of the project area?

Woodland	0 acres	Productive Resources:	
Wetland	0 acres	Agriculture	0 acres
Floodplain	0.12 acres	Forestry	0 acres
Open space	0 acres	Mining/Extraction	0 acres
Developed	0 acres	Total Project Acreage	0.12 acres

What is the acreage of the proposed new construction? 0.12 acres

What is the present land use of the project area?
The present land use includes the developed right-of-way of Hartwell Street, water surface of Kiln brook, and surrounding wetlands.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.
Attached.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Jake McIntire Date: 11/10/2025

Name: Jake McIntire

Address: 282 Merrimack Street, 2nd Floor

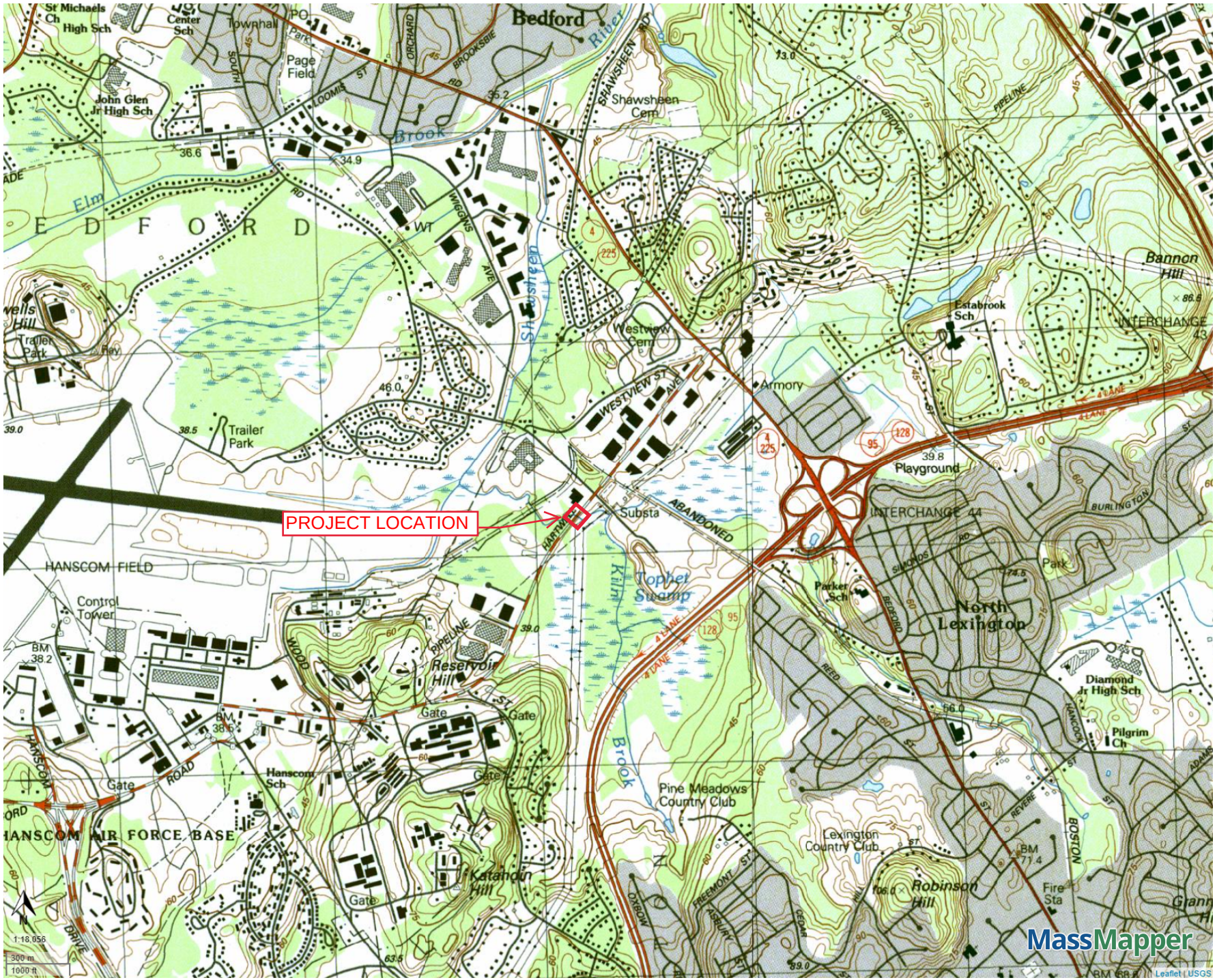
City/Town/Zip: Lawrence, MA 01843

Telephone: 978-794-1792

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

Hartwell Ave over Kiln Brook



LEGEND

- TEMP BVW IMPACTS 125 SF
- TEMP LUW IMPACTS 153 SF
- TEMP BANK IMPACT 126 LF
- BLSF (ELEV 118.5' to 119.9')
- DELINEATED RESOURCE AREA
- BUFFER TO BVW
- LIMIT OF WORK

PROPOSED PLANTING SUMMARY TABLE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	3	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24" - 36"	5' ON CENTER
	3	ACER RUBRUM	RED MAPLE	MIN 6'	10' ON CENTER

PLANTING NOTES:

1. CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
2. FINAL LOCATION OF ALL PLANT MATERIAL WILL BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.
3. ALL PLANT MATERIAL WILL HAVE TAGS INDICATING COMMON NAME, BOTANICAL NAME & SIZE.
4. PLANTING SOIL OR LOAM SHALL BE APPLIED TO ALL DISTURBED AREAS AND SEEDED WITH THE CORRESPONDING SEED MIX PER THE APPLICABLE DETAIL.
5. IMPORTED SOIL SHALL CONSIST OF EQUAL PARTS ORGANIC MATTER (LEAF COMPOST IS PREFERRED) AND CLEAN LOAM OR ORGANIC RICH LOAM WITH A MINIMUM 20% ORGANIC CARBON BY DRY WEIGHT. SURVEYING OF SUBGRADES AND FINISHED ELEVATIONS SHOULD BE CONDUCTED FREQUENTLY DURING CONSTRUCTION. CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED. THEY SHOULD BE TRANSPORTED IN VEHICLES THAT HAVE BEEN WASHED SO THAT NO EXOTIC/INVASIVE SEEDS FROM OTHER SITES GET MIXED IN WITH THEM.
6. SHRUBS SHOULD BE PLANTED IN A RANDOM PATTERN OR IN CLUSTERS TO MIMIC NATURAL CONDITIONS.
7. TRUCKS THAT HAVE PREVIOUSLY BEEN ON OTHER SITES SHOULD BE WASHED PRIOR TO INTRODUCTION TO THE RESTORATION SITE SO THAT MUD/DIRT WITH EXOTIC/INVASIVE SEEDS IS NOT INADVERTENTLY BROUGHT TO THE RESTORATION SITE.
8. ALL PLANTING SHOULD OCCUR AT THE BEGINNING OR END OF THE GROWING SEASON. FALL PLANTINGS SHOULD BE DONE BEFORE THE FIRST FROST, BUT NO LATER THAN NOVEMBER 15.
9. PROPOSED PLANTING SPECIES ARE NATIVE TO THE EXISTING A-SERIES WETLAND, AS IDENTIFIED IN THE WETLAND CHARACTERIZATION REPORT BY HANCOCK ASSOCIATES DATED MARCH 17, 2025.

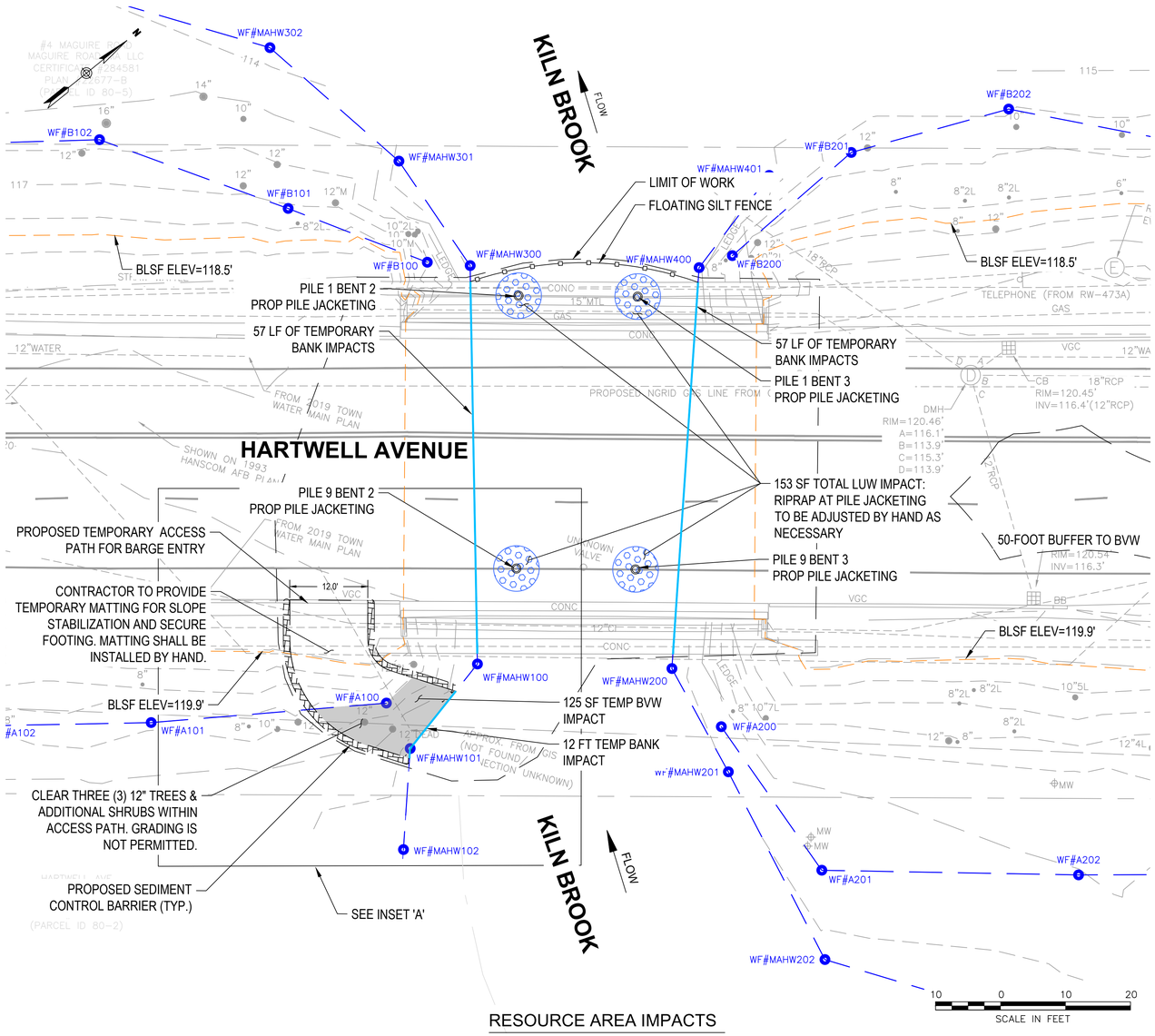
IMPACT NOTES:

1. THE ENTIRETY OF THE LIMIT OF WORK IS WITHIN THE 100-FOOT BUFFER TO BVW AND 200-FOOT RIVERFRONT AREA.
2. AREAS OF TEMPORARY RESOURCE AREA IMPACT ARE TO BE RESTORED TO ORIGINAL CONDITION.
3. EARTHWORK WITHIN THE PROPOSED TEMPORARY ACCESS PATH SHALL BE LIMITED TO PLANTING. GRADING IS NOT PERMITTED.
4. BASED ON THE AVAILABLE INSPECTION REPORTS, IT IS NOT BELIEVED THAT PILE DETERIORATION EXTENDS BEYOND THE MUDLINE. THE CONTRACTOR SHALL CONFIRM THIS WITH THE ENGINEER AT THE TIME OF CONSTRUCTION. EXISTING RIPRAP STONES MAY REQUIRE ADJUSTMENT TO INSTALL PILE REPAIRS.
5. WORK BENEATH THE BRIDGE IS NOT EXPECTED TO ALTER THE EXISTING STONE RIPRAP BANKS, HOWEVER THE IMPACT HAS BEEN QUANTIFIED IN AN EFFORT TO BE CONSERVATIVE.

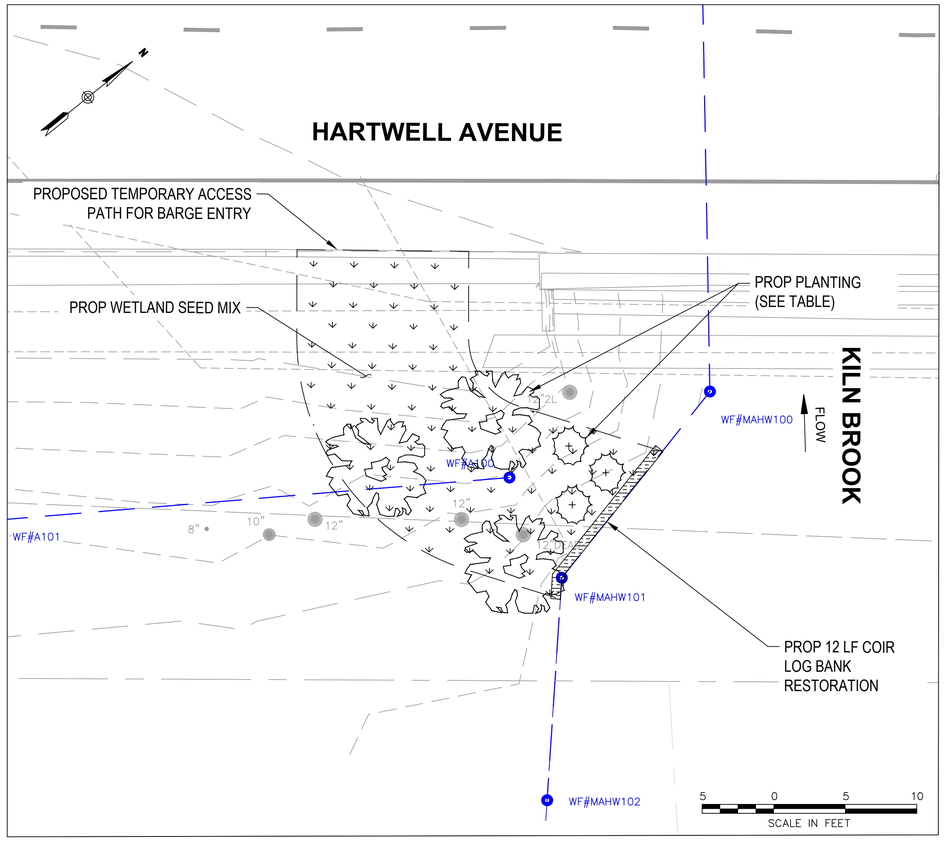
LEXINGTON
HARTWELL AVE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	2
PROJECT FILE NO.	T1559		

RESOURCE AREA IMPACT PLAN (1 OF 2)



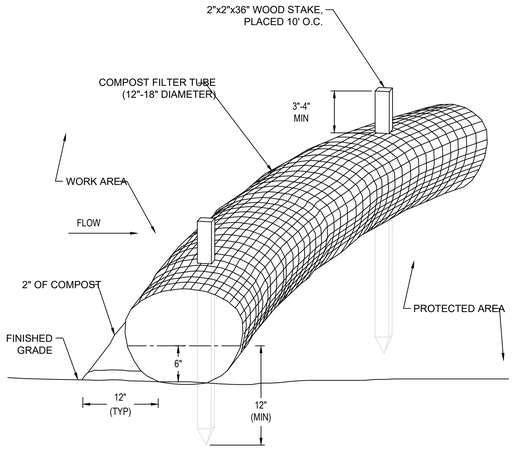
RESOURCE AREA IMPACTS
SCALE: 1" = 10'

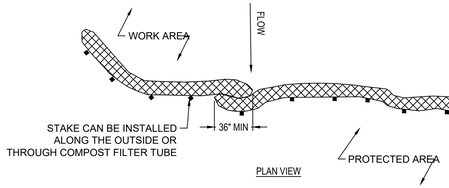


INSET 'A'
RESOURCE AREA RESTORATION
SCALE: 1" = 5'

COMMONWEALTH OF MASSACHUSETTS
KASEY PROVOST
CIVIL
No. 58048
PROFESSIONAL ENGINEER
9/23/25

RESOURCE AREA IMPACT PLAN FINAL.DWG Plotted on 23-Sep-2025 2:24 PM





PLAN VIEW

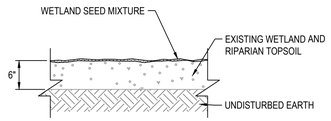
NOTES:

1. CONFIGURE TUBES AROUND EXISTING FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF. TUBES SHALL BE PLACED PERPENDICULARLY TO STORMWATER FLOW WHERE POSSIBLE.
2. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
3. TUBES MAY BE SLEEVED OR PROVIDED A 3 FEET MINIMUM OVERLAP AT THE ENDS OF THE TUBE FOR A CONTINUOUS BARRIER.
4. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
5. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY CONCRETE OR CINDER BLOCKS CAN BE USED BEHIND TUBES UP TO 5 FT. APART OR AS REQUIRED TO SECURE TUBES IN PLACE. DO NOT PUNCTURE TUBES WITH STAKES.
6. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
7. UPON COMPLETION OF PROJECT, ALL TUBES USED FOR EROSION CONTROL SHALL BE REMOVED FROM PROJECT LIMITS, OR DETERMINED BY THE ENGINEER, CAN BE DISPERSED ON SITE.

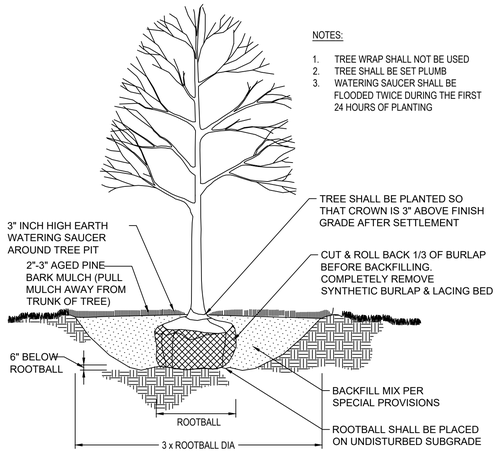
COMPOST FILTER TUBE
N.T.S.

NOTES:

1. GRASS SEED SHALL BE SPREAD DURING THE GROWING SEASON AT THE RATE OF TWENTY (20) POUNDS PER ACRE. IT SHALL BE A WETLAND SEED SEASONALLY FLOODED MIX WITH SPECIES NATIVE TO THE NEW ENGLAND REGION. IT SHALL BE PROPERLY WATERED. A GUARANTY PERIOD OF ONE (1) YEAR FROM FULL GROWTH SHALL BE HONORED BY THE CONTRACTOR.



WETLAND SEED
N.T.S.



NOTES:

1. TREE WRAP SHALL NOT BE USED
2. TREE SHALL BE SET PLUMB
3. WATERING SAUCER SHALL BE FLOODED TWICE DURING THE FIRST 24 HOURS OF PLANTING

TREE SHALL BE PLANTED SO THAT CROWN IS 3" ABOVE FINISH GRADE AFTER SETTLEMENT

CUT & ROLL BACK 1/3 OF BURLAP BEFORE BACKFILLING. COMPLETELY REMOVE SYNTHETIC BURLAP & LACING BED

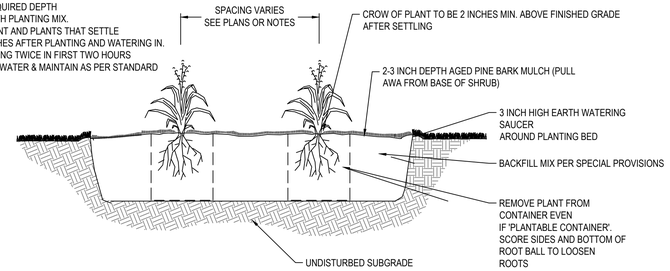
BACKFILL MIX PER SPECIAL PROVISIONS

ROOTBALL SHALL BE PLACED ON UNDISTURBED SUBGRADE

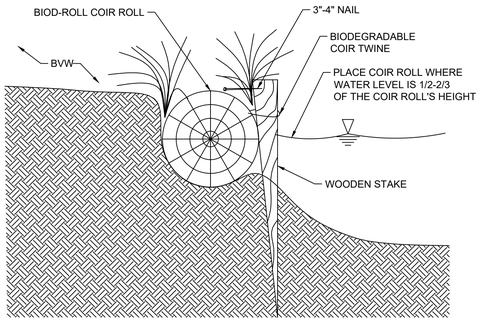
DECIDUOUS TREE PLANTING
N.T.S.

NOTE:

1. EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH PLANTING MIX.
2. RAISE AND REPLANT AND PLANTS THAT SETTLE MORE THAN 3 INCHES AFTER PLANTING AND WATERING IN.
3. WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS.



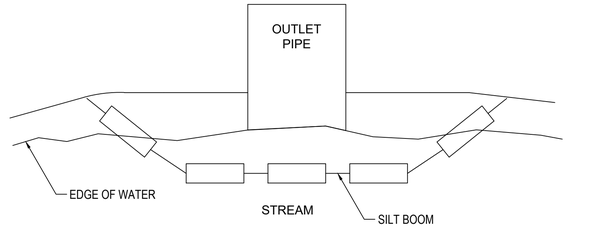
PERENNIAL PLANTING
N.T.S



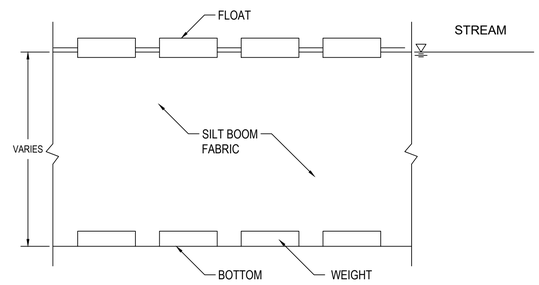
NOTES:

1. CLEAR AREA OF ANY DEBRIS, TREES, ROCKS OR LARGE OBSTRUCTIONS PRIOR TO INSTALLATION.
2. LOGS ARE PLACED IN A SMALL PRE-DUG TRENCH ALONG STREAM BANK.
3. COIR LOGS ARE CONSTRUCTED FROM CYLINDER/ROUND SHAPE COIR NETTING PACKED WITH BIODEGRADABLE COIR FIBER.
4. LOGS ARE SECURED INTO POSITION USING WOODEN STAKES, COIR TWINE AND A NAIL.
5. ADJACENT LOGS ARE TIED TOGETHER END TO END USING COIR TWINE.

COIR GREEN LOGS
N.T.S.



PLAN



PROFILE

FLOATING SILT FENCE
N.T.S.

COMMONWEALTH OF MASSACHUSETTS
KASEY PROVOST
CIVIL
No. 58048
PROFESSIONAL ENGINEER
9/23/25

Custom Soil Resource Report
Soil Map

Map Scale: 1:459 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 5 10 20 30

Feet: 0 20 40 80 120

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

TEC, Inc.
282 Merrimack Street, 2nd Floor
Lawrence, MA 01843
978.794.1792

Massachusetts Board of Underwater Archaeological Resources
100 Cambridge Street
Suite 900
Boston, MA 02114

November 10, 2025

Attn: Massachusetts BUAR

Ref. T1559

Re. Hartwell Avenue Bridge over Kiln Brook – Lexington

To whom it may concern:

The Town of Lexington is proposing to rehabilitate the Hartwell Avenue bridge over Kiln Brook. The recent bridge inspection identified structural deficiencies such as deterioration of the timber piles and spalling of the concrete rails. The project proposes rehabilitation to extend the life of the bridge and restore vehicular safety features. I am reaching out to initiate coordination regarding this project in accordance with the requirements of the USACE Self-Verification Notification.

The proposed rehabilitation includes pile jacketing of four timber piles using Sika fiberglass reinforced plastic (FRP) pile repair sleeves, repairing the bridge rail, and replacing the utility duct brackets.

The project proposes minor clearing as necessary to launch a barge by hand at the southeastern bank of Kiln Brook. Generally, the proposed improvements seek to retain the existing features of Hartwell Avenue and Kiln Brook.

Please see attached Project Notification Form, locus map, plans, and soil maps for further project information.

Please do not hesitate to contact me directly if you have any questions concerning our project at 978-794-1792. Thank you for your consideration.

Sincerely,

Jake McIntire, EIT
Project Engineer

TEC, Inc.
"The Engineering Corporation"

Attachment
Project Notification Form
Locus Map
Construction Plans
Soil Maps

Jake McIntire

From: Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@theengineeringcorp.com>
To: david.s.robinson@mass.gov
Sent: Monday, November 10, 2025 1:54 PM
Subject: Relayed: Hartwell Ave over Kiln Brook

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

david.s.robinson@mass.gov (david.s.robinson@mass.gov)

Subject: Hartwell Ave over Kiln Brook

Hartwell Ave over Kiln Brook

TEC, Inc.
282 Merrimack Street, 2nd Floor
Lawrence, MA 01843
978.794.1792

David Weeden
Tribal Historic Preservation Officer (THPO)
Mashpee Wampanoag Tribe
483 Great Neck Road South
Mashpee, MA 02649

November 10, 2025

Attn: Mr. Weeden

Ref. T1559

Re. Hartwell Street Bridge over Kiln Brook – Lexington

To whom it may concern:

The Town of Lexington is proposing to rehabilitate the Hartwell Street bridge over Kiln Brook. The recent bridge inspection identified structural deficiencies such as deterioration of the timber piles and spalling of the concrete rails. The project proposes rehabilitation to extend the life of the bridge and restore vehicular safety features. I am reaching out to initiate coordination regarding this project in accordance with the requirements of the USACE Self-Verification Notification.

The proposed rehabilitation includes pile jacketing of four timber piles using Sika fiberglass reinforced plastic (FRP) pile repair sleeves, repairing the bridge rail, and replacing the utility duct brackets.

The project proposes minor clearing as necessary to launch a barge by hand at the southeastern bank of Kiln Brook. Generally, the proposed improvements seek to retain the existing features of Hartwell Street and Kiln Brook.

Please see attached Project Notification Form, locus map, plans, and soil maps for further project information.

Please do not hesitate to contact me directly if you have any questions concerning our project at 978-794-1792. Thank you for your consideration.

Sincerely,

Jake McIntire, EIT
Project Engineer

TEC, Inc.
"The Engineering Corporation"

Attachment
Project Notification Form
Locus Map
Construction Plans
Soil Maps

Jake McIntire

From: Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@theengineeringcorp.com>
To: 106review@mwtribe-nsn.gov; david.weeden@mwtribe-nsn.gov
Sent: Monday, November 10, 2025 1:59 PM
Subject: Relayed: Hartwell Ave over Kiln Brook

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

106review@mwtribe-nsn.gov (106review@mwtribe-nsn.gov)

david.weeden@mwtribe-nsn.gov (david.weeden@mwtribe-nsn.gov)

Subject: Hartwell Ave over Kiln Brook

Hartwell Ave over
Kiln Brook

TEC, Inc.
282 Merrimack Street, 2nd Floor
Lawrence, MA 01843
978.794.1792

November 10, 2025

John Brown
Tribal Historic Preservation Officer
Narragansett Indian Longhouse
4425 South County Trail
Charlestown, RI 02813

Attn: John Brown

Ref. T1559

Re. Hartwell Street Bridge over Kiln Brook – Lexington

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The Town of Lexington is proposing to rehabilitate the Hartwell Street bridge over Kiln Brook. The recent bridge inspection identified structural deficiencies such as deterioration of the timber piles and spalling of the concrete rails. The project proposes rehabilitation to extend the life of the bridge and restore vehicular safety features. I am reaching out to initiate coordination regarding this project in accordance with the requirements of the USACE Self-Verification Notification.

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Jake McIntire, EIT
Project Engineer

TEC, Inc.
*"**T**he **E**ngineering **C**orporation"*

Attachment Project Notification Form
Locus Map
Construction Plans
Soil Maps

Jake McIntire

From: Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@theengineeringcorp.com>
To: tashtesook@aol.com
Sent: Monday, November 10, 2025 2:08 PM
Subject: Relayed: Hartwell Ave over Kiln Brook

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

tashtesook@aol.com (tashtesook@aol.com)

Subject: Hartwell Ave over Kiln Brook

Hartwell Ave over Kiln Brook

TEC, Inc.
282 Merrimack Street, 2nd Floor
Lawrence, MA 01843
978.794.1792

Bettina Washington
Wampanoag Tribe of Gay Head
Tribal Historic Preservation Officer
20 Black Brook Road
Aquinnah, MA 02535

November 10, 2025

Attn: Bettina Washington

Ref. T1559

Re. Hartwell Street Bridge over Kiln Brook – Lexington

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Sincerely,

Jake McIntire, EIT
Project Engineer

TEC, Inc.
"The Engineering Corporation"

Attachment
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Construction Plans
Soil Maps

Jake McIntire

From: Microsoft Outlook <MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@theengineeringcorp.com>
To: Bettina Washington
Sent: Monday, November 10, 2025 2:27 PM
Subject: Relayed: Hartwell Ave over Kiln Brook

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

Bettina Washington (thpo@wampanoagtribe-nsn.gov)

Subject: Hartwell Ave over Kiln Brook

Hartwell Ave over Kiln Brook

TEC, Inc.
282 Merrimack Street, 2nd Floor
Lawrence, MA 01843
978.794.1792

Massachusetts Historical Commission
The Massachusetts Archives Building
220 Morrissey Boulevard
Boston, MA 02125

November 10, 2025

Attn: Massachusetts Historical Commission

Ref. T1559

Re. Hartwell Street Bridge over Kiln Brook – Lexington

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Sincerely,

Jake McIntire, EIT
Project Engineer

TEC, Inc.
"The Engineering Corporation"

Attachment Project Notification Form
Locus Map
Construction Plans
Soil Maps

RECEIVED
NOV 12 2025
MASS. HIST. COMM
RC. 77569

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Proposed bridge Rehabilitation - Hartwell Ave over Kiln Brook

Location / Address: Hartwell Ave over Kiln Brook

City / Town: Lexington

After review of MHC files and the materials you submitted, it has been determined that this project is unlikely to affect significant historic or archaeological resources.

12/4/25
Caitriona Parker RC. 77569 Date
Preservation Planner
Massachusetts Historical Commission

Project Proponent

Name: John Livsey, Town of Lexington

Address: 201 Bedford Street

City/Town/Zip/Telephone: Lexington, MA 02420 781-274-8392

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Army Corps of Engineers	Self Verification Notification (SVN)
MassDEP	Chapter 91

Project Description (narrative):
The Town of Lexington is proposing bridge rehabilitation including pile jacketing, replacing utility brackets, and repairing concrete bridge rail. A barge will be launched by hand at the northeast bank of the crossing.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.
The project proposes selective demolition of the concrete bridge rail and utility brackets. There are no structures or buildings proposed to be demolished.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

N/A

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

The proposed project includes repairs and improvements to the existing bridge. See attached plans.