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.: 14474
MEPA Analyst: Ruth Patel
Phone: 617-626- 1029

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: Damde Meadows Salt Marsh Restoration (World's End Reservation)		
Street: 250 Martins Lane		
Municipality: Hingham	Watershed: Boston Harbor Basin	
Universal Transverse Mercator Coordinates:	Latitude: 42 d 15 m 30 s Longitude: 70 d 52 m 26s	
Estimated commencement date: 7/21/09	Estimated completion date: March 2011	
Approximate cost: $600,000	Status of project design: 100 %complete	
Proponent: The Trustees of Reservations		
Street: 572 Essex Street		
Municipality: Beverly	State: MA	Zip Code: 01915
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Stacy H. Minihane		
Firm/Agency: Beals and Thomas, Inc.	Street: 32 Court Street	
Municipality: Plymouth	State: MA	Zip Code: 02360
Phone: 508-366-0560	Fax: 508-366-4391	E-mail: sminihane@btiweb.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. 12748)** ☐No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting: No

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): **None**

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

List Local or Federal Permits and Approvals: **Order of Conditions, Hingham Conservation Commission, Category 2 Programmatic General Permit (Section 404), Army Corps of Engineers**

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

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

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage[1]	±1.4		
New acres of land altered[2]		±0.5	
Acres of impervious area	0	0	0
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		±1.1[3]	
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)	--	--	--
TRANSPORTATION			
Vehicle trips per day	--	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:

MESA Joint Filing with NOI

MHC finding of No Adverse Effect

1 Includes limit of construction and access/staging/stockpile areas where they do not overlay existing drives/roads. Does not include dredge material storage location at Turkey Hill.

2 Does not include construction and access/staging/stockpile areas.

3 Note that this acreage was determined by summing the area of impact areas for each "other" resource area. Many of these resource areas overlap (refer to attached plans), and therefore, the combined alteration area would be less than 1.1 acre.

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: **Priority and Estimated Habitat**) ☐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: **Boston Harbor Islands Archaeological District, World's End, Martin's Well Dam**) ☐No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☒**Yes** (Specify: **Lower Dike, MHC issued a "finding of no adverse effect"**) ☐No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☒**Yes** (Specify: **Weir River ACEC**) ☐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.*)

a. Description of Project Site The overall property is identified as a portion of Hingham Assessor's Map 20 Parcel 60 and in total is approximately 255 acres. The Damde Meadows salt marsh and surrounding area lies within the Boston Harbor Basin, and the Weir River Area of Critical Environmental Concern.

Damde Meadows was cut off from the tide in the 1600's and was managed as a hay field until 1967. The complex drainage structures that were historically installed to keep this area dry fell into disrepair, and the area filled with brackish water and was subsequently invaded by dense stands of common reed. In 2003, box culverts were installed at both the upper and lower dikes in order to enhance/restore tidal flows to the area. The installation of these culverts resulted in a significant decrease in the amount of common reed present, and expansion of coastal resources (salt marsh, etc.).

The Project Site consists of an area extending south from Damde Meadows, across an upper dike/causeway, through an estuary, across a lower dike/causeway and into Hingham Harbor (Refer to Figure 1). The upper and lower dikes are located west and northwest of the parking area for the World's End Reservation and link a pedestrian path and driveway with the World's End peninsula. Presently, two 4 by 8 foot concrete culverts in the dikes connect Damde Meadows to Hingham Harbor. The Project Site also contains access, staging, and stockpile areas. The staging area is located in a field west of the lower causeway and the stockpile area consists of an unimproved parking area northeast of the culvert removal area.

b. Description of On-site and Off-site Alternatives Off-site alternatives were not considered, as the project is meant to increase tidal influence to the Damde Meadows estuarine system.

Alternative 1-No Change The no change alternative would propose no work on the culverts but provide barriers around the proposed work area. Advantages: Least expensive alternative, No alteration to wetland/coastal resource areas, Maintains appearance of historic area. Disadvantages: No increase in hydraulic capacity, No public safety improvements for water recreation, No resource area improvements, No reduction in channel constrictions. This alternative was rejected because it does not meet the project goals.

Alternative 2-Remove inner or outer culvert only

Removal of only the upper culvert would not result in increased tidal influence due to the existing downgradient restriction (lower culvert). Removal of only the lower culvert would merely increase tidal influence to a small area

(the area between the causeways). Therefore, Alternative 2 is not a viable option for the proposed project.

Alternative 3-Prefered and Proposed Alternative
The preferred option involves full removal of both culverts, creation of 20-foot open channel bottom widths, and riprap armament of the causeways and approaches to the channels. This option would result in the lowest flow velocities of the three options and would reduce the potential for erosion and sedimentation of adjacent resource areas. This option is the most appropriate from both engineering and habitat perspectives and as such, is the preferred alternative. This alternative is consistent with the natural resource goals at the site.

c. Potential On-site and Off-site Mitigation Measures This is a pro-active Salt Marsh restoration project that is estimated to enhance approximately 15 acres of Salt Marsh. Therefore, there are no on-site or off-site mitigation measures proposed other than sediment and erosion control and other construction related Best Management Practices during construction activities.