Commonwealth of Massachusetts Executive Office of Environmental Affairs ■ MEPA Office

Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs

EOEA No.: 13076 MEPA Analyst**Derectee Bockley** Phone: 617-626-1044

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:	+
Quivett Creek Marsh Restoration Project	
Street: Sea Street (abandoned) Municipality: Dennis & Brewster	Watershed: Cape Cod
Universal Tranverse Mercator Coordinates	
Zone 19N NAD83	Longitude: 41° 44' 48.7" North
404921 East 4622304 North	
Estimated commencement date: Nov. 200	
Approximate cost: 150,000.00	Status of project design: 75% complete
Proponent: Town of Dennis	
Street: 485 Main Street, PO Box 1419	
Municipality: South Dennis	State: MA Zip Code: 02660
Name of Contact Person From Whom Co	pies of this ENF May Be Obtained:
Craig A. Wood	
Firm/Agency: The Louis Berger Group, In-	
Municipality: Manchester	State: NH Zip Code: 03101
Phone: (603) 644-5200 Fax:	(603) 644-6220 E-mail: cwood@louisberger.com
Does this project meet or exceed a mandator Has this project been filed with MEPA before Has any project on this site been filed with MI	☐Yes
Is this an Expanded ENF (see 301 CMR 11.05(7)) r a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CMR 11.0 a Waiver of mandatory EIR? (see 301 CMR 11.1 a Phase I Waiver? (see 301 CMR 11.11)	☐Yes No □yes No
Identify any financial assistance or land trans the agency name and the amount of funding	fer from an agency of the Commonwealth, including or land area (in acres): N/A
Are you requesting coordinated review with a Yes(Specify	ny other federal, state, regional, or local agency?
Order of Conditions	oproval ennis/Brewster Conservation Commissions EP-Waterways Program

Conservation Permit Water Quality Certification (Section 401) Federal Consistency PGP Category II

treatment

(in miles)

Length of water/sewer mains

Division of Fisheries and Wildlife DEP-Wetlands and Waterways Program MA Coastal Zone Management Army Corps of Engineers

Which ENF or EIR review thresh	iold(s) does th	ie project me	et or exceed	(see 301 CMR 11.03):
☐ Land ☐ Water ☐ Energy ☐ ACEC ☐	⊠ Rare Speci ☐ Wastewate ☐ Air ☐ Regulations	r 🔲	Transportat Solid & Haz	Vaterways, & Tidelands ion ardous Waste Archaeological
Summary of Project Size	Existing	Change	Total	State Permits &
& Environmental Impacts				Approvals
L	AND			Order of Conditions
Total site acreage	11 Acres			Superseding Order of Conditions
New acres of land altered		0		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		0		MHD or MDC Access Permit
Square feet of new other wetland alteration (Salt Marsh)		875 sf perm. 100 sf temp.		☐ Water Management Act Permit
Acres of new non-water dependent use of tidelands or waterways		0		☐ New Source Approval☐ DEP or MWRA Sewer Connection/ Extension Permit
STRI	JCTURES			Other Permits
Gross square footage	0	0	0	(including Legislative Approvals) — Specify:
Number of housing units	0	0	0	, pp.oraio, opcony.
Maximum height (in feet)	5 ft	3 ft	8 ft	Army Corps of Engineers-
TRANSI	PORTATION			Individual Permit
Vehicle trips per day	0	0	0	Coastal Zone Management- Federal Consistency
Parking spaces	0	0	0	
WATER/V	VASTEWATE	R		
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/	0	0	0	

0

0

0

CONSERVATION LAND : Will the project involve the conversion of public parkland or other Article 97 public natur
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 Although properties are encumbered
☐Yes (Specify)
<u>RARE SPECIES</u> : Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare <u>Species</u> , or Exemplary Natural Communities?
☑Yes (Specify: This restoration site is located within an area mapped by the Massachusetts Natural Heritaç and Endangered Species Program (MNHESP) as Priority Habitats-PH 1487 ☐No
HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district liste
in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth Yes (Specify) No The SHPO has indicated that the project is unlikely to affect significant historic or archaeological resources (see Attachment A).
project is unlikely to affect significant historic or archaeological resources (see Attachment A).
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?
☐Yes (Specify)
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.) Quivett Creek defines the border border of Dennis and Brewster on Cape Cod, Massachusetts. The Creek and associated salt marsh lies just north of Route 6A. An abandoned roadbed (Sea Street) bisects the upper limits of the marsh. A pair of 30-inch corrugated metal pipes under Sea Street carries flow in Quivett Creek. The Creek extends under Route 6A via a 30-inch concrete pipe and connects to Bound Brook Reservoir. A masonry fish ladder at the outlet of the pond allows herring to spawn in the impoundment. The existing culverts under Sea Street, as well as the roadbed, itself are in poor condition and will fail in the near future without necessary rehabilitation. Substantial erosion is currently occurring within the former roadbed and around the existing culverts carrying sediment into the adjacent marsh. Field observations recorded a limited restriction in tidal flow to the upgradient marsh (which is approximately 11 acres in size) during high amplitude tide cycles. By stabilizing the eroding roadbed and enlarging the dilapidated culverts, the project will minimize the adverse ecological effects of the existing tidal restriction to the upper marsh, ease the passage of river herring, avoid increases in water levels during larger storm events which could impact abutting low-lying properties. and enhance passive recreation and environmental education opportunities.

Observations indicate a population of herring reluctant to pass beyond Sea Street. A larger structure will improve passage of migrating herring by increasing natural light, reducing velocities and eliminating the existing rough edges to the culverts. The culvert design is a three-sided, 8x8-foot structure with a 12-foot wide timber span over the top. Break-away bollards are proposed at either end of Sea Street for emergency access. The culvert will be outfitted with flashboards to restrict water movement above the design elevation. The provision for flashboards will allow town officials to gradually increase tidal flows over time. The design also includes the grading and repair of Sea Street to be at or above Elevation 8.0 feet NAVD to reduce the frequently of the roadbed being overtopped by tidal waters.

Unavoidable impacts to a state-listed plant (*Spartina cynosuroides*) are estimated as a loss of less than 1% of the local population. Permanent impacts to salt marsh associated with the culvert replacement total 875 square feet. Approximately 10 acres of remaining salt marsh and/or *Phragmites*-dominated wetland are anticipated to benefit from somewhat increased tidal flow during typical spring tides. The design also includes the restoration of 220 square feet of marsh within the former roadbed.