

Kings Cove Conservation Restriction Area MCP Response Action

Weymouth, Massachusetts

SUBMITTED TO

The Executive Office of Energy and
Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

SUBMITTED BY

Algonquin Gas Transmission, LLC
890 Winter Street, Suite 300
Waltham, Massachusetts 02451

PREPARED BY



99 High Street, 13th Floor
Boston, MA 02110

May 13, 2025



May 13, 2025

Ref: 16105.00

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
Attn: Tori Kim, MEPA Director
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Kings Cove Conservation Restriction Area MCP Response Action, Weymouth, MA
Expanded Environmental Notification Form

Dear Secretary Tepper:

On behalf of Algonquin Gas Transmission, LLC (the Proponent), we are pleased to submit the enclosed Expanded Environmental Notification Form (EENF) for the Kings Cove Conservation Restriction Area (KCCRA) Response Action in Weymouth, Massachusetts (the Project).

The Project will be implemented in the southeastern portion of the KCCRA to respond to Hazardous Materials as defined in the Massachusetts Contingency Plan (310 CMR 40.0000, *et seq.*) (MCP) contained in the fill used to create the landform that became the KCCRA.

The Project includes the excavation and replacement of approximately 630 cubic yards (CY) of fill and sediment, extensions of an existing rip rap revetment, and placement of clean cobble to create a gradual surficial transition between the revetment and the area in which fill and sediment will be replaced.

The purpose of the Project is to achieve a Permanent Solution under the MCP.

The Project is located within one mile of Environmental Justice populations, and exceeds the following MEPA Review Thresholds for an ENF and other MEPA Review:

- 301 CMR 11.03(3)(b)(1)(a) – Alteration of coastal bank;
- 301 CMR 11.03(3)(b)(1)(e) – New fill in a velocity zone;
- 301 CMR 11.03(3)(b)(1)(f) – Alteration of ½ or more areas of any other wetlands.

Pursuant to 301 CMR 11.06(8), the Proponent respectfully requests that you allow a single EIR for the Project in light of the evaluations of the KCCRA Response Action and all feasible alternatives that have already been conducted pursuant to the MCP, the opportunities for public comment provided regarding each of the MCP submittals relating to those evaluations, and the additional evaluations and opportunities for public comment that will follow relating to the State approvals that are required to implement the Project, including a Waterways License under Massachusetts General Laws Chapter 91.

Please publish notice of availability of the EENF for public review in the May 23, 2025, edition of the Environmental Monitor. We understand that public comments will be due by June 23, 2025, and a Certificate is anticipated to be

Rebecca Tepper, Secretary
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issued on June 30, 2025. This filing has been distributed electronically, and hard copies will be made available at the Weymouth Public Library in Weymouth, MA, as well as by request.

We look forward to your review of this Project. Please contact me at 617-607-6172 or ejohnson@vhb.com if you have any questions.

Sincerely,

A handwritten signature in brown ink, appearing to read "Erika L. Johnson".

Erika Johnson, AICP, LEED AP BD+C, ENV SP
Senior Environmental Planner

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Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

| |
|---|
| <p><i>For Office Use Only</i></p> <p>EEA#: Click or tap here to enter text.</p> <p>MEPA Analyst: Click or tap here to enter text.</p> |
|---|

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

| | | |
|---|---|---|
| Project Name: Kings Cove Conservation Restriction Area MCP Response Action | | |
| Street Address: 82-90 Bridge Street | | |
| Municipality: Weymouth | Watershed: WEIR | |
| Universal Transverse Mercator Coordinates: Zone 19 | Latitude: 42.24355 N | Longitude: 70.96207W |
| Estimated commencement date: 12/1/2025 | Estimated completion date: 4/1/2026 | |
| Project Type: Massachusetts Contingency Plan Response Action | Status of project design: 75 % Complete | |
| Proponent: Algonquin Gas Transmission, LLC | | |
| Street Address: 890 Winter Street, Suite 300 | | |
| Municipality: Waltham | State: MA | Zip Code: 02451 |
| Name of Contact Person: Erika Johnson | | |
| Firm/Agency: VHB | Street Address: 99 High Street, 13th Fl | |
| Municipality: Boston | State: MA | Zip Code: 02110 |
| Phone: 617.607.6172 | Fax: Click or tap here to enter text. | E-mail: ejohnson@vhb.com |
| Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No; | | |
| If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting: | | |
| a Single EIR? (see 301 CMR 11.06(8)) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| a Rollover EIR? (see 301 CMR 11.06(13)) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Special Review Procedure? (see 301CMR 11.09) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Waiver of mandatory EIR? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Phase I Waiver? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| <i>(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)</i> | | |
| Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)? | | |
| <ul style="list-style-type: none"> • 301 CMR 11.03(3)(b)(1)(a) – Alteration of coastal bank • 301 CMR 11.03(3)(b)(1)(e) – New fill in a velocity zone • 301 CMR 11.03(3)(b)(1)(f) – Alteration of ½ or more acres of any other wetlands | | |

Which State Agency Permits will the project require?

Federal

| | |
|---|---|
| US Army Corps of Engineers (USACE) | Section 404 Pre-Construction Notification |
| US Environmental Protection Agency (EPA) | National Pollution Discharge Elimination System (NPDES) General Permit coverage for construction stormwater and dewatering |

State

| | |
|---|--|
| Executive Office of Energy and Environmental Affairs (EOEEA) | Review under the Massachusetts Environmental Policy Act (MEPA) |
| Department of Environmental Protection (DEP) | Chapter 91 License 401 Water Quality Certification for intertidal dredging/fill |
| Department of Transportation (DOT) | Transportation Access Permit for construction access to Bridge Street |
| Water Resources Authority (MWRA) | 8(m) Permit for work within MWRA Sewer Easements |

Local

| | |
|---|---|
| Weymouth Conservation Commission | Wetlands Protection Act Order of Conditions for work within jurisdictional resource areas. Includes review by the Department of Marine Fisheries (DMF). (Already received) |
|---|---|

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

Not Applicable

Summary of Project Size & Environmental Impacts

| | Existing | Change | Total |
|--|---------------|------------------|-----------|
| LAND | | | |
| Total site acreage | 1.5 ac | | |
| New acres of land altered | | 0.8 ac | |
| Acres of impervious area | 0 | 0 | 0 |
| Square feet of new bordering vegetated wetlands alteration | | 0 | |
| Square feet of new other wetland alteration | | 37,105 sf | |
| Acres of new non-water dependent use of tidelands or waterways | | 0 | |
| STRUCTURES | | | |
| Gross square footage | 0 | 0 | 0 |
| Number of housing units | 0 | 0 | 0 |
| Maximum height (feet) | NA | NA | NA |
| TRANSPORTATION | | | |
| Vehicle trips per day | 0 | 0 | 0 |
| Parking spaces | 0 | 0 | 0 |
| WASTEWATER | | | |
| Water Use (Gallons per day) | 0 | 0 | 0 |
| Water withdrawal (GPD) | 0 | 0 | 0 |
| Wastewater generation/treatment (GPD) | 0 | 0 | 0 |
| Length of water mains (miles) | 0 | 0 | 0 |
| Length of sewer mains (miles) | 0 | 0 | 0 |

| |
|--|
| Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA #) <input checked="" type="checkbox"/> No |
| Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA #) <input checked="" type="checkbox"/> No |

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION

Existing Conditions

Describe the existing conditions and land uses on the project site:

The Project Site is located in the southern portion of the Kings Cove Conservation Restriction Area (KCCRA), north of Bridge Street. The Project Site is comprised of a part of the Upland Portion of the KCCRA, which includes the grassed and paved areas of the KCCRA and eroding fill adjacent to the Shore Portion of the Site, and a part of the Shore Portion of the KCCRA which is an intertidal area with gravel-sized and cobble-sized pieces of coal slag and other fill material such as bricks mixed with small amounts of natural sand and gravel. At the northern limit of the Project Site, there is an existing rip rap revetment which extends north between the Upland Portion of the KCCRA and the Shore Portion of the KCCRA along the Kings Cove shoreline to the top of the peninsula. MLW at the Project Site is located at elevation -5.3 feet NAVD88 and MHW is located at elevation 4.3 feet NAVD88. Topography at the Project Site slopes steeply down to the edge of the water. Figure 1.1 is a Site Locus map and Figure 1.2 is a Project Site Context map showing the Upland Portion of the KCCRA and the Shore Portion of the KCCRA within the Project Site.

According to the most recently available data provided by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife exist within the Project Site limits and no Certified or Potential vernal pools are located on or adjacent to the Project Site. Similarly, no portion of the Project Site is located within an Area of Critical Environmental Concern (ACEC) or an area designated as an Outstanding Resource Water (ORW). The most recently issued FEMA Flood Insurance Rate Map (FIRM) indicates that the Project Site is within the mapped coastal floodplain for the 100-year storm event. These areas in the 100-year floodplain are regulated as Land Subject to Coastal Storm Flowage (LSCSF). The Natural Resources Conservation Service (NRCS) soil survey mapped the surface soils within the Project Site as Urban Land (602). Federal and state regulated wetland resource areas present on the Project Site consist of waters and lands beneath Kings Cove, as well as Coastal Beach, Coastal Bank, Lands Containing Shellfish, and LSCSF as based on the statistical 100-year storm event. FEMA maps depict the Project Site entirely within the velocity (VE) zone. Jurisdictional wetland and waterways resources are described further in Chapter 4, *Wetlands and Waterways*. Refer to Figure 1.3 for the Environmental Constraints map and Figure 1.4 for the Existing Site Conditions Plan.

Project Description

Describe the proposed project and its programmatic and physical elements:

The Project is the KCCRA Response Action under the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000) specified in the Phase IV Remedy Implementation Plan (RIP) for the KCCRA. The KCCRA Response Action includes the removal and replacement of 630 cubic yards (CY) of sediment/impacted fill within an intertidal area and the extension of an existing rip rap revetment in the northern area of the Project Site to contain eroding impacted fill in the KCCRA. In connection with the KCCRA Response Action, clean cobble will be placed between the revetment and the area in which fill and sediment will be removed and replaced to create a gradual surficial transition, improving the current condition in the KCCRA.

Refer to Figure 1.5 for the Proposed Conditions Site Plan.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Alternatives

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

NOTE: The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.

As specified in the MCP at 310 CMR 40.850, a detailed evaluation of alternatives to the KCCRA Response Action was conducted and reviewed by the Massachusetts Department of Environmental Protection.

Three remedial action alternatives were considered for the Shore Portion of the KCCRA and five remedial action alternatives were considered for the Upland Portion of the Site.

The Shore Portion Alternatives include:

- 1. No Action**
- 2. Excavation with Offsite Disposal**
- 3. Excavation with Offsite Disposal and Onsite Beneficial Reuse (the Shore Portion of the Project)**

The Upland Portion Alternatives include:

- 1. No Action**
- 2. Sheet Pile Bulkhead and Stone Revetment**
- 3. Complete Excavation and Replacement**
- 4. Soft Shoreline Solution**
- 5. Extended Stone Revetment (the Upland Portion of the Project)**

Refer to Chapter 2, *Alternative Analysis* for detailed information.

Mitigation

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The purpose of the Project is to achieve a Permanent Solution as outlined in the MCP to address Hazardous Materials as defined in the MCP present in the fill used to create the landmass that includes the KCCRA. Consistent with the purpose of the Project, the impacts of the KCCRA are overwhelmingly positive. However, a suite of mitigation measures will be employed to prevent short - and long-term impacts to wetland resource areas in connection with the implementation of the Project. These mitigation measures include an erosion and sedimentation control program. Sediment and turbidity controls, including a turbidity curtain for in-water work, will be utilized to prevent the migration of sediment from the Shore Portion of the Project Site into Kings Cove during the implementation of the Project.

Phasing

If the project is proposed to be constructed in phases, please describe each phase:

The Project will consist of the following general activities:

- › **Before any work begins, installing erosion and sedimentation controls according to the Project Plans, including controls for in-water work;**

- › Excavating fill and sediment during low tide cycles and placing the excavated fill and sediment within designated stockpile areas awaiting reuse or disposal;
- › Placing clean cobble cover;
- › Constructing the rip rap revetment, including placing dewatered excavated fill behind the armor stone;
- › Removal of remaining excavated fill and sediment for off-site disposal;
- › Restoration of disturbed construction access and staging areas (loaming and seeding);
- › Removing erosion and sedimentation controls.

If applicable approvals and permissions are received, implementation of the Project could begin in Fall 2025 and be completed during Winter 2026.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Is the project within or adjacent to an Area of Critical Environmental Concern?

Yes (Specify: [Click or tap here to enter text.](#)) No

If yes, does the ACEC have an approved Resource Management Plan? Yes No; If yes, describe how the project complies with this plan.

[Click or tap here to enter text.](#)

Will there be stormwater runoff or discharge to the designated ACEC? Yes No; If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

[Click or tap here to enter text.](#)

RARE SPECIES

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/priority_habitat/priority_habitat_home.htm)

Yes (Specify: [Click or tap here to enter text.](#)) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth? Yes (Specify: [Click or tap here to enter text.](#)) No; If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify: [Click or tap here to enter text.](#)) No;

WATER RESOURCES

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? Yes No; If yes, identify the ORW and its location.

[Click or tap here to enter text.](#)

NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.

Are there any impaired water bodies on or within a half-mile radius of the project site? Yes No; If yes, identify the water body and pollutant(s) causing the impairment:

Yes. The Project is located within an approximately 2.29 square mile Class SB waterbody (Assessment Unit ID: MA74-14) named Weymouth Fore River, which is identified as a Category 5 waterbody AU in the Massachusetts Year 2022 Integrated List of Waters report. A Category 5 is described as a waterbody that is impaired for one or more uses and requires a restorative “action” plan, such as a Total Maximum Daily Load or Alternative Restoration Plan.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? Yes No

STORMWATER MANAGEMENT

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

Not Applicable

MASSACHUSETTS CONTINGENCY PLAN

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes No; If yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome Classification):

The KCCRA is within the Disposal Site identified by the Release Tracking Number (RTN) 4-26230. A Final Phase IV Remedy Implementation Plan regarding the KCCRA Response Action was submitted to the Massachusetts Department of Environmental Protection in July 2024 following public and DEP review and comments.

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes No; If yes, describe which portion of the site and how the project will be consistent with the AUL:

N/A

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes No; If yes, please describe:

N/A

SOLID AND HAZARDOUS WASTE

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

The KCCRA Response Action will generate approximately 830 cubic yards of excess fill and sediment requiring management as specified in the Final Phase IV Remedy Implementation Plan.

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes No; If yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment:

Construction equipment will be required to abide by the Massachusetts 5-minute idle law.

DESIGNATED WILD AND SCENIC RIVER

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes No; If yes, specify name of river and designation: [Click or tap here to enter text.](#)

If yes, does the project have the potential to impact any of the “outstandingly remarkable” resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River? Yes No; If yes, specify name of river and designation: [Click or tap here to enter text.](#)

If yes, will the project result in any impacts to any of the designated “outstandingly remarkable” resources of the Wild and Scenic River or the stated purposes of a Scenic River? Yes No; If yes, describe the potential impacts to one or more of the “outstandingly remarkable” resources or stated purposes and mitigation measures proposed.

[Click or tap here to enter text.](#)

ATTACHMENTS:

1. List of all attachments to this document.

Appendix A – EENF Distribution List

Appendix B – Public Involvement Plan

Appendix C – Environmental Justice Supporting Documentation

Appendix D – RMA Report

2. U.S.G.S. map (good quality color copy, 8-1/2 x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.

Refer to Figure 1.1 for the Site Location Map.

3. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.

Refer to Figure 1.4 for the existing conditions plan.

4. Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.

Refer to Figure 1.3 for the environmental constraints.

5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).

Refer to Figure 1.5 for the proposed conditions plan.

6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).

Refer to Appendix A – EENF Distribution List.

7. List of municipal and federal permits and reviews required by the project, as applicable.

Refer to Table 1-2 for the local, state, and federal permits required.

8. Printout of output report from RMAAT Climate Resilience Design Standards Tool, available [here](#).

Refer to Appendix D for the RMAAT Report.

9. Printout from the EEA [EJ Maps Viewer](#) showing the project location relative to Environmental Justice (EJ) Populations located in whole or in part within a 1-mile and 5-mile radius of the project site.

Refer to Figure 3.1 for the Environmental Justice Map.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1) Yes No; If yes, specify each threshold:

Click or tap here to enter text.

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

| | Existing | Change | Total |
|-------------------------------|----------|--------|--------|
| Footprint of buildings | 0 | 0 | 0 |
| Internal roadways | 0 | 0 | 0 |
| Parking and other paved areas | 0 | 0 | 0 |
| Other altered areas | 1.5 ac | 0 ac | 1.5 ac |
| Undeveloped areas | 0 ac | 0 ac | 0 ac |
| Total: Project Site Acreage | 1.5 ac | 0 | 1.5 |

B. Has any part of the project site been in active agricultural use in the last five years? Yes No; If yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

Click or tap here to enter text.

C. Is any part of the project site currently or proposed to be in active forestry use? Yes No; If yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

Click or tap here to enter text.

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? Yes No; If yes, describe:

Click or tap here to enter text.

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? Yes No; If yes, does the project involve the release or modification of such restriction? Yes No; If yes, describe:

The Project is located within the Kings Cove Conservation Restriction Area. No release or modification of the restriction is anticipated.

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? Yes No; If yes, describe:

Click or tap here to enter text.

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes No; If yes, describe:

Click or tap here to enter text.

III. Consistency

A. Identify the current municipal comprehensive land use plan.

Title: **Weymouth Town Master Plan**

Date: **April 2021**

B. Describe the project's consistency with that plan with regard to:

- 1) Economic development: **The economic development goal of the Town Master Plan is to support the redevelopment and reinvestment in Weymouth's villages and commercial centers, and the creation of new commercial development options within the areas designated for such development. This goal is not applicable to the Project as the Project Site is located within the industrial zone (I-2) and the Project is limited to a Response Action under the MCP.**
- 2) Adequacy of infrastructure: **The Project is located in the KCCRA area, north of the Bridge Street (Route 3A). The Project does not involve transportation and infrastructure and will not result in any transportation and traffic impacts after implementation. However, the Project will be subject to a Transportation Access Permit from MassDOT for construction access to Bridge Street and transportation management will be conducted during the construction period.**
- 3) Open space impacts: **The Project will meet certain objectives highlighted under the open space goal in the Town Master Plan. Specifically, the Project will stabilize the eroding shoreline and improve environmental conditions and public health by achieving a Permanent Solution under the MCP.**
- 4) Compatibility with adjacent land uses: **The Project is located in the General Industrial Zone (I-2). The Project will improve the site conditions, therefore support the continued use of the site.**

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)

RPA: **Metropolitan Area Planning Council (MAPC)**

Title: **MetroCommon 2050**

Date: **2021**

D. Describe the project's consistency with that plan with regard to:

- 1) Economic development: **This goal is not applicable to the Project. The Project is limited to a Response Action under the MCP.**
- 2) Adequacy of infrastructure: **As mentioned above, the Project is located in the KCCRA area, north of the Bridge Street (Route 3A). The Project does not involve transportation and infrastructure and will not result in any transportation and traffic impacts after implementation. Construction period transportation management will be implemented properly.**
- 3) Open space impacts : **The Project meets the 'A Healthy Environment' and the 'Healthy and Safe Neighborhoods' goals which are related to open space. The Project will achieve a Permanent Solution as defined in the MCP.**

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to **rare species or habitat**? Yes No
- C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes No
- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

- A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes No; If yes:
- 1) Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? Yes No; If yes, have you received a determination as to whether the project will result in the "take" of a rare species Yes No; If yes, attach the letter of determination to this submission.
 - 2) Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? Yes No; If yes, provide a summary of proposed measures to minimize and mitigate rare species impacts.

Click or tap here to enter text.
 - 3) Which rare species are known to occur within the Priority or Estimated Habitat?

Click or tap here to enter text.
 - 4) Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? Yes No
 - 5) If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? Yes No; If yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? Yes No
- B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? Yes No; If yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? Yes No; If yes, specify, in quantitative terms:

The Project will exceed the following thresholds listed under 301 CMR 11.03(3):

- **301 CMR 11.03(3)(b)(1)(a) – Alteration of coastal bank**
- **301 CMR 11.03(3)(b)(1)(e) – New fill in a velocity zone**
- **301 CMR 11.03(3)(b)(1)(f) – Alteration of ½ or more acres of any other wetlands**

C. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? Yes No; If yes, specify which permit:

- 1. Chapter 91 License**
- 2. 401 Water Quality Certification**
- 3. Local Order of Conditions**

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? Yes No

If yes, has a Notice of Intent been filed? Yes No; If yes, list the date and MassDEP file number:

7/12/2024; DEP# 81-1320

If yes, has a local Order of Conditions been issued? Yes No

Was the Order of Conditions appealed? Yes No

Will the project require a Variance from the Wetlands regulations? Yes No

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

The Project will result in positive permanent impacts to approximately 37,105 Square Feet of Coastal Beach/LCS, approximately 590 Linear Feet of Coastal Bank, and 46,385 Square Feet of LSCSF.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

| | Area (square feet) or Length (linear feet) | Temporary or Permanent Impact? |
|---------------------------|--|--------------------------------|
| Coastal Wetlands | | |
| Land Under the Ocean | 0 | NA |
| Designated Port Areas | 29,000 | Permanent |
| Coastal Beaches | 37,105 | Permanent |
| Coastal Dunes | 0 | NA |
| Barrier Beaches | 0 | NA |
| Coastal Banks | 590 | Permanent |
| Rocky Intertidal Shores | 0 | NA |
| Salt Marshes | 0 | NA |
| Land Under Salt Ponds | 0 | NA |
| Land Containing Shellfish | 37,105 | Permanent |

| | | |
|---------------------------------------|---------------|------------------|
| Fish Runs | 0 | NA |
| Land Subject to Coastal Storm Flowage | 46,385 | Permanent |
| Inland Wetlands | | |
| Bank (lf) | NA | NA |
| Bordering Vegetated Wetlands | NA | NA |
| Isolated Vegetated Wetlands | NA | NA |
| Land Under Water | NA | NA |
| Isolated Land Subject to Flooding | NA | NA |
| Bordering Land Subject to Flooding | NA | NA |
| Riverfront Area | NA | NA |

NA: Not Applicable

D. Is any part of the project:

- 1) proposed as a **limited project**? Yes No; if yes, what is the area (in sf)? 1.5 ac
- 2) the construction or alteration of a **dam**? Yes No; If yes, describe: [Click or tap here to enter text.](#)
- 3) fill or structure in a **velocity zone** or **regulatory floodway**? Yes No
- 4) dredging or disposal of dredged material? Yes No; if yes, describe the volume of dredged material and the proposed disposal site: **630 CY; Offsite disposal**
- 5) a discharge to an Outstanding Resource Water (ORW) or an Area of Critical Environmental Concern (ACEC)? Yes No
- 6) subject to a wetlands restriction order? Yes No; if yes, identify the area (in sf): [Click or tap here to enter text.](#)
- 7) located in buffer zones? Yes No; if yes, how much (in sf) **5,275 sf**

E. Will the project:

- 1) be subject to a local wetlands ordinance or bylaw? Yes No
- 2) alter any federally-protected wetlands not regulated under state law? Yes No; if yes, what is the area (sf)? [Click or tap here to enter text.](#)

III. Waterways and Tidelands Impacts and Permits

- A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? Yes No

If yes, is there a current Chapter 91 License or Permit affecting the project site? Yes No

If yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands: **Refer to Chapter 4, Wetlands and Waterways for information.**

- C. Does the project require a new or modified license or permit under M.G.L.c.91? Yes No;
If yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use?
Current: **0** Change: **0** Total: **0**

If yes, how many square feet of solid fill or pile-supported structures (in sf)? **37,105 sf**

- D. For non-water-dependent use projects, indicate the following: **Not Applicable**

Area of filled tidelands on the site: [Click or tap here to enter text.](#)

Area of filled tidelands covered by buildings:

For portions of site on filled tidelands, list ground floor uses and area of each use:

Does the project include new non-water-dependent uses located over flowed tidelands?

Yes No

Height of building on filled tidelands: [Click or tap here to enter text.](#)

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-

dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

- E. Is the project located on landlocked tidelands? Yes No; If yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

Click or tap here to enter text.

- F. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? Yes No; If yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

Click or tap here to enter text.

- G. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? Yes No
(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

- H. Does the project include dredging? Yes No; If yes, answer the following questions:

What type of dredging? Improvement Maintenance Both

What is the proposed dredge volume, in cubic yards (cys): **630**

What is the proposed dredge footprint:

length (ft): **330**

width (ft): **50**

depth (ft): **1**

Will dredging impact the following resource areas?

Intertidal Yes No; if yes, **16,905** sq ft

Outstanding Resource Waters Yes No; if yes, Click or tap here to enter text. sq ft

Other resource area (i.e. shellfish beds, eel grass beds) Yes No; if yes Click or tap here to enter text. sq ft

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

Yes. Refer to Chapter 8, Draft Section 61 Findings and Proposed Mitigation.

If no to any of the above, what information or documentation was used to support this determination? Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.

Please refer to Chapter 2, Alternatives Analysis. As specified in the MCP at 310 CMR 40.850, a detailed evaluation of alternatives to the KCCRA Response Action was conducted and reviewed by the Massachusetts Department of Environmental Protection. See below for information regarding sediment physical and chemical data.

Sediment Characterization

Existing gradation analysis results? Yes* No; if yes, provide results. **See note below**

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? Yes* No; if yes, provide results. **See note below**

Do you have sufficient information to evaluate feasibility of the following management options for

dredged sediment? Yes* No See note below

If yes, check the appropriate option:

- Beach Nourishment
- Unconfined Ocean Disposal
- Confined Disposal:
 - Confined Aquatic Disposal (CAD)
 - Confined Disposal Facility (CDF)
- Landfill Reuse in accordance with COMM-97-001
- Shoreline Placement
- Upland Material Reuse
- In-State landfill disposal
- Out-of-state landfill disposal

(NOTE: This information is required for a 401 Water Quality Certification.)

*** Chemical and physical data have been collected at the Project Site as specified in the MCP. A Stage II Ecological Risk Characterization (ERC) was completed to evaluate these data. Based on the results of the Stage II ERC, MassDEP has indicated a preference for removal of an area of sediment at the Project Site. Please refer to Chapter 6 for an overview of MCP activities at the Site, including a discussion of the primary Hazardous Materials as defined in the MCP in sediments in the Shore Portion of the KCCRA.**

IV. Consistency:

- A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? Yes No; If yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

The Project is within the Massachusetts Coastal Zone. The Coastal Zone Management Plan allows for the use of coastal engineering structures in circumstances where non-structural measures are not feasible. As detailed Chapter 2, *Alternatives Analysis*, non-structural alternatives will not achieve a Permanent Solution as defined in the MCP.

The Project has also been designed to follow the guidance provided in the 2017 document released by DEP and CZM: *Applying the Massachusetts Coastal Wetlands Regulations: A Practical Manual for Conservation Commissions to Protect the Storm Damage Prevention and Flood Control Functions of Coastal Resource Areas* (the Coastal Manual).

- B. Is the project located within an area subject to a Municipal Harbor Plan? Yes No; If yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

Click or tap here to enter text.

WATER SUPPLY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

- B. Does the project require any state permits related to **water supply**? Yes No; If yes, specify which permit:

Click or tap here to enter text.

- C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

- A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

| | Existing | Change | Total |
|------------------------------------|----------|--------|-------|
| Municipal or regional water supply | | | |
| Withdrawal from groundwater | | | |
| Withdrawal from surface water | | | |
| Interbasin transfer | | | |

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

- B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? Yes No

- C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? Yes No; If yes, attach a map of the drilling sites and a summary of the alternatives considered and the results:

Click or tap here to enter text.

- D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? Click or tap here to enter text. Will the project require an increase in that withdrawal? Yes No; If yes, then how much of an increase (gpd)?

Click or tap here to enter text.

- E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? Yes No; If yes, describe existing and proposed water supply facilities at the project site:

| | Permitted Flow | Existing Avg Daily Flow | Project Flow | Total |
|---|----------------|-------------------------|--------------|-------|
| Capacity of water supply well(s) (gpd) | | | | |
| Capacity of water treatment plant (gpd) | | | | |

D. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

Click or tap here to enter text.

E. Does the project involve:

- 1) new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? Yes No
- 2) a Watershed Protection Act variance? Yes No; if yes, how many acres of alteration? [Click or tap here to enter text.](#)
- 3) a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? Yes No

III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

Click or tap here to enter text.

WASTEWATER SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

- B. Does the project require any state permits related to **wastewater**? Yes No ; If yes, specify which permit:

Click or tap here to enter text.

- C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

- A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

| | Existing | Change | Total |
|------------------------------------|----------|--------|-------|
| Discharge of sanitary wastewater | | | |
| Discharge of industrial wastewater | | | |
| TOTAL | | | |

| | Existing | Change | Total |
|--|----------|--------|-------|
| Discharge to groundwater | | | |
| Discharge to outstanding resource water | | | |
| Discharge to surface water | | | |
| Discharge to municipal or regional wastewater facility | | | |
| TOTAL | | | |

- B. Is the existing collection system at or near its capacity? Yes No; If yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

Click or tap here to enter text.

- C. Is the existing wastewater disposal facility at or near its permitted capacity? Yes No; If yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

Click or tap here to enter text.

- D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? Yes No; if yes, describe as follows:

| | Permitted | Existing Avg Daily Flow | Project Flow | Total |
|--|-----------|-------------------------|--------------|-------|
| Wastewater treatment plant capacity (in gallons per day) | | | | |

- E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

Click or tap here to enter text.

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

- F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district Yes No
- G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? Yes No; If yes, what is the capacity (tons per day):

| | Existing | Change | Total |
|------------|----------|--------|-------|
| Storage | | | |
| Treatment | | | |
| Processing | | | |
| Combustion | | | |
| Disposal | | | |

- H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal:

Click or tap here to enter text.

III. Consistency

- A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

Click or tap here to enter text.

- B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? Yes No; If yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

Click or tap here to enter text.

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

- A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

- B. Does the project require any state permits related to **state-controlled roadways**? Yes No; If yes, specify which permit:

Click or tap here to enter text.

- C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

- A. Describe existing and proposed vehicular traffic generated by activities at the project site:

| | Existing | Change | Total |
|---------------------------------|----------|--------|-------|
| Number of parking spaces | | | |
| Number of vehicle trips per day | | | |
| ITE Land Use Code(s): | | | |

- B. What is the estimated average daily traffic on roadways serving the site?

| Roadway | Existing | Change | Total |
|---------|----------|--------|-------|
| 1. | | | |
| 2. | | | |
| 3. | | | |

- C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

Click or tap here to enter text.

- D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

Click or tap here to enter text.

- E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? Yes No; If yes, describe if and how the project will participate in the TMA:

Click or tap here to enter text.

- F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities?

- G. Yes No; If yes, generally describe:

Click or tap here to enter text.

H. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

Click or tap here to enter text.

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

Click or tap here to enter text.

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

- B. Does the project require any state permits related to **roadways or other transportation facilities**? Yes No; If yes, specify which permit:

MassDOT Highway Access Permit

- C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

- A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

The Project Site located north of the Bridge Street (Route 3A) and two MBTA bus stops, and south of the Harbor Express ferry route.

- B. Will the project involve any:

- | | |
|--|-------------------------|
| 1) Alteration of bank or terrain (in linear feet)? | 590 |
| 2) Cutting of living public shade trees (number)? | Not anticipated* |
| 3) Elimination of stone wall (in linear feet)? | Not anticipated |

*** As specified in the Order of Conditions, if removal of trees or shrubs is required during the construction of the revetment, they will be replaced in kind or with an approved substitute, in consultation with the Weymouth Conservation Administrator.**

III. Consistency

Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

The Project's impacts to existing transportation infrastructure will be temporary in nature and will not impact regional transportation planning.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?

Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

B. Does the project require any state permits related to **energy**? Yes No; If yes, specify which permit:

Click or tap here to enter text.

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

| | Existing | Change | Total |
|--|----------|--------|-------|
| Capacity of electric generating facility (megawatts) | | | |
| Length of fuel line (in miles) | | | |
| Length of transmission lines (in miles) | | | |
| Capacity of transmission lines (in kilovolts) | | | |

B. If the project involves construction or expansion of an electric generating facility, what are:

A. the facility's current and proposed fuel source(s)?

B. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? Yes No; If yes, please describe:

Click or tap here to enter text.

D. Describe the project's other impacts on energy facilities and services:

Click or tap here to enter text.

III. Consistency

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

- B. Does the project require any state permits related to **air quality**? Yes No; If yes, specify which permit:

Click or tap here to enter text.

- C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

- A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? Yes No

If yes, describe existing and proposed emissions (in tons per day) of:

| | Existing | Change | Total |
|-----------------------------|----------|--------|-------|
| Particulate matter | | | |
| Carbon monoxide | | | |
| Sulfur dioxide | | | |
| Volatile organic compounds | | | |
| Oxides of nitrogen | | | |
| Lead | | | |
| Any hazardous air pollutant | | | |
| Carbon dioxide | | | |

- B. Describe the project's other impacts on air resources and air quality, including noise impacts:

Click or tap here to enter text.

III. Consistency

- A. Describe the project's consistency with the State Implementation Plan:

Click or tap here to enter text.

- B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

Click or tap here to enter text.

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? Yes No; If yes, specify, in quantitative terms:

Click or tap here to enter text.

- B. Does the project require any state permits related to **solid and hazardous waste**? Yes No; If yes, specify which permit:

Click or tap here to enter text.

- C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

- A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? Yes No; If yes, what is the volume (in tons per day) of the capacity:

| | Existing | Change | Total |
|-----------------------|----------|--------|-------|
| Storage | | | |
| Treatment, processing | | | |
| Combustion | | | |
| Disposal | | | |

- B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? Yes No If yes, what is the volume (in tons or gallons per day) of the capacity:

| | Existing | Change | Total |
|-----------|----------|--------|-------|
| Storage | | | |
| Recycling | | | |
| Treatment | | | |
| Disposal | | | |

- C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

Click or tap here to enter text.

- D. If the project involves demolition, do any buildings to be demolished contain asbestos?

Yes No

- E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

Click or tap here to enter text.

III. Consistency

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

Click or tap here to enter text.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

- A. Have you consulted with the Massachusetts Historical Commission? Yes No; if yes, attach correspondence.

For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? Yes No if yes, attach correspondence.

- B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes No; If yes, does the project involve the demolition of all or any exterior part of such historic structure? Yes No; If yes, please describe:

Click or tap here to enter text.

- C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes No; If yes, does the project involve the destruction of all or any part of such archaeological site? Yes No; If yes, please describe:

Click or tap here to enter text.

- D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

Click or tap here to enter text.

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

Click or tap here to enter text.

CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION:

This section of the Environmental Notification Form (ENF) solicits information and disclosures related to climate change adaptation and resiliency, in accordance with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency (the “MEPA Interim Protocol”), effective October 1, 2021. The Interim Protocol builds on the analysis and recommendations of the 2018 Massachusetts Integrated State Hazard Mitigation and Climate Adaptation Plan (SHMCAP), and incorporates the efforts of the Resilient Massachusetts Action Team (RMAT), the inter-agency steering committee responsible for implementation, monitoring, and maintenance of the SHMCAP, including the “Climate Resilience Design Standards and Guidelines” project. The RMAT team recently released the RMAT Climate Resilience Design Standards Tool, which is available [here](#).

The MEPA Interim Protocol is intended to gather project-level data in a standardized manner that will both inform the MEPA review process and assist the RMAT team in evaluating the accuracy and effectiveness of the RMAT Climate Resilience Design Standards Tool. Once this testing process is completed, the MEPA Office anticipates developing a formal Climate Change Adaptation and Resiliency Policy through a public stakeholder process. Questions about the RMAT Climate Resilience Design Standards Tool can be directed to rmat@mass.gov.

All Proponents must complete the following section, referencing as appropriate the results of the output report generated by the RMAT Climate Resilience Design Standards Tool and attached to the ENF. In completing this section, Proponents are encouraged, but not required at this time, to utilize the recommended design standards and associated Tier 1/2/3 methodologies outlined in the RMAT Climate Resilience Design Standards Tool to analyze the project design. However, Proponents are requested to respond to a respond to a [user feedback survey](#) on the RMAT website or to provide feedback to rmat@mass.gov, which will be used by the RMAT team to further refine the tool. Proponents are also encouraged to consult general guidance and best practices as described in the [RMAT Climate Resilience Design Guidelines](#).

Climate Change Adaptation and Resiliency Strategies

Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? Yes No

Note: Climate adaptation and resiliency strategies include actions that seek to reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. Examples of climate adaptation and resiliency strategies include flood barriers, increased stormwater infiltration, living shorelines, elevated infrastructure, increased tree canopy, etc. Projects should address any planning priorities identified by the affected municipality through the Municipal Vulnerability Preparedness (MVP) program or other planning efforts, and should consider a flexible adaptive pathways approach, an adaptation best practice that encourages design strategies that adapt over time to respond to changing climate conditions. General guidance and best practices for designing for climate risk are described in the [RMAT Climate Resilience Design Guidelines](#).

A. If no, explain why.

Click or tap here to enter text.

B. If yes, describe the measures the project will take, including identifying the planning horizon and climate data used in designing project components. If applicable, specify the return period and design storm used (e.g., 100-year, 24-hour storm).

The Project does not propose impervious area and includes a revetment that is designed to stabilize an existing eroding coastal bank, which will provide stability during current

and future rainfall events. The Proponent has designed the Project to protect the Coastal Bank from future coastal flooding events caused by increased sea level and storm surge. The Northeast Climate Adaptation Science Center estimates that sea levels could rise by 4.2 feet above the current levels by 2070 given a high emissions pathway (RCP 8.5). Multiple coastal storm scenarios were analyzed for the revetment design, including the present day and 2070 100-year events. The armor stone size selected was determined based on guidance from the USACE Coastal Engineering Manual and site-specific wave modeling and is expected to provide protection and scour resistance under both present-day and 2070 100-year events. Additionally, the Proponent recognizes the importance of tree canopy for mitigating the effects of extreme heat and will maintain all existing vegetation in the work area to the extent practical. Any disturbed vegetation will be replaced.

C. Is the project contributing to regional adaptation strategies? Yes No; If yes, describe.

Click or tap here to enter text.

II. Has the Proponent considered alternative locations for the project in light of climate change risks?

Yes No

A. If no, explain why.

The location of the Project is driven by the presence of Hazardous Materials, as defined in the MCP, at the Project Site; therefore, no off-site alternatives were considered.

B. If yes, describe alternatives considered.

Click or tap here to enter text.

III. Is the project located in Land Subject to Coastal Storm Flowage (LSCSF) or Bordering Land Subject to Flooding (BLSF) as defined in the Wetlands Protection Act? Yes No; If yes, describe how/whether proposed changes to the site's topography (including the addition of fill) will result in changes to floodwater flow paths and/or velocities that could impact adjacent properties or the functioning of the floodplain. General guidance on providing this analysis can be found in the CZM/MassDEP Coastal Wetlands Manual, available [here](#).

The Project will not result in impacts to adjacent properties or the functioning of the floodplain. Instead, the Project will protect the Coastal Bank from increased risk of erosion from future coastal flooding events caused by increased sea level and storm surge. Refer to Chapter 5, *Climate Change Adaptation and Resiliency*, for more information.

ENVIRONMENTAL JUSTICE SECTION

I. Identifying Characteristics of EJ Populations

- A. If an Environmental Justice (EJ) population has been identified as located in whole or in part within 5 miles of the project site, describe the characteristics of each EJ populations as identified in the EJ Maps Viewer (i.e., the census block group identification number and EJ characteristics of “Minority,” “Minority and Income,” etc.). Provide a breakdown of those EJ populations within 1 mile of the project site, and those within 5 miles of the site.

Within a one-mile radius of the Project Site, the following 10 census block groups meet the EJ criteria of minority; minority and English isolation; minority and income; and minority, income, and English Isolation:

- › **Block Group 4, Census Tract 4227, Norfolk County**
- › **Block Group 1, Census Tract 4194, Norfolk County**
- › **Block Group 3, Census Tract 4179.01, Norfolk County**
- › **Block Group 1, Census Tract 4178.02, Norfolk County**
- › **Block Group 6, Census Tract 4179.01, Norfolk County**
- › **Block Group 2, Census Tract 4194, Norfolk County**
- › **Block Group 1, Census Tract 4179.01, Norfolk County**
- › **Block Group 2, Census Tract 4178.02, Norfolk County**
- › **Block Group 5, Census Tract 4179.01, Norfolk County**
- › **Block Group 2, Census Tract 4179.01, Norfolk County**

Within a five-mile radius of the Project Site, the following 98 census block groups meet the EJ criteria of minority; income; minority and English isolation; minority and income; and minority, income, and English Isolation:

- | | |
|---|--|
| › Block Group 2, Census Tract 4224.02, Norfolk County | › Block Group 1, Census Tract 4225.01, Norfolk County |
| › Block Group 3, Census Tract 5012.04, Plymouth County | › Block Group 2, Census Tract 4225.01, Norfolk County |
| › Block Group 2, Census Tract 1007, Suffolk County | › Block Group 3, Census Tract 4225.02, Norfolk County |
| › Block Group 1, Census Tract 4171, Norfolk County | › Block Group 4, Census Tract 4225.02, Norfolk County |
| › Block Group 4, Census Tract 4171, Norfolk County | › Block Group 2, Census Tract 4225.02, Norfolk County |
| › Block Group 3, Census Tract 4172.02, Norfolk County | › Block Group 3, Census Tract 4222.02, Norfolk County |
| › Block Group 2, Census Tract 4175.01, Norfolk County | › Block Group 2, Census Tract 1006.03, Suffolk County |
| › Block Group 3, Census Tract 4175.01, Norfolk County | › Block Group 2, Census Tract 4172.01, Norfolk County |
| › Block Group 2, Census Tract 4177.04, Norfolk County | › Block Group 3, Census Tract 4172.01, Norfolk County |
| › Block Group 4, Census Tract 4179.01, Norfolk County | › Block Group 4, Census Tract 4172.02, Norfolk County |
| › Block Group 1, Census Tract 4179.02, Norfolk County | › Block Group 1, Census Tract 4175.01, Norfolk County |
| › Block Group 2, Census Tract 4179.02, Norfolk County | › Block Group 4, Census Tract 4175.01, Norfolk County |
| › Block Group 3, Census Tract 4179.02, Norfolk County | › Block Group 4, Census Tract 4176.01, Norfolk County |
| › Block Group 2, Census Tract 4180.02, Norfolk County | › Block Group 4, Census Tract 4172.01, Norfolk County |
| › Block Group 3, Census Tract 4180.02, Norfolk County | › Block Group 1, Census Tract 4175.02, Norfolk County |
| › Block Group 4, Census Tract 4180.02, Norfolk County | › Block Group 2, Census Tract 4177.03, Norfolk County |
| › Block Group 2, Census Tract 4180.04, Norfolk County | › Block Group 4, Census Tract 4175.02, Norfolk County |
| › Block Group 1, Census Tract 4181.01, Norfolk County | › Block Group 3, Census Tract 4181.01, Norfolk County |
| › Block Group 2, Census Tract 4181.02, Norfolk County | › Block Group 1, Census Tract 4195, Norfolk County |

- › Block Group 1, Census Tract 4191, Norfolk County
- › Block Group 4, Census Tract 4191, Norfolk County
- › Block Group 1, Census Tract 4196.02, Norfolk County
- › Block Group 2, Census Tract 4197, Norfolk County
- › Block Group 1, Census Tract 4198, Norfolk County
- › Block Group 5, Census Tract 4171, Norfolk County
- › Block Group 2, Census Tract 4172.02, Norfolk County
- › Block Group 1, Census Tract 4177.04, Norfolk County
- › Block Group 1, Census Tract 4192, Norfolk County
- › Block Group 2, Census Tract 4193, Norfolk County
- › Block Group 2, Census Tract 4182.01, Norfolk County
- › Block Group 2, Census Tract 4192, Norfolk County
- › Block Group 1, Census Tract 4172.02, Norfolk County
- › Block Group 3, Census Tract 4171, Norfolk County
- › Block Group 1, Census Tract 4180.04, Norfolk County
- › Block Group 1, Census Tract 4196.01, Norfolk County
- › Block Group 3, Census Tract 4180.04, Norfolk County
- › Block Group 2, Census Tract 4171, Norfolk County
- › Block Group 1, Census Tract 4193, Norfolk County
- › Block Group 1, Census Tract 4172.01, Norfolk County
- › Block Group 2, Census Tract 4195, Norfolk County
- › Block Group 3, Census Tract 4201.01, Norfolk County
- › Block Group 4, Census Tract 4221, Norfolk County
- › Block Group 1, Census Tract 4223.03, Norfolk County
- › Block Group 2, Census Tract 4223.03, Norfolk County
- › Block Group 3, Census Tract 4223.03, Norfolk County
- › Block Group 1, Census Tract 4224.01, Norfolk County
- › Block Group 3, Census Tract 4224.01, Norfolk County
- › Block Group 3, Census Tract 4194, Norfolk County
- › Block Group 1, Census Tract 4197, Norfolk County
- › Block Group 1, Census Tract 4182.01, Norfolk County
- › Block Group 3, Census Tract 4176.02, Norfolk County
- › Block Group 6, Census Tract 4171, Norfolk County
- › Block Group 1, Census Tract 4177.03, Norfolk County
- › Block Group 3, Census Tract 4193, Norfolk County
- › Block Group 4, Census Tract 4181.01, Norfolk County
- › Block Group 1, Census Tract 4225.02, Norfolk County
- › Block Group 2, Census Tract 4198, Norfolk County
- › Block Group 1, Census Tract 4181.02, Norfolk County
- › Block Group 2, Census Tract 4224.01, Norfolk County
- › Block Group 3, Census Tract 4176.01, Norfolk County
- › Block Group 3, Census Tract 4177.03, Norfolk County
- › Block Group 3, Census Tract 4175.02, Norfolk County
- › Block Group 3, Census Tract 4181.02, Norfolk County
- › Block Group 2, Census Tract 4180.03, Norfolk County
- › Block Group 1, Census Tract 4173, Norfolk County
- › Block Group 2, Census Tract 4177.02, Norfolk County
- › Block Group 1, Census Tract 4180.02, Norfolk County
- › Block Group 2, Census Tract 4175.02, Norfolk County
- › Block Group 1, Census Tract 4176.01, Norfolk County
- › Block Group 2, Census Tract 4176.01, Norfolk County
- › Block Group 1, Census Tract 4176.02, Norfolk County
- › Block Group 2, Census Tract 4176.02, Norfolk County
- › Block Group 4, Census Tract 4192, Norfolk County
- › Block Group 1, Census Tract 4180.03, Norfolk County
- › Block Group 2, Census Tract 4181.01, Norfolk County
- › Block Group 3, Census Tract 4182.01, Norfolk County
- › Block Group 3, Census Tract 4191, Norfolk County
- › Block Group 5, Census Tract 4191, Norfolk County
- › Block Group 4, Census Tract 4193, Norfolk County

B. Identify all languages identified in the “Languages Spoken in Massachusetts” tab of the EJ Maps Viewer as spoken by 5 percent or more of the EJ population who also identify as not speaking English “very well.” The languages should be identified for each census tract located in whole or in part within 1 mile and 5 miles of the project site, regardless of whether such census tract contains any designated EJ populations.

One-mile radius:

Chinese:

- › Census Tract 4178.02
- › Census Tract 4179.01

Five-mile radius

Chinese:

- › Census Tract 4180.02
- › Census Tract 4180.04

- > **Census Tract 4180.03**
- > **Census Tract 4182**
- > **Census Tract 4181.02**
- > **Census Tract 4176.02**
- > **Census Tract 4177.01**
- > **Census Tract 4171**
- > **Census Tract 4172**
- > **Census Tract 4176.01**
- > **Census Tract 4175.02**
- > **Census Tract 4175.01**
- > **Census Tract 4173**

Vietnamese

- > **Census Tract 1006.03**

Spanish

- > **Census Tract 9801.01**

- C. If the list of languages identified under Section I.B. has been modified with approval of the EEA EJ Director, provide a list of approved languages that the project will use to provide public involvement opportunities during the course of MEPA review. If the list has been expanded by the Proponent (without input from the EEA EJ Director), provide a list of the additional languages that will be used to provide public involvement opportunities during the course of MEPA review as required by Part II of the MEPA Public Involvement Protocol for Environmental Justice Populations (“MEPA EJ Public Involvement Protocol”). If the project is exempt from Part II of the protocol, please specify.

N/A

II. Potential Effects on EJ Populations

- A. If an EJ population has been identified using the EJ Maps Viewer within 1 mile of the project site, describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

No potential negative short-term or long-term environmental and public health impacts have been identified. The Project is expected to improve current conditions in the KCCRA by achieving a Permanent Solution under the MCP respecting the presence of Hazardous Materials. A suite of mitigation measures will prevent short- and long-term impacts on wetland resource areas related to the implementation of the KCCRA Response Action.

- B. If an EJ population has been identified using the EJ Maps Viewer within 5 miles of the project site, will the project:
- (i) meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-(b) Yes No; or
 - (ii) generate 150 or more new average daily trips (adt) of diesel vehicle traffic, excluding public transit trips, over a duration of 1 year or more. Yes No
- C. If you answered “Yes” to either question in Section II.B., describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

Click or tap here to enter text.

III. Public Involvement Activities

- A. Provide a description of activities conducted prior to filing to promote public involvement by EJ populations, in accordance with Part II of the MEPA EJ Public Involvement Protocol. In particular:

1. If advance notification was provided under Part II.A., attach a copy of the Environmental Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.

The Proponent completed the 45-day-Advance Notice to the MEPA determined Community Based Organizations (CBO), with an EJ Screening Form describing the Project. Advance Notification was delivered to the MEPA provided CBO and tribal organization list on 2/14/2025. The Proponent also provided translated versions into the languages spoken within the Project's DGA.

2. State how CBOs and tribes were informed of ways to request a community meeting, and if any meeting was requested. If public meetings were held, describe any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns.

The Proponent has met with potentially affected communities at each phase of the MCP process, with meetings occurring between 2017 and present. To encourage potentially affected communities to participate, the Proponent has arranged for bus transportation from nearby communities and provided Mandarin-speaking translation during the meetings. To date, no potentially affected community members have used the transportation or translation services provided.

At each Phase of the MCP process the Proponent has provided specific opportunities for potentially affected communities to provide comments on documents concerning the Project. The comment period is normally 20 days but may be longer if warranted by the complexity of a particular document or if requested by potentially affected communities. Responses are prepared for the written and verbal comments received during the comment period and public meetings. A copy of the responses is sent to those who submitted comments, and potentially affected communities are notified that the Response to Comments is available.

The Project was reviewed by the Weymouth Conservation Commission during two public meetings. Potentially affected communities were notified of the meeting dates, times and locations. During those meetings residents of Weymouth vocalized their support for the Project and the Weymouth Conservation Commission issued a favorable determination.

Additionally, the EJ Screening Form includes contact information of the Project team for recipients to request further information or a community meeting.

3. If the project is exempt from Part II of the protocol, please specify.

Click or tap here to enter text.

- B. Provide below (or attach) a distribution list (if different from the list in Section III.A. above) of CBOs and tribes, or other individuals or entities the Proponent intends to maintain for the notice of the MEPA Site Visit and circulation of other materials and notices during the course of MEPA review.

Refer to Appendix A: EENF Distribution List for the CBOs and tribes that will receive Project documents throughout the MEPA process.

- C. Describe (or submit as a separate document) the Proponent's plan to maintain the same level of community engagement throughout the MEPA review process, as conducted prior to filing.

Refer to Appendix B: for the Public Involvement plan.

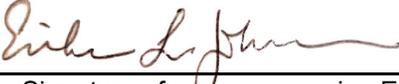
CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

Name: **Patriot Ledger** Date: **5/22/2025**

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

| | | | |
|--|---|-----------------------------------|--|
| 5/12/2025 |  | 5/12/2025 |  |
| Date | Signature of Responsible Officer or Proponent | Date | Signature of person preparing ENF (if different from above) |
| Alana Clark | | Erika Johnson | |
| Name | | Name | |
| Algonquin Gas Transmission, LLC | | VHB | |
| Firm/Agency | | Firm/Agency | |
| 200, 425 1st St. SW | | 99 High Street, 13th Floor | |
| Street | | Street | |
| Calgary, AB, T2P 3L8, Canada | | Boston, MA 02110 | |
| Municipality/State/Zip | | Municipality/State/Zip | |
| 587-545-4075 | | 617-607-6172 | |
| Phone | | Phone | |

1

Project Description

In accordance with the Massachusetts Environmental Policy Act (MEPA), Massachusetts General Law (MGL) Chapter 30, Section 61-62I, and the regulations promulgated thereunder set forth in 301 CMR 11.00, Algonquin Gas Transmission, LLC (the "Proponent") respectfully submits this Expanded Environmental Notification Form (EENF) for the Massachusetts Contingency Plan (310 CMR 40.0000) (MCP) Remedial Action (the "Project") selected for the Kings Cove Conservation Restriction Area (KCCRA) in Weymouth, Massachusetts (the "Project Site").

Chapter 1, *Project Description*, describes the Project Site's history and conditions, introduces the Project and its benefits, impacts, and mitigation measures, summarizes the anticipated permit and approvals required to implement the Project, and lists the agency coordination and community outreach involved in the Project. Chapter 2, *Alternatives Analysis*, presents the alternatives to the Project that have been evaluated, illustrating how the Project best meets the Project objectives. Chapter 3, *Environmental Justice and Public Health*, describes surrounding Environmental Justice (EJ) populations and efforts to ensure that no EJ populations are reasonably likely to be adversely impacted by the Project. Chapter 4, *Wetlands and Waterways*, describes the existing Wetland Resource Areas on the Project Site, the Project's potential impacts on Wetland Resource Areas, and proposed mitigation measures related to local, state, and federally regulated Wetland Resource Areas. Chapter 5, *Climate Change Adaptation and Resiliency*, assesses the projected climate change impacts on the Project Site and associated proposed measures to promote resiliency. Chapter 6, *Hazardous Materials*, summarizes the steps taken to address risks to human health and the environment related to Hazardous Materials, as defined in the MCP, present in the fill used to create what is now the KCCRA. Chapter 7, *Construction Period*, outlines procedures to control construction-related impacts including dust, noise, erosion, sedimentation, transportation, and contamination impacts during construction. Chapter 8, *Draft Section 61 Findings and Proposed Mitigation*, includes a summary of mitigation measures to avoid, minimize, and mitigate environmental impacts of the Project and Draft Section 61 Findings for all State Permits and Agency Actions.

1.1 Site History

Prior to the 1900s, Kings Cove and what are now surrounding land areas were flowed tidelands. In 1922, a license to fill portions of Kings Cove was obtained by the Edison Electric Illuminating Company of Boston (Edison Electric) in order to construct a coal-fired power station located south of Bridge Street. By 1928, a north-south oriented bulkhead was approved and constructed within Kings Cove and the area behind the bulkhead was filled. Historical license plans depict the bulkhead located relatively parallel to the Mean Low Water (MLW) line in the northern portions of the

peninsula and closer to the shoreline and Mean High Water (MHW) near Bridge Street. Hazardous Materials, as defined in the MCP, are present in that fill.

The Proponent is responsible for the Project at the KCCRA which is owned by Calpine Fore River Energy Corporation and subject to a Conservation Restriction held by the Town of Weymouth. The Conservation Restriction is recorded in Book 26454, Page 446 of the Norfolk County Registry of Deeds.

1.2 Site Context and Existing Conditions

The Project Site is located in the southern portion of the KCCRA, north of Bridge Street. The Project Site is comprised of a part of the Upland Portion of the KCCRA, which includes the grassed and paved areas of the KCCRA and eroding fill adjacent to the Shore Portion of the Site, and a part of the Shore Portion of the KCCRA which is an intertidal area with gravel-sized and cobble-sized pieces of coal slag and other fill material such as bricks mixed with small amounts of natural sand and gravel.

At the northern limit of the Project Site there is an existing rip rap revetment which extends north between the Upland Portion of the KCCRA and the Shore Portion of the KCCRA along the Kings Cove shoreline to the top of the peninsula.

The Mean Low Water (MLW) line at the Project Site is located at elevation -5.3-feet NAVD88 and the Mean High Water (MHW) line is located at elevation 4.3 feet NAVD88. Topography at the Project Site slopes steeply down to the edge of the water. Figure 1.1 is a Site Locus map and Figure 1.2 is a Project Site Context map showing the Upland Portion of the KCCRA and the Shore Portion of the KCCRA within the Project Site.

According to the most recently available data provided by the Massachusetts Natural Heritage and Endangered Species Program (NHESP)¹, no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife exist within the Project Site limits and no Certified or Potential vernal pools are located on or adjacent to the Project Site. Similarly, no portion of the Project Site is located within an Area of Critical Environmental Concern (ACEC) or an area designated as an Outstanding Resource Water (ORW)². The most recently issued FEMA Flood Insurance Rate Map (FIRM)³ indicates that the Project Site is within the mapped coastal floodplain for the 100-year storm event. These areas in the 100-year floodplain are regulated as Land Subject to Coastal Storm Flowage (LSCSF). The Natural Resources Conservation Service (NRCS) soil survey⁴ mapped the surface soils within the Project Site as Urban Land (602). Federal and state regulated wetland resource areas present on the Project Site consist of waters and lands beneath Kings Cove, as well as Coastal Beach, Coastal Bank, Lands Containing Shellfish (LCS), and LSCSF as based on the statistical 100-year storm event. FEMA maps depict the Project Site entirely within the velocity (VE) zone. Jurisdictional wetland and waterways resources are described further in Chapter 3, *Wetlands and Waterways*. Refer to Figure 1.3 for the Environmental Constraints map and Figure 1.4 for the Existing Site Conditions.

¹ NHESP, 2021. *Massachusetts Natural Heritage Atlas, 15th Edition*.

² DEP, 2010. Designated Outstanding Resource Waters of Massachusetts.

³ Federal Emergency Management Agency, National Hazard Flood Layer, Digital Flood Insurance Rate Map (DFIRM) and FEMA FIRM Panel 25021C0227F

⁴ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey

1.3 Project Description

The Project includes excavating and replacing approximately 630 cubic yards (CY) of fill and sediment within the Shore Portion of the Project Site, extending the rip rap revetment in the northern area of the Project Site to contain eroding fill in the Upland Portion of the Project Site, and placing cobble to create a gradual surficial transition between the area of the Shore Portion of the Project Site to be excavated and the revetment as extended. The volume of soil to be excavated from the Upland Portion of the Project Site during the extension of the revetment is estimated at approximately 200 CY. The Project has been designed to minimize potential impacts to the Upland area of the KCCRA through construction access directly from Bridge Street, rather than through the KCCRA. Each of these components and their associated work are described in more detail below.

Refer to Figure 1.5 for the Proposed Conditions Site Plan.

1.3.1 Excavation

As summarized in the MCP Phase III Remedial Action Plan (RAP) for the Project Site⁵, an area of fill below the MHW line in the Shore Portion of the Project Site contains nickel and vanadium at concentrations exceeding the Site-specific ecological Apparent Effects Thresholds for those metals. The Project includes the removal of 630 CY of fill and sediment in the areas below the MHW line determined to contain elevated concentrations of nickel and vanadium. The excavation will occur during low tide to facilitate the excavation and contain the work area. A turbidity curtain will also be installed within Kings Cove to control the migration of suspended fine materials. Machinery will access the Shore Portion of the Project Site from Bridge Street. The excavated fill and sediment will be replaced with an equal amount of clean cobble stone to restore the excavated area to the preexisting mudline elevation.

To facilitate required state permitting, prior to any excavation, additional sediment samples may be collected within the area to be excavated and submitted for appropriate laboratory analyses to determine disposal options. Samples will be collected using hand tools only. All excavated fill and sediment will be dewatered onsite prior to being transported offsite for disposal, in accordance with proper waste handling and transport procedures. Dewatering is anticipated to be complete in approximately 48 hours.

An offsite area outside of jurisdictional resource areas will be used, as needed, for staging excavated fill and sediment during construction.

1.3.2 Rip Rap Revetment

The Project also includes containment and armoring of the eroding portions of the Upland Portion of the Project Site with a rip rap revetment. The erosion is exposing fill impacted with Hazardous Materials, as defined in the MCP, that was placed landward of the bulkhead in the 1920s. The construction of the revetment will occur "in the dry" because a sandbag cofferdam will be established

⁵ TRC, 2023. Final Phase III Remedial Action Plan: Kings Cove Conservation Restriction Area: 82-90 Bridge Street, Weymouth, Massachusetts, Release Tracking Number 4-26230, August 2023.

along the length of the Shore Portion of the Project Site between the proposed construction access at Bridge Street and the edge of the existing revetment.

In areas where backfill is required to support the revetment (landward of the rip rap revetment), fill excavated from the Shore Portion of the Project Site will be reused for that purpose. The fill reused for this purpose will be contained behind a layer of geotextile fabric, followed by a layer of clean core stone and the larger armor stones.

In response to community requests, although not required under the MCP, clean cobble will be placed in the Shore Portion of the Project Site to create better transitions between that area and the Upland Portion of the Site.

1.3.3 Construction Sequence and Schedule

The Project will consist of the following general activities:

- › Before any work begins, installing erosion and sedimentation controls according to the Project Plans, including controls for in-water work;
- › Excavating fill and sediment during low tide cycles and placing the excavated fill and sediment within designated stockpile areas awaiting reuse or disposal;
- › Placing clean cobble cover;
- › Constructing the rip rap revetment, including placing dewatered excavated fill behind the armor stone;
- › Removal of remaining excavated fill and sediment for off-site disposal;
- › Restoration of disturbed construction access and staging areas (loaming and seeding);
- › Removing erosion and sedimentation controls.

If applicable approvals and permissions are received, implementation of the Project could begin in Fall 2025 and be completed during Winter 2026.

1.4 Summary of Project Benefits

The Project will achieve a Permanent Solution as defined in the MCP. It will also enhance the KCCRA by stabilizing the Upland Portion of the KCCRA and improving surface conditions in the Shore Portion of the KCCRA.

1.5 Summary of Potential Impacts

The Project will result in the positive impacts summarized in section 1.4 above but also have other potential impacts to Coastal Beach, Coastal Bank, Land Containing Shellfish (LCS), and Land Subject to Coastal Storm Flowage (LSCSF), all of which are Wetland Resource Areas as defined in the Wetland Protection Act Regulations at 310 CMR 10.00, *et seq.* (collectively "Wetland Resource Areas"), as summarized below in Table 1-1.

Table 1-1 Potential Impacts to Wetland Resource Areas

| Wetland Resource Area | Impacts |
|-----------------------|-----------|
| Coastal Beach/LCS | 37,105 SF |
| Coastal Bank | 590 LF |
| LSCSF | 46,385 SF |

All square footages are approximate values as they have been rounded to the nearest value of five (most values were rounded up).

LF = linear feet

SF = square feet

1.6 Overview of Mitigation Measures

A suite of mitigation measures will prevent short- and long-term negative impacts to Wetland Resource Areas, including an erosion and sedimentation control program. Sediment and turbidity controls, including a turbidity curtain for in-water work, will be utilized to prevent the spread of sediment from the Shore Portion of the Project Site into Kings Cove.

1.6.1 Erosion and Sediment Control

An erosion and sedimentation control program will be implemented to minimize temporary impacts to Wetland Resource Areas during the construction phase of the Project. The program incorporates Best Management Practices (BMPs) specified in guidelines developed by the DEP⁶ and the U.S. Environmental Protection Agency⁷ (EPA).

Proper implementation of the erosion and sedimentation control program will:

- › minimize exposed soil areas through sequencing and temporary stabilization; and
- › establish a permanent vegetative cover or other forms of stabilization as soon as practicable.

The following sections describe the controls that will be used and practices that will be followed during the Project. These practices comply with criteria contained in the National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP) for Discharges from Large and Small Construction Activities issued by the EPA.

1.6.1.1 Structural Controls

Structural erosion and sedimentation controls to be used on the Project Site include sandbag cofferdams, a turbidity curtain, and stabilized construction exits.

⁶ DEP, 1997. *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers, and Municipal Officials*.

⁷ EPA, 2007. *Interim Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites*. Office of Water. Report EPA 833-R-060-04.

Sandbag Cofferdam

Sandbags will be utilized to create a cofferdam around the Upland Portion of the Project Site to protect Kings Cove. The cofferdam will also establish a work area “in the dry” for the construction of the revetment.

Turbidity Curtain

An anchored turbidity curtain with a weighted bottom will be installed seaward of the excavation limits in the Shore Portion of the Project Site to control migration of suspended fine material. The turbidity curtain will be attached to vertical poles installed using ring connectors, which will allow vertical movement of the turbidity curtain as water levels change during tidal cycles.

Stabilized Construction Exits

Stone anti-tracking pads will be installed at the southern construction access point to the Shore Portion of the Project Site to prevent the offsite transport of sediment by construction vehicles. The stabilized construction exits will be at least forty feet long and will consist of a 4-inch-thick layer of crushed stone (1.5 inches in diameter). The stone will be placed over a layer of non-woven filter fabric. The anti-tracking pads will remain in place until the proposed work is complete.

1.7 Anticipated Permits, Approvals, and Reviews

Table 1-2 below presents a list of federal, state, and local permits and approvals anticipated for the Project.

Table 1-2 List of Permits and Approvals

| Agency Name | Permit / Review / Approval | Status |
|--|---|--------------------------------------|
| Federal | | |
| US Army Corps of Engineers (USACE) | Section 404 Pre-Construction Notification | To be provided |
| US Environmental Protection Agency (EPA) | National Pollution Discharge Elimination System (NPDES) general permits for construction storm water and dewatering | Coverage may be obtained if required |
| State | | |
| Executive Office of Energy and Environmental Affairs | Review under the Massachusetts Environmental Policy Act (MEPA) | Initiated by this filing |
| Department of Environmental Protection (DEP) | Chapter 91 License | To be obtained |
| | 401 Water Quality Certification for intertidal dredging/fill | To be obtained |

Table 1-2 List of Permits and Approvals

| Agency Name | Permit / Review / Approval | Status |
|------------------------------------|--|--|
| Department of Transportation (DOT) | Transportation Access Permit for construction access to Bridge Street | To be obtained |
| Water Resources Authority | 8(m) Permit for work within MWRA Sewer Easements | To be obtained |
| Local | | |
| Weymouth Conservation Commission | Wetlands Protection Act Order of Conditions for work within jurisdictional resource areas. Includes review by the Department of Marine Fisheries (DMF) | Issued Sept. 5, 2024 DEP File No. 81-1320 |

1.8 Agency Coordination and Community Outreach

The Project has already been the subject of considerable public involvement, including pursuant to a site-specific Public Involvement Plan (PIP) developed in collaboration with the DEP and representatives of the potentially affected communities in accordance with the applicable provisions of the MCP. A copy of the PIP is included in Appendix B.

1.8.1 MCP Public Involvement

As specified in the PIP, the potentially affected communities received notice of the availability of the MCP Phase IV Remedy Implementation Plan (RIP) specifying the Project on April 26, 2024. This notice was published in the *Boston Globe* and the *Quincy Patriot Ledger* in both English and Mandarin Chinese. Notice was also transmitted to everyone who has asked to join the MCP Site mailing list. There are approximately 158 individuals on that list. A copy of the Phase IV RIP was available on request and copies were also placed in the public document repositories specified in the PIP.

A public meeting regarding the Phase IV RIP was held on May 14, 2024, in Weymouth. Free transportation was provided from the Germantown neighborhood of Quincy to the meeting. Live Mandarin Chinese translation of the public meeting was also provided. Public comments on the Phase IV RIP were received both orally at the meeting and in writing through the end of the specified public comment period. The Proponent responded to those comments in response to comments published with the final Phase IV RIP on June 23, 2024.

1.8.2 MA Wetlands Protection Regulations and Weymouth Wetlands By-Law Public Involvement

Additional public involvement occurred in connection with the Proponent’s application for the Order of Conditions needed to implement the Project. The Proponent’s Notice of Intent was the subject of a notice published in English and Mandarin Chinese in the *Quincy Patriot Ledger* on June 23, 2024. Notice was also transmitted to everyone who has asked to join the MCP Site mailing list. A copy of

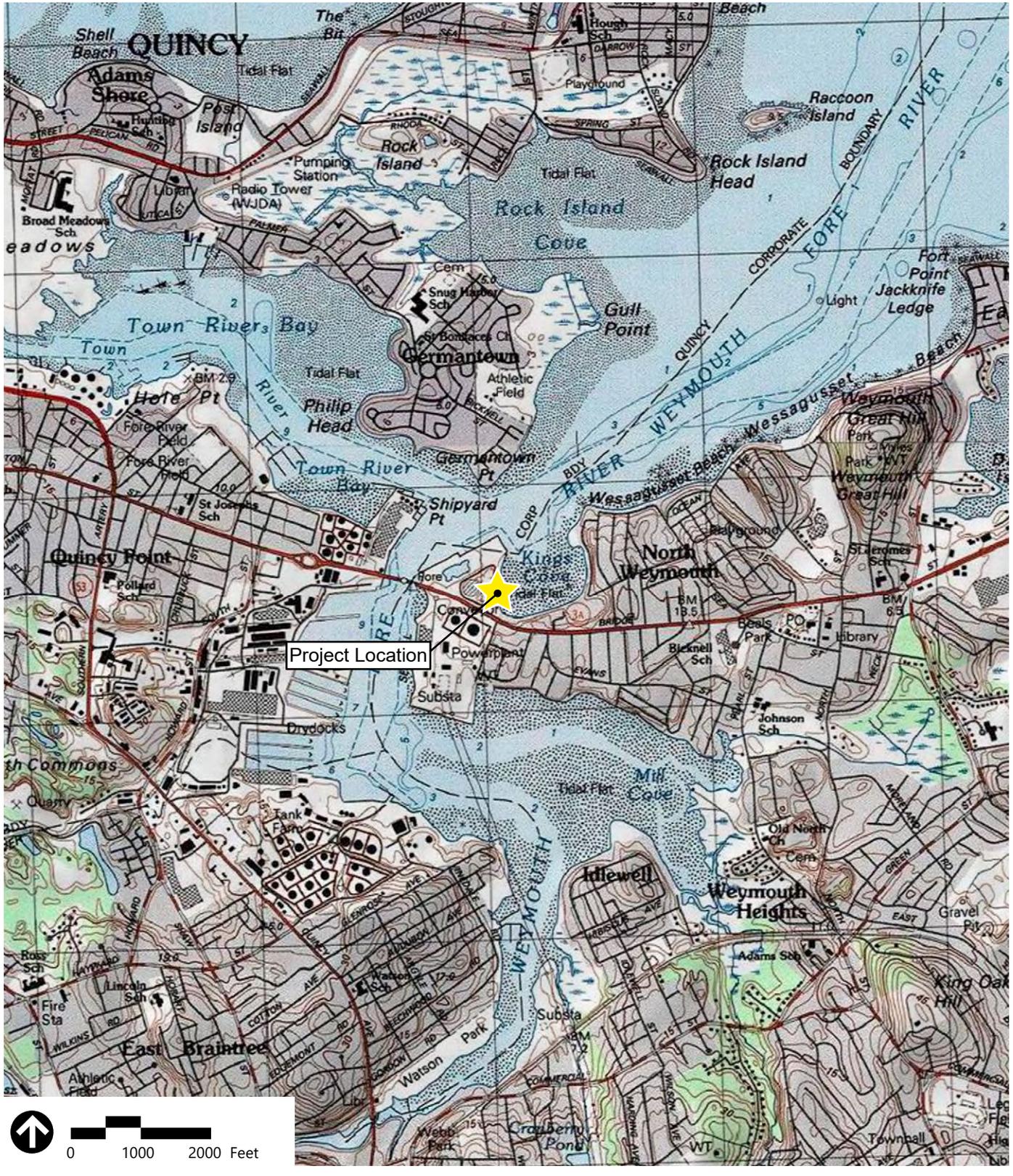
the Notice of Intent was available on request. Public comments on the Notice of Intent were received at two hearings of the Weymouth Conservation Commission on July 30 and August 27, 2024, before the Weymouth Conservation Commission issued the necessary Order of Conditions.

1.8.3 Other Public Involvement

Enhanced public involvement occurred in connection with the permitting of the Weymouth Compressor Station, including relating to the Proponent's Chapter 91 license application, the Proponent's application for a Certificate of Public Convenience and Necessity from the Federal Energy Regulatory Commission, and in connection with Algonquin's Non-Major Comprehensive Plan Application under the applicable DEP regulations.

1.8.4 Conclusion

Over the past several months, the Proponent, DEP, and potentially affected communities have had several opportunities to interact regarding the Project and its positive impacts. That makes this Project much different than most projects that are the subject of an EENF. Given the extensive public involvement already had regarding the Project, and the positive response the Project has already received, including from DEP and the Weymouth Conservation Commission, the opportunities for public comment provided in 301 CMR 11.06 and 11.08, supplemented by the provisions of the PIP, will satisfy the requirements for enhanced public outreach specified at Massachusetts Laws Chapter 30, section 62J, and the Massachusetts Environmental Policy Act regulations at 301 CMR 11.05.



Source: USGS, MassGIS, VHB

Figure 1.1
Site Location Map

**KCCRA - MCP Response Action
Weymouth, MA**



Source: USGS, MassGIS, VHB

 Limit of Work

Figure 1.2
Project Site Context

**KCCRA - MCP Response Action
Weymouth, MA**



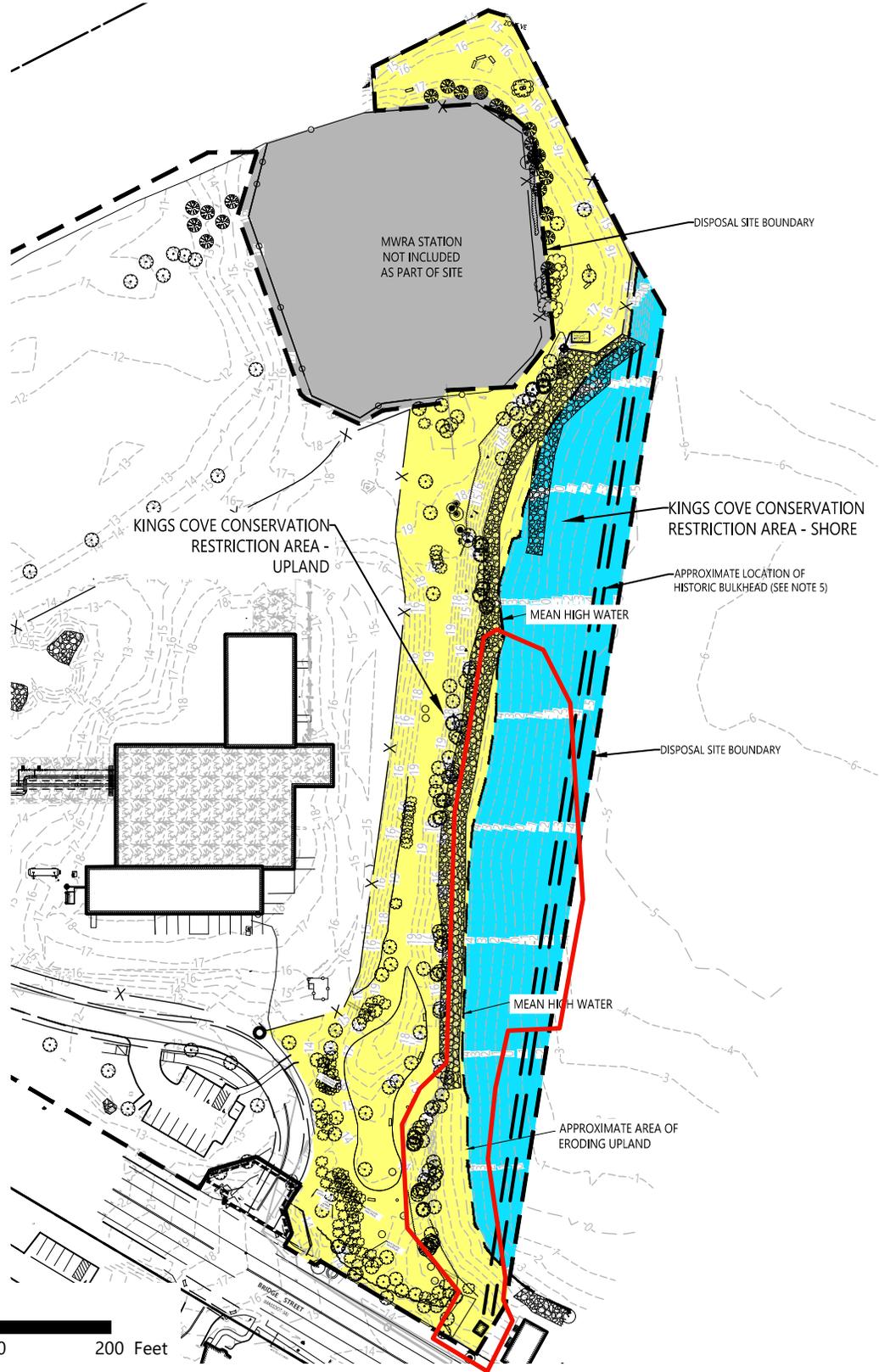
Source: VHB, Mass DEP

-  Limit of Work
-  Open water
-  Tidal Flat
-  FEMA Floodplain
-  Protected Open Space

-  Chapter 91 Jurisdiction
- Resources not present:**
 - Priority/Estimated Habitats of Rare Species
 - Areas of Critical Environmental Concern
 - Outstanding Resource Water
 - Water Supply Protection Areas
 - Historic Resources/Districts
 - Certified/Potential Vernal Pools

Figure 1.3
Environmental Constraints

**KCCRA - MCP Response Action
Weymouth, MA**



Source: VHB, Algonquin Gas Transmission, LLC

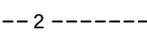
- | | | | |
|---|----------------|---|---------------------------------|
|  | Limit of Work |  | Tree Line |
|  | KCCRA - Shore |  | Topo. Bathymetric Contours |
|  | KCCRA - Upland |  | ≈ Location of Historic Bulkhead |
|  | Rip Rap |  | Disposal Site Boundary |
| | |  | MassDOT Parcel |

Figure 1.4
Existing Site Conditions

**KCCRA - MCP Response Action
Weymouth, MA**



Source: NearMap Imagery, MassDOT Roads, TRC July 2023 Phase II Remedial Action Plan

-  Proposed Revetment
-  Proposed Cobble
-  KCCRA Boundary
-  Existing Rip Rap
-  Limit of Work
-  Approx. Mean High Water Line
-  Proposed Extent of Fill Below MHW Excavation and replaced with clean cobbles

Figure 1.5
Proposed Conditions Site Plan

**KCCRA - MCP Response Action
Weymouth, MA**

2

Alternatives Analysis

This chapter provides an overview of potential alternatives to the Project. It describes each project alternative, including the No-Build Alternative as the baseline for comparison and assessment of potential environmental impacts. This chapter also provides a comparison of potential environmental impacts and an evaluation of the alternatives against Project-specific goals described in Section 2.3.1.

2.1 Project Alternatives

The following section provides a description and evaluation of remedial action alternatives that were considered to address Hazardous Materials as defined in the MCP in fill below MHW in the Shore Portion of the Project Site and in the eroding fill in the Upland Portion of the Project Site.

2.1.1 Shore Portion of the Project Site Alternatives

An area of fill below MHW within the Shore Portion of the Project Site contains nickel and vanadium at concentrations exceeding the Site-specific ecological Apparent Effects Thresholds (AETs). Three alternatives were evaluated in the Phase III RAP to achieve a Permanent Solution.

2.1.1.1 No Action

Under the No Action Alternative, no work below MHW would be conducted. Based on the results of a Method 3 Risk Characterization completed as part of the MCP, fill removal is not required from below MHW to maintain a Condition of No Significant Risk as defined in the MCP. While this Alternative would be the least impactful to the wetland resource areas affected, it does not meet DEP's preference for the removal of fill containing nickel and/or vanadium at concentrations exceeding the AETs. Therefore, this Alternative was not selected as the preferred Remedial Action Alternative.

2.1.1.2 Excavation with Offsite Disposal

In this Alternative, the area of fill below MHW containing nickel and/or vanadium at concentrations exceeding the AETs would be excavated and replaced with clean cobbles, with excavated fill and sediment disposed of offsite at an appropriate licensed disposal facility. This Alternative would reduce nickel and vanadium concentrations in the intertidal area but does not include the beneficial reuse of excavated material and associated reduction of the impacts of offsite disposal.

2.1.1.3 Excavation with Offsite Disposal and Onsite Beneficial Reuse (the Shore Portion of the Project)

In this Alternative excavated fill will be beneficially reused onsite during construction of the revetment in the Upland Portion of the Project Site. The existing, eroding fill would be graded to a sloped surface, dewatered excavated fill would be placed, and the area would then be reinforced with geotextile fabric and a layer of bedding stone before the rip rap/armor stones are placed. Any excavated material which is not reused onsite would be sampled and transported to an offsite disposal facility.

This is the Preferred Alternative and was ultimately selected because it provides the opportunity to beneficially reuse a certain volume of the excavated fill during onsite construction of the rip rap revetment.

2.1.2 Upland Portion of the Project Site Alternatives

The Project includes containment and armoring of eroding fill with a rip rap revetment. This erosion is exposing fill impacted with Hazardous Materials as defined in the MCP which was emplaced landward of the bulkhead in the 1920s. To minimize the Project's footprint and impact, while still meeting the Project purpose and need of containing eroding impacted fill, five Alternatives were evaluated in the Phase III RAP.

2.1.2.1 No Action

While this Alternative would be the least impactful to the Wetland Resource Areas on the Project Site, it does not meet the purpose identified so it was not selected.

2.1.2.2 Sheet Pile Bulkhead and Stone Revetment

As shown in Figure 2.1, this Alternative includes the installation of a sheet pile bulkhead on the face of the eroding fill, just above the MHW line. The eroding fill would be shaped and covered with geotextile fabric, backfilled with clean, compacted fill, and topped with a concrete pile cap and fence. The top elevation of the bulkhead would be consistent with the top of the existing revetment to the north. If deemed necessary during the final design, a parallel deadman would be installed 20-30 feet landward of the bulkhead and connected to the bulkhead via tie rods to provide lateral support. The deadman would likely be comprised of additional sheet piles, helical anchors, or poured concrete cylinders. To reduce wave impacts on the installed bulkhead, a stone revetment would be installed on the seaward side and sloped to match the landside topography. An Activity and Use Limitation (AUL) would be implemented for the Upland Portion of the Project Site to maintain a Condition of No Significant Risk under the MCP.

The Alternative was not selected because the proposed subsurface work (installing the sheetpile and potential deadman) would negatively impact MWRA facilities and utilities and would result in additional impacts to the Upland Portion of the KCCRA.

2.1.2.3 Complete Excavation and Replacement

This Alternative consists of removing and replacing all existing fill above MHW within the Project Site up to depths of approximately 12 feet below grade (Figure 2.2). This would involve excavation and offsite disposal of approximately 45,000 tons of fill. Due to the location and scope of the excavation,

utilities that supply water, gas, electricity, and telecommunications to the nearby MWRA pumping station would need to be relocated.

This Alternative was not selected because of its scale, cost and other impacts, including the elimination of the Upland Portion of the KCCRA.

2.1.2.4 Soft Shoreline Solution

This Alternative would include a more gradually sloped design on which coastal wetland plantings would be installed to reduce wave velocities. Because of the more gradual (almost flat) slope this design would require, a wider limit of work would need to be established. Implementing this alternative would therefore result in impacts to the Upland Portion of the KCCRA. Additionally, a soft solution such as this Alternative would not achieve a Permanent Solution as defined in the MCP because it would not prevent erosion during large storm events and impacted fill would eventually be exposed. For this reason, the soft shoreline Solution was not selected.

2.1.2.5 Extended Stone Revetment (the Upland Portion of the Project)

This Alternative would extend the existing stone revetment to the south toward Bridge Street. The eroding fill would be contained behind beneficially reused excavated fill, then topped with clean fill and core stone, and armored with rip rap. An AUL would be implemented for the Upland Portion of the Project Site to maintain a Condition of No Significant Risk under the MCP.

This Alternative is the Preferred Alternative and was ultimately selected for several reasons, including its reliability in achieving a Permanent Solution under the MCP, its relative ease of implementation, and its consistency with the existing armoring of the Coastal Bank immediately adjacent to the Project Site.

2.2 Impacts Comparison of Alternatives

2.2.1 Impacts Comparison of Shore Portion Alternatives

Table 2-1 below provides a quantitative impact analysis comparing the above three alternatives in the Shore Portion of the Project Site.

Table 2-1 Impacts Comparison of Shore Portion Alternatives

| Impact Category | No Action | Excavation with Offsite Disposal | Excavation with Offsite Disposal and Onsite Beneficial Reuse (Preferred) |
|-----------------------------|-----------|----------------------------------|--|
| Land | | | |
| Total Site Area (acres) | 0 | 1.4 | 1.4 |
| New Land Alteration (acres) | 0 | 1.2 | 1.2 |
| New Impervious Area (acres) | 0 | 0 | 0 |

continued

Table 2-1 Impacts Comparison of Shore Portion Alternatives

| Impact Category | No Action | Excavation with Offsite Disposal | Excavation with Offsite Disposal and Onsite Beneficial Reuse (Preferred) |
|--|-----------|----------------------------------|--|
| Wetland Resource Areas | | | |
| Land Subject to Coastal Storm Flowage (sf) | 0 | 46,385 | 46,385 |
| Coastal Beach/Land Containing Shellfish (sf) | 0 | 37,105 | 37,105 |
| 100-foot Buffer Zone to Coastal Bank (sf) | 0 | 5,275 | 5,275 |
| Other Wetland Areas | 0 | 0 | 0 |

All square footages are approximate values as they have been rounded to the nearest value of five (most values were rounded up).
 sf square feet

The proposed excavation Alternatives will not result in any permanent impacts on traffic and transportation, water demand, or wastewater generation. Temporary impacts on traffic are anticipated during the construction period, as noted in Chapter 7, *Construction Period*.

2.2.1.1 Land Alteration

As shown in Table 2-1, the No Action Alternative will not result in any impacts to the Project Site, while the two Excavation with Offsite Disposal Alternatives will alter approximately 1.4 acres of land, including approximately 1.2 acres of new land alteration.

2.2.1.2 Wetland Resource Areas

The No Action Alternative will not result in any impacts to Wetland Resource Areas. However, it does not satisfy DEP’s preference for the removal of fill containing nickel and/or vanadium at concentrations exceeding the AETs. The other two Excavation with Offsite Disposal Alternatives will both result in impacts to 46,385 SF of LSCSF, 37,105 SF of Coastal Beach/LCS, and 5,275 SF of Buffer Zone. Note that the impacts to LSCSF are a result of the work proposed in Coastal Beach and Coastal Bank as described in Section 2.2.2, and the impacts to the Coastal Beach also include the backfill of clean cobble after excavation to connect the excavated area and the new rip rap revetment.

2.2.2 Impacts Comparison of Upland Portion Alternatives

Table 2-2 below provides a quantitative impact analysis comparing the above five alternatives in the Upland Portion of the Project Site.

Table 2-2 Impacts Comparison of Upland Portion Alternatives

| Impact Category | No Action | Sheet Pile Bulkhead and Stone Revetment | Complete Excavation and Replacement | Soft Shoreline Solution | Extended Stone Revetment (Preferred Alternative) |
|--|-----------|---|-------------------------------------|-------------------------|--|
| Land | | | | | |
| Total Site Area (acres) | 0 | 1.4 | 4.5 | 2.0 | 1.4 |
| New Land Alteration (acres) | 0 | 1.2 | 4.3 | 1.8 | 1.2 |
| New Impervious Area (acres) | 0 | 0 | 0 | 0 | 0 |
| Wetland Resource Areas | | | | | |
| Land Subject to Coastal Storm Flowage (sf) | 0 | 49,000 | 130,000 | 53,000 | 46,385 |
| Coastal Bank (lf) | 0 | 590 | 950 | 590 | 590 |
| 100-foot Buffer Zone to Coastal Bank (sf) | 0 | 400 | 79,200 | 21,000 | 5,275 |
| Other Wetland Resources | 0 | 0 | 0 | 0 | 0 |

All square footage are approximate values as they have been rounded to the nearest value of five (most values were rounded up).
 sf square feet

2.2.2.1 Land Alteration

The No Action Alternative involves no changes and thus has no positive or negative impacts. The Sheet Pile Bulkhead and Stone Revetment and Extended Stone Revetment (Preferred) Alternatives both require 1.4 acres of total site area, and cause 1.2 acres of new land alteration, but do not create any new impervious areas. The other two Alternatives, the Complete Excavation and Replacement Alternative and the Soft Shoreline Solution Alternative, will, respectively, require 4.5 acres and 2.0 acres of total site area and cause 4.3 acres and 1.8 acres of land alteration. None of the Alternatives will result in any new impervious area.

Compared to the other Alternatives, the Extended Stone Revetment (Preferred) Alternative best meets the MCP’s criteria for the selection of a remedial action specified in the MCP as detailed in the Final Phase III Remedial Action Plan for the KCCRA Response Action.

2.2.2.2 Wetland Resource Areas

Under the No Action Alternative, there are no changes to the land or wetland resource areas. This means there is zero impact on all wetlands.

The Sheet Pile Bulkhead and Stone Revetment Alternative involves moderate alterations. The impacts are as follows: 49,000 SF of Land Subject to Coastal Storm Flowage, 590 SF of Coastal Bank, and 400 SF of the 100-foot Buffer Zone to Coastal Bank. The Complete Excavation and Replacement alternative represents an intensive approach with significant effects on wetland areas. The Soft Shoreline Solution seeks to balance impact with natural integration. Compared to other Alternatives,

this approach would result in a great impact, approximately 21,000 SF, on the 100-foot Buffer Zone to Coastal Bank.

The Extended Stone Revetment Alternative, which is the Preferred Alternative, is favored due to its balanced implications. This approach impacts 46,385 SF of Land Subject to Coastal Storm Flowage, 590 SF of Coastal Bank, and 5,275 SF of the 100-foot Buffer Zone to Coastal Bank. Other Wetland Resources that are not listed in the table will not be impacted by any of the Upland Portion Alternatives.

2.3 Comparison of Alternatives to Project Goals

The Project will meet the following goals:

1. Reduce potential human and ecological exposure to site contaminants in the Upland Portion of the KCCRA by stabilizing eroding fill at the KCCRA.
2. Remove an area of fill below MHW containing elevated concentrations of vanadium and nickel as preferred by DEP, with proper disposal of the excavated materials.
3. Achieve a Condition of No Significant Risk to human health, safety, public welfare, and the environment for current and foreseeable site uses.
4. Support the filing of a Permanent Solution with Conditions Statement for the KCCRA.
5. Execute remediation efforts efficiently while maintaining a cost-effective project budget.

2.3.1 Project Goals

Table 2-3 below provides a qualitative summary of the extent to which each evaluated Alternative is anticipated to meet these goals. A much more detailed evaluation of these Alternatives is presented in the Final Phase III Remedial Action Plan for the KCCRA Response Action which reflects input from DEP and the public. This rubric is meant to aid decision-makers in their review of the Project, the alternatives, and associated environmental impacts.

Table 2-3 Evaluation of Alternatives Against Project Goals

| Alternatives | Project Goals | | | | |
|--|---------------|-----|----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 |
| <i>Shoreline Portion Alternatives</i> | | | | | |
| No Action | NA | x | NA | x | x |
| Excavation with Offsite Disposal | NA | ✓✓ | NA | ✓✓✓ | ✓✓✓ |
| Excavation with Offsite Disposal and Onsite Beneficial Reuse (Preferred) | NA | ✓✓✓ | NA | ✓✓✓ | ✓✓✓ |
| <i>Upland Portion Alternatives</i> | | | | | |
| No Action | x | NA | x | x | x |

continued

Table 2-3 Evaluation of Alternatives Against Project Goals

| Alternatives | Project Goals | | | | |
|---|---------------|----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 |
| Sheet Pile Bulkhead and Stone Revetment | ✓✓ | NA | ✓✓✓ | ✓✓ | ✓✓ |
| Complete Excavation and Replacement | ✓✓ | NA | ✓✓ | ✓✓✓ | ✓ |
| Soft Shoreline Solution | ✗ | NA | ✗ | ✗ | |
| Extended Stone Revetment (Preferred) | ✓✓✓ | NA | ✓✓✓ | ✓✓✓ | ✓✓✓ |

*As described in Section 2.3 above.

✗ = Does not meet Project Goal

✓ = Somewhat meets Project Goal

✓✓ = Significantly meets Project Goal

✓✓✓ = Fully meets Project Goal

NA = Not Applicable

2.3.2 Comparison of Project Alternatives Against Goals

Compared to other Alternatives, the Project, which is the Extended Stone Revetment (Preferred) Alternative, fully meets the Project goals, as described below.

- › **Goal #1: Reduce potential human and ecological exposure to site contaminants in the Upland Portion of the KCCRA by stabilizing eroding fill at the KCCRA.**

This goal is only applicable to the Upland Portion of the Project Site. Among all Upland Alternatives, the No Action and the Soft Shoreline Solution Alternatives do not meet Project Goal #1. The Sheet Pile Bulkhead Alternative and Complete Excavation and Replacement Alternative can somewhat meet this goal but with greater impacts to the Upland Portion of the KCCRA, greater disruption of the MWRA’s operations adjacent to the Project Site, and at a greater cost. The Extended Stone Revetment (Preferred) Alternative will fully meet the goal by stabilizing eroding fill at the Upland Portion of the KCCRA.

- › **Goal #2: Remove an area of fill below MHW containing elevated concentrations of vanadium and nickel as preferred by DEP, with proper disposal of the excavated materials.**

This goal is only applicable to the Shore Portion of the Project Site. The No Action Alternative will not meet Project Goal #2 of removing fill with elevated concentrations of nickel and vanadium below MHW with proper disposal. The Excavation with Offsite Disposal Alternative can significantly meet the goal, but it does not include beneficial reuse of excavated fill. These benefits can be achieved by the Excavation with Offsite Disposal and Onsite Beneficial Reuse (Preferred) Alternative.

- › **Goal #3: Achieve a Condition of No Significant Risk to human health, safety, public welfare, and the environment for current and foreseeable site uses**

Project Goal #3 is only applicable to the Upland Portion of the Project Site, since a Condition of No Significant Risk has already been achieved for the Shore Portion. In terms of the Upland Alternatives, the Sheet Pile Bulkhead and Stone Revetment and Extended Stone Revetment (Preferred) Alternatives can fully meet this goal. The Complete Excavation and Replacement Alternative cannot fully meet the goal, because this alternative would result in the greatest

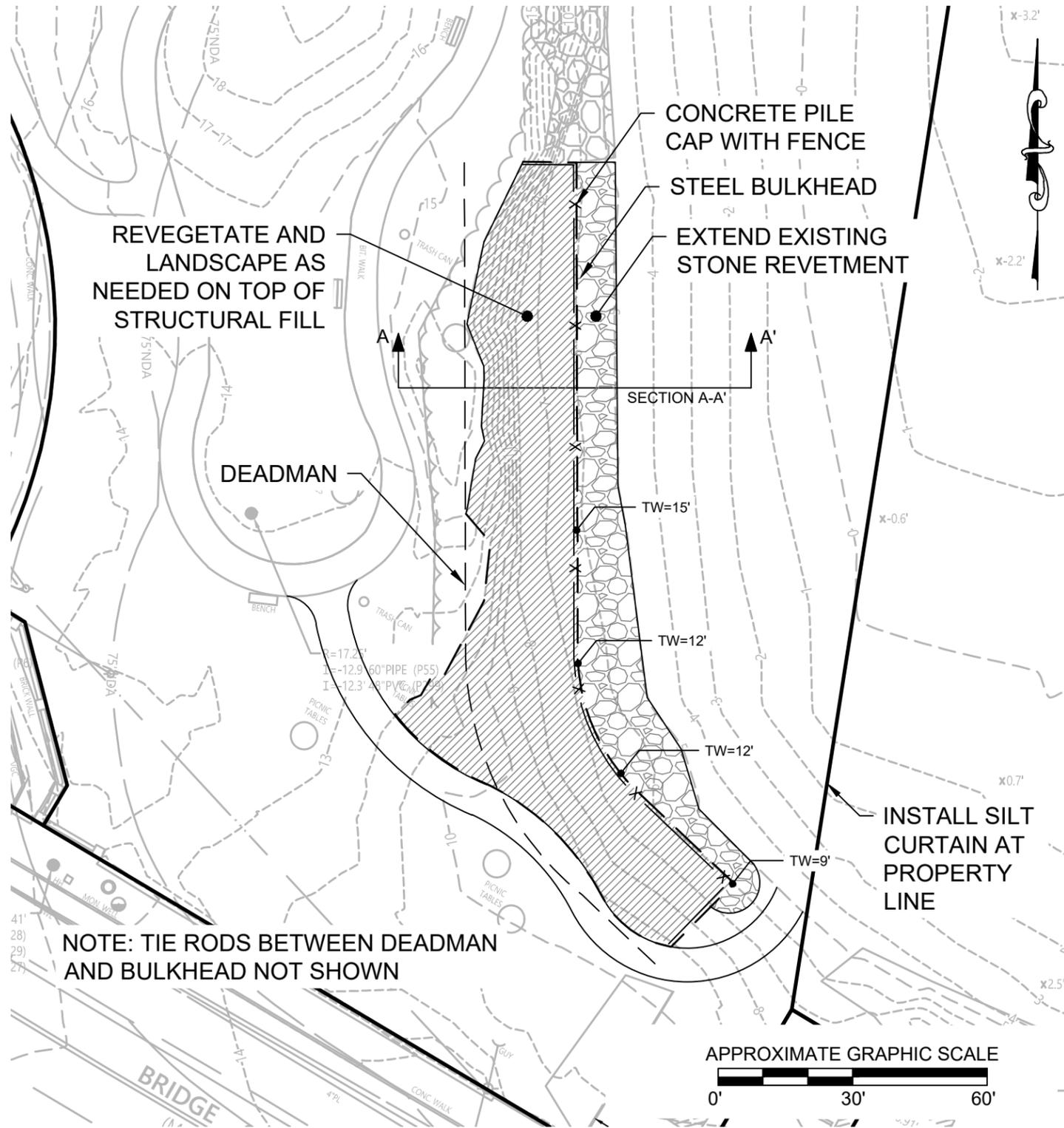
environmental impact and land alteration among all options. The Soft Shoreline Solution and No Action Alternatives also cannot meet this goal.

› **Goal #4: Support the filing of a Permanent Solution with Conditions for the KCCRA.**

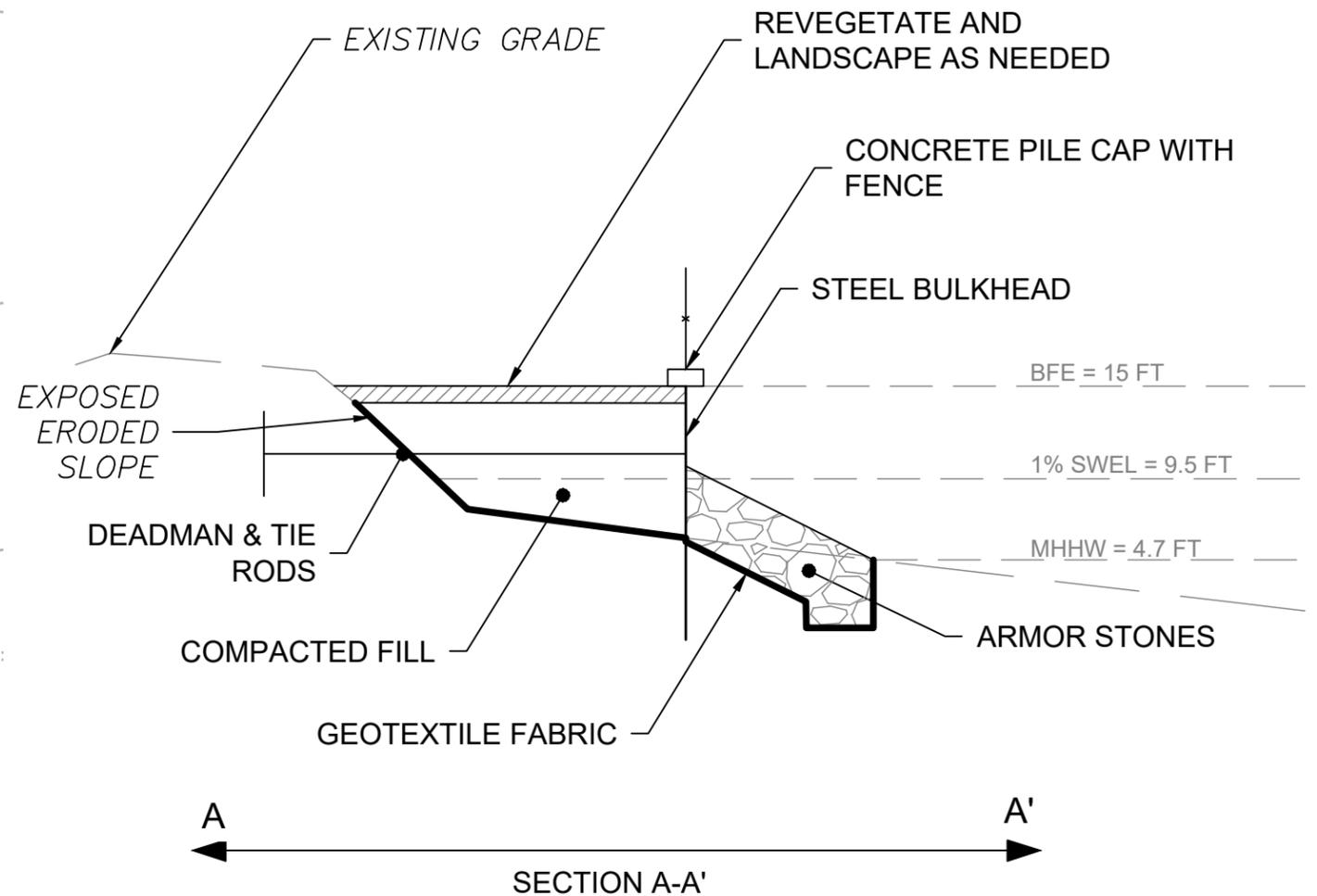
Neither of the No Action Alternatives can meet Project Goal #4. It can be met in the Shore Portion of the Site by both Excavation Alternatives. Among all Upland Alternatives, the Sheet Pile Bulkhead and Extended Stone Revetment (Preferred) Alternatives can both meet this goal with an AUL that incorporates use limitations and maintenance requirements. The Soft Shoreline Solution Alternative would not meet this goal because a Condition of No Significant Risk for the foreseeable future could not be achieved.

› **Goal #5: Execute remediation efforts efficiently while maintaining a cost-effective project budget.**

Neither of the No Action Alternatives meets Project Goal #5. For the Shore Portion, both Excavation Alternatives fully achieve this goal, but the Extended Stone Revetment (Preferred) Alternative, which incorporates the beneficial reuse of excavated materials, will cost approximately \$70,000 less than the other option. Among the Upland Portion Alternatives, aside from the No Action option, the Complete Excavation and Replacement Alternative has the highest estimated cost at \$22,970,000, nearly ten times that of other options. Meanwhile, the Extended Stone Revetment (Preferred) Alternative is the least expensive and can effectively achieve the Project objectives. The Sheet Pile Bulkhead and Stone Revetment Alternative will cost approximately \$440,000 more than the preferred option, while the Soft Shoreline Alternative will cost approximately \$3,000,000. Cost estimates evaluated in this Chapter were derived from the Phase III RAP.



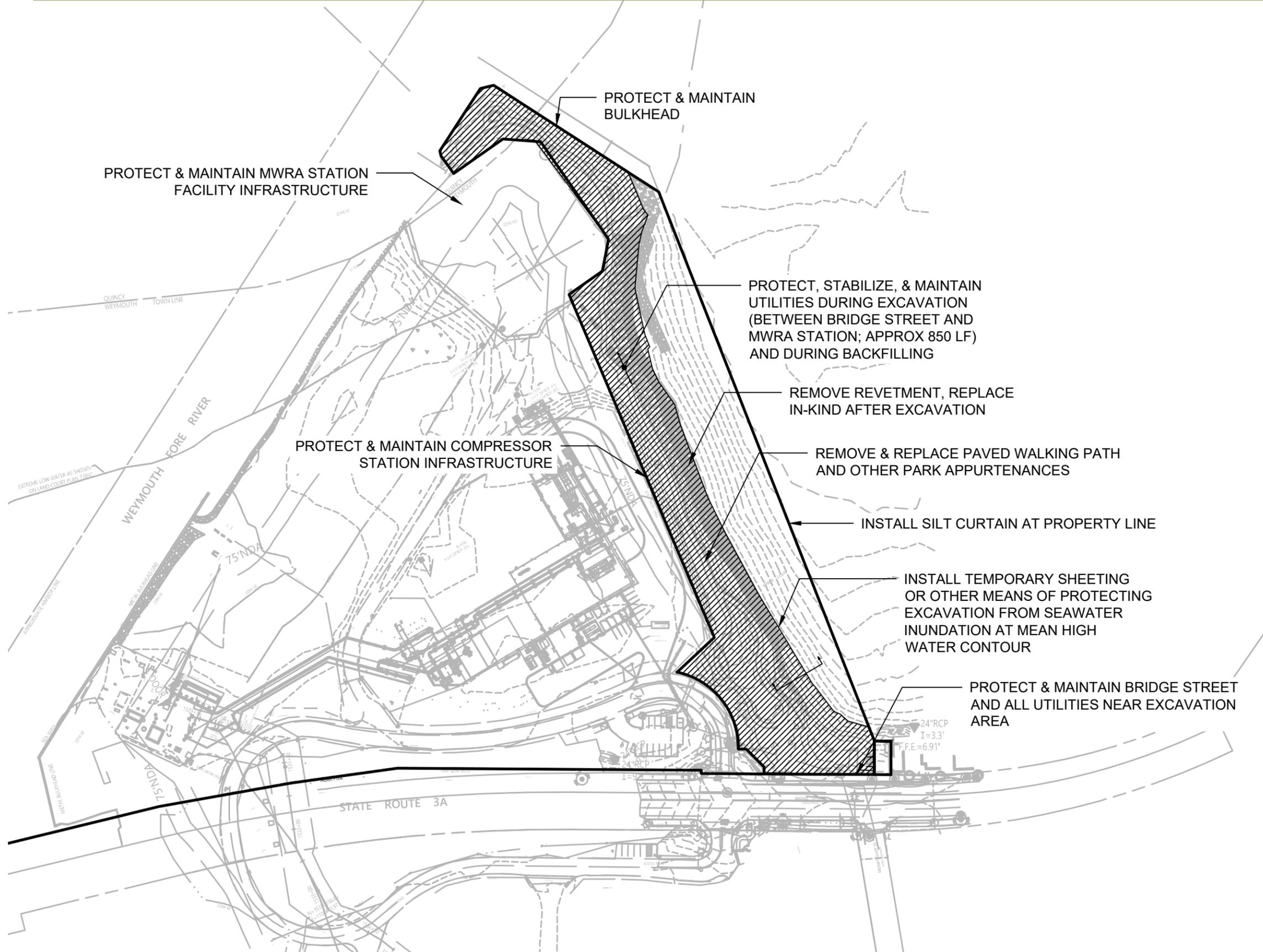
NOTE: TIE RODS BETWEEN DEADMAN AND BULKHEAD NOT SHOWN



GENERAL NOTES:

1. BASE PLAN PROVIDED BY VHB'S "ATLANTIC BRIDGE WEYMOUTH COMPRESSOR STATION, KING COVE NOI" DATED APRIL 2020.
2. MHHW - MEAN HIGH HIGH WATER
BFE - BASE FLOOD ELEVATION (1% CHANCE OF EXCEEDANCE)
SWEL - STILL WATER STORM SURGE ELEVATION

Figure 2.1
Sheet Pile Bulkhead and Stone Revetment Alternative



LEGEND:

 EXTENT OF FILL REMOVAL AND BACKFILL

GENERAL NOTES:

1. BASE PLAN PROVIDED BY VHB'S "ATLANTIC BRIDGE WEYMOUTH COMPRESSOR STATION, KING COVE NOI" DATED APRIL 2020.

APPROXIMATE GRAPHIC SCALE



Figure 2.2

Complete Excavation and Replacement Alternative

**KCCRA - MCP Response Action
Weymouth, MA**

3

Environmental Justice and Public Health

In compliance with Chapter 8 of the Acts of 2021, an act creating a next-generation roadmap for Massachusetts climate policy, which became effective on June 24, 2021, and with Energy and Environmental Affairs' (EEA) updated Environmental Justice Policy (together, the "EJ Policy"), this EENF evaluates whether any Environmental Justice (EJ) populations located within one mile of the Project Site are reasonably likely to be adversely impacted by the Project. Based on the evaluations presented in this Chapter, no EJ populations are reasonably likely to be adversely impacted by the Project. In fact, the only impacts will be positive.

3.1 Identification of Environmental Justice Populations

In compliance with the MEPA Protocol for Public Involvement Protocol for Environmental Justice Populations (the "Public Involvement Protocol"), effective January 1, 2022, this section identifies the EJ populations in the vicinity of the Project Site.

EEA defines EJ as "the equal protection and meaningful involvement of all people and communities" regarding environmental issues, including the equitable allocation of benefits and burdens.

In accordance with the EJ Policy, the Proponent consulted EEA's Massachusetts 2020 Environmental Justice Populations Map¹ (EJ Maps Viewer) to identify the presence of EJ populations as an initial screening tool for identifying potential EJ populations under the EJ Policy. It derives from the 2020 U.S. Census (for EJ block groups) and 2015 American Community Survey 5-Year Estimates (for English isolation criteria).

EJ Populations in Massachusetts are defined as:

- › A neighborhood that meets one or more of the following criteria:
 - The annual median household income is not more than 65 percent of the statewide annual median household income;
 - Minorities comprise 40 percent or more of the population;
 - 25 percent or more of households lack English language proficiency; or
 - Minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income; or

¹ This map is based on US Census Bureau data released in October 2021 and March 2022, and was updated on November 12, 2022

- › A geographic portion of a neighborhood designated by the Secretary as an environmental justice population in accordance with law.

3.1.1 Project Location

The Project Site is located in the southwestern portion of the KCCRA, north of Bridge Street in Weymouth, Massachusetts. The Project is not expected to exceed MEPA Review Thresholds related to air quality and is not expected to generate 150 or more average daily trips of diesel trucks over the duration of a year. Therefore, the area of study for EJ impacts, or “Designated Geographic Area” (DGA) for the Project is the 1-mile radius from the Project Site. Figure 3.1 is a graphic depiction of EJ populations in the vicinity of the Project Site.

3.1.2 Characteristics of EJ Populations within 1 Mile of the Project Site

Within the 1-mile radius of the Project Site, the following 10 census block groups are identified as EJ populations:

- › Block Group 1, Census Tract 4179.01, Norfolk County, Massachusetts
- › Block Group 2, Census Tract 4194, Norfolk County, Massachusetts
- › Block Group 6, Census Tract 4179.01, Norfolk County, Massachusetts
- › Block Group 4, Census Tract 4227, Norfolk County, Massachusetts
- › Block Group 1, Census Tract 4194, Norfolk County, Massachusetts
- › Block Group 3, Census Tract 4179.01, Norfolk County, Massachusetts
- › Block Group 1, Census Tract 4178.02, Norfolk County, Massachusetts
- › Block Group 2, Census Tract 4179.01, Norfolk County, Massachusetts
- › Block Group 5, Census Tract 4179.01, Norfolk County, Massachusetts
- › Block Group 2, Census Tract 4178.02, Norfolk County, Massachusetts

These block groups meet the Massachusetts EJ criteria based on the following criteria:

- › **Minority** – the block group minority population is greater than or equal to 40 percent, or the block group minority population is greater than or equal to 25 percent, and the median household income of the municipality and the block group is less than 150 percent of the Massachusetts median household income;
- › **Minority and English Isolation** – 25 percent or more households do not include anyone older than 14 who speaks English very well, in addition to the “Minority” population defined above;
- › **Minority and Income** – at least 25 percent of households have a median household income 65 percent or less than the state median household income, and also have the attributes of the “Minority” population defined above; and
- › **Minority, Income, and English Isolation** – includes all of the above-defined populations.

3.1.3 Characteristics of EJ Populations within 5 Miles of the Project Site

Within the 5-mile radius of the Project Site, there are 108 census block groups that meet the EJ criteria of:

- › **Minority;**
- › **Minority and English Isolation;**
- › **Minority and Income;**
- › **Minority, Income, and English Isolation;** and
- › **Income** – at least 25 percent of households have a median household income 65 percent or less than the state median household income.

The census block groups located within 5 miles of the Project Site include the following:

- | | |
|--|---|
| › Block Group 2, Census Tract 4224.02, Norfolk County | › Block Group 1, Census Tract 4225.01, Norfolk County |
| › Block Group 3, Census Tract 5012.04, Plymouth County | › Block Group 2, Census Tract 4225.01, Norfolk County |
| › Block Group 2, Census Tract 1007, Suffolk County | › Block Group 3, Census Tract 4225.02, Norfolk County |
| › Block Group 1, Census Tract 4171, Norfolk County | › Block Group 4, Census Tract 4225.02, Norfolk County |
| › Block Group 4, Census Tract 4171, Norfolk County | › Block Group 2, Census Tract 4225.02, Norfolk County |
| › Block Group 3, Census Tract 4172.02, Norfolk County | › Block Group 4, Census Tract 4227, Norfolk County |
| › Block Group 2, Census Tract 4175.01, Norfolk County | › Block Group 2, Census Tract 1006.03, Suffolk County |
| › Block Group 3, Census Tract 4175.01, Norfolk County | › Block Group 2, Census Tract 4172.01, Norfolk County |
| › Block Group 2, Census Tract 4177.04, Norfolk County | › Block Group 3, Census Tract 4172.01, Norfolk County |
| › Block Group 4, Census Tract 4179.01, Norfolk County | › Block Group 4, Census Tract 4172.02, Norfolk County |
| › Block Group 1, Census Tract 4179.02, Norfolk County | › Block Group 1, Census Tract 4175.01, Norfolk County |
| › Block Group 2, Census Tract 4179.02, Norfolk County | › Block Group 4, Census Tract 4175.01, Norfolk County |
| › Block Group 3, Census Tract 4179.02, Norfolk County | › Block Group 4, Census Tract 4176.01, Norfolk County |
| › Block Group 2, Census Tract 4180.02, Norfolk County | › Block Group 1, Census Tract 4194, Norfolk County |
| › Block Group 3, Census Tract 4180.02, Norfolk County | › Block Group 1, Census Tract 4175.02, Norfolk County |
| › Block Group 4, Census Tract 4180.02, Norfolk County | › Block Group 2, Census Tract 4177.03, Norfolk County |
| › Block Group 2, Census Tract 4180.04, Norfolk County | › Block Group 3, Census Tract 4179.01, Norfolk County |
| › Block Group 1, Census Tract 4181.01, Norfolk County | › Block Group 3, Census Tract 4181.01, Norfolk County |
| › Block Group 2, Census Tract 4181.02, Norfolk County | › Block Group 1, Census Tract 4178.02, Norfolk County |
| › Block Group 1, Census Tract 4191, Norfolk County | › Block Group 1, Census Tract 4182.01, Norfolk County |
| › Block Group 4, Census Tract 4191, Norfolk County | › Block Group 3, Census Tract 4176.02, Norfolk County |
| › Block Group 1, Census Tract 4196.02, Norfolk County | › Block Group 6, Census Tract 4171, Norfolk County |
| › Block Group 2, Census Tract 4197, Norfolk County | › Block Group 1, Census Tract 4177.03, Norfolk County |
| › Block Group 1, Census Tract 4198, Norfolk County | › Block Group 3, Census Tract 4193, Norfolk County |
| › Block Group 5, Census Tract 4171, Norfolk County | › Block Group 2, Census Tract 4179.01, Norfolk County |
| › Block Group 2, Census Tract 4172.02, Norfolk County | › Block Group 5, Census Tract 4179.01, Norfolk County |
| › Block Group 1, Census Tract 4177.04, Norfolk County | › Block Group 2, Census Tract 4198, Norfolk County |
| › Block Group 1, Census Tract 4192, Norfolk County | › Block Group 1, Census Tract 4181.02, Norfolk County |
| › Block Group 2, Census Tract 4193, Norfolk County | › Block Group 2, Census Tract 4224.01, Norfolk County |
| › Block Group 2, Census Tract 4182.01, Norfolk County | › Block Group 3, Census Tract 4176.01, Norfolk County |
| › Block Group 2, Census Tract 4192, Norfolk County | › Block Group 3, Census Tract 4177.03, Norfolk County |

- › Block Group 4, Census Tract 4181.01, Norfolk County
- › Block Group 1, Census Tract 4172.02, Norfolk County
- › Block Group 3, Census Tract 4171, Norfolk County
- › Block Group 1, Census Tract 4179.01, Norfolk County
- › Block Group 1, Census Tract 4180.04, Norfolk County
- › Block Group 1, Census Tract 4196.01, Norfolk County
- › Block Group 3, Census Tract 4180.04, Norfolk County
- › Block Group 2, Census Tract 4171, Norfolk County
- › Block Group 1, Census Tract 4193, Norfolk County
- › Block Group 2, Census Tract 4194, Norfolk County
- › Block Group 1, Census Tract 4172.01, Norfolk County
- › Block Group 2, Census Tract 4195, Norfolk County
- › Block Group 3, Census Tract 4201.01, Norfolk County
- › Block Group 4, Census Tract 4221, Norfolk County
- › Block Group 3, Census Tract 4222.02, Norfolk County
- › Block Group 1, Census Tract 4223.03, Norfolk County
- › Block Group 2, Census Tract 4223.03, Norfolk County
- › Block Group 3, Census Tract 4223.03, Norfolk County
- › Block Group 1, Census Tract 4224.01, Norfolk County
- › Block Group 3, Census Tract 4224.01, Norfolk County
- › Block Group 3, Census Tract 4194, Norfolk County
- › Block Group 1, Census Tract 4197, Norfolk County
- › Block Group 1, Census Tract 4195, Norfolk County
- › Block Group 2, Census Tract 4178.02, Norfolk County
- › Block Group 3, Census Tract 4175.02, Norfolk County
- › Block Group 3, Census Tract 4181.02, Norfolk County
- › Block Group 4, Census Tract 4172.01, Norfolk County
- › Block Group 2, Census Tract 4180.03, Norfolk County
- › Block Group 1, Census Tract 4173, Norfolk County
- › Block Group 2, Census Tract 4177.02, Norfolk County
- › Block Group 1, Census Tract 4180.02, Norfolk County
- › Block Group 2, Census Tract 4175.02, Norfolk County
- › Block Group 4, Census Tract 4175.02, Norfolk County
- › Block Group 1, Census Tract 4176.01, Norfolk County
- › Block Group 2, Census Tract 4176.01, Norfolk County
- › Block Group 1, Census Tract 4176.02, Norfolk County
- › Block Group 2, Census Tract 4176.02, Norfolk County
- › Block Group 6, Census Tract 4179.01, Norfolk County
- › Block Group 4, Census Tract 4192, Norfolk County
- › Block Group 1, Census Tract 4180.03, Norfolk County
- › Block Group 2, Census Tract 4181.01, Norfolk County
- › Block Group 3, Census Tract 4182.01, Norfolk County
- › Block Group 3, Census Tract 4191, Norfolk County
- › Block Group 5, Census Tract 4191, Norfolk County
- › Block Group 4, Census Tract 4193, Norfolk County
- › Block Group 1, Census Tract 4225.02, Norfolk County

Refer to Appendix C for information on EJ populations within 1 mile and 5 miles of the Project Site.

3.1.4 MEPA Language Criteria

According to the “Languages Spoken in Massachusetts” tab of MEPA’s EJ Maps Viewer, within the 1-mile radius of the Project Site, two Census tracts in Quincy identify Chinese as the language spoken by 5 percent or more of residents who also identify as not speaking English very well: Tract 4178.02 (25.6 percent of the population) and Tract 4179.01 (6.2 percent of the population).

The MEPA EJ Screening Form was translated into Chinese (Mandarin) and distributed to the EJ Community Based Organization (CBO) list on February 14, 2025. The Proponent will provide oral interpretation upon request at the MEPA Site Consultation public meeting and any subsequent public/community meetings held during the MEPA review process to ensure meaningful community engagement. Refer to Appendix C for detailed language information within 1 mile and 5 miles of the Project Site.

3.2 Assessment of Existing Public Health Conditions

This section addresses Vulnerable Health Criteria, Potential Sources of Pollution, and Climate Change Vulnerability to help assess whether an existing unfair or inequitable environmental burden related to public health consequences has been placed upon the EJ communities, as compared to the general population, within one mile of the Project Site.

3.2.1 Vulnerable Health Criteria

To understand potential health vulnerabilities faced by EJ populations within the study area, Vulnerable Health EJ Criteria, as defined by the Massachusetts Department of Public Health EJ Tool (DPH EJ Tool), were identified within the community. The DPH EJ Tool provides information at the community level (defined as municipalities). These criteria include four environmentally related health indicators to determine populations that may have higher than average rates of environmentally related health outcomes, which are:

- › **Heart Attack:** This is evaluated as the 5-year average age-adjusted rate of hospitalizations for heart attacks that is equal to or greater than 110 percent of the state rate. Heart attack data are only gathered from people greater than or equal to 35 years of age, and were based on their residential locations, not where the health incident occurred. This is a criterion because air pollution exposure, including particulate matter, can increase the risk for heart attack and other forms of heart disease.
- › **Childhood Blood Lead:** This is evaluated as the 5-year average prevalence of elevated childhood blood lead levels that is equal to or greater than 110 percent of the state rate. This is a criterion because lead exposure from sources including soil and drinking water contamination, housing, and household items and toys, disproportionately impacts EJ communities. Exposure to lead even at low levels can cause severe and irreversible health effects in children.
- › **Low Birth Weight:** This is evaluated as the 5-year average low birth weight rate among full-term births that is equal to or greater than 110 percent of the state rate. A baby is considered low birth weight if they weigh less than 5.5 pounds, and data only consider singleton births. This is a criterion because there is an increased risk of delivering a low-birth-weight baby or a baby having other birth defects when exposed to air and environmental contaminants. Additionally, women of color and women of low income are at a higher risk.
- › **Childhood Asthma:** This is defined as the 5-year average rate of emergency department visits for childhood asthma that is equal to or greater than 110 percent of the state rate. This is a criterion because EJ populations experience a greater risk of asthma due to an increased exposure to asthma triggers, including air pollution, which impacts one's overall health and well-being. EJ communities also have more limited access to health care services, which is considered a contributing factor.

The DPH EJ Tool indicates that the City of Weymouth does not meet the Vulnerable Health EJ criteria for heart attack, childhood blood lead, low birth weight, or childhood asthma at the municipality level. Census-tract-level data is only available for childhood blood lead and low birth weight on the DPH EJ Tool. Within a 1-mile radius of the Project Site, one census tract (178.02) exceeds the childhood blood lead criterion, and two census tracts (179.01 and 227.00) exceed the low birth weight criterion. However, census tract 228.00, where the Project Site is located, does not meet these two criteria.

Health vulnerabilities faced by EJ populations within the study area were also assessed in 2019 through a Health Impact Assessment² (HIA) prepared by DPH and DEP with support from the Metropolitan Area Planning Council. The HIA leveraged available data, health expertise, and public

² Fore River HIA. (2019). *Health Impact Assessment of a Proposed Natural Gas Compressor Station in Weymouth, MA*. Retrieved from https://foreriverhia.com/wp-content/uploads/2019/01/Final-Report_20190104.pdf

input to identify possible health effects associated with the development of the Weymouth Compressor Station. The HIA concluded that there were no anticipated substantial changes in health from direct exposure to the Compressor Station except for temporary sound levels during construction.

3.2.2 Potential Sources of Pollution

The Project team used the DPH EJ Tool and the U.S. EPA's "EJScreen" tool to identify potential sources of pollution that may have impacted, or may currently impact, EJ populations within the DGA.

3.2.2.1 Massachusetts Department of Public Health EJ Tool

The DPH EJ Tool indicates that the following number of facilities/infrastructures are mapped in EJ communities within the DGA.

- › MassDEP major air and waste facilities – 8
- › M.G.L. c. 21E sites – 2
- › "Tier II" toxics use reporting facilities – 6
- › MassDEP sites with AULs – 8
- › MassDEP groundwater discharge permits – 0
- › MassDEP public water suppliers – 0
- › Wastewater treatment plants – 7
- › Underground storage tanks (UST) – 10
- › EPA facilities-Toxics Release Inventory Sites - 2
- › Road infrastructure – **State Route**
- › MBTA bus and rapid transit – **2 Bus Shelters, 62 Bus Stops, and 22 Bus Routes**
- › Other transportation infrastructure – **1 Freight Rail Yard, 7 Railroad Tracks, and 1 Ferry Route**
- › Regional transit agencies (RTA) – **None**
- › Energy generation and supply – **3 Power Plants and 2 Transmission Lines**

3.2.2.2 U.S. EPA's EJScreen Tool

The Project team also consulted the U.S. EPA's EJScreen, which provides a percentile ranking by census block group compared against statewide averages for 13 environmental indicators. The results from the EJScreen indicate the following for the area within the DGA:

1. 49th percentile for Particulate Matter 2.5
2. 78th percentile for Ozone
3. 66th percentile for Nitrogen Dioxide
4. 75th percentile for Diesel PM
5. 71st percentile for Toxic Releases To Air
6. 68th percentile for Traffic Proximity
7. 70th percentile for Lead Paint

8. 74th percentile for Superfund Proximity
9. 81st percentile for Risk Management Plan Facility Proximity
10. 64th percentile for Hazardous Waste Proximity
11. 61st percentile for Underground Storage Tanks
12. 80th percentile for Wastewater Discharge
13. 62nd percentile for Drinking Water Non-Compliance

EPA identified the 80th percentile as the initial starting point for an early application of EJScreen. Based on the above results, there are two waste/water/air-related environmental indicators at or above the 80th percentile, which are Risk Management Plan Facility proximity and Wastewater Discharge. The Risk Management Plan Facility Proximity indicator measures how close people might live to an active facility with a required Risk Management Plan. The Wastewater Discharge indicator measures how much relative risk there is of being exposed to pollutants from wastewater that flows into rivers or other bodies of water downstream. This relative risk is based on estimated concentrations of pollutants in downstream water bodies.

3.2.3 Climate Change Vulnerability

The ResilientMass Action Team (RMAT) Climate Resilience Design Standards Tool indicates that the Project Site received moderate exposure to impacts of sea level rise/storm surge, high exposure to impacts of extreme precipitation-urban flooding and extreme heat, and no exposure to impacts of extreme precipitation-riverine flooding. According to the RMAT Tool report (**Appendix D**), potential reasons leading to exposure from extreme climate events include:

Sea Level Rise/Storm Surge (High Exposure)

- › Located within the predicted mean high water shoreline by 2030
- › Exposed to the 1% annual coastal flood event as early as 2030
- › Historic coastal flooding at project site

Extreme Precipitation - Urban Flooding (Moderate Exposure)

- › Maximum annual daily rainfall exceeds 10 inches within the overall project's useful life
- › No historic flooding at project site
- › No increase to impervious area
- › Existing impervious area of the project site is less than 10%

Extreme Precipitation - Riverine Flooding (No Exposure)

- › No historic riverine flooding at project site
- › The project is not within a mapped FEMA floodplain [outside of the Massachusetts Coast Flood Risk Model (MC-FRM)]
- › Project is more than 500ft from a waterbody
- › Project is not likely susceptible to riverine erosion

Extreme Heat (High Exposure)

- › 30+ days increase in days over 90 deg. F within project's useful life
- › Less than 10% of the existing project site has canopy cover

- › Located within 100 ft of existing water body
- › No increase to the impervious area of the project site
- › No tree removal

See further discussion in Chapter 5, *Climate Change Adaptation and Resiliency*.

3.3 Likely Impacts/Benefits for EJ Populations

Although the Project Site is not located within an EJ census tract, there are EJ populations adjacent to the Project Site. The Project will result in ***significant environmental benefits to the surrounding community*** by achieving a Permanent Solution, as defined in the MCP, at the Project Site. This will be accomplished by construction of the Project which will stabilize eroding fill and include the removal of an area of fill below MHW containing elevated concentrations of vanadium and nickel.

Natural Resources

The Project will alter approximately 46,385 SF of LSCSF as a result of the work proposed in Coastal Beach and Coastal Bank. Proposed work on the Project Site will not divert flood waters to adjacent properties. As a result of the Project, the KCCRA will receive additional protection from coastal flooding events.

Wetland Resource Areas will be protected from impacts during the implementation of the Project through the employment of an erosion and sedimentation control program, which includes provisions to limit erosion through stabilization and prevent sediment from leaving the Project Site by the use of structural controls. The Project has been designed to minimize hydrological changes to Wetland Resource Areas while still achieving the Remedial Action objective.

Upgradient of the proposed excavation area, the Project proposes containment and armoring of the eroding portions of Coastal Bank with a rip rap revetment. The erosion is exposing fill impacted with Hazardous Materials, as defined in the MCP, which was emplaced landward of the bulkhead in the 1920s. To prevent additional exposure to impacted fill, a revetment will be constructed on the face of the existing, unarmored Coastal Bank. The proposed excavation within Coastal Beach will not increase erosion or decrease volume of the Coastal Beach since all excavated fill and sediment will be replaced with clean fill designed to be scour-resistant and the proposed mudline elevations will be similar to the existing elevations. Cobble will be placed within portions of the nearshore/Coastal Beach area to establish a more natural ground cover. This is not anticipated to have an adverse effect on the ability of the Coastal Beach to provide storm damage prevention, flood control, or protection of wildlife habitat.

The Project's impact to Wetland Resource Areas was reviewed by the Weymouth Conservation Commission at two public meetings following the public notice specified by the applicable regulations. An Order of Conditions approving the Project was issued on September 5, 2024. The Project has also been designed to follow the guidance provided in the 2017 document released by DEP and the Office of Coastal Zone Management (CZM): *Applying the Massachusetts Coastal Wetlands Regulations: A Practical Manual for Conservation Commissions to Protect the Storm Damage Prevention and Flood Control Functions of Coastal Resource Areas*.

Construction Period

Temporary construction access roads and temporary structures will be removed within 30 days of the completion of work. Temporarily altered resource areas within staging areas will be substantially restored to existing hydrologic and topographic conditions with vegetative cover. The Project has been designed to minimize potential impacts to the KCCRA through construction access directly from Bridge Street, rather than through the KCCRA.

3.4 Enhanced Public Involvement

To enable the public to assess the impact of proposed projects that affect their environment, health, and safety through the MEPA review process, it is important to provide opportunities for meaningful public involvement by EJ populations. As per the requirements stated under Section II of the Public Involvement Protocol, "Measures to Enhance Public Involvement Prior to Filing ENF/EENF," and as detailed below, the Proponent has made a meaningful effort to engage with the community through expanded outreach.

3.4.1 Prior to the EENF Filing

Prior the EENF filing, the Proponent proactively engaged with potentially impacted communities in accordance with a site-specific PIP. The PIP, included in Appendix B, details how information is shared with the public and how the public can comment on cleanup and assessment plans.

This engagement builds upon the extensive work undertaken by the Proponent in connection with the permitting and review of the Weymouth Compressor Station. The Proponent sought to facilitate the participation of EJ populations by providing information in Spanish, Mandarin, and Cantonese (in addition to English) regarding public meetings and notices regarding construction information. In their review of the Proponent's application for a Certificate of Public Convenience and Necessity from the Federal Energy Regulatory Commission (the "Commission"), the Commission concluded that the Project would not have a disproportionately high and adverse effect on any minority or low-income populations and emphasized that the Proponent provided numerous opportunities for community involvement.

3.4.1.1 Advance Notification

In accordance with the Public Involvement Protocol, the Proponent completed the 45-day-Advance Notice to the MEPA-determined CBOs, with an EJ Screening Form describing the Project. Advance Notification was delivered to MEPA provided CBO and tribal organization list on February 14, 2025. The Proponent also provided a version of the notice translated into Chinese (Mandarin).

For MCP related milestones, consistent with the site-specific Public Involvement Plan, the Proponent has provided a minimum of 14 days' notice of public meetings, including notice of the meeting date, time, and location, in the *Boston Globe* and *Quincy Patriot Ledger* as well as the *Weymouth News*. A copy of the public notice was provided by email to members of the PIP group, the Chief Municipal Officer and the Board of Health of the Town of Weymouth, and the Department of Environmental Protection. To date there have been more than five public meetings associated with the assessment, remediation planning, and permitting of the Project.

3.4.1.2 Pre-Filing Consultation

Prior to filing this Expanded Environmental Notification Form, the Proponent held a MEPA Pre-Filing meeting on January 23, 2025. The discussion during the meeting centered around the topics of site overview, proposed work and design, MEPA review thresholds, EJ, and permitting schedule.

3.4.1.3 Community Outreach and Engagement

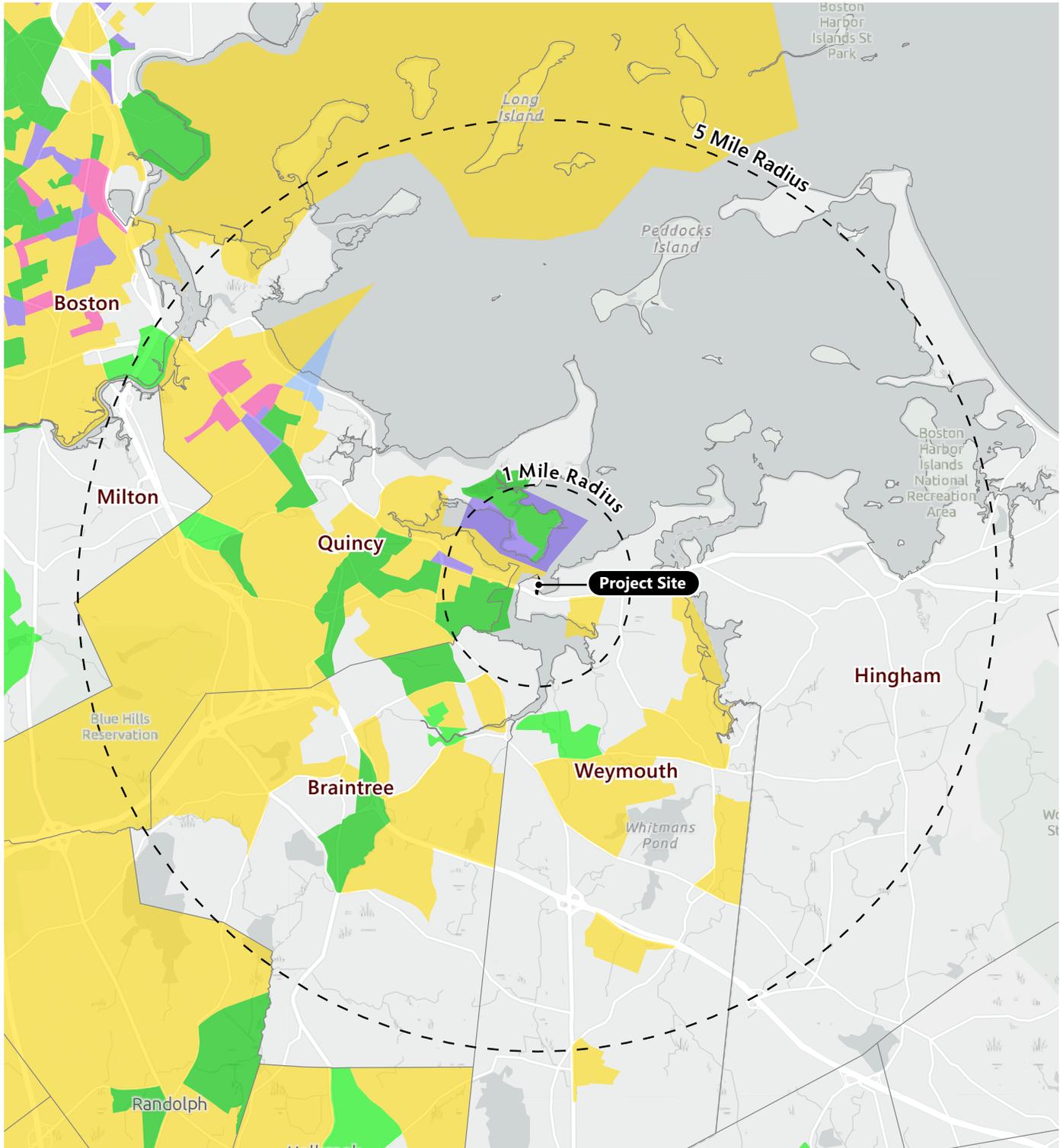
Chapter 1, *Project Description*, also discusses the most recent public meetings and hearings that have occurred regarding the Project. The Proponent has met with potentially affected communities at each phase of the MCP process, with meetings occurring between 2017 and present. To encourage potentially affected communities to participate, the Proponent has arranged for bus transportation from nearby communities and provided Mandarin-speaking translation during the meetings. To date, no potentially affected community members have used the transportation or translation services provided.

At each Phase of the MCP process the Proponent has provided specific opportunities for potentially affected communities to provide comments on documents concerning the Project. The comment period is normally 20 days but may be longer if warranted by the complexity of a particular document or if requested by potentially affected communities. Responses are prepared for the written and verbal comments received during the comment period and public meetings. A copy of the responses is sent to those who submitted comments, and potentially affected communities are notified that the Response to Comments is available.

The Project was reviewed by the Weymouth Conservation Commission during two public meetings. Potentially affected communities were notified of the meeting dates, times and locations. During those meetings residents of Weymouth vocalized their support for the Project and the Weymouth Conservation Commission issued a favorable determination.

3.4.2 Public Involvement After EENF Filing

The Proponent will continue to promote meaningful public involvement by EJ populations after filing the EENF by maintaining the CBO and tribal organization list. Notices, in English and Chinese (Mandarin), will be circulated for the MEPA Site Visit, and translation services will be available upon request for any summaries of supplemental information submitted to the MEPA office, or any other relevant notices or materials generated during the course of MEPA review. Given the extensive public involvement already conducted regarding the KCCRA Response Action, and the positive response the KCCRA Response Action has already received, including from DEP and the Weymouth Conservation Commission, the opportunities for public comment provided in 301 CMR 11.06 and 11.08, supplemented by the provisions of the PIP, will satisfy the requirements for enhanced public outreach specified at Massachusetts Laws Chapter 30, section 62J, and the Massachusetts Environmental Policy Act regulations at 301 CMR 11.05.



Source: The Environmental Justice Map Viewer (an interactive map that uses population data from the 2020 Census, based upon three demographic criteria developed by the state's Executive Office of Energy and Environmental Affairs (EEA), to show which Census 2020 block groups are classified as EJ populations).

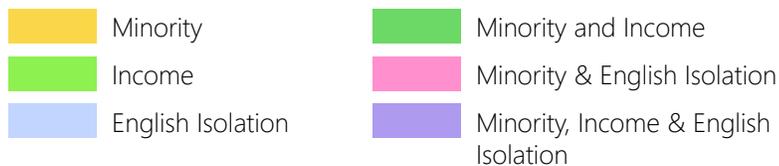


Figure 3.1
EJ Populations Map

**KCCRA - MCP Response Action
Weymouth, MA**

4

Wetlands and Waterways

This Chapter describes the existing conditions on the Project Site, the Project's potential impacts on Wetland Resource Areas, and proposed mitigation measures related to local, state, and federally regulated Wetland Resource Areas.

The Project involves work in local, state, and federally regulated Wetland Resource Areas, and portions of the Project Site are located in flowed tidelands and within the Massachusetts Coastal Zone.

4.1 Wetlands

4.1.1 Jurisdiction

The Project Site's location within and adjacent to coastal waters places it within the geographical jurisdiction of the following federal and state wetland and waterway statutes:

- › Sections 404 and 401 of the US Clean Water Act (33 U.S.C. 1251 - 1376)
- › Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, sec. 40)
- › Massachusetts Coastal Zone Management Plan (M.G.L. Ch. 21A, sec. 2, 4A)
- › Federal Coastal Zone Management Act (16 U.S.C 1451 et seq.)
- › Chapter 91 of Massachusetts General Laws
- › Weymouth Wetlands Protection Ordinance

Wetland Resource Areas present on the Project Site consist of Land Under Water Coastal Beach, Coastal Bank, LCS, and LSCSF as based on the statistical 100-year storm event. FEMA maps depict the Project Site entirely within the VE zone. The following sections describe the specific Wetland Resource Areas present at the Project Site.

4.1.1.1 Coastal Beach

The Massachusetts Wetlands Protection Act (WPA) Regulations (310 CMR 10.00) define Coastal Beach at 310 CMR 10.27 as "*unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes **tidal flats**. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing human-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.*"



Kings Cove Shoreline

Also defined at 310 CMR 10.27 is **Tidal Flat** – which means "any nearly level part of a coastal beach which usually extends from the mean low water line landward to the more steeply sloping face of the coastal beach or which may be separated from the beach by land under the ocean."

Areas of Coastal Beach on the Project Site are those areas located landward of the MLW line (-5.3 feet NAVD88) and seaward of the toe of Coastal Bank. Coastal Beach areas on the Project Site are best characterized as gravel-sized and cobble-sized pieces of coal slag and other fill material such as bricks mixed with small amounts of natural sand and gravel. MHW at the Project Site is located at elevation 4.3 feet NAVD88.

There is no known or mapped eelgrass (*Zostera marina*) within or immediately adjacent to the Project Site¹ and no attached intertidal algae (i.e., *Ascophyllum nodosum* or *Fucus* sp.) is present.

4.1.1.2 Coastal Bank

The WPA regulations define Coastal Bank (310 CMR 10.30) as "*the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland.*"

Coastal Bank on the Project Site was delineated using landscape position, slope determinations and limits of LSCSF, in accordance with the DEP Wetlands Program Policy 92-1: Coastal Banks.² DEP provides the following standards to delineate the "top of coastal bank":

- › The slope of a coastal bank must be greater than or equal to 10:1.
- › For a coastal bank with a slope greater than or equal to 4:1 the "top of coastal bank" is that point above the 100-year flood elevation where the slope becomes less than 4:1.
- › For a coastal bank with a slope greater than or equal to 10:1 but less than 4:1, the top of coastal bank is the 100-year flood elevation.
- › A "top of coastal bank" will fall below the 100-year flood elevation and is the point where the slope ceases to be greater than or equal to 10:1.

¹ MassDEP Eelgrass Mapping Project Data Viewer accessed September 2024

² [Wetlands Program Policy 92-1: Coastal Banks | Mass.gov](https://www.mass.gov/info-details/wetlands-program-policy-92-1-coastal-banks)

A Coastal Bank comprised of historic fill runs parallel to the western edge of Kings Cove throughout the Project Site. Generally, the limits of Coastal Bank are coincident with the top of slope along the perimeter of the Project Site, at approximately elevation 15 feet NAVD88.

There is an existing rip rap revetment within the northern limit of the Project Site. The armored bank transitions to an unarmored section of Coastal Bank and continues south approximately 200 feet northeast of Bridge Street. Along the unarmored Coastal Bank, evidence of scour and erosion is visible, exposing fill containing anthropogenic debris. Vegetation is scrubby and thick along the top of Coastal Bank.

The WPA regulates Coastal Banks to protect their function as sediment sources, and/or for their function in storm damage prevention. Interrupting the function of the unarmored Coastal Bank as a potential sediment source is one of the primary benefits of the Project. However, the Project will also improve the storm damage prevention function of the armored Coastal Bank.

4.1.1.3 Land Containing Shellfish

LCS is defined by the WPA at 310 CMR 10.34 as *“land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish”*

Based on the MassGIS data layer for Shellfish Suitability Areas³, LCS is found within Coastal Beach on the Project Site. The area of LCS on the Project Site is mapped as a spawning/settlement area for soft-shell clam (Figure 4.1) and a Conditionally Restricted shellfish growing area GBH1.20⁴. However, the Stage II Environmental Risk Characterization (ERC) which was included in the Phase III RAP⁵ indicates that no populations of soft-shell clams were observed during the conduct of the ERC survey in May and June 2022 and therefore the soft-shell clam population is not large enough to self-seed any of these areas.

4.1.1.4 Land Subject to Coastal Storm Flowage

Land Subject to Coastal Storm Flowage is defined by the WPA as *“land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater”*

Figure 4.1 shows the limits of LSCSF based on the base flood elevation of 15 feet NAVD88, as defined by FEMA.⁶ LSCSF within the Project Site includes the Coastal Beach and the Coastal Bank, which is steeply sloped in areas of the Project Site.

4.1.2 Regulatory Context

4.1.2.1 Massachusetts Wetlands Protection Act

The WPA regulations establish performance standards for work proposed within Coastal Beach, Coastal Bank, and LCS and require a review of any work proposed within 100 feet of a wetland

³ [MassGIS Data: Shellfish Suitability Areas | Mass.gov](#)

⁴ Source: Massachusetts Division of Marine Fisheries website. <https://www.mass.gov/service-details/shellfish-classification-areas>.

⁵ 2022, TRC. Phase III RAP Appendix B. <https://eeaonline.eea.state.ma.us/EEA/FileViewer/FileViewer.aspx?fileEncryptionId=hhiegijj>

⁶ FEMA FIRM Panel 25021C0227F

resource to determine if that work will result in the alteration of wetland resources. The Project received an Order of Conditions (DEP File #81-1320) on September 5, 2024, indicating that the Project, as conditioned in the Order of Conditions, meets the applicable performance standards for the Wetland Resource Areas. Because the Project is an MCP Response Action, it satisfies the requirements of the Wetland Protection Act Regulations at 310 CMR 10.24(7)(c)(6), and it was approved as a Limited Project under the applicable regulations.

4.1.2.2 Section 404 of the Clean Water Act

Section 404 of the Clean Water Act requires a Department of the Army permit for the discharge of dredged or fill material into waters of the United States⁷. The Project will require authorization under the Massachusetts General Permit for Construction Stormwater and Dewatering by the United States Army Corps of Engineers (USACE) because there will be excavation and backfill within tidal waters. USACE, as the lead federal agency on the Project, will consult with CZM and the National Marine Fisheries Service on the General Permit.

4.1.2.3 Section 401 of the Clean Water Act (Water Quality Certification)

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards.⁸ In addition, projects that propose excavating more than 100 CY of material require Water Quality Certification, pursuant to the Massachusetts Clean Waters Act (M.G.L. c. 21 §§ 26 – 53). The Project will require issuance of a Section 401 Water Quality Certification from DEP because it will result in greater than 100 CY of excavated and fill material.

4.1.3 Project Impact

The Project will result in impacts to Coastal Beach, Coastal Bank, LCS, LSCSF, and Land Under Water/Land Below Annual High Tide (conservatively assumed as the Highest Astronomical Tide) as summarized below in Table 4-1.

⁷ Code of Federal Regulations (CFR) Title 33, Part 328.3(a), Definition of Waters of the United States.

⁸ Code of Federal Regulations (CFR) Title 33, Part 320.3(a), General Regulatory Policies.

Table 4-1 Impacts to Wetland Resource Areas

| Wetland Resource Area | Jurisdiction | Impacts |
|---|-----------------|-----------|
| Coastal Beach/Land Containing Shellfish | State and Local | 37,105 SF |
| Coastal Bank | State and Local | 590 LF |
| Land Subject to Coastal Storm Flowage | State and Local | 46,385 SF |
| Land Below Annual High Tide (Conservatively assumed as the Highest Astronomical Tide) | Federal | 41,250 SF |

All square footages are approximate values as they have been rounded to the nearest value of ten (most values were rounded up).
 LF = linear feet
 SF = square feet

4.1.3.1 Work in Coastal Beach/Land Containing Shellfish

The Project will require excavation within Coastal Beach. During construction, excavation areas will be sized to allow for complete excavation and backfilling of each area within one tidal cycle/one day of work. After the excavation is completed, clean cobble will be placed as backfill. To gradually connect the excavated areas to the new revetment, clean cobble will be placed between the two areas. There will be a slight change to existing beach elevations as a result of this work. The Project will result in 37,105 SF of permanent positive impact to Coastal Beach.

4.1.3.2 Work on Coastal Bank

Work proposed on Coastal Bank includes construction of the rip rap revetment. Construction of the revetment will include placement of beneficially reused excavated material or other backfill material, then placement of geotextile fabric covered by clean fill material, core stones, and armor stones. As proposed, this work will result in 590 LF of permanent positive impact to Coastal Bank.

4.1.3.3 Work in Land Subject to Coastal Storm Flowage

The Project will alter approximately 46,385 SF of LSCSF as a result of the work in Coastal Beach and Coastal Bank as described above. Work on the Project Site will not divert flood waters to adjacent properties. As a result of the work, the KCCRA will receive additional protection from coastal flooding events.

4.1.3.4 Federally Jurisdictional Areas

Kings Cove is a resource area federally regulated as a Water of the United States. Work will be conducted within both coastal and intertidal areas. Rip rap installation, cobble placement, and excavation activities below the annual high tide line will be subject to review under Section 401 and Section 404 of the Clean Water Act. Temporary impacts to coastal areas will result from the proposed construction access to reach the work area in the Shore Portion of the Project Site. Areas temporarily impacted will be restored post-construction.

4.1.4 Regulatory Compliance

The Project has been or will be subject to regulatory review with respect to state and federal wetlands regulatory programs, as described below.

4.1.4.1 Massachusetts Wetlands Protection Act (WPA)

Performance standards are outlined for work performed in each of the Wetland Resource Areas regulated under the Massachusetts Wetland Protection Act Regulations. This section lists the applicable performance standards by Wetland Resource Area type.

Limited Project

The Project was approved as a Limited Project under 310 CMR 10.24(7)(c)(6). Per 310 CMR 10.24(7)(c)(6), a project may be permitted as Limited Project if:

a. *There are no practicable alternatives to the response action being proposed that are consistent with the provisions of 310 CMR 40.0000: Massachusetts Contingency Plan and that would be less damaging to resource areas. The alternatives analysis shall include the following:*

- i. *an alternative that does not alter resource areas, which will provide baseline data for evaluating other alternatives; and*
- ii. *an assessment of alternatives to both temporary and permanent impacts to resource areas.*

A "Comprehensive Remedial Action Alternative" that is selected in accordance with the provisions of 310 CMR 40.0851 through 40.0869 shall be deemed to have met the requirements of 310 CMR 10.24(7)(c)6.a.;

The purpose of the Project is to achieve a Permanent Solution respecting the releases of Hazardous Materials as defined in the MCP. The Phase III RAP identified the Project as the preferred Remedial Action Alternative in accordance with the provisions of 310 CMR 40.0850 through 40.0869 (the Phase III requirements in the MCP). Chapter 2, *Alternative Analysis*, summarizes that analysis.

b. *Such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:*

- i. *hydrological changes to resource areas shall be minimized;*

In order to achieve a Permanent Solution in compliance with the MCP, work within Wetland Resource Areas is unavoidable. The Project has been designed to minimize hydrological changes to Wetland Resource Areas. The revetment will continue to provide functions of a Coastal Bank, including velocity dissipation, storm damage prevention, and flood control. There are no anticipated hydrological changes resulting from the proposed excavation.

- ii. *best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of resource areas in accordance with standard U.S.D.A. Soil Conservation Service methods;*

Chapter 1, *Project Description*, provides an overview of the erosion and sedimentation control program that will be implemented to minimize temporary impacts to Wetland Resource Areas during the construction of the Project.

iii. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, §40;

No such mitigating measures are required as the Project itself will contribute to the protection of the specified statutory interests.

iv. no access road, assessment or monitoring device, or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;

No access road, device, or structure will increase flood stage or velocity. The revetment will provide additional resiliency to the Upland Portion of the Project Site.

v. temporary structures and work areas in resource areas, such as access roads and assessment and monitoring devices, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods. Temporary structures, work areas, and alterations to resource areas are those that no longer are necessary to fulfill the requirements of 310 CMR 40.0000: Massachusetts Contingency Plan;

Temporary construction access roads and temporary structures will be removed within 30 days of the completion of work. Temporarily altered resource areas within staging areas will be substantially restored to existing hydrologic and topographic conditions.

vi. work in resource areas shall occur only when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used.

Work in resource areas is proposed to occur "in the dry" by working during the low-tide cycles for the Project Site and/or through the establishment of sandbag cofferdams.

Coastal Beach (310 CMR 10.27)

When a Coastal Beach is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat, 310 CMR 10.27(3) through (7) shall apply:

(3) Any project on a coastal beach, except any project permitted under 310 CMR 10.30(3)(a), shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or downdrift coastal beach.

The Project will not increase erosion or decrease volume of the Coastal Beach since all excavated fill and sediment will be replaced with clean fill designed to be scour resistant and proposed mudline elevations will be similar to the existing elevations. Cobble will be placed within portions

of the nearshore/Coastal Beach area to establish a more natural ground cover. The cobble will replace existing areas of coal slag and other debris. The cobble will help dissipate wave energy within the waterbody and intertidal areas to protect the new revetment.

(4) Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

- (a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, coastal engineering, physical oceanographic and/or coastal geologic information shall be considered.*
- (b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.*
- (c) Jetties trapping littoral drift material shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.*

Not applicable. The Project does not include a groin, jetty, solid pier, or other such solid fill structure within areas of Coastal Beach.

(5) Notwithstanding 310 CMR 10.27(3), beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

Not applicable. The Project does not include beach nourishment.

WHEN A TIDAL FLAT IS DETERMINED TO BE SIGNIFICANT TO MARINE FISHERIES OR THE PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(6) SHALL APPLY:

(6) In addition to complying with the requirements of 310 CMR 10.27(3) and (4), a project on a tidal flat shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries and wildlife habitat caused by:

- (a) alterations in water circulation;*
- (b) alterations in the distribution of sediment grain size; and*
- (c) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.*

Once excavation and restoration of the tidal flat bottom is complete, mudline elevations will be similar to the existing elevations and the cobble will replace existing areas of coal slag and other debris to create a similar but improved substrate. As the cobble area transitions southerly to the revetment, it results in a slight fill over existing conditions. This design will minimize changes to water circulation, sediment distribution, and water quality to avoid negative impacts to marine fisheries and wildlife.

(7) Notwithstanding the provisions of 310 CMR 10.27(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

No rare wildlife habitat has been identified on the Project Site.

Coastal Bank (310 CMR 10.30)

When a Coastal Bank is determined to be significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches, 310 CMR 10.30(3) through (5) shall apply:

(3) No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on such a coastal bank except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to the effective date of 310 CMR 10.21 through 10.37 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.21 through 10.37 (August 10, 1978), including reconstructions of such buildings subsequent to the effective date of 310 CMR 10.21 through 10.37, provided that the following requirements are met:

- (a) a coastal engineering structure or a modification thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due to changes in wave action, and*
- (b) the applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible.*
- (c) protective planting designed to reduce erosion may be permitted.*

None of the alternatives to the Project, other than no action, meet this performance standard. However, the Project was properly reviewed as a Limited Project since it is a response action required to achieve a Permanent Solution under the MCP.

(4) Any project on a coastal bank or within 100 feet landward of the top of a coastal bank, other than a structure permitted by 310 CMR 10.30(3), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.

None of the alternatives to the Project other than no action meet this performance standard. The Project is intended to contain the fill containing Hazardous Materials, as defined in the MCP, which comprises the Coastal Bank.

(5) The Order of Conditions and the Certificate of Compliance for any new building within 100 feet landward of the top of a coastal bank permitted by the issuing authority under M.G.L. c. 131, § 40 shall contain the specific condition: 310 CMR 10.30(3), promulgated under M.G.L. c. 131, § 40, requires that no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions.

Not applicable. The Project does not include the construction of a building.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT IS A VERTICAL BUFFER TO STORM WATERS, THE FOLLOWING SHALL APPLY:

(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

The Project will improve the stability of the Coastal Bank by armoring the unprotected, eroding slope.

(7) Bulkheads, revetments, seawalls, groins, or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

None of the alternatives to the Project other than no action meet this performance standard. The Project is intended to contain fill containing Hazardous Materials, as defined in the MCP, which comprises the Coastal Bank.

(8) Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

No rare wildlife habitat has been identified on the Project Site.

Lands Containing Shellfish (310 CMR 10.34)

When a resource area, including tidal flats, is determined to be significant to the protection of land containing shellfish and therefore to the protection of marine fisheries, 310 CMR 10.34(4) through (8) shall apply:

(4) Except as provided in 310 CMR 10.34(5), any project on land containing shellfish shall not adversely affect such land or marine fisheries by a change in the productivity of such land caused by:

- (a) *alterations of water circulation;*
- (b) *alterations in relief elevation;*
- (c) *the compacting of sediment by vehicular traffic;*
- (d) *alterations in the distribution of sediment grain size;*
- (e) *alterations in natural drainage from adjacent land; or*
- (f) *changes in water quality, including, but not limited to, other than natural fluctuations in the levels of salinity, dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.*

The Project will not adversely affect the productivity of LCS within the Project Site by altering water circulation, sediment distribution, erosion or accretion, or water quality. No structures are proposed within LCS that would result in an alteration to water circulation, there will only be a slight change to mudline elevations, no change to the distribution of sediment grain size (bottom sediment is primarily fill and debris with small to medium-sized gravel and cobble now, and will remain that way), and no alterations to natural drainage from adjacent land. Vehicular transport of excavated fill over areas of LCS is not anticipated to significantly compact sediments due to the nature of the current fill. Algonquin anticipates that the Project will result in a favorable change to water quality as the work in the Shore Portion of the Project Site entails the removal of fill containing elevated concentrations of nickel and vanadium.

(5) Notwithstanding the provisions of 310 CMR 10.34(4), projects which temporarily have an adverse effect on shellfish productivity but which do not permanently destroy the habitat may be permitted if the land containing shellfish can and will be returned substantially to its former productivity in less than one year from the commencement of work, unless an extension of the Order of Conditions is granted, in which case such restoration shall be completed within one year of such extension.

The Project will not negatively impact shellfish productivity within the limits of the Project Site. Shellfish productivity in Kings Cove is already limited by poor water quality and poor substrate quality⁹. During a site visit in September 2023, VHB observed nearshore and intertidal areas and found no evidence of shellfish, consistent with the earlier findings of the Stage II ERC. Additionally, it was noted by VHB that there was limited algal growth on the gravel and slag currently present.

(6) In the case of land containing shellfish defined as significant in 310 CMR 10.34(3)(b) (i.e., those areas identified on the basis of maps and designations of the Shellfish Constable), except in Areas of Critical Environmental Concern, the issuing authority may, after consultation with the Shellfish Constable, permit the shellfish to be moved from such area under the guidelines of, and to a suitable location approved by, the Division of Marine Fisheries, in order to permit a proposed project on such land. Any such project shall not be commenced until after the moving and replanting of the shellfish have been commenced.

The Project Site is mapped as a spawning/settlement area for soft-shell clam but no individuals have been observed within nearshore areas of the Project Site. No transfer of shellfish is proposed under this Project.

- (a) *Notwithstanding 310 CMR 10.34(4) through (6), projects approved by the Division of Marine Fisheries that are specifically intended to increase the productivity of land containing shellfish may be permitted. Aquaculture projects approved by the appropriate local and state authority may also be permitted.*

This Project is not specifically intended to enhance shellfish stocks or include aquaculture.

- (b) *Notwithstanding the provisions of 310 CMR 10.34(4) through (7), no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.*

No rare wildlife habitat has been identified on the Project Site.

Land Subject to Coastal Storm Flowage (310 CMR 10.02)

Work within LSCSF is not governed by specific regulatory performance standards at this time; however, measures have been incorporated into the Project design to ensure that work will be done in a manner that prevents impacts to downgradient wetland resources while creating a resilient waterfront. The Project has also been designed to follow the guidance provided in the 2017

9 2022, TRC. Phase III RAP Appendix B. <https://eeaonline.eea.state.ma.us/EEA/FileViewer/FileViewer.aspx?fileEncryptionId=hhiegijj>

document released by DEP and CZM: *Applying the Massachusetts Coastal Wetlands Regulations: A Practical Manual for Conservation Commissions to Protect the Storm Damage Prevention and Flood Control Functions of Coastal Resource Areas*¹⁰ (the Coastal Manual).

LSCSF on the Project Site is coincident with areas of Coastal Beach and Coastal Bank, and the work proposed in LSCSF is the same as the work proposed in those resource areas as described above. Additionally, as a result of the proposed work the KCCRA will receive additional protection from coastal flooding as a result of the construction of the revetment in the KCCRA.

Overall, a clear limit of work will be identified, and erosion and sedimentation control areas will be installed throughout the Project Site. Temporary disturbances in vegetated areas will be restored in place.

4.1.4.2 Federally Regulated Resource Areas

Filling below the Annual High Tide Line¹¹ (elevation 2.3' MLLW) is subject to Sections 401 and 404 of the Clean Water Act. Within the Project, 16,905 SF of impact will result from excavation, and 20,200 SF of impact will result from cobble placement.

The following is a description of how applicable functions and values of coastal wetlands under federal jurisdiction would be affected.

Fish and Shellfish Habitat

The Project will improve the condition of fish and shellfish habitat on the Project Site by replacing areas of residual coal slag with clean cobble while maintaining similar mudline elevations. This design will minimize changes to water circulation, sediment distribution, and water quality to avoid negative impacts to marine fisheries and wildlife. Construction-period impacts will be temporary in nature, and excavation and cobble placement will adhere to the time of year restriction recommended by the Division of Marine Fisheries (DMF) and included in the Order of Conditions to minimize effects on aquatic life from silt-producing activities.

Production Export

The Project Site is mapped as a spawning/settlement area for soft-shell clam, but no shellfish have been observed within nearshore areas of the Project Site. No specific change in production export is anticipated as a result this Project.

Sediment/Shoreline Stabilization

The Project will improve the stability of the Project Site by armoring the unprotected, eroding slope. The purpose of this Project is to remove or contain fill containing Hazardous Materials, as defined in the MCP.

Wildlife Habitat

Wildlife habitat would not be altered. The Project would not be a barrier to wildlife for movement along the shoreline.

¹⁰ [Applying the Massachusetts Coastal Wetlands Regulations](#)

¹¹ The highest annual tide of the calendar year.

4.1.4.3 Clean Water Act Section 401

The Project will require the Proponent to obtain a Water Quality Certificate from DEP based on the proposed quantity of excavation and fill. The Project will meet the criteria for the evaluation of applications for discharge of dredge or fill material (314 CMR 9.07) as follows:

- › No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem;

The purpose of the Project is to remove or contain fill containing Hazardous Materials, as defined in the MCP, so the excavation and fill activities within jurisdictional areas are unavoidable.

- › Dredging and dredged material management shall be conducted in a manner that ensures the protection of human health, public safety, public welfare and the environment.

The work has been planned and will be conducted to increase the protection of human health, public safety, public welfare and the environment.

- › Dredged material shall not be disposed of if a feasible alternative exists that involves the reuse, recycling, or contaminant destruction and/or detoxification.

Once excavated fill and sediment have been fully characterized, any excavated material considered suitable for reuse will be beneficially reused on the Project Site as backfill required for the construction of the extended revetment. Any material considered unsuitable for reuse will be disposed of offsite in accordance with applicable regulations.

- › Dredged material placed directly on or in upland locations is subject to the release notification requirements and thresholds of 310 CMR 40.0300 (Massachusetts Contingency Plan).

The Project will comply with all applicable MCP requirements. Refer to Chapter 6, *Hazardous Materials*, for additional information.

- › No dredging is permitted for the impoundment or detention of stormwater.

The Project does not include dredging for stormwater management.

- › No dredging shall be permitted in the rare circumstances where the activity meets the criteria for evaluation but will result in substantial adverse impacts to the physical, chemical, or biological integrity of waters of the Commonwealth.

The Project will not result in adverse impacts to the physical, chemical, or biological integrity of the waters of the Commonwealth.

- › No dredging shall be permitted in Outstanding Resource Waters.

No part of the Project Site has been identified as an ORW.

- › Sampling and analysis for upland reuse or disposal of dredged material, as set out in 314 CMR 9.07(2)(a), shall be carried out.

The Project will comply with applicable sampling and analysis requirements.

- › The resuspension of silt, clay, oil and grease and other fine particulate matter shall be minimized to protect aquatic life and other existing and designated uses of waters of the Commonwealth

The Project will be constructed “in the dry” by excavating during the low-tide cycles for the Project Site, and by utilizing sandbag cofferdams to create a dry work area for the construction of the revetment. In addition, construction will adhere to the time of year restriction set by DMF and the Weymouth Conservation Commission.

- › Improvement dredging activities shall minimize and, to the maximum extent possible, avoid affecting areas of ecological importance including shellfish habitat.

The Project will improve the ecological condition of the areas affected, including the identified potential shellfish habitat within the limits of the Project Site.

- › Dredging shall not be undertaken during migration, spawning or juvenile development periods of finfish, shellfish, crustaceans or merostomatans in locations where such organisms may be affected

The Project will comply with the time of year restriction recommended by DMF and set by the Weymouth Conservation Commission.

- › Applicants for dredging projects proposing unconfined open water disposal at designated disposal sites shall comply with sediment and water quality sampling, biological testing, and evaluation according to the requirements and procedures of the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency.

The Project does not include any unconfined open water disposal.

4.1.5 Mitigation Measures

Sediment and turbidity controls, including a silt curtain enclosure for in-water work and a cofferdam for shoreline work, will be utilized to prevent the spread of sediment. Additionally, excavation will occur only during low tide in order to limit sediment/impacted fill movement and to contain the work area. DMF issued a letter on July 29, 2024, supporting these measures, as well as recommending a time of year restriction for work in the Shore Portion of the Project Site extending from May 1st through November 1st. That time of year restriction is now a condition of the Order of Conditions for the Project.

4.2 Waterways

This section describes the Chapter 91 jurisdictional area on the Project Site, previously issued licenses, and discusses the water dependency of the Project. Additionally, the section provides a description of how the Project complies with the applicable Chapter 91 regulatory standards, and a draft of the Public Benefits Determination.

4.2.1 Jurisdiction

The Project Site contains filled tidelands and flowed tidelands subject to the licensure requirements of Massachusetts General Law, Public Waterfront Act, MGL Chapter 91 ("Chapter 91") as implemented by DEP through the Waterways Regulations (310 CMR 9.00). The limits of Chapter 91 jurisdiction on the Project Site are shown in **Figure 4.2**.

The Project team identified the following Waterways Licenses for the Project Site:

- › DPW 276 (1922) – The Edison Electric Illuminating Company of Boston – Build and maintain pile and timber bulkheads, build pile wharf, fill solid, and dredge.
- › DPW 936 (1928) – The Edison Electric Illuminating Company of Boston – Maintain, as now built, bulkheads, pile wharves, six pile dolphins, intake wells and a discharge flume, and solid filling, as placed, and to build and maintain additional bulkheads and place additional filling in Weymouth Fore River at its property; Rectify any discrepancy between work actually done and work described in licenses previously granted to the license No. 177, No. 276, No 394, and No 710.
- › DEP 1896 (1937) – The Boston Edison Company – Build and maintain a pile and timber wharf, pile and timer bulkheads and to fill solid in Weymouth Fore River at its property.
- › DEP 8449 (2000) – Sithe Edgar Development, LLC – Construct and maintain a natural gas fired power plant, including the construction of a public access area at the Project Site.

The regulations at 310 CMR 9.05(1)(a), *Activities Requiring a License*, require a new or amended license for the Project because it includes "construction, placement, excavation, addition, improvement, maintenance, repair, replacement, reconstruction, demolition or removal of any fill or structures, not previously authorized, or for which a previous grant or license is presently valid." The Project is regulated as a water-dependent use project according to 310 CMR 9.12 (2)(a)9, 11 and 14 which direct DEP to find water dependent the following uses:

- › **310 CMR 9.12 (2)(a)9**, "dredging for navigation channels, boat basins, and other water-dependent purposes, and subaqueous disposal of the dredged materials below the low water mark;"
- › **310 CMR 9.12 (2)(a)11**, "shore protection structures, such as seawalls, bulkheads, revetments, dikes, breakwaters, and any associated fill which are necessary either to protect an existing structure from natural erosion or accretion, or to protect, construct, or expand a water-dependent use;"
- › **310 CMR 9.12 (2)(a)14**, "facilities and activities undertaken or required by a public agency for purposes of decontamination, capping, or disposal of polluted aquatic sediments"

The Proponent is seeking a new water-dependent license under Chapter 91 for the Project as described in this EENF.

4.2.2 Regulatory Compliance

Table 4-2 below summarizes the Project's compliance with the applicable provisions of the Waterways Regulations.

Table 4-2 Licensing Requirements

| Regulation 310 CMR | Standard | Applicable? | Compliance Summary |
|-----------------------|--|-------------|---|
| 9.31 (1) | Basic Requirements | Yes | The Project meets all applicable criteria as described in this table. |
| 9.31 (2)(a) | Categorical Restrictions on Fill and Structures | Yes | Since the Project Site is part of the KCCRA, a water-dependent use, the Chapter 91 regulations presume that the Project meets the regulatory requirement of serving a proper public purpose pursuant to 310 CMR 9.31(2)(a). Refer to Section 4.2.4 for a description of public benefits. |
| 9.32 | Categorical Restrictions on Fill and Structures | Yes | The Project is eligible for a license as it is restricted to fill or structures that accommodate the use specified at 310 CMR 9.32(2)(a). |
| 9.33 | Environmental Protection Standards | Yes | The Project complies with all applicable Commonwealth environmental regulatory programs and standards. In addition to a Waterways License, environmental permits required for the Project include an Order of Conditions from the Weymouth Conservation Commission and compliance with the Massachusetts Stormwater Management Standards. Refer to Chapter 1, <i>Project Description</i> , for a list of anticipated permits and approvals. |
| 9.34 (1) | Conformance with Municipal Zoning | Yes | The Project is located within the General Industrial zoning district and proposes no change in use or new buildings. The Project has received an Order of Conditions from the Weymouth Conservation Commission confirming consistency with the local wetlands ordinance. |
| 9.34 (2) | Conformance with Municipal Harbor Plan | No | The Project is not subject to a Municipal Harbor Plan. |
| 9.35 (2) | Public Rights Applicable to All Waterways | Yes | The Project does not significantly interfere with public rights of navigation, free passage over and through the water, or access to any Town Landings. |
| 9.35 (3) | Public Rights Applicable to Tidelands and Great Ponds | Yes | The Project does not significantly interfere with the public rights of fishing, fowling, on-foot passage. Instead, the Project will restore and improve the Site to provide a better environment for the public, therefore protecting the public rights. |
| 9.35 (4) | Compensation for Interference with Public Rights in Commonwealth Tidelands and Great Ponds | No | The Project does not include any fill or structures for private use of Commonwealth tidelands. All work is proposed in private tidelands above MLW. |

continued

| Regulation 310 CMR | Standard | Applicable? | Compliance Summary |
|-----------------------|---|-------------|--|
| 9.35 (5) | Management of Areas Accessible to the Public | Yes | Long-term management of the Project Site to achieve effective public use and enjoyment is ensured through a Conservation Restriction held by the Town of Weymouth, which grants the public the perpetual right and easement to Project Site subject to certain provisions. The Project, following construction, will not impact the existing accessibility of the Project Site to the public. The Conservation Restriction is recorded in Book 26454, Page 446 of the Norfolk County Registry of Deeds. |
| 9.36 (2) | Private Access to Littoral or Riparian Property | Yes | The Project does not interfere with riparian property owners' right to approach their property from a waterway, and to approach the waterway from their property. |
| 9.36 (3) | Disruption of Water-Dependent Use in Operation | Yes | The Project does not disrupt any water-dependent use in operation at an off-site location within the vicinity of the Project Site. |
| 9.36 (4) | Displacement of Previous Water-Dependent Use | Yes | The Project will not displace any previous water-dependent use that has occurred at the Project Site in the last five years, and in fact, proposes improvements to the Project Site. |
| 9.36 (5) | Fill and/or Structures within a DPA | Yes | Portions of the Project Site above MHW are located within the Weymouth Fore River Designated Port Area. The Project does not preempt any future water-dependent industrial use. |
| 9.37 | Engineering and Construction Standards | Yes | The Project has been designed and certified by a Registered Professional Engineer. A portion of the Project is located within the FEMA Flood Zone VE at elevation 15 ft NAVD88, however no buildings are proposed in the Project. The Project includes the extension of the rip rap revetment on the south side of the Project Site, which will be landward of the MHW and is the preferred alternative compared to the other four alternatives. Refer to Chapter 2, <i>Alternative Analysis</i> , for detailed information. The extended rip rap revetment structure will be compatible with the existing rip rap structure in terms of design, size, function, and materials. |
| 9.38 | Use Standards for Recreational Boating Facilities | No | The Project does not include recreational boating facilities. |
| 9.39 | Standards for Marinas, Boatyards, and Boat Ramps | No | The Project does not include a marina, boat yard, or boat ramp. |
| 9.40 (1) | Limitations on Dredging and Disposal Activity | Yes | The Project is not located within an Area of Critical Environmental Concern (ACEC) and does not involve any dredging of channels, mooring basins, or turnaround basins to a MLW depth greater than 20 feet. |

continued

| Regulation 310 CMR | Standard | Applicable? | Compliance Summary |
|-----------------------|--|-------------|--|
| 9.40 (2) | Resource Protection Requirements | Yes | <p>The excavation and excavated fill disposal activity will be implemented to avoid interference with anadromous/catadromous fish runs and minimize adverse impacts on shellfish beds, fishery resource areas, and submerged aquatic vegetation. The Project will comply with the time of year restrictions recommended by DMF that are now conditions of the Project's Order of Conditions.</p> <p>As described in the Phase III RAP, shellfish productivity in Kings Cove is already limited by poor water quality and substrate quality. The Project will not negatively impact shellfish productivity within the limits of the Project Site.</p> |
| 9.40 (3) | Operational Requirements for Dredging | Yes | <p>The Project will meet all applicable operational requirements. Excavation in the Shore Portion of the Project Site will occur only during low tide. A turbidity curtain will also be installed to control the migration of suspended fine materials away from excavated areas. Machinery will access the work area from the beach to remove and transport the sediments to the proposed dewatering location(s) located onsite near Bridge Street. The excavated volume will be replaced with an equal amount of clean cobble stone to restore the excavated area to the preexisting mudline elevation.</p> |
| 9.40 (4) | Operational Requirements for Dredged Material Disposal | Yes | <p>To the extent practicable, excavated material will be beneficially reused onsite during construction of the revetment along the Coastal Bank. All excavated material that cannot be reused onsite will be sampled and transported to an offsite disposal facility.</p> |
| 9.40 (5) | Supervision of Dredging and Disposal Activity | Yes | <p>The Proponent will inform the Department in writing at least three days before commencing the Project. The Project will also identify an inspector for the Department's approval, provide a Department-approved inspector for the excavated fill disposal, and submit a report to the Department within 30 days after the completion of the excavation.</p> |
| 9.51- 53 | Conservation of Water Dependent Use; Utilization of Shoreline for Water Dependent Use; Activation of Commonwealth Tidelands for Public Use | No | <p>Pursuant to 310 CMR 9.55, these requirements do not apply to projects meeting the definition of a water-dependent use project.</p> |
| 9.54 | Consistency with Coastal Zone Management Policies | No | <p>The Project is not a nonwater-dependent project.</p> |

continued

| Regulation 310 CMR | Standard | Applicable? | Compliance Summary |
|-----------------------|--|-------------|---|
| 9.55 | Standards for Nonwater-Dependent Infrastructure Facilities | No | The Project is not a nonwater-dependent infrastructure facility. |
| 9.56 | Standards for Facilities of Limited Accommodation | No | The Project does not include Facilities of Limited Accommodation. |

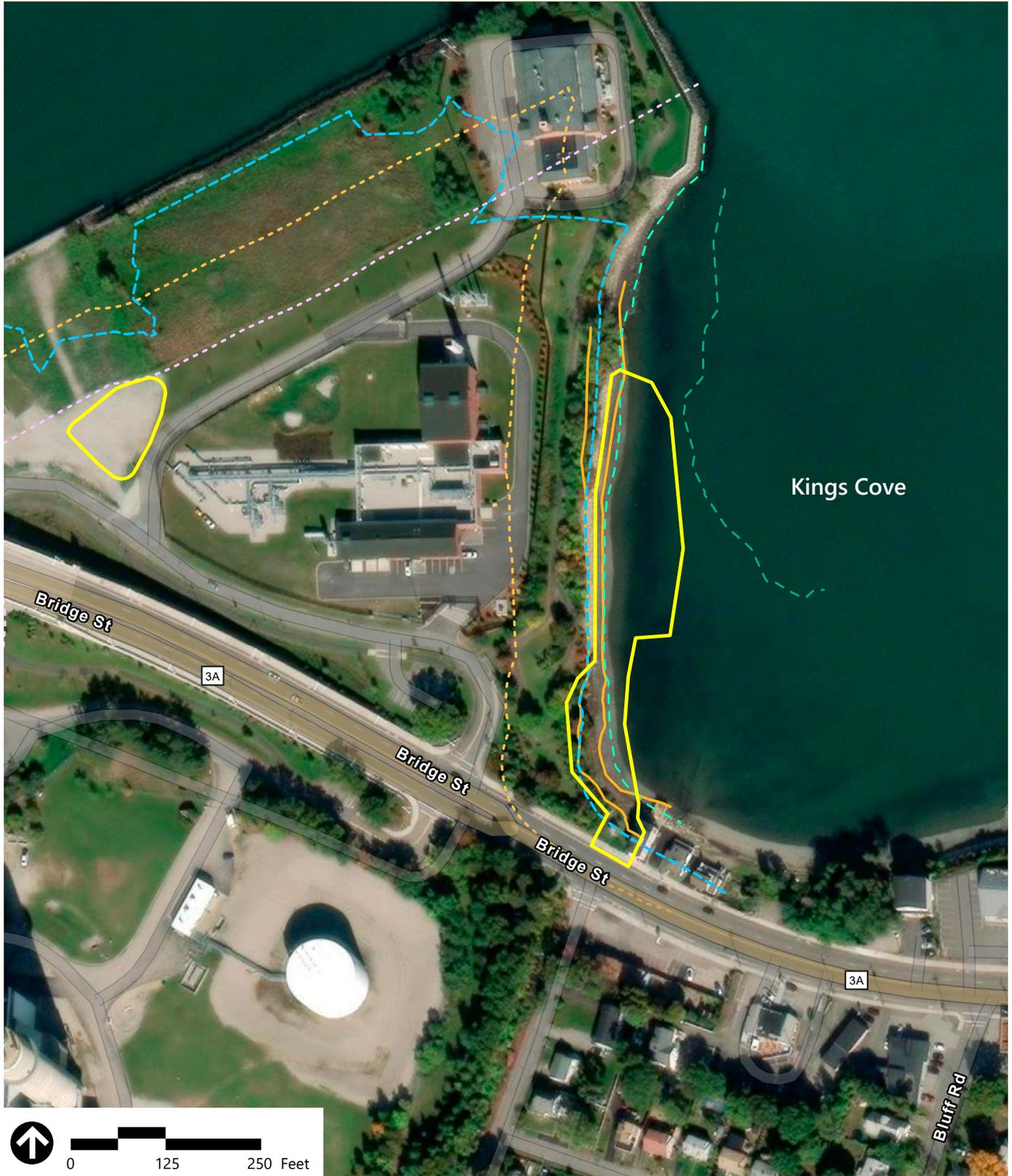
4.2.3 Draft Public Benefit Determination

The Project is subject to the jurisdiction of the 2007 statute “*An Act Relative to Licensing Requirements for Certain Tidelands*” (2007 Mass. Acts Ch. 168, sec 8) because it is within filled tidelands and requires the filing of an Environmental Impact Report due to its location within one mile of EJ Populations. The act requires the Secretary to consider the following when making a Public Benefit Determination:

- › Purpose and effect of the development;
- › The impact on abutters and the surrounding community;
- › Enhancement of the property;
- › Benefits to the public trust rights in tidelands or other associated rights;
- › Community activities on the development site;
- › Environmental protection and preservation;
- › Public health and safety; and
- › General welfare.

According to 310 CMR 13.04 (1) *Water-dependent Projects*, water-dependent projects are presumed to meet the criteria listed in 301 CMR 13.04 and provide adequate public benefit, therefore the Project complies with the criterion. The purpose of the Project is to achieve a Permanent Solution under the MCP respecting Hazardous Materials in fill on the Project Site which will provide a benefit to the environment, public health, safety and public welfare.

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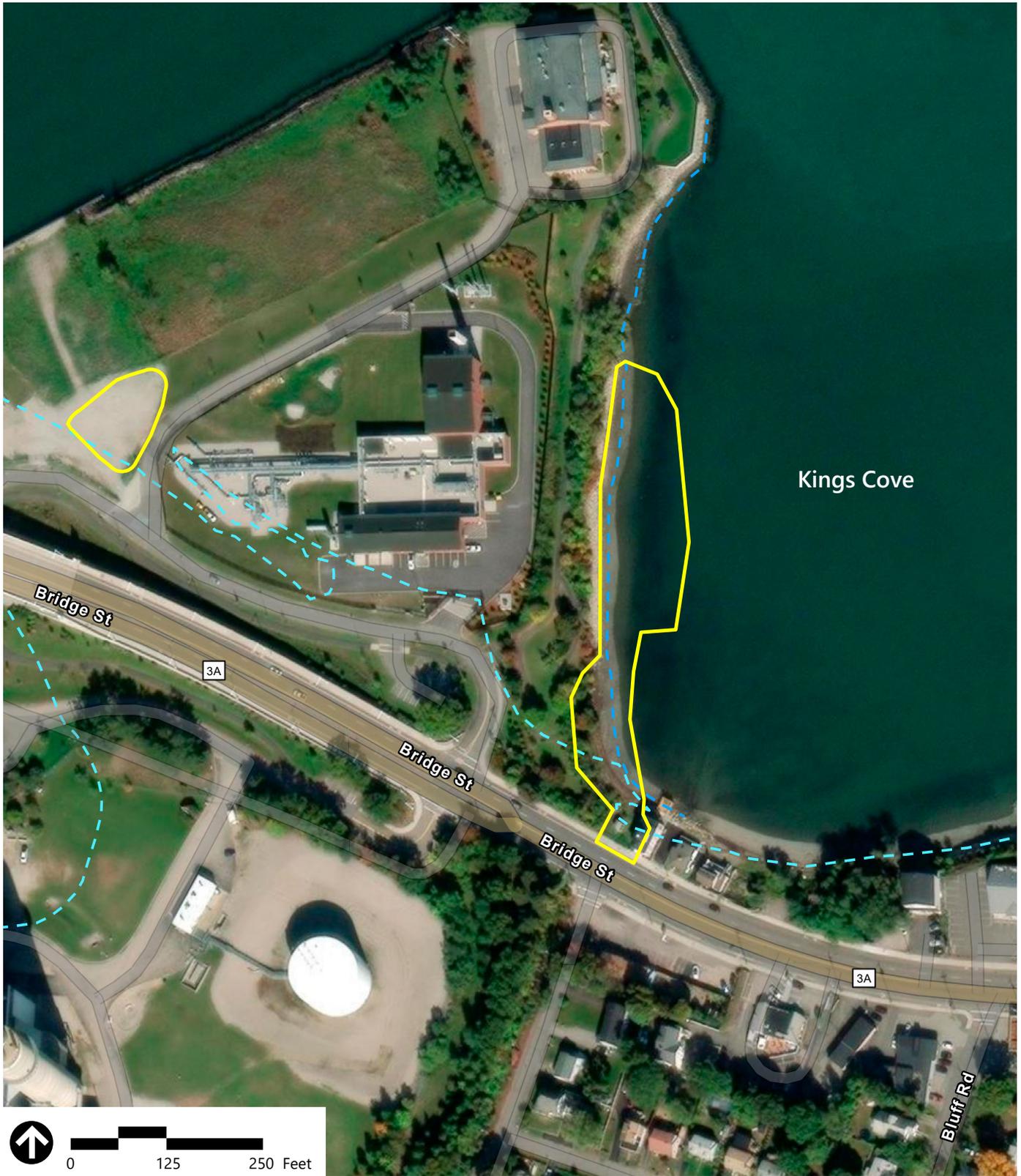


Source: VHB, MassGIS

- Limit of Work
- Delineated Coastal Bank
- Mean High Water
- Mean Low Water
- Land Subject to Coastal Storm Flowage
- 200' Riverfront Area Buffer
- 100' Buffer Zone

Figure 4.1
Wetland Resources

**KCCRA - MCP Response Action
Weymouth, MA**



Source: VHB, MassGIS

- Limit of Work
- Chapter 91 Jurisdiction
- Approx. Mean High Water Line

Figure 4.2
Chapter 91 Jurisdiction

**KCCRA - MCP Response Action
Weymouth, MA**

5

Climate Change Adaptation and Resiliency

This chapter describes the projected climate change impacts on the Project Site and associated proposed measures to promote resiliency.

5.1 Regulatory Context

5.1.1 MEPA Interim Protocol on Climate Change Adaptation and Resiliency

MEPA requires state agencies to study the environmental consequences of their actions, and take all feasible measures to avoid, minimize, or mitigate damage to the environment. To address climate change adaptation (as opposed to solely mitigation), EEA released the MEPA Interim Protocol on Climate Change Adaptation and Resiliency ("Interim Protocol") (effective October 1, 2021). It describes how projects should assess and mitigate the risks and vulnerabilities that are likely to result from climate change impacts. Although this is an interim protocol, it provides useful information on which to base a resiliency strategy for the Project.

5.1.2 RMAT Climate Resilience Tool

Effective October 1, 2021, all new projects filing with the MEPA Office are required to run the state's Resilient Massachusetts Action Team (RMAT) Climate Resilience Design Standards Tool and submit the output report generated from it as an attachment to ENF submittals. This is an interactive web-based tool that automates the Commonwealth's available climate change data and provides a preliminary climate risk screening and planning recommendations for projects. The report is provided in Appendix D.

5.2 Vulnerability Assessment

The RMAT Climate Resilience Design Standards Tool indicates that the Project has high exposure to sea level rise/storm surge, moderate exposure to extreme precipitation/urban flooding, and high exposure to extreme heat. The sections below describe anticipated climate vulnerabilities and how the Project will combat correlated impacts.

5.2.1 Sea Level Rise/Storm Surge

The Project is considered to have high exposure to sea level rise/storm surge because it is located within the mean high-water shoreline and is exposed to the one percent annual (100-year) coastal

flood event, as shown in Figure 5.1 – FEMA Flood Map. The proposed measures that have been incorporated into the Project to provide resilience during future coastal storm events are described in Section 5.3 below.

5.2.2 Extreme Precipitation

Climate projections indicate that Massachusetts will experience growing intensity and frequency of rainfall events. The Project is estimated to have moderate exposure to extreme precipitation and urban flooding because the maximum annual daily rainfall is expected to exceed 10 inches within the overall Project's useful life. The Project does not propose impervious area and includes a revetment that is designed to stabilize an existing eroding coastal bank, which will provide stability during current and future rainfall events.

5.2.3 Temperature

The Project is expected to have a high exposure to extreme heat due to a projected 30+ days increase in days over 90 degrees within Project's useful life and because less than 10 percent of the existing Project Site has canopy cover. The Proponent recognizes the importance of tree canopy for mitigating the effects of extreme heat and will maintain all existing vegetation in the work area to the extent practical. Any disturbed vegetation will be replaced.

5.3 Proposed Resilience Measures and Coastal Improvements

The Project includes the construction of a rip rap revetment to stabilize eroding fill in the Upland Portion of the Project Site.

The Proponent has designed the Project to protect the Coastal Bank from future coastal flooding events caused by increased sea level and storm surge. The Northeast Climate Adaptation Science Center estimates that sea levels could rise by 4.2 feet above the current levels by 2070 given a high emissions pathway (RCP 8.5). Multiple coastal storm scenarios were analyzed for the revetment design, including the present day and 2070 100-year events. The armor stone size selected was determined based on guidance from the USACE Coastal Engineering Manual and site-specific wave modeling and is expected to provide protection and scour resistance under both present-day and 2070 100-year events.

The Project also proposes cobble seaward of the existing and proposed rip rap revetment to establish a more nature-like ground cover. The cobble will be placed in the dredged area, seaward of the proposed rip rap, and between the two areas to connect them. It will help dissipate wave energy within the waterbody and intertidal areas to protect the revetment, while also providing an improved benthic surface for organisms within the intertidal zone. The material will be cobble and gravel sourced from natural deposits or quarries and will be rounded, durable rock to mimic natural beach cobbles. Soft, friable, or highly fractured rock will not be acceptable. It will be dark grey, and or dark brown to blend as much as possible to the existing material; white rock will not be acceptable.

The cobble will be a well-mixed distribution of all size fractions of the gradation requirements as noted in Table 5-1.

Table 5-1 Cobble Gradation Requirements

| Percent Passing | Size (inch) |
|-----------------|-------------|
| D90 | 4.50-7.50 |
| D70 | 2.00-4.00 |
| D50 | 1.50-2.50 |
| D30 | 0.50-1.00 |
| D20 | 0.20-0.50 |
| D10 | 0.05-0.10 |

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Source: VHB, MassGIS, FEMA

-  Limit of Work
-  Zone AE: 1% Chance of Flooding, with BFE
-  Zone AO: 1% Chance of 1'-3' Sheet Flow Flooding, with Depth
-  VE: High Risk Coastal Area

Figure 5.1
FEMA Flood Map

**KCCRA - MCP Response Action
Weymouth, MA**

6

Hazardous Materials

This chapter presents information pertaining to the assessment and remediation of Hazardous Materials, as defined in the MCP, at the Project Site, including a summary of previous MCP response actions.

6.1 Existing Conditions

The following releases of Hazardous Materials as defined in the MCP have been reported at the Project Site:

- › Release Tracking Number (RTN) 4-26230 was issued in July 2016 following the identification of evidence of a historical release of petroleum in soil at the Compressor Station portion of the Disposal Site located north of the Project Site. Subsequent RTNs have been linked to this primary RTN 4-26230. A Phase II Comprehensive Site Assessment (CSA) Report for the KCCRA portion of the Disposal Site was filed in January 2022 and is discussed in more detail in Section 6.2.1. A Phase III RAP was filed for the KCCRA portion of the Disposal Site in August 2023 and is discussed in more detail in Section 6.2.4. A Phase IV Remedy Implementation Plan was filed for the KCCRA portion of the Disposal Site in July 2024 and is discussed throughout this EENF.
- › RTN 4-28186 was assigned in response to the identification of a potential Imminent Hazard (IH) condition due to concentrations of arsenic in shallow soil in the KCCRA portion of the Disposal Site. An IH evaluation concluded that these arsenic concentrations did not present an IH condition, and that the arsenic identified was associated with the use of coal ash as fill.
- › RTN 4-28615 was assigned in December 2021 in response to the identification of a potential IH condition due to concentrations of arsenic and total chromium in the top six inches of the fill material below MHW at the KCCRA. An IH evaluation concluded that the concentrations of arsenic and chromium in fill material below MHW at the Project Site did not present an IH condition.
- › RTN 4-28676 was assigned in January 2021 in response to the identification of a potential IH condition associated with concentrations of arsenic in the top 12 inches of fill within the Upland Portion of the KCCRA. An IH evaluation concluded that the concentrations of arsenic in the top 12 inches of fill within the Upland Portion of the Project Site did not present an IH condition.

RTNs 4-28186, 4-28615, and 4-28676 were administratively linked to primary RTN 4-26230.

6.2 Site Assessments

Previous assessments of the Project Site have been conducted under RTNs 4-26230, 4-28186, 4-28615, and 4-28676. Details of previous investigations and associated reports can be found in the Phase II CSA and are summarized in the following sections.

6.2.1 Phase II CSA (January 2022)

The Phase II CSA included the advancement of soil borings, installation of groundwater monitoring wells, and excavation of test pits. Samples of soil, groundwater, surface water, fill below MHW, and surface water were collected and a Stage I ERC was completed. Details of these investigations and findings are included in the Phase II CSA report.

Conclusions from the Phase II CSA included the following:

- › Fill at the Project Site is heterogeneous due to large scale reworking and regrading and contains a wide range of material and construction debris.
- › Laboratory analysis of the coal slag (a byproduct of coal combustion) present within the Shore Portion of the Project Site indicated that the potential future breakdowns of the material into sand and sediment-size material does not pose a foreseeable human or ecological risk.
- › No Hazardous Materials as defined in the MCP were detected in surface water samples from the Shore Portion of the Project Site at concentrations in excess of applicable water quality criteria or screening benchmarks; therefore, no ecological risk was identified for aquatic organisms.
- › Vanadium was detected in excess of the ecological AET in 90 percent of the sediment samples collected from the Shore Portion of the Project Site. However, based on the estimated exposure doses received by indicator species, the concentrations of polycyclic aromatic hydrocarbons (PAHs), antimony, arsenic, barium, beryllium, chromium, lead, nickel, and vanadium in sediment were not expected to result in adverse impacts to wildlife that forage on aquatic invertebrates or shellfish within the Shore Portion of the Project Site.
- › With the possible exception of vanadium in sediment, a Condition of No Significant Risk to the environment exists within the Shore Portion of the Project Site.
- › Further erosion of the Upland Portion of the Project Site could expose fill containing higher concentrations of arsenic.

6.2.2 Method 3 Human Health Risk Characterization Summary (January 2022)

A Method 3 Human Health Risk Characterization was completed as part of the Phase II CSA.

The Method 3 Human Health Risk Characterization concluded that a Condition of No Significant Risk to Human Health currently exists at the KCCRA. However, it also concluded that future conditions may present a significant risk to human health in the following scenarios:

- › Visitors exposed to arsenic in fill at depths greater than 3 feet in the Upland Portion of the KCCRA; and
- › Residents exposed to arsenic and lead in fill in the Upland Portion of the KCCRA.

Both of these scenarios could be effectively addressed with the implementation of an Activity and Use Limitation (AUL).

The Method 3 Human Health Risk Characterization also concluded that further erosion in the area of eroding fill in the southeastern area of the Upland Portion of the Project Site could expose fill containing higher concentrations of arsenic in the Upland Portion of the Project Site. Consequently, additional response actions were warranted to reduce the possibility of such erosion.

6.2.3 Stage II ERC (November 2022)

A Stage II ERC was conducted to further evaluate the potential ecological risk to aquatic invertebrates (e.g., shellfish and aquatic worms) associated with exposure to certain metals and PAHs in fill material present in the Shore Portion of the Project Site. The complete Stage II ERC is included as Appendix B of the Phase III RAP.

The conclusions of the Stage II ERC included:

- › The relative absence of soft-shell clams on the Project Site is not related to the presence of metals or PAHs in fill material within the Shore Portion of the Project Site.
- › There is no evidence of biologically significant harm to aquatic invertebrates living in the Shore Portion of the Project Site related to the presence of metals and PAHs in the fill material.
- › Based on the assessment of sediments from the Project Site and nearby, the poor aquatic habitats are due to the current and historical heavy industrial use in the area and are unrelated to the presence of metals and PAHs in the fill material within the Shore Portion of the Project Site.
- › Based on laboratory testing of aquatic invertebrates, impaired growth and reproduction were observed in those exposed to fill material samples from the Shore Portion of the Project Site relative to those not exposed. However, none of the aquatic invertebrates exhibited increased mortality.
- › Fill material containing nickel and/or vanadium at concentrations exceeding the ecological AETs makes up less than one percent of the aquatic habitat in Kings Cove. Therefore, there is no potential for biological harm to the populations of aquatic invertebrates in Kings Cove associated with the concentrations of nickel and/or vanadium in fill within the Shore Portion of the Project Site now or in the future.
- › Because there is no potential for biologically significant harm to aquatic invertebrates in Kings Cove associated with nickel and/or vanadium concentrations in the Project Site, a Condition of No Significant Risk to the environment exists.

6.2.4 Phase III RAP (August 2023)

The purpose of the Phase III RAP was the identification, evaluation, and selection of remedial action alternatives (i.e., remedial solutions) that can potentially achieve the remedial action objectives for the KCCRA. Remedial action objectives were developed, in part, based on information presented in the Phase II CSA.

The remedial action objectives were:

- › To address the potential future risk to visitors who might be exposed to arsenic in fill at depths greater than three feet and potential residents of what is now the KCCRA who might be exposed to arsenic and lead in fill at all depths in the Upland Portion of the KCCRA. The remedial action objective is to achieve a Condition of No Significant Risk for these potential future exposures.

- › To address the potential that further erosion in the southeastern area of the Upland Portion of the KCCRA could expose fill containing higher concentrations of arsenic. The remedial action objective is to control this potential source of arsenic.
- › To remove an area of fill below MHW which contained nickel and vanadium at concentrations exceeding the AETs. This objective was identified in response to DEP's preference despite the existence of a Condition of No Significant Risk.

The preferred Remedial Action Alternative for the Upland Portion of the KCCRA was to extend the existing stone revetment and record an AUL. A description of the plan for implementation of the remedial alternative can be found in Section 6.3.

The preferred Remedial Action Alternative for the Shore Portion of the KCCRA and the fill below MHW was to excavate an area of fill below MHW with off-site disposal of the fill if necessary. In addition, in response to community preferences, the current design includes a new element which consists of the placement of cobble to create a gradual surficial transition between the excavation area and the revetment.

A description of the plan for implementation of the Remedial Action Alternative, which is the subject of this EENF, can be found in Section 6.3.

6.2.5 Phase IV Remedy Implementation Plan (RIP) (July 2024)

The Phase IV RIP details the engineering concepts and design criteria to be used for the design and construction of the preferred Remedial Action Alternative. A summary of the construction elements is provided in Section 6.3.

6.3 Proposed Activities

The construction of the preferred Remedial Action Alternative consists of the following:

- › Collection of soil/sediment samples for laboratory analysis to determine appropriate disposition;
- › Before any construction work begins, install erosion and sedimentation controls according to the design plans, including controls for in-water work, setting up temporary construction fencing, and selecting dust monitoring locations;
- › Excavation during low tide cycles;
- › Placing excavated material in a staging area and/or roll-off containers awaiting reuse or disposal;
- › Placing clean cobble cover within the excavated area and up to the base of the new revetment;
- › Constructing the rip rap revetment, including placing a subset of the dewatered excavated material behind the rip rap;
- › Off-site disposal of remaining excavated material;
- › Restoration of disturbed construction access and staging areas (loaming and seeding);
- › Removing erosion and sedimentation controls.

Refer to Chapter 1, *Project Description*, for additional information on the details of the Project. The exact sequence and schedule will be finalized by the selected remediation contractor.

6.3.1 Activity and Use Limitation

An Activities and Use Limitation (AUL) will be recorded in the Registry of Deeds on the KCCRA site, which will outline restrictions and requirements for future activities and uses of the KCCRA, including conditions for accessing soils and maintaining the revetment. The implementation of the Project with an AUL would achieve a Permanent Solution with Conditions without “active” operation and maintenance systems (as defined by the MCP), although future routine inspections and maintenance will be required per the AUL to confirm the integrity of the revetment.

6.4 Regulatory Compliance

The Project will reduce potential human and ecological exposure to contaminants and achieve a Condition of No Significant Risk to human health, safety, public welfare, and the environment for current and foreseeable Site uses thereby supporting the filing of a Permanent Solution with Conditions for the Project Site in accordance with the MCP.

6.5 Mitigation Measures

The Project will include soil and sediment excavation and management, as well as potential dewatering effluent management. To minimize risks to nearby receptors during these activities, the following procedures will be implemented:

- › An erosion and sedimentation control program will be implemented to minimize temporary impacts to Wetland Resource Areas during construction of the Project. The program incorporates BMPs (specified in guidelines developed by DEP and EPA). Additional details on the program can be found in Chapter 1, *Project Description*.
- › The generation of fugitive dust during excavation activities will be minimized by implementing dust mitigation measures based on real-time dust monitoring results. Dust mitigation measures that may be implemented include but are not limited to the following:
 - Wet suppression to minimize the generation of dust from demolition activities, excavation operations and on-site vehicle traffic.
 - Maintaining low vehicle speeds in unpaved areas.
 - Anti-tracking pads at the construction entrance as previously noted.
 - All trucks that enter and exit the site will be subject to wheel cleaning. This will entail hosing down the truck wheels while the truck is on the gravel tracking pad, just before the truck exits the Project Site.
 - Construction trucks hauling materials to and from the Project Site will have their loads securely covered. Loads should not be above the freeboard.
 - Street cleaning may be required and will be completed by a mechanical street sweeper during excavation activity, and on an as needed basis during subsequent construction phases. If determined to be necessary, sweeping extents and frequencies will be increased.
 - If required, short duration stockpiling of soil (intended for immediate reuse) will be stabilized and surrounded by erosion controls.

- Existing ground will not be disturbed until required for construction, and areas may be stabilized with gravel or other stabilizing material if dust generation is observed that cannot be controlled with water.
- No storage of construction debris will be allowed on-site, other than in roll-off dumpsters.
- Construction practices will be monitored to verify that unnecessary transfers and mechanical disturbances of loose materials are minimized and that any emissions of dust are minimal.
- › Dust monitoring will be conducted during excavation activities, including the loading of soils/sediments into containers/trucks at the Project Site. Given the coastal environment and since a portion of the material to be excavated is sediment, dust generation during construction of the Project is anticipated to be low. Dust monitoring procedures are described in more detail in Chapter 3 of the Phase IV RIP.
- › Stockpile staging areas for soil/sediment generated during excavation activities will be established in the construction plans. The staging areas will be located on the southeastern edge of the Project Site closest to Route 3A. In addition, roll-off containers may be staged in this area to contain soils/sediments prior to off-site disposal.
- › Implementation of the Project will require the presence of heavy equipment; therefore, there is a small risk of accidental discharge due to mechanical/physical failures of excavation and trucking equipment and/or fueling incidents. As a preventive measure, the Proponent will institute standard operating procedures that will include daily inspection of hydraulic lines and reservoirs, and general inspection of equipment which contains fuel, oils and lubricants. Absorbent materials and containers will be kept on-site during Remedial Action Alternative construction to contain incidental spills and/or accidental discharges from excavation and trucking equipment.
- › Construction contractors on site shall ensure that a worker health and safety plan is implemented to the extent required by the Federal Occupational Safety and Health Administration (OSHA) under the Occupational Safety and Health Act of 1970, 29 U.S.C. 651, as amended, and 29 CFR 1910.120(e) and any other applicable federal, state and local law. The health and safety plan will be prepared by a Certified Industrial Hygienist or other qualified Individual appropriately trained in worker health and safety procedures. In addition, the contractor shall conduct all activities at the Project Site involving worker contact with impacted fill or sediment with OSHA 40-hour trained workers.

7

Construction Period

This chapter provides information related to the Project's construction period. A plan will be developed and implemented to control construction-related impacts including dust, noise, erosion, sedimentation, transportation, and contamination impacts during construction.

7.1 Construction Schedule

If applicable approvals and permissions are received, implementation of the Project could begin in Fall 2025 and be completed during Winter 2026. The exact sequence and schedule will be finalized by the selected contractor. A pre-construction kick-off meeting will be conducted prior to the implementation of the Project to review and discuss the design, schedule, and inspection procedures with the contractor.

7.2 Construction Management Plan

The Proponent will employ a Construction Manager who will be responsible for developing a Construction Management Plan (CMP) coordinating construction activities with all appropriate utility companies and regulatory agencies. A plan consistent with the Order of Conditions for the Project to control construction-related impacts including erosion, sedimentation, and other pollutant sources during construction and any land disturbance activities will be developed and implemented.

The contractor will be required to complete the excavation during low tides only and install the clean cobble cover in the same tide cycle.

7.3 Site Preparation

Before any work begins, erosion and sedimentation controls will be installed including the installation of a stabilized construction entrance, turbidity curtain, and a sandbag cofferdam. The sandbag cofferdam allows the contractor to construct the revetment in the dry and provides erosion control by restricting sediments from moving seaward past the cofferdam.

7.4 Construction Waste Management

Any construction waste will be sampled and properly characterized to facilitate identification of an appropriate disposal/recycling facility. The sampling and analysis will be performed in accordance with the MCP. Excavated fill will be reused behind the revetment to be constructed as part of the Project to the extent practicable.

On-site excavations are not expected to require dewatering, since excavation below MHW will be conducted during low tide and the fill and sediments are anticipated to be well-draining. However, should groundwater dewatering be required to facilitate revetment construction, the dewatering effluent will be pumped to and contained within tanks on site prior to being characterized and later disposed of at an offsite treatment/recycling facility.

7.5 Construction Traffic, Parking, Pedestrian, and Biking

The construction of the Project will result in temporary traffic to facilitate workers and construction materials to and from the Project Site. The contractor will have a designated parking area within the Algonquin-owned property near the Project Site.

The Project requires a MassDOT Access Permit for the temporary construction access from Bridge Street. MassDOT will require temporary traffic management details to properly manage traffic on Bridge Street for vehicles, pedestrians, and bikes.

The Project results in no permanent traffic impacts.

7.6 Air Quality

The Project will implement several mitigation measures and monitoring practices to manage dust and air quality during the construction period at the KCCRA property.

The generation of fugitive dust will be minimized by implementing dust mitigation measures based on monitoring results. Dust mitigation measures that may be implemented include wet suppression during excavation activities, maintaining low vehicle speeds in unpaved areas, installing anti-tracking pads at construction entrances, cleaning truck wheels before they exit the site, securely covering truck loads, and conducting regular street cleaning. Additionally, soil stockpiles intended for immediate reuse will be stabilized, and construction practices will be closely monitored to minimize unnecessary disturbances.

Dust monitoring will be conducted during excavation activities, including the loading of fill and sediments into containers/trucks at the Project Site. Real-time particulate sampling using TSI DustTrak meters will be implemented to ensure that dust levels remain within safe limits. Daily monitoring of upwind and downwind dust concentrations will be recorded, and handheld particulate monitors will be used to assess real-time dust levels in active work areas. The Project will also conduct periodic checks for volatile contaminants using a photoionization detector (PID). If elevated PID readings persist, further actions, including potential upgrades in personal protective equipment, will be undertaken.

7.7 Noise

Elevated noise levels may occur during the Project due to construction equipment. Persons working in close proximity to construction equipment will be required to wear sufficient hearing protection. This equipment may include foam earplugs or foam earmuffs. Hand signals must be used for communication in these situations. Hand signals will be established and practiced prior to donning protective hearing equipment.

7.8 Stormwater Runoff and Erosion Control

An erosion and sedimentation control program will be implemented to minimize temporary impacts to Wetland Resource Areas during the construction phase of the Project. The program incorporates BMPs specified in guidelines developed by DEP and EPA. Structural erosion and sedimentation controls instituted for the Project Site include sandbag cofferdams, a turbidity curtain, and stabilized construction exits. Refer to Chapter 1, *Project Description*, for additional detail on proposed erosion and sedimentation control measures.

The Project does not include an increase in impervious materials and therefore will result in no changes in stormwater runoff and quality.

7.9 Stockpile Management

Stockpile staging areas will be located on the southeastern edge of the Project Site, closest to Route 3A, and will have a base composed of an impermeable material and be covered with the same material or other suitable material to minimize the infiltration of precipitation and erosion of the stockpile. If excavated material has free-draining liquids, a bermed stockpile area will be created using straw wattles beneath polyethylene sheets. The contractor will use sufficiently wide polyethylene sheets to avoid connecting individual sheets. If liquids don't evaporate naturally, they will be pumped into 55-gallon drums for characterization. For excavated material in a roll-off container, the top will be covered with polyethylene or other suitable material. Clean imported materials like fill and cobbles will be stockpiled on Algonquin-owned property and may be covered to prevent precipitation infiltration.

7.10 Hazardous Materials Management

Implementation of the Project will require the presence of heavy equipment. Therefore, there is a small risk of accidental discharge due to mechanical/physical failures of excavation and trucking equipment. Standard operating procedures to prevent accidental releases will include daily inspection of hydraulic lines and reservoirs, and general inspection of equipment that contains fuel, oils and lubricants. Absorbent materials and containers will be kept on-site during construction to contain incidental spills and/or accidental discharges from excavation and trucking equipment or stockpile staging areas. Refer to Chapter 6, *Hazardous Materials*, for additional detail.

Fill or sediment containing Hazardous Materials as defined in the MCP at levels equal to or greater than applicable release notification thresholds that are not otherwise hazardous waste will be managed under the Bill of Lading (BOL) process if they are transported off-site.

Any fill or sediment transported off-site will be transported only to facilities and locations permitted to accept said fill or sediment.

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8

Draft Section 61 Findings and Proposed Mitigation

This chapter includes a summary of mitigation measures to avoid, minimize, and mitigate environmental impacts of the Project and Draft Section 61 Findings for all State Permits and Agency Actions.

8.1 Mitigation Summary

The Project will avoid, minimize or mitigate damage to the environment to the maximum extent practicable. To achieve a Permanent Solution under the MCP, the Project will positively impact approximately 46,385 sf feet of LSCSF, which includes Coastal Beach and Coastal Bank. The Proponent commits to the measures summarized in **Table 8-1** below in connection with the Project. Implementation is the responsibility of the Proponent. All costs associated with mitigation measures are inherent to the Project.

Table 8-1 Summary of Mitigation Measures

| Mitigation Measure | Timing/Schedule |
|---|-------------------|
| Beneficial Measures | |
| The Project will remove fill in specified areas of the Project Site determined to contain elevated concentrations of nickel and vanadium. | Construction |
| The Project will prevent future exposure to fill containing Hazardous Materials, as defined by the MCP, in the Upland Portion of the Project Site by the construction of a revetment. | Construction |
| The Project will place clean cobble to connect the excavated area and the new rip rap revetment. | Construction |
| The Project will prevent erosion from large storm events by the construction of the revetment. | Construction |
| The Project will achieve a Permanent Solution as defined under the MCP. | Post-Construction |
| Construction Impact Mitigation | |
| Develop and implement a Construction Management Plan. | Construction |
| Comply with air quality regulations at 310 CMR 7.01, 7.09-7.10 | Construction |
| Enforce Commonwealth of Massachusetts anti-idling law | Construction |
| Comply with the requirements of the Clean Construction Equipment Initiative | Construction |
| Comply with applicable local noise regulations | Construction |

| Mitigation Measure | Timing/Schedule |
|---|-----------------|
| Comply with the Order of Conditions for the Project, including the time of year restriction for the proposed excavation and placement of cobble recommended by DMF. | Construction |
| Implement erosion and sedimentation control measures in accordance with DEP's "Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas" and the Order of Conditions for DEP File No. 081-1320, and summarized in Chapter 1, <i>Project Description</i> . | Construction |

8.2 Draft Section 61 Findings

8.2.1 Department of Environmental Protection

DRAFT ONLY

Findings Pursuant to

MGL Chapter 30, Section 61

Project Name: Kings Cove Conservation Restriction Area MCP Response Action

Project Location: Weymouth, MA

Project Proponent: Algonquin Gas Transmission, LLC

EEA Number: TBD

Project Description

The Project will include excavating 630 cubic yards (CY) of fill and sediment containing Hazardous Materials, as defined in the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000), and extending the existing rip rap revetment in the northern area of the Project Site to achieve a Permanent Solution as defined under the MCP.

Project Impacts

The Project will achieve a Permanent Solution as defined under the MCP. It will also enhance the KCCRA by stabilizing the Upland Portion of the KCCRA and improving surface conditions in the Shore Portion of the KCCRA.

Mitigation Measures

The Proponent will develop and implement a plan to control construction-related impacts including emissions, dust, noise, erosion, sedimentation, transportation, and contamination impacts during construction and any land disturbance activities. During construction, public safety will be prioritized and construction will not impact pedestrians, bicyclists, or transit riders in the vicinity of the Project Site.

Section 61 Findings

The potential environmental and public health benefits of the Project quantified in this EENF are incorporated by reference into this Section 61 Finding. Throughout the planning and environmental review processes, the Proponent has developed measures to mitigate impacts of the Project. With the

mitigation carried out in cooperation with state agencies, the Department of Environmental Protection finds that there are no significant unmitigated impacts.

For the reasons stated above, the Department of Environmental Protection hereby finds, pursuant to MGL c. 30, § 61, that construction of the Project as described above, will mean that all practicable means and measures will have been taken to avoid or minimize adverse environmental impacts related to the Project.

Agency: _____
Commissioner: _____
Date: _____

8.2.2 Massachusetts Water Resources Authority

DRAFT ONLY

Findings Pursuant to

MGL Chapter 30, Section 61

Project Name: Kings Cove Conservation Restriction Area MCP Response Action

Project Location: Weymouth, MA

Project Proponent: Algonquin Gas Transmission, LLC

EEA Number: TBD

Project Description

The Project will include excavating 630 cubic yards (CY) of fill and sediment containing Hazardous Materials, as defined in the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000), and extend the existing rip rap revetment in the northern area of the Project Site to achieve a Permanent Solution as defined under the MCP.

Project Impacts

The Project will achieve a Permanent Solution as defined under the MCP. It will also enhance the KCCRA by stabilizing the Upland Portion of the KCCRA and improving surface conditions in the Shore Portion of the KCCRA.

Mitigation Measures

The Proponent will develop and implement a plan to control construction-related impacts including emissions, dust, noise, erosion, sedimentation, transportation, and contamination impacts during construction and any land disturbance activities. During construction, public safety will be prioritized and construction will not impact pedestrians, bicyclists, or transit riders in the vicinity of the Project Site.

Section 61 Findings

The potential environmental and public health benefits of the Project quantified in this EENF are incorporated by reference into this Section 61 Finding. Throughout the planning and environmental review processes, the Proponent has developed measures to mitigate impacts of the Project. With the

mitigation carried out in cooperation with state agencies, Massachusetts Water Resources Authority finds that there are no significant unmitigated impacts.

For the reasons stated above, Massachusetts Water Resources Authority hereby finds, pursuant to MGL c. 30, § 61, that construction of the Project as described above, will mean that all practicable means and measures will have been taken to avoid or minimize adverse environmental impacts related to the Project.

Agency: _____
Commissioner: _____
Date: _____

8.2.3 Department of Transportation

DRAFT ONLY

Findings Pursuant to

MGL Chapter 30, Section 61

Project Name: Kings Cove Conservation Restriction Area MCP Response Action

Project Location: Weymouth, MA

Project Proponent: Algonquin Gas Transmission, LLC

EEA Number: TBD

Project Description

The Project will include excavating 630 cubic yards (CY) of fill and sediment containing Hazardous Materials, as defined in the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000), and extend the existing rip rap revetment in the northern area of the Project Site to achieve a Permanent Solution as defined under the MCP.

Project Impacts

The Project will achieve a Permanent Solution as defined under the MCP. It will also enhance the KCCRA by stabilizing the Upland Portion of the KCCRA and improving surface conditions in the Shore Portion of the KCCRA.

Mitigation Measures

The Proponent will develop and implement a plan to control construction-related impacts including emissions, dust, noise, erosion, sedimentation, transportation, and contamination impacts during construction and any land disturbance activities. During construction, public safety will be prioritized and construction will not impact pedestrians, bicyclists, or transit riders in the vicinity of the Project Site.

Section 61 Findings

The potential environmental and public health benefits of the Project quantified in this EENF are incorporated by reference into this Section 61 Finding. Throughout the planning and environmental review processes, the Proponent has developed measures to mitigate impacts of the Project. With the

mitigation carried out in cooperation with state agencies, Massachusetts Department of Transportation finds that there are no significant unmitigated impacts.

For the reasons stated above, Massachusetts Department of Transportation hereby finds, pursuant to MGL c. 30, § 61, that construction of the Project as described above, will mean that all practicable means and measures will have been taken to avoid or minimize adverse environmental impacts related to the Project.

Agency: _____

Commissioner: _____

Date: _____

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