## 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.: 1378/ 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: Marina Improvements	– Wavel	and Marina, H	Iull, MA			
Street:2-4 A Street						
Municipality: Hull		Watershed: Hull Bay				
Universal Tranverse Mercator Coord	linates:	Latitude:42d17'27"N				
		Longitude:70d53'0"W				
Estimated commencement date: Fall 2006		Estimated completion date: Spring 2009				
Approximate cost: \$2.5 million		Status of project design: 90 %complete				
Proponent: Folsom Development Co	гр.					
Street: 54 Broadway						
Municipality: Norwood		State: MA Zip Code: 02062				
Name of Contact Person From Who Susan Nilson, P.E.	m Copies	of this ENF N	flay Be Obtaine	ed:		
Firm/Agency: CLE Engineering, Inc.		Street: 15 Ci	reek Road			
Municipality: Marion		State: MA	Zip Code	: 02738		
Phone: 508 748-0937	Fax: 508	3 748-1363	E-mail:SNilson	@CLEengineering.co		
Does this project meet or exceed a ma Has this project been filed with MEPA I Has any project on this site been filed v	oefore?	Yes Yes (EOEA No	)	⊠No ⊠No ⊠No		
Is this an Expanded ENF (see 301 CMR 11. a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 Cl a Waiver of mandatory EIR? (see 301 Cl a Phase I Waiver? (see 301 CMR 11.11)	MR 11.09)	esting:		□No □No □No □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):						
Are you requesting coordinated review Yes(Specify				r local agency?		
List Local or Federal Permits and Appr <u>DEP Chapter 91 license, Order of Con</u> Programmatic General Permit Categor	ditions fro					

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):						
☐ Land ☐ Water ☐ Energy ☐ ACEC	Rare Speci Wastewate Air Regulation	s	Transportation Solid & Haza	ardous Waste Archaeological		
Summary of Project Size	Existing	Change	Total	State Permits &		
& Environmental Impacts				Approvals		
	LAND			Order of Conditions		
Total site acreage	0.92			Superseding Order of Conditions		
New acres of land altered				☐ Chapter 91 License		
Acres of impervious area	0.19	0.16	0.35	401 Water Quality		
Square feet of new bordering vegetated wetlands alteration				Certification  MHD or MDC Access  Permit		
Square feet of new other wetland alteration		1,112 (land under ocean & coastal beach)		☐ Water Management _ Act Permit		
Acres of new non-water dependent use of tidelands or waterways		0		☐ New Source Approval ☐ DEP or MWRA Sewer Connection/		
STR	- UCTURES			Extension Permit		
Gross square footage				Other Permits		
Number of housing units				(including Legislative Approvals) — Specify:		
Maximum height (in feet)				ACOE Programmatic		
TRANS	PORTATIO	V		General Permit Category  2, Coastal Zone		
Vehicle trips per day				Management		
Parking spaces				Consistency		
WATER/	WASTEWAT	ER				
Gallons/day (GPD) of water use						
GPD water withdrawal			-			
GPD wastewater generation/ treatment						
Length of water/sewer mains (in miles)						
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						
☐Yes (Specify		)	⊠No			

RAKE SPECIES: Does the project site include Estimated Hat	Jilal (	n Kare opecies, vernar Pools, Prionty offes o
Rare Species, or Exemplary Natural Communities?		
☐Yes (Specify	_)	⊠No
HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the	e proi	ect site include any structure, site or district
listed in the State Register of Historic Place or the inventory of		
Commonwealth?	JI 1 110	tono and Atonacological Acocts of the
Yes (Specify	.)	⊠No
If yes, does the project involve any demolition or destruction archaeological resources?	of an	y listed or inventoried historic or
☐Yes (Specify	)	⊠No
AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is th	e pro	ject 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.*)

<u>Site Description:</u> The applicant, Folsom Development Company, is proposing marina improvements to the existing Waveland Marina, located at 2-4 A Street, Hull Assessor's Map 18, Parcel 150, in Hull, MA. The site is located on Hull Bay and is bordered to the north by a municipal pier.

<u>Project Description:</u> The design of the marina improvements includes a wave attenuator (to replace the existing one), a reconfiguration and expansion of the existing floating dock system, relocation of the travel lift including new pile supported piers and a sheet pile section along the top of the existing stone revetment, a ramp and float system to provide access to the marina in accordance with 521 CMR: Architectural Access Board, and a pedestrian walkway. The project also includes the permitting of 40 moorings, which have been historically rented by the marina. Also included in this project is the repaving of the existing marina parking area and associated storm water management system which includes filling of the existing travel lift area to provide treatment on site. <u>Purpose:</u> The purpose of the project is to improve marina facilities including the addition of boat slips and permitting of relocated moorings, new travel lift piers, replacement of the existing wave attenuator, improved access and designated marina parking spaces. The proposed project is water dependent and includes 150 slips, resulting in improved access for the public to navigable waters.

Existing Conditions: The site is located on Hull Bay at the end of A Street, adjacent to the municipal "A-Street Pier". The site is currently an active marina business providing boat storage, parking, boat maintenance and slips for customers to gain access to naviable waters. Nantasket Survey Engineering, LLC conducted a site survey to depict existing conditions relative to NGVD on the upland portion of the marina site. CLE Engineering, Inc. conducted a hydrographic survey (depths relative to mean low water) of the waterside area on November 2, 2005. The attached plan depicts the existing conditions and general hydrography of the area surrounding the proposed float system and wave attenuator. At the time of the survey, there was no submerged aquatic vegetation within the survey area noted based on visual observations as well as the fathometer rolls.

<u>Resource Areas:</u> Project components are located within Land Under Ocean, Land Containing Shellfish, Coastal Beach and Land Subject to Coastal Storm Flowage.

## Performance Standards and Mitigation Measures

Land Under Ocean: Pursuant to 310 CMR 10.25, Land Under Ocean is likely to be significant to storm damage prevention, flood control, protection of marine fisheries and wildlife habitat and where there are shellfish, protection of land containing shellfish. The project includes the expansion/reconfiguration of a floating dock system, the replacement of the existing wave attenuator, the pile supported access ramp system, and the construction of timber piers to support the travel lift. Consistent with 310 CMR 10.25 (6), this water dependent project has been designed using best available measures to minimize adverse effects caused by:

- a. alterations in water circulation
- b. destruction of eel grass (Zostera marina) or widgeon grass (Rupia maritina)
- c. alterations in sediment grain size,
- d. changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants
- e. alterations of shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae

The wave attenuator is a floating dock system that is replacing a system that has historically had issues with breakage

and loss of components. The new concrete wave attenuator and floating dock systems will be constructed utilizing a core of closed cell polystyrene foam that is totally encapsulated. These floats will be pile supported, therefore minimizing the impact on bottom topography and eliminating the impact of current bottom anchor systems on the land under ocean. The system has been engineered for the site conditions as detailed in Exhibit D, and provides greater than 2.5 feet of clearance below the floats at all tides. This will further minimize the impacts on bottom topography.

The proposed piles will be driven using a barge-mounted crane and hammer and the proposed wave attenuator and dock system will be deployed from water based equipment floated into the site.

As described above, there was no submerged aquatic vegetation observed through visual observation or based on the fathometer rolls during the hydrographic survey of the site. The MassGIS database does not show any eel grass (Zostera marina) or widgeon grass (Rupia maritina) within the vicinity of the project.

Coastal Beach: Pursuant to 310 CMR 10.27, Coastal Beaches are likely to be significant to storm damage prevention, flood control, and the protection of wildlife habitat. Within the coastal beach, the project includes the construction of a section of the timber piers to support the travel lift, and the installation of a sheet pile section across the existing 40 foot wide opening of the travel lift. The area landward of the proposed sheeting will be filled and utilized for storm water management. An existing stone revetment (340 linear feet) forms the landside boundary along the site. The travel lift area is the only section on site without a revetment. Because of its configuration relative to the rest of the site and downdrift areas, filling of this area will not interfere with littoral drift or increase erosion. The treatment of stormwater within this area will result in a net improvement to water quality relative to existing conditions, which allow for untreated surface water run off from the site to the waterway.

Consistent with 310 CMR 10.27 (6), this water dependent project has been designed using best available measures to minimize adverse effects caused by:

- a. alterations in water circulation
- b. alterations in the distribution of sediment grain size,
- c. changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants

Land Containing Shellfish: Based on MassGIS, the project area is conditionally restricted as a shellfish growing area along the shoreline and prohibited in Hull Bay. The project has however been designed to minimize impacts to this potential resource as described above.

Storm Water Management: Consistent with the MA DEP Stormwater Management Policy, Best Management Practices have been incorporated to the maximum extent practicable for this combination new development/redevelopment project. The proposed parking area encompasses approximately 8,270 square feet of existing pavement and pedestrian walkway that is considered redevelopment and 7,230 square feet of new pavement over gravel and crushed stone that is considered new development. The stormwater system is designed to provide the required volume of runoff infiltration and to remove 80% of the Total Suspended Solids from the runoff from the combined 15,500 square foot of new development and redevelopment. The calculations are provided in the Stormwater Management Form attached to the NOI form. The existing travel lift will be abandoned and will be constructed as an infiltration trench as described in the Stormwater Management Policy. Stormwater will collect in 3 catch basins: each constructed with a sump a minimum of 4' deep and fitted with a stainless steel hood designed to trap hydrocarbons and floating debris. One catch basin will be installed in the parking lot at the proposed travel lift area to capture water used to hosing off boats in the travel lift. It will be piped to a second catch basin in the parking lot to the south that will capture parking lot runoff. The third catch basin will be constructed in the parking lot to the south of the infiltration basin. The catch basins will discharge to the infiltration basin, which will be created by backfilling the existing travel lift area with clean sand covered with crushed stone in a Geogrid® matrix to allow for the passage of vehicle traffic. Two perforated pipes will be set level near the surface of the infiltration trench to provide uniform distribution of the runoff from the catch basins. The infiltration trench will be 14' wide by 60' long providing a surface area of 840 square feet. At high tide the water table in the infiltration area will be less than the 5.13 mean high water elevation (relative to NGVD), but assuming the elevation of the distribution pipes is 8.2' and the water table is 5' there will be a minimum of 3.2' of separation between the bottom of the diffuser pipe and the groundwater table at high tide. The separation will be greater at low tide. The use of hooded deep sump catch basins to trap hydrocarbons and sediment followed by sand filtration ensures runoff from the combination new development/redevelopment area will be adequately treated to comply with DEP's Stormwater Management Policy.

Alternatives Analysis: The proposed marina improvements have no off-site alternatives. On-site alternatives include:

- No-build alternative: The no-build alternative will result in the continued limited access to navigable waters from
  the site and the continued surface run off of untreated storm water into the adjacent waterbody. The no-build
  alternative does not meet the project goals and is not considered further.
- Alternative Float System: The use of a seasonal, bottom anchored float system would not be viable as the
  intermittent impact for deployment and retrieval and the continued use of bottom anchored is greater than the
  proposed improvements.
- The proposed marina improvements are the preferred alternative presented in this Notice of Intent filing. The improvements will provide increased access to navigable waters to recreational boaters in an area that is