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## 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.: / 2896 MEPA Analyst: B, 11 GAGE Phone: 617-626-/0 2 5	

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:						
Peabody Family Trust House- Si	ngle Fa	mily Dwelling				
Street: 51st Street						
Municipality: Newbury, MA		Watershed: Merrimack				
Universal Tranverse Mercator Coordinates:		Latitude: N42-48.6 Longitude: W70-48.6				
Estimated commencement date: ASAP		Estimated completion date: 6 months from start				
Approximate cost: TBD		Status of project design:			%complete	
Proponent: Peabody Family Trust						
Street: 51st Street						
Municipality: Newbury		State: MA	Zip Code: (	01951		
Name of Contact Person From Whom	Copies	of this ENF May	Be Obtained	<b>d</b> :		
Stephen Peabody Trustee						
Firm/Agency:		Street: PO Box 624				
Municipality: Newburyport		State: MA.	Zip Code:	01950		
Phone: 978-462-8412	Fax: <b>n/a</b>		E-mail:	ibash u	20141.0011	
Does this project meet or exceed a mand waterway& tideland	ΧY		CMR 11.03)? We	etlands, No		
Has this project been filed with MEPA bet		s (EOEA No	)	X No		
Has any project on this site been filed wit	th MEPA	v before? Yes (EOEA No	)	X No		
Is this an Expanded ENF (see 301 CMR 11.05 a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CMR a Waiver of mandatory EIR? (see 301 CMR a Phase I Waiver? (see 301 CMR 11.11)	R 11.09)	esting:		X No X No X No X No		
Identify any financial assistance or land the agency name and the amount of fun	transfer ding or l	from an agency of and area (in acres)	the Common : <b>None</b>	wealth,	including	
Are you requesting coordinated review w	vith any		, regional, or <b>X</b> No	local ag	jency?	

List Local or Federal Permits and Approvals: Septic Disposal Permit approved by Newbury by Board of Health in 12/1999 and Newbury Conservation Commission approved Order of Conditions on 3/29/2001. Modifications to the septic system are being discussed with the Newbury Board of Health and the DEP's Northeast Regional office

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 ☐ Regulations	r 🔲	Transportati Solid & Haz Historical & Resources	ardous Waste Archaeological			
Summary of Project Size	Existing	Change	Total	State Permits &			
& Environmental Impacts				Approvals			
	LAND			Order of Conditions			
Total site acreage	.85			<ul><li>Superseding Order of Conditions</li></ul>			
New acres of land altered		.03		Chapter 91 License			
Acres of impervious area	0	.03	0	☐ 401 Water Quality Certification			
Square feet of new bordering vegetated wetlands alteration		0		MHD or MDC Access Permit			
Square feet of new other wetland alteration		.09		☐ Water Management Act Permit			
Acres of new non-water dependent use of tidelands or waterways		0		☐ New Source Approval ☐ DEP or MWRA Sewer Connection/			
STRI	UCTURES			Extension Permit			
Gross square footage	140 sq ft	1080 sq ft	1220 sq ft	X Other Permits			
Number of housing units	0	1	1	(including Legislative Approvals) — Specify:			
Maximum height (in feet)	0	35 ft	35ft				
TRANS	PORTATION			Final Order of Conditions			
Vehicle trips per day	0	3-4	3-4				
Parking spaces	0	2	2				
WATER/\	WASTEWATE	R					
Gallons/day (GPD) of water use	0	330 GPM	330 GPM				
GPD water withdrawal		330 GPM	330 GPM				
GPD wastewater generation/ treatment		330 GPM	330 GPM				
Length of water/sewer mains (in miles)		N/A	N/A				

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) X No
Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?
☐Yes (Specify) X 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) X 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) X No 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) <b>X</b> No
Millennium engineering using the current state maps that defines the ACEC, found the location of the project to be outside of all areas that are mapped on Plum Island. In addition the project is for the construction of a
single-family dwelling.

**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.*)

The Proponents the Peabody Family Trust proposes the construction of a single-family house (1080 sq feet)on Plum Island on 51<sup>st</sup>. Street. The site consist of over 37,235 square feet of land(.85 acres) bounded to the north and northeast by a right of way know as 51<sup>st</sup> street and residential properties, to the west and south by residential properties and to the east by the Atlantic Ocean. The property is residential and is assessed and taxed as such.

As we progressed through the local permitting process with the Newbury Conservation Committee the original plans were changed to further mitigate any negative environmental impact of the project. These changes were voluntary and were not completed in order to comply with any local, state or federal regulations. The floor plan of the house was reduced 750 square feet. The house was moved 40 feet west away from the ocean. The combined changes moved the house further landward approximately 65 feet. The location of the house is now approximately 195 feet from the edge of the coastal beach and over 220 feet from the FEMA mapped velocity zone. The elevation is approximately 22-23 (1929 NGVD). In addition engineers have completed the FEMA 540 and 1100 calculation that also shows the location of the house and septic system to be well outside the velocity zone (see site plan). Furthermore the Hartford Insurance company using National Flood Insurance Data has determined that the specific lots (208 & 209) the house and septic system are to be built on are not in a coastal high hazard zone (Attachment 3)

After reviewing the plans, being on site, our geological consultants from ENSR conducted a review of plans, topography and reviewed FEMA storm elevation data. He found the 100-year storm elevation mapped by FEMA at the site to be 14 feet NGVD. The storm flood elevations measured by the USGS following the Blizzard of '78 on Plum Island were approximately 12.5 feet NGVD. That storm was documented as being a 70-year storm. The site was not impacted by the Blizzard since elevation range from 20-23 feet NGVD or 6-9 feet higher than the predicted 100-year storm. In addition, over the past 100 years, the closest that mean high tide has been to the proposed dwelling location was 250 feet away in 1952. The long-term shoreline change rate is -0.03 ft/yr. (1928-1994). Although the shoreline has shifted horizontally by some 85 feet during the period, coastal erosion is not an eminent threat to the proposed dwelling.

An extensive re-vegetation plan will replace 110% of displaced grass. With the exception of areas around and under the house the re-vegetation will be seaward of the house location. This plan will significantly increase the amount of vegetation located seaward of the project location this is an area that is not subjected any of the construction activity or traffic. In an area of about 3,870 square feet of dune grass and other beach species will be planted. The proponent is willing to increase the size of re-vegetation efforts elsewhere on the property... A staging area for supplies, waste and vehicle parking is to be established on the abutting properties parking area. This minimize damages to the dune grass that may result from traffic and storage of new building material, waste and construction workers

The DEP's Northeast Regional Office has raised some issues with a pending modification of the septic system that currently with the Newbury Board of Health. The applicant is working with that office on an alternative septic system design. (Attachment 3) These proposed changes were the outcome of a recent meeting with the Town of Newbury and Board of Health and are as follows:

- Replacing the leaching chambers (hard structures) with a trench system. Similar to other systems used in similar situations on the Island.
- 2) Using I/A technology for nitrogen reduction purposes
- Relocating the leaching field to underneath the house which bring it further landward and reduce the amount of impact on the dune grass being temporary disturbed.
- 4) The septic tank is also being installed to the maximum depth possible, while maintaining compliance with Title V regulations
- 5) Shared well system with abutting property located at 14 51st Street is also being considered.

In summary, the applicant has incorporated a number of changes to the dwelling size and location, is considering alternatives to modify the utilities and proposes to increase the vegetative growth on the coastal dune. In addition the Proponents has retained a team of environmental specialist and certified engineers and coastal geologist experts that have extensive experience with Mass. coastal properties, FEMA and the Mass. Department of Environmental Protection. The team has conducted numerous lengthy on site visits gathering site data which was followed by the completion of in-depth analysis and objective engineering models of the site using the latest FEMA methodologies.

Although the project site has not been damaged by nor is it threatened by coastal floods or erosion, the Proponent understands protection of coastal dune is critical to the long-term management of these threats in the future. The current and proposed changes to the original plans are clear examples of the proponent's desire and willingness to protect the environment while exercising is rights to develop the property

To ensure compliance with the various local and state regulations the applicant retained the services William Decie of Kairos Environment, Millennium Engineering of Salisbury to work with the Town of Newbury Conservation Commission. Both firms have extensive experience working with the coastal communities on the North Shore, and have number years of experience working on Plum Island and with the MEPA process. Much of Mr. Decie's vegetation work, the resizing of the house, the proposed use of trenches was modeled after the Hughes/Zerella property on 41st street which was reviewed by MEPA.