Commonwealth of Massachusetts

ENF

Executive Office of Environmental Affairs ■ MEPA Office

Environmental Notification Form

Septic system For Office Use Only Executive Office of Environmental Affairs	
EOEA No.: 1273/ MEPA Analyst Tay Wickersham Phone: 617-626-1022	

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: Wings Neck Road Ma	arsh R	estoration					_
Street: Wings Neck Road							
Municipality: Bourne	Watershed: Buzzards Bay						
Universal Tranverse Mercator Coordin	ates:	Latitude:					
		Longitude					
Estimated commencement date: May	'02	Estimated				1ay '02	
Approximate cost: \$40,000		Status of p		design:		100 % com	ple
Proponent: Town of Bourne Cons	ervatio	on Commis	sion				
Street: 24 Perry Avenue							
Municipality: Bourne		State: MA	-	Zip Co	A STATE OF THE PARTY OF THE PAR	2532	
Name of Contact Person From Whom	Copies	of this ENF	May	Be Obta	ained:		
Barbara Frappier							
Firm/Agency: Warwick & Associates	, Inc.					O. Box 801	
Municipality: North Falmouth		State: MA		Zip Co			
Phone: (508) 563-7777 F	ax: (50	08) 563-263	38	E-mail:	warwic	k@adelphia.	ne
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) No							
Is this an Expanded ENF (see 301 CMR 11.05(7) a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CMR 1 a Waiver of mandatory EIR? (see 301 CMR 1 a Phase I Waiver? (see 301 CMR 11.11)	11.09)	⊠Yes □Yes				No No No No	
Identify any financial assistance or land trathe agency name and the amount of funding Restoration Program \$19,000.							g
Are you requesting coordinated review wit ☐Yes. Specify:_	h any o	ther federal,	state,	regional	, or loca	al agency?	

Which ENF or EIR review three	shold(s) does t	he project me	eet or excee	ed (see 301 CMR 11.03):		
Land Water Energy ACEC	☐ Rare Spec ☐ Wastewate ☐ Air ☑ Regulation	er 🔲	 ✓ Wetlands, Waterways, & Tidelands ☐ Transportation ☐ Solid & Hazardous Waste ☐ Historical & Archaeological Resources 			
Summary of Project Size	Existing	Change	Total	State Permits &		
& Environmental Impacts	A			Approvals		
Total site acreage New acres of land altered	10.07+-	0		✓ Order of Conditions✓ Superseding Order of Conditions✓ Chapter 91 License		
Acres of impervious area	< .1	≤ .03	≤ .1			
Square feet of new bordering vegetated wetlands alteration		0		Certification MHD or MDC Access Permit		
Square feet of new other wetland alteration		545+- S.F.		☐ Water ManagementAct Permit☐ New Source		
Acres of new non-water dependent use of tidelands or waterways		0		Approval DEP or MWRA Sewer Connection/		
	UCTURES			Extension Permit Other Permits		
Gross square footage				(including Legislative		
Number of housing units				Approvals) - Specify:		
Maximum height (in feet)				These are permits required for		
TRANS	PORTATION			the project but not yet received.		
Vehicle trips per day	N/A	N/A	N/A			
Parking spaces	N/A	N/A	N/A			
WATER/\	WASTEWATER	?				
Gallons/day (GPD) of water use	N/A	N/A	N/A			
GPD water withdrawal	N/A	N/A	N/A			
GPD wastewater generation/ treatment	N/A	N/A	N/A			
Length of water/sewer mains (in miles)	N/A	N/A	N/A			
CONSERVATION LAND: Will the propublic natural resources to any purpor	oject involve the	ance with Artic	public parkla le 97?	nd or other Article 97		

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

Yes (Specify	_)	
RARE SPECIES: Does the project site include Estimated H Sites of Rare Species, or Exemplary Natural Communities? \(\times \) Yes (Specify \(Estimated Habitat per Natural H)		riority
HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does to district listed in the State Register of Historic Place or the in the Commonwealth? Yes (Specify	ventory of Historic and Archaeological A	
If yes, does the project involve any demolition or destruction archaeological resources?		
☐Yes (Specify)	
AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is t Environmental Concern? Yes (Specify		ritical

<u>PROJECT DESCRIPTION</u>: 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.)

Wings Neck Road, the only road providing access to the Wings Neck area in the Town of Bourne, crosses a man-made causeway that bisects a salt marsh. The existing 24-inch diameter culvert under and through the causeway is in disrepair and its inadequate size restricts the tidal flow to and fresh water drainage from the upgradient salt marsh. The proposed project will replace the existing culvert with two 3' x 4' concrete box culverts. Associated work includes the construction of rip-rap aprons at the culvert openings, removal of approximately 225 c.f. of sand/sediment build-up, replacement of the guardrail, resurfacing of the roadway, and some planting on the banking. The resource areas in the vicinity of the project site include Coastal Bank, Land Under Ocean, Salt Marsh, Land Containing Fisheries and Shellfisheries, and Land Subject to Coastal Storm Flowage. A portion of the site is also within an Estimated Habitat as mapped by the Natural Heritage & Endangered Species Program. A portion of the work site is owned by the Town of Bourne while the remainder is owned by private parties who have advocated for this work for some time.

This project has been accepted into the GROWetlands Initiative by EOEA's Wetlands Restoration Program as a viable and meaningful step in the effort to rehabilitate or reclaim lost wetlands, particularly salt marshes, throughout the Commonwealth. This project is also a Coastal America project and is supported by each of the Coastal America partners.

The tidally-restricted portion of the marsh is approximately eight acres in area. Over the years the restriction of tidal flow has resulted in a loss of some salt marsh around the perimeter and the encroachment of woody vegetation and invasive species such as common reed (Phragmites australis) onto the marsh. A significant problem is that the restrictive culvert hinders the ability of the

upper marsh to properly drain at each tide cycle. This slow drainage has created a shoaling of sand at the mouth of the culvert which only exacerbates the overall situation. More importantly, the estuarine and coastal waters are being deprived of vital detritus and dissolved organics. In addition to enhancing the ability of this marsh to act as an important spawning and nursery habitat for finfish, its rehabilitation is critical to the nekton that utilize the tidal pools.

Due to the specific nature of the project, two options were considered. The first option is to do nothing. This alternative will only lead to further functional loss of the upper salt marsh, depriving the estuarine and coastal waters of important nutrients and allowing upland and/or invasive plant species to continue to encroach onto the marsh. The proposed alternative is based on the results of hydraulic/hydrologic modeling performed for the site by the Natural Resources Conservation Service and is the only viable alternative that will restore/enhance tidal flows to, and improve fresh water drainage from, the tidally-restricted marsh. The proposed work will not lead to any additional flooding of adjacent developments.

Preliminary discussions with design engineers and contractors indicate that all of the work can be accomplished within one week. Prior to the start of construction a siltation / turbidity barrier will be installed to prevent the migration of any disturbed soils beyond the immediate work site. At no time will any excavated soils or other materials be stockpiled in a wetland resource area or allowed to erode into a resource area. Once the barriers have been installed it will be necessary to remove the roadway over the existing culvert. This will be done in ¼ sections. As each new culvert is positioned the roadway will be replaced. The proposed rip-rap apron will prevent the erosion of the banking at either end of the culvert. All heavy equipment will operate from the roadway. There will be on-site hazardous spill absorbent pads and containment booms in the event of an accident or emergency. During construction, traffic flow on Wings Neck Road will be maintained.

The goal of the project is to restore a more normal tidal hydrology to enhance the functions provided by this tidally-restricted salt marsh. There will be unavoidable permanent loss of approximately 130 s.f. of salt marsh at the culvert openings. This is a small sacrificial loss leading to a significant gain in quality and function of the eight-acre salt marsh and its associated marine environment.