Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
EOEA No.: 14073
MEPA Analyst: Anne Canaday
Phone: 617-626-1035

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Revetment Reconstruction, Seawall Boulevard**		
Street: **Seawall Boulevard, Point Allerton Ave**		
Municipality: **Hull**	Watershed:	
Universal Tranverse Mercator Coordinates:	Latitude: **42° 18' 35"** Longitude: **70° 52' 55"**	
Estimated commencement date: **2007**	Estimated completion date: **2008**	
Approximate cost: $6,000,000	Status of project design: **50** %complete	
Proponent: **MA DCR, Office of Waterways**		
Street: **349 Lincoln Street, Bldg #45**		
Municipality: **Hingham**	State: **MA**	Zip Code: **02043**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Russell Titmuss**		
Firm/Agency: **Bourne Consulting Engineering**	Street: **184 West Central Street**	
Municipality: **Franklin**	State: **MA**	Zip Code: **02038**
Phone: **508-528-8133**	Fax: **508-520-1652**	E-mail: **Rtitmuss@bournece.com**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐Yes ☒No

Has this project been filed with MEPA before?
☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before?
☒Yes (EOEA No. 11459) ☐No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☐No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☐No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes	☐No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☐No

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):
Project will be funded 100% by MA DCR

Are you requesting coordinated review with any other federal, state, regional, or local agency?
☐Yes(Specify_____) ☒No

List Local or Federal Permits and Approvals: USACE

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

☐ Land	☐ Rare Species	☒ Wetlands, Waterways, & Tidelands
☐ Water	☐ Wastewater	☐ Transportation
☐ Energy	☐ Air	☐ Solid & Hazardous Waste
☐ ACEC	☐ Regulations	☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	4+ acres		
New acres of land altered		1.65 acres	
Acres of impervious area	0	0	0
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		1.65 acres	
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 (in feet)	0	0	0
TRANSPORTATION			
Vehicle trips per day	0	0	0
Parking spaces	0	0	0
WATER/WASTEWATER			
Gallons/day (GPD) of water use	0	0	0
GPD water withdrawal	0	0	0
GPD wastewater generation/ treatment	0	0	0
Length of water/sewer mains (in miles)	0	0	0

State Permits & Approvals

- ☒ Order of Conditions
- ☐ Superseding Order of Conditions
- ☒ Chapter 91 License
- ☒ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐Yes (Specify_____) ☒No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of

Rare Species, or Exemplary Natural Communities?
☒Yes (Specify_____**Shown on NHESP maps 2006 – filed under NOI**____) ☐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_____) ☒No

- **Point Allerton Lifesaving Station is on the list of historic places but is not in the area of the project.**

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?
☐Yes (Specify_____) ☒No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?
☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

PROJECT DESCRIPTION

The Massachusetts Department of Conservation and Recreation (DCR) Office of Waterways is seeking to repair and improve the flood protection provided by the Seawall Boulevard revetment at Point Allerton in Hull, MA.

The existing revetment is in poor condition and does not provide adequate flood protection to the adjacent properties. A study of the existing revetment has revealed the following key issues:

- Long term trend on beach in front of wall is erosion with vertical rate of change up to -0.064 feet per year.
- Predominant wave direction is approaching site from the east towards lowest crest area near STA 12+00. This exposure is major cause of the extensive erosion behind the revetment crest.
- Typical 100 year return period storm runup elevations are +34'MLW compared to crest elevations from +25'MLW at STA 12+00 to +30'MLW between STA 13+00 and 17+00.
- Predicted 100 year storm overtopping discharges are order of magnitude larger than acceptable rates.
- Significant repairs and alterations have been made to the revetment in 1982, 1987, 1995, 1998 and 2000.
- Revetment is in poor condition and defects include:
    - Loss of underlayer stone and sinking of armor layer by up to 12"
    - Erosion of material from beneath crest armor stone causing large voids
    - Localized loss of armor stone
    - Severe erosion of drainage swale, grassed areas and bank behind revetment.
- Area of adjacent bank at southern end STA 10+00 has severe erosion. Condition of neighboring house is critical.
- Fundamental problems with revetment construction include:
    - Existing Armor stone is undersized for 100 year return period storm. Calculated median stone size should be 13 tons compared to observed 8 to 12 ton stones.
    - Only single armor layer is present. This decreases stability of stone and increases runup and overtopping discharge.
    - Loss of stone from single armor layer exposes underlayer to wave attack.
    - Underlayer stone is undersized and can be lost through openings between armor stones.

The proposed project seeks to address these issues by providing major improvements to the existing revetment. The proposed revetment cross section for the majority of the site includes the following:

- filling the existing voids
- addition of geotextile and suitable graded stone underlayers
- resetting the existing armor stone
- addition of a second armor cover layer consisting of heavier armor stones sized for projected wave conditions at the site.
- raised crest elevation of +36 feet MLW from +30 feet MLW.

The addition of the second armor layer will provide the necessary stability to the revetment and provides improved ability to absorb some damage without exposure of the smaller underlayer stone. This is considered extremely important at this highly exposed location where maintenance is very difficult. The second armor layer and the raised crest elevation will significantly reduce overtopping by absorbing more wave energy and allowing higher runup to occur.

The revetment will also be extended to the south to address the erosion issues on the existing seawall and the neighboring house. The transition to the adjacent beach area will be made more gentle by a

revetment slope flattening out to 1 vertical to 3 horizontal. Past erosion of this area will be remediated by the addition of cobble beach renourishment outshore of the proposed revetment. The proposed material will be matched as closely as possible with the adjacent natural cobble berm and will also provide a much smoother transition between the existing steep armored revetment slope and the adjacent beach areas.

The line of the new revetment at the southern end will leave an open space between the existing stone wall and the new revetment. This area will be incorporated into an enlarged park area leading to the beach access. The existing beach access at the southern end will be relocated to the end of the new revetment. The beach access will consist of a walkway behind 64 Holbrook Avenue from the park area leading to concrete stairs down to the existing grades.