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July 6, 2018

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Adams Shore/Houghs Neck Seawall Repairs and Improvements Project
PROJECT MUNICIPALITY	: Quincy
PROJECT WATERSHED	: Boston Harbor
EEA NUMBER	: 15861
PROJECT PROPONENT	: City of Quincy Department of Public Works
DATE NOTICED IN MONITOR	: May 23, 2018

Pursuant to the Massachusetts Environmental Policy Act (MEPA) (M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF) and supplemental information[1], the project consists of reconstruction of seawalls, revetments, outfalls, and associated beach access stairs along 8,000 linear feet (lf) of shoreline in Quincy. The project includes replacement of deteriorated precast concrete seawall units and cast-in-place leveling pads to raise the wall height by a minimum of two feet; resetting approximately 30 percent of the revetments with additional stone within existing footprints; removal of grout from the voids in revetments; removal of temporary rip rap placed on Coastal Bank landward of the seawalls and revetments following the three nor'easters in March 2018; installation of granular stone backfill on landward side of the walls; grading and stabilization of eroded banks landward of the coastal engineering structures with natural fiber blankets and erosion control vegetation; replacement of public access stairs; and improvements to stormwater drainage outfalls including installation of one-way check valves, repairs to tide gates, and reconstruction of the groin at

[1] Email from Tracy Adamski, Tighe & Bond, on June 13, 2018 on behalf of the City of Quincy.

Narragansett Road in the same footprint after the addition of the Chickatabot outfall pipe. The project would have a design life of approximately 50 years. Private wall sections (H and I) would be replaced in-kind, by others.

The City of Quincy (City) completed a detailed City-wide assessment of seawall structures in 2011 and 2012 (2012 City-Wide Seawall Assessment Report). Seawall sections in Adams Shore and Houghs Neck areas were rated among those in poorest condition and with the highest need of replacement. Observed deficiencies include loss of backfill, wall subsidence due to structurally deficient wall sections, cracking, and loss of revetment.

The purpose of this project is to improve the seawalls to reduce storm damage and provide additional climate change resiliency. It is an example of how municipalities are responding to the effects of climate change, such as sea level rise and more powerful storms. Quincy is participating in the Municipal Vulnerability Preparedness (MVP) Program which provides support for cities and towns to begin the process of planning for climate change resiliency and implementing priority projects.

Project Area

Houghs Neck is on a peninsula located on the eastern shoreline of Quincy and is bounded by Hingham Bay to the east, Rock Island Cove to the south and Quincy Bay to the west. It is a densely populated area that contains a yacht club, elementary school, fire station, and the Massachusetts Water Resources Authority (MWRA) Nut Island Headworks sewage screening facility. Houghs Neck is surrounded by 16,730 lf of coastal structures that are owned by the City and provide protection for an evacuation route, residences, businesses, and utilities.

Adams Shore is a heavily populated residential neighborhood located on the northern shoreline adjacent to Quincy Bay. It is bounded on the west by the Merrymount neighborhood and the east by Houghs Neck, and provides access to Houghs Neck. There are approximately 1,370 lf of coastal structures which protect residences, roads, and utilities.

The project area is located on the north side of the peninsula, from the intersection of Babcock Street/Manet Street/Sea Street in Houghs Neck west to Narrangensett Avenue in Adams Shore. The seawall is generally oriented east-west with Quincy Bay to the north and Adams Shore to the south. The project area contains approximately 8,000 lf of coastal structures constructed from the 1930s to the 1950s. These include a combination of multiple structures including precast concrete blocks, cast-in-place concrete, granite blocks, and stone revetment. Seawall sections with the greatest need of replacement are located along Sea Street, Post Island Road, Shelton Road, and Terne/Norton Road.

Wetland resource areas in the project area include Coastal Beach/Land Containing Shellfish (LCS), Barrier Beaches consisting of Coastal Dune and Coastal Beach, Coastal Bank, Land Under Ocean (LUO), Land Subject to Coastal Storm Flowage (LSCSF), and Salt Marsh. According to the Federal Emergency Management Agency's (FEMA) National Flood Insurance Rate Map (FIRM) (Panel Nos. 25021C0088F and 25021C0089F (revised to reflect Letter of Map Revision (LOMR) effective March 1, 2017)), portions of the project area are located within the Special Flood Hazard Area Zones AE (Base Flood Elevation (BFE) 12 feet North American Vertical Datum of 1988 (NAVD88) and VE (BFE 14, 16, and 17 feet NAVD88).

The project area is located within mapped shellfish habitat for soft shell clam (*Mya arenaria*), blue mussel (*Mytilus edulis*), European oyster (*Ostrea edulis*), and razor clam (*Ensis directus*). According to the Massachusetts Division of Marine Fisheries (DMF), the shellfish growing area is conditionally restricted for shellfish harvest. Quincy Bay supports populations of winter flounder (*Pseudopleuronectes americanus*), Atlantic horseshoe crab (*Limulus polyphemus*), diadromous fish species including alewives (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), rainbow smelt (*Osmerus mordax*), American eel (*Anguilla rostrata*), white perch (*Morone Americana*), Atlantic tomcod (*Microgadus tomcod*), and a variety of other commercially and recreationally important finfish and crustaceans.

Environmental Impacts and Mitigation

Environmental impacts associated with the project include alteration of 430,740 square feet (sf) (9.84 acres) of wetland resource areas, several of which are coincident. Alteration includes 23,050 sf of Coastal Bank (22,675 sf permanent and 375 sf permanent); 171,620 sf of Coastal Beach/LCS (173,870 temporary and permanent restoration of 2,250 sf); 5,240 sf of Coastal Dune (5,175 sf permanent and 65 sf permanent); 167,705 sf of Barrier Beach (128,205 sf temporary and 39,500 sf permanent) and 228,580 sf of LSCSF (136,595 sf temporary and 91,985 sf permanent). Resetting the revetment will require repositioning of 3,315 cubic yards of man-made materials. Outfall pipe improvements will require 3,615 cubic yards (cy) of dredging; removed material will be reused on-site.

Measures to avoid, minimize and mitigate environmental impacts will include avoiding Salt Marsh in the vicinity of the project area; using sedimentation and erosion controls; and, drainage improvements. The project will replace the concrete stairs to maintain public access to the beach.

Jurisdiction and Permitting

The project is undergoing MEPA review and requires preparation of an ENF pursuant to 301 CMR 11.03(3)(b)(1)(a), 301 CMR 11.03(3)(b)(1)(e), 301 CMR 11.03(3)(b)(1)(f), and 301 CMR 11.03(3)(b)(6) because it requires State Agency Actions and it will result in the alteration of Coastal Dune, Barrier Beach and Coastal Bank; expansion of existing fill or structure in a velocity zone; alteration of one-half or more acres of wetlands; and reconstruction or expansion of an existing solid fill structure of 1,000 or more sf base area in flowed tidelands, provided the project occupies flowed tidelands or other waterways. The project will require a Chapter 91 (c. 91) License and a Section 401 Water Quality Certification (WQC) from the Massachusetts Department of Environmental Protection (MassDEP) and a Section 8(m) Permit from MWRA[2]. The project is subject to Federal Consistency Review by the Massachusetts Office of Coastal Zone Management (CZM).

The project will require an Order of Conditions from the Quincy Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP) and an Individual Permit from the U.S. Army Corps of Engineers (ACOE) under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA).

Because the City is seeking State Financial Assistance in the form of funding through the Executive Office of Energy and Environmental Affairs (EEA) Dam and Seawall Program, MEPA

[2] MWRA comments indicate that the project requires a Section 8(m) Permit; this permit was not identified in the ENF.

jurisdiction is broad and extends to those aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Review of the ENF

The ENF describes existing and proposed conditions and contains detailed site plans and cross-sections. The City submitted supplemental information during the MEPA review period on June 13, 2018. The City consulted with MassDEP, CZM, DMF, and ACOE and the project incorporates many of the recommendations made by State Agencies to minimize impacts associated with the repair and reconstruction of the coastal engineering structures in the project area. State Agencies did not identify additional alternatives to be evaluated or request additional information that would warrant the preparation of an EIR. The City provided a response to comments from DMF and CZM during the MEPA review period.

Alternatives Analysis

The ENF includes an evaluation of several alternatives, including: No Action; Removal of Seawall; Surficial Repairs; Partial Reconstruction (Preferred Alternative); and Complete Reconstruction. The No Action Alternative would leave the coastal engineering structures in their current deteriorating condition. This alternative was dismissed because potential failure of the structure(s) would result in environmental resource area impacts; increased costs; loss of protection to residents, businesses, and utilities, and liability to the City. The Removal of Seawall Alternative was deemed infeasible because the shoreline does not have sufficient space to replace the seawall with coastal landscaping or a stone revetment without increasing fill along Coastal Beach and Salt Marsh; costs associated with private property takings and building removals; and potential impacts to shellfish habitat.

The analysis considered repair alternatives based on property access, site access, cost, repair life, permitting complexity, environmental impacts, feasibility, resiliency, and compliance with project goals. The Surficial Repairs Alternative would consist of repairing concrete spalls and replacing approximately 20 percent of seawall units. While this alternative would reduce impacts to environmental resources and cost less compared to the Preferred Alternative, it would not provide structural restoration, improvement over existing conditions, increased protection and resiliency against sea level rise, nor meet the project goal of a minimum of 20 years of service life.

The Complete Reconstruction Alternative would remove/reset more than 50 percent of revetment (including beyond the existing toe), replace 100 percent of concrete pads/blocks, raise the seawall above the FEMA VE Zone elevation (requiring an increase in the base of the seawall) to provide additional protection, and reconstruct public access stairs in-kind. While this alternative would provide the highest level of protection against sea level rise and longest design life (100 years), it could potentially result in additional erosion from increased wave energy and would have the highest costs, the greatest impacts to environmental resources because of the larger footprint, and increased construction period impacts.

As previously described, the Preferred Alternative would require less environmental impacts than the Complete Reconstruction Alternative, limit work to the existing footprint, and would continue to provide protection to the Houghs Neck and Adams Shore areas through improved coastal engineering structures (50-year life span and a minimum two-foot increase in the wall height).

The ENF provides an analysis of wall height alternatives including: maintaining the existing wall height; raising the wall height by a minimum of two feet (Preferred); and raising wall height above the FEMA VE Zone Elevation. The analysis considered protection against sea level rise, shoreline erosion and wave energy, and resident concerns with regard to level of protection, impacts to views, property value, and waterfront access. Resiliency was based on sea level rise projections from the Northeast Climate Science Center (NECSC) report, *Massachusetts Climate Change Projections – Statewide and for Major River Basins (2018).* Ultimately, increasing the wall height by a minimum of two feet would balance the need for additional protection against wave overtopping while maintaining public access to the waterfront. The 2018 NECSC report estimates a sea level rise for Boston of 1.1 to 2.1 feet for the year 2070.

The ENF describes green infrastructure alternatives that may be used in conjunction with the Preferred Alternative such as beach nourishment, dune vegetation restoration, and salt marsh restoration. Comments from MassDEP and DMF indicate that green alternatives such as beach nourishment, dune vegetation restoration, supplemental dune vegetation and Salt Marsh plantings should be further evaluated in the Notice of Intent (NOI) to improve coastal resiliency in the project area. Maintenance of the beach elevation through nourishment will be necessary to ensure the continued stability of the seawalls and revetments. The City will work with permitting agencies to determine appropriate mitigation, including additional plantings and development of a planting plan.

The ENF evaluates alternatives to repair and improve the resiliency of the existing storm drainage outfalls; alternatives were separately evaluated for smaller outfall pipes (less than 24 inches in diameter) and larger outfall pipes that discharge further out on the shoreline or within previously constructed groins. The City will replace smaller outfall pipes with larger diameter pipes and partially reconstruct the four larger outfall pipes within the project area. The Shoreside Road and Chickatabot Road outfalls will be partially reconstructed in new locations to increase their protection and minimize impacts to resource areas.

Wetland, Waterways, and Water Quality

The project will result in significant temporary impacts to wetland resource areas. The Quincy Conservation Commission will review the project to determine its consistency with the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00), and associated performance standards, including stormwater management standards (SMS). MassDEP will also review the project to determine its consistency with the 401 WQC (314 CMR 9.00) and c. 91 regulations (310 CMR 9.00). Finally, ACOE review will determine its consistency with Section 404 of the Federal CWA and Section 10 of the RHA.

CZM and MassDEP recommend that coastal engineering structures be improved during repairs or reconstruction to minimize potential impacts according to guidance provided in *Applying the Massachusetts Coastal Wetlands Regulations: A Practical Manual for Conservation Commissions to Protect the Storm Damage Protection and Flood Control Functions of Coastal Resources Areas* (2017). The project includes the reconstruction of privately owned coastal engineering structures in-kind. CZM comments recommend that project permitting solely include work to public structures because the ENF only addresses measures to minimize impacts to the publicly owned walls in the project area; any work

to private coastal engineering structures should comply with the 2017 guidance manual and be permitted separately.

The project includes replacement and/or improvements to City-owned stairs and replacement of private stairs in-kind. CZM and DMF comments recommend the use of pile-supported stairs without landing pads to minimize impacts associated with reflected wave energy which increases scour of the adjacent beach and impacts habitat and provide resiliency as beach elevations continue to lower over time. The stairs at STA 54+00 will be removed but not replaced to avoid potential impacts to Salt Marsh.

The project will stabilize Coastal Banks landward of the seawalls with natural fiber blankets and erosion control vegetation instead of lawn grass previously used. As recommended by CZM, the City will use erosion control measures, including blankets made from natural fibers and biodegradable anchors. CZM comments also recommend education and outreach to area residents describing the change in vegetation to improve the bank's ability to provide storm damage protection and flood control.

Work in the intertidal zone will take place in the dry and will be dependent on the tide. In addition, work will be completed from the landward side of the seawall whenever possible; where this is not feasible, work may occur from the Coastal Beach. According to DMF, the City may be required to mitigate impacts to intertidal areas. Equipment and materials will be staged and stored outside of resource areas. Construction access near salt marsh habitat should be avoided. The City will develop a construction access plan in consultation with DMF and other State Agencies.

The project includes approximately 6,930 cy of dredging, of which 3,315 cy consists of existing stone revetment that will be repositioned below the Mean High Tide Line and 3,615 cy of sediment that will be dredged in association with outfall pipe reconstruction. Dredged material will be stockpiled with the proposed limit of work either directly adjacent to the revetment or within the closest temporary staging area prior to being reset in place. The City should consult with MassDEP regarding any sediment sampling and testing requirements that will be necessary for its evaluation of the WQC application. The project will include measures to minimize turbidity and contain sediment and debris during the construction period, including working from the uplands during low tide, using siltation/turbidity controls and stabilizing the site prior to the incoming tide each day. If the chosen contractor elects to perform work from a barge platform, the City will prohibit the grounding of the barge platform within tidal flats.

Outfall repairs and reconstruction will not alter upstream functions of storm drain outfall pipes, such as tide gates, to maintain existing flow patterns. The City should provide additional detail in the NOI application to demonstrate compliance with the Stormwater Regulations for any stormwater outfalls that are enlarged or combined.

Construction

All activities should be managed in accordance with applicable MassDEP Solid Waste and Air Pollution Control regulations pursuant to M.G.L. c.40, §54. Precast seawall units will be salvaged for reuse, where practicable. I encourage the City to require contractors to use construction equipment with engines manufactured to Tier 4 federal emissions standards and limit excessive idling during the

construction period to reduce emissions. The project will require a Section 8(m) Permit from MWRA because of its proximity to the MWRA's High Level Sewer. I encourage the City to consult with MWRA prior to completing final design to ensure that the project will not affect MWRA infrastructure.

Conclusion

The ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review and demonstrated that the project's environmental impacts will be avoided, minimized and/or mitigated to the extent practicable. Based on the information in the ENF and after consultation with State Agencies, I find that no further MEPA review is required at this time. Remaining issues can be addressed through the local, State and federal permitting and review processes.

July 6, 2018
Date

Matthew A. Beaton

Comments Received:

05/29/2018 Massachusetts Board of Underwater Archaeological Resources (BUAR)
06/18/2018 Massachusetts Department of Environmental Protection (MassDEP) – Southeast Regional Office (SERO)
06/19/2018 Massachusetts Division of Marine Fisheries (DMF)
06/19/2018 Massachusetts Water Resources Authority (MWRA)
06/26/2018 Massachusetts Office of Coastal Zone Management (CZM)

MAB/PPP/ppp

The COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
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MAY 29 2018
MEPA

May 24, 2018

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
Attention: Purvi Patel, MEPA Unit
100 Cambridge St., Suite 900
Boston, MA 02114

RE: Adams Shore/Houghs Neck Seawall Repairs and Improvement Project, Quincy (EEA#15861)

Dear Secretary Beaton:

The Massachusetts Board of Underwater Archaeological Resources (BUAR) has completed its review of the proposed project's ENF (EEA#15861) prepared by Tighe & Bond on behalf of the City of Quincy. We offer the following comments.

The Board has conducted a preliminary review of its files and secondary literature sources to identify known and potential submerged cultural resources within the proposed project area. No record of any underwater archaeological resources was found. Based on the results of this review, prior disturbance and the nature of the proposed project, the Board expects that this project is unlikely to impact submerged cultural resources.

However, should heretofore-unknown submerged cultural resources be encountered during the course of the project, the Board expects that the project's sponsor will take steps to limit adverse affects and notify the Board and the Massachusetts Historical Commission, as well as other appropriate agencies, immediately in accordance with the Board's *Policy Guidance for the Discovery of Unanticipated Archaeological Resources*.

The Board appreciates the opportunity to provide these comments as part of the review process. Should you have any questions regarding this letter, please do not hesitate to contact me at the address above, by email at victor.mastone@state.ma.us, or by telephone at (617) 626-1141.

Sincerely,

Victor T. Mastone
Director

/vtm

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MassDEP
Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

June 18, 2018

Matthew A. Beaton, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

RE: QUINCY
Adams Shore/Houghs Neck Seawall Repairs and Improvements Project
Sea Street & Babcock Street to Shore Ave & Chickatabot Road
EEA #15861

Attn: MEPA Unit

Dear Secretary Beaton:

The Department of Environmental Protection Northeast Regional Office has reviewed the Environmental Notification Form (ENF) submitted by the City of Quincy, Department of Public Works for the proposed Adams Shore/Houghs Neck Seawall Repairs and Improvements Project, located at Sea Street & Babcock Street to Shore Ave. and Chickatabot Road. The Department provides the following comments.

The project proposes reconstruction and improvements to seawalls along Houghs Neck and Adam's Shore, including increasing the height of existing seawalls and resetting revetments. Work will include removal of all existing precast and leveling pads throughout the project area; installation of new precast seawall units and concrete leveling pads to raise the wall height by a minimum of two (2) feet; removal of existing public access stairs and replacement with timber stairs; and installation of stone backfill on the landward side of the seawalls. The project also will entail stormwater outfall improvements, including the installation of one-way check valves and repairs to existing tide gate structures.

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

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The ENF discusses green infrastructure alternatives such as beach renourishment, dune plantings and salt marsh restoration. These alternatives, particularly beach nourishment and dune vegetation restoration, appear to be feasible and should be included in the NOI. Maintenance of the beach elevation through renourishment will be necessary to ensure the continued stability of the seawalls and revetments. The project also proposes enlarging some of the stormwater outfall pipes within the project site. The applicant should provide additional detail in the NOI application to show compliance with the Stormwater Regulations for any stormwater outfalls that are enlarged or combined.

The MassDEP Northeast Regional Office appreciates the opportunity to comment on this proposed project. Please contact Rachel.Freed@state.ma.us at (978) 694-3258 for further information on wetlands issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@state.ma.us or at (978) 694-3304.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Rachel Freed, MassDEP-NERO

Commonwealth of Massachusetts
Division of Marine Fisheries
251 Causeway Street, Suite 400
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Mary-Lee King
Deputy Commissioner

June 18, 2018

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Purvi Patel, EEA No. 15861
100 Cambridge Street, Suite 900
Boston MA 02114

Re: Adams Shore/Houghs Neck Seawall Repairs and Improvements Project

Dear Secretary Beaton:

Division of Marine Fisheries (*MarineFisheries*) staff have reviewed the Environmental Notification Form (ENF) submitted by the City of Quincy for the reconstruction and strengthening of 8,000 linear feet of seawall from Babcock Street and Sea Street to Chickatabot Road in Quincy. Existing structures have deteriorated due to storms, and localized flooding has occurred. Proposed work includes replacing seawall structures in their current footprint but at least 2 feet higher, resetting and enhancing revetment stones, repairs and upsizing to tide gates and outfalls, and repairs to eroded areas landward of the seawall.

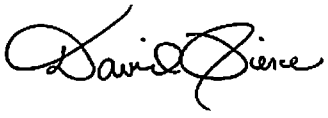
The project site is located along the Northern shore of Adams Shore/Houghs Neck in Quincy Bay. This area is mapped habitat for shellfish spawning and settling, including soft shell clam (*Mya arenaria*), blue mussel (*Mytilus edulis*), European oyster (*Ostrea edulis*), and razor clam (*Ensis directus*). Located in designated shellfish growing area GBH2.1, this area is currently conditionally restricted and is a productive, harvestable fishing flat when open. Shallow near-shore areas of Quincy Bay also support winter flounder (*Pseudopleuronectes americanus*), Atlantic horseshoe crab (*Limulus polyphemus*), diadromous fish species including alewives (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), rainbow smelt (*Osmerus mordax*), American eel (*Anguilla rostrata*), white perch (*Morone Americana*), Atlantic tomcod (*Microgadus tomcod*), and a variety of other commercially and recreationally important finfish and crustaceans.

- The applicant should clarify whether excavation (dredging) will be needed in order to access and reset revetment and toe stones. If dredging is proposed, details should be provided on how and where dredged material will be stored. If new revetment material will be added, its volume should be estimated.
- The calculation of impacts and/or gains to the resource areas should be further broken down. For tidal flats, the amount of new fill for revetment encroachment, outfall pipes and/or aprons or armoring should be quantified. New fill may be subject to mitigation by permitting agencies.
- We support the proposal for two outfalls to share a new apron at Post Island Beach, and the removal and relocation of Chickatabot Road outfall to the existing groin.
- We also support the removal of grout within the revetment to increase interstitial spaces and surface rugosity.
- We concur that work in the intertidal should take place in the dry, and work should take place from uplands whenever possible. Construction access near salt marsh habitat should be avoided. As project permitting continues, a construction access plan should be developed.

- In areas where salt marsh is behind the seawall, the applicant should confirm that adequate flow will be maintained (if applicable) and sedimentation impacts will be avoided during construction.
- New staircase landing slabs in the tidal flat should be removed or minimized to the greatest extent possible.
- We agree with section 4.3.3, that planting supplemental dune vegetation could benefit coastal resiliency in the project area. We also feel that supplemental salt marsh plantings could help maintain the existing marsh and mitigate for impacts likely caused by the presence of the existing seawall. The development of a planting plan should be considered.
- It is unclear if any work will need to be done from the water, e.g. installing pipes or outfalls in existing groins. If barges are to be used, they should not be permitted to ground in the tidal flats.

Questions regarding this review may be directed to Jill Carr in our Gloucester office at (978) 282-0308 ext. 108.

Sincerely,



David E. Pierce, PhD
Director

DP/jc/sd

cc: Quincy Conservation Commission
Greg Bettencourt, DMF
Lisa Engler, Rebecca Haney, MA CZM
Ed Reiner, EPA
Josh Helms, ACOE
Tracy Adamski, Tighe and Bond

MASSACHUSETTS WATER RESOURCES AUTHORITY
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June 19, 2018

Matthew A. Beaton, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge St, Suite 900
Attn: MEPA Office, Purvi Patel
Boston, MA 02114

Subject: EOEEA #15861 – Environmental Notification Form
Adams Shore/Houghs Neck Seawall Repairs and Improvements Project
Quincy, MA

Dear Secretary Beaton,

The Massachusetts Water Resources Authority (MWRA) appreciates the opportunity to comment on the Environmental Notification Form (ENF) submitted by The City of Quincy Departments of Public Works (the "Proponent") for the Adams Shore/Houghs Neck Seawall Repairs and Improvements Project (the "Project") in Quincy, Massachusetts. This Project consists of improvements to the seawall, revetment, outfalls, and associated stairs in order achieve compliance with current safety standards, reduce storm damage, and provide additional climate change resiliency.

MWRA's comments relate to MWRA Enabling Statute Section 8(m) Permitting and Discharge Permitting from the Toxic Reduction and Control (TRAC) Department.

Section 8 (m) Permitting

Section 8(m) of Chapter 372 of the Acts of 1984, MWRA's Enabling Legislation, allows the MWRA to issue permits to build, construct, excavate, or cross within or near an easement or other property interest held by the MWRA, with the goal of protecting Authority-owned infrastructure. Due to the proximity of MWRA's High Level Sewer, the Project will require a Section 8(m) Permit. The Proponent should coordinate with Kevin McKenna in the Water and Wastewater Permitting Group at 1 (617) 305-5956 for assistance in this process.

TRAC Discharge Permitting

Pursuant to 360 C.M.R. 10.023(1), MWRA prohibits the discharge of groundwater into its sanitary sewer system except in a combined sewer area when specially permitted by the Authority and the municipality. Because the Project site is not located in a combined sewer area, the discharge of groundwater and stormwater to the sanitary sewer system is prohibited.

On behalf of the MWRA, thank you for the opportunity to provide comments on this Project. Please do not hesitate to contact me at 1 (617) 788-4958 with any questions or concerns.

Sincerely,

Bethany Card
Director
Environmental and Regulatory Affairs

cc: John Viola, DEP
Holly Johnson, DEP
Kevin McKenna, MWRA
Kattia Thomas, MWRA
David Kubiak, MWRA
Solomon Wondimu, MWRA

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
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MEMORANDUM

TO: Matthew A. Beaton, Secretary, EEA
ATTN: Purvi Patel, MEPA Unit
FROM: Bruce Carlisle, Director, CZM
DATE: June 26, 2018
RE: EEA 15861 – Adams Shore/Houghs Neck Seawall Repairs and Improvements Project; Quincy

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The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Environmental Notification Form (ENF), noticed in the *Environmental Monitor* dated May 23, 2018. Based on our review of the ENF, supplemental information dated June 13, 2018, and our participation in the site visit, CZM recommends that the remaining issues articulated below be addressed in permitting.

Project Description

The proposed project consists of repairs and improvements to the seawalls, revetments, outfalls, and associated beach access stairs along an 8,000 linear foot section of shoreline. The repairs and improvements include replacement of deteriorated precast seawall units and concrete leveling pads, resetting approximately 30% of the revetments within their existing footprint, removal of grout from the voids in existing revetments, removal of temporary rip rap placed on the coastal bank landward of the seawalls and revetments after the March 2018 storms, installation of granular stone backfill behind the walls, installation of one-way check valves in stormwater outfalls, repairs to existing tide gates, and reconstruction of the groin at Narragansett Road in the same footprint after the addition of the Chickatabot outfall pipe. In addition, eroded banks landward of the coastal engineering structures will be graded and stabilized with natural fiber blankets and erosion control vegetation.

Project Comments

CZM participated in an inter-agency pre-application site visit with representatives from the City of Quincy and their consultants on December 11, 2017. CZM provided recommendations regarding alternatives to minimize impacts associated with the repair and reconstruction of the coastal engineering structures in the project area. Many of the suggestions made to minimize impacts were included in the ENF.

The proposed project, as described in the ENF, includes the reconstruction of privately owned coastal engineering structures in-kind. As discussed at the site visit, CZM recommends that improvements be made to coastal engineering structures when they are repaired or reconstructed to reduce potential adverse impacts. CZM and the MA Department of Environmental Protection issued guidance on this topic in 2017: Applying the Massachusetts Coastal Wetlands Regulations: A Practical Manual for Conservation Commissions to Protect the Storm Damage Protection and Flood Control Functions of Coastal Resources Areas (best practices for repair of existing seawalls and revetments is covered on page 3-38 in the guidance). Since this filing only includes analysis of measures to

minimize impacts to the publicly owned walls in the project area, CZM recommends that the permits for this project include work to the public walls only. Any work to the private seawalls, revetments or other coastal engineering structures should follow the guidance referenced above and file for permits separately.

The proposed project includes replacement of the existing public and private access stairs in kind. The ENF noted severe erosion of the beach adjacent to the landing platforms. Solid concrete stairs and concrete landing slabs reflect waves, increasing scour of the adjacent beach and adversely affecting habitat. In order to minimize adverse impacts, CZM recommends the use of pile-supported stairs without landing pads. Structurally, this design will also be more resilient as beach elevations continue to lower over time.

The project includes stabilization of the coastal banks landward of the seawalls with natural fiber blankets and erosion control vegetation instead of lawn grass previously used. CZM strongly recommends that the specifications for this portion of the project include the use of blankets made from natural fibers only, as synthetic fibers do not readily break down and can become marine debris. In addition, CZM recommends the use of biodegradable anchors for the blankets. Finally, as discussed at the site visit, CZM recommends education and outreach to the residents in this area explaining that the vegetation has been changed to improve the ability of the bank to withstand wave splash and resist erosion. Fact sheets regarding coastal landscaping available on CZM's website could be used as part of the public education and outreach.

Federal Consistency

The proposed project is subject to CZM federal consistency review, in which case the project must be found to be consistent with CZM's enforceable program policies. For further information on this process, please contact, Robert Boeri, Project Review Coordinator, at 617-626-1050 or visit the CZM web site at www.state.ma.us/czm/fcr.htm.

BKC/rh

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