

**Commonwealth of Massachusetts**  
**Executive Office of Environmental Affairs ■ MEPA Office**

**ENF Environmental Notification Form**

*For Office Use Only*  
*Executive Office of Environmental Affairs*  
 EOE No.: 12884  
 MEPA Analyst: Bill GAGE  
 Phone: 617-626-1025

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: Crosby Cottages		
Street: 0, 207 & 222 Weathervanes Way		
Municipality: Brewster	Watershed: Cape Cod	
Universal Tranverse Mercator Coordinates:	Latitude: N 41° - 46' - 54"	
	Longitude: W 70° - 2' - 14"	
Estimated commencement date: 8-2002	Estimated completion date: 5-2003	
Approximate cost: \$ 20,000 +/-	Status of project design: 90 %complete	
Proponent: Massachusetts Department of Environmental Management (DEM)		
Street: 251 Causeway Street, Suite 600-7000		
Municipality: Boston	State: MA	Zip Code: 02114-2104
Name of Contact Person From Whom Copies of this ENF May Be Obtained: John M. O'Reilly, P.E.		
Firm/Agency: Bennett & o'Reilly, Inc	Street: P.O. Box 1667, 1573 Main Street	
Municipality: Brewster	State: MA	Zip Code: 02631
Phone: 508-896-6630	Fax: 508-896-4687	E-mail: joreilly@bennett-oreilly.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. \_\_\_\_\_)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
  - 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): N/A

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 from the Brewster Conservation Commission under the Massachusetts Wetlands Protection Act

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

- |                                 |                                       |  |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land   | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water  | <input type="checkbox"/> Wastewater   | <input type="checkbox"/> Transportation                              |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air          | <input type="checkbox"/> Solid & Hazardous Waste                     |
| <input type="checkbox"/> ACEC   | <input type="checkbox"/> Regulations  | <input type="checkbox"/> Historical & Archaeological Resources       |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>  Title 5 Permit from the MA DEP
Total site acreage	1.5			
New acres of land altered		0.14		
Acres of impervious area	.06	0	0.06	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0.14		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	2370	0	2370	
Number of housing units	2	0	2	
Maximum height (in feet)	28'+/-	0	28'+/-	
<b>TRANSPORTATION</b>				
Vehicle trips per day	8+/-	0	8+/-	
Parking spaces	4	0	4	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	660	0	660	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	less than 0.01	0.02	0.03	

**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 \_\_\_\_\_)  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 \_\_\_\_\_ ) No See Attached MHC 5-7-02 Letter

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 Cape Cod Bay \_\_\_\_\_ ) 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.*)

SEE ATTACHED NARRATIVE

# BENNETT & O'REILLY, Inc.

Engineering, Environmental & Surveying Services

Sanitary	21E/Site Remediation	Property Line
Site Development	Hydrogeologic Survey	Subdivision
Waste Water Treatment	Water Quality Monitoring	Land Court
Water Supply	Licensed Site Professional	Trial Court Witness



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September 10, 2002

## MEMORANDUM

TO: Massachusetts Environmental Policy Act (MEPA)

FROM: John M. O'Reilly, P.E.  
BENNETT & O'REILLY, Inc.

RE: **Project Description and Project Mitigation in conjunction with the Environmental Notification Form (MEPA, M.G.L. c.30,s.s.61,62 62H)**  
Sully & Graham Cottages  
0, 207 & 222 Weathervanes Way, Brewster, MA  
Parcels 51, 52 & 54 of Assr's Map 9

### Project Description:

The subject property, owned by the Department of Environmental Management ("DEM"), is improved with two (2) cottages. These cottages, named the Sully and Graham cottages, were serviced by two cesspools and this project involves upgrading these cesspools to current Title 5 standards. The Sully cottage is the one depicted on the accompanying site plan as being closest to the Bay, and the Graham cottage is located further landward. The project also involves the repair of two existing and dilapidated decks (one on each cottage), in their original footprint. Because the property is DEM owned, a Title 5 permit must come from the state and not from the local Board of Health. Furthermore, both properties are situated entirely within a coastal dune. Thus, because a state permit is required, and because the work of the project will take place in a coastal dune, a MEPA threshold is triggered for the filing of this Environmental Notification Form.

### Wetland Resources:

Attached to the Environmental Notification Form (ENF), please find a report of the Coastal Dune Evaluation as prepared by ENSR, Inc., Buzzards Bay, MA. The cottages are located within a Coastal Dune resource, as substantiated by ENSR's report, dated April 18, 2000. The other wetland resources on or abutting the locus properties are a Coastal Beach and Land Subject to Coastal Storm Flowage. Both resources are located to the north of the Sully cottage and are located greater than 100 feet away from the proposed limit of work. The property abuts the Cape

Cod Bay and as such abuts the ACEC of the Bay, EL=10.0. The project site does not lie within a rare wildlife habitat or a priority rare species habitat.

No work is proposed within 100 feet of the ACEC, Coastal Beach or Land Subject to Coastal Storm Flowage. Although the landward extent of the dune was never determined, the project was developed with the understanding that the work was taking place within a coastal dune. As outlined in the ENSR report however, the portion of the dune which is "significant to storm damage and flood control" is the portion of the dune which is located to the north of the Sully cottage and labeled as "frontal Dune" on the attached Sewage Disposal System Plan. The dune area landward of the Sully cottage and adjacent to the Graham cottage is "well vegetated and stable and is not presumed significant to storm damage prevention and flood control since it lies above the 100 year coastal flood zone, El=12.0". No work is proposed within the portion of the frontal dune which is significant to storm damage prevention and flood control. Furthermore, with the exception of the installation of a septic tank, pump chamber and the deck repair on the Sully property, the entire disturbance to the project site is on the landward side of the paved road surface of Weathervane Way.

#### **MEPA Thresholds and Mitigation:**

The MEPA Environmental Notification Form is being required due to the alteration of a dune and the requirement of seeking a Disposal Works Permit and Title 5 System Up-grade variance from the Massachusetts Department of Environmental Protection (DEP). The alteration of the dune is as a result of the installation of the sewage systems for the Sully and Graham cottages, the resource mitigation/improvement of the dune area with the planting of 65 shrubs and trees and the repair to the existing decks. The Department of Environmental Management owns the properties and as a result is required to file with the MA DEP for the Disposal Works Permit.

The sewage systems are being proposed to serve the existing cottages. There is no expansion to the living space or number of bedrooms within the cottages and as such the proposed systems are upgrades to the existing cottages.

The proposed disturbance within the rear dune (above the frontal dune and the dune slope) is approximately 6000 sf. Approximately 4000 sf of the disturbance is as a result of the installation of the sewage systems. Included within the 4000 sf is the repair of the two existing decks for the cottages. The Sully's deck is about 360 sf while the Graham's deck is about 160 sf. The remaining 2000 sf of disturbance to the dune is as a result of the proposed planting of the 65 shrubs and trees. The disturbance as a result of the sewage system will be restored and re-vegetated upon the completion of the installation is viewed as temporary and not permanent. The disturbance due to the deck repair is minimal and should be viewed as temporary. The repairs will not change the existing footprint of the decks. The remaining 2000 sf of disturbance is the re-vegetation of the surrounding dune area. This disturbance will be an enhancement of the dune resource as a result of the additional stability and wildlife habitat. Thus, all the disturbance should be viewed as temporary impacts and should not be considered permanent impact to the dune.

Additional project mitigation proposed includes using on-site windblown material, as excavated and stockpiled prior to and during the installation, for backfill over the systems. The area will be re-graded, once the system is installed, back to its original contour. The area will be re-planted with American beach (10" on-center) directly over the leaching portions of the systems, with the shrubs and trees planted as shown on the plan. Every effort will be made to save the existing shrubs by transplanting prior to installation and re-planting after installation is complete. Also, after one growing season, the area of disturbance will be evaluated, and if needed, be further fortified with additional plants.

### **Regional Comprehensive Plan and Brewster Open Space Plan:**

The proposed project is consistent with the both of these plans as it is merely the installation of two sewage systems which will service the existing structures. The project does not destroy any structures or eliminate any open space, nor does it involve construction of any new structures. The proposed system upgrade and the vegetation mitigation/improvement within the project area will further promote wildlife activities, resource protection and water quality

### **Performance Provisions.**

Wetlands. As noted above, both properties on which the cottages sit are comprised entirely of coastal dune. Thus, the project does not benefit from the presumption afforded Title 5 systems under the Wetlands Protection Act regulations set forth at 310 C.M.R. 10.03(3). However, as the ENSR report establishes, only the "frontal dune" area is significant to storm damage prevention and flood control. The rear dune is considered NOT significant to either storm damage prevention or flood control because it lies above the 100 year coastal flood zone, El=12.0. All work on the project takes place outside the "frontal dune" and within the rear dune area. Thus, the burden set forth in the Wetlands Protection Act regulations is met in that the applicant has provided credible evidence from a competent source, a coastal geologist, that the area is not significant to the protection of the interests presumed significant for coastal dunes, namely storm damage prevention and flood control. 310 C.M.R. 10.03(1)(a)1. Moreover, the project meets the performance standards for work performed in a coastal dune because all standards set forth at 310 C.M.R. 10.28(3) apply only when the coastal dune is significant to storm damage prevention and flood control. The project further meets the only other applicable performance standard for coastal dunes set forth at 310 C.M.R. 10.28(6), in that no specified habitat sites of rare vertebrate or invertebrate species are located on site.

Nevertheless, it is the opinion of BENNETT & O'REILLY, Inc. that even were the performance standards set forth at 310 C.M.R. 10.28(3) applicable, the work proposed meets those standards and will not have an adverse impact on the rear dune, the frontal dune, or the dune slope. Our opinion is based on the following: the dune's shape and volume will be restored to its original condition after the project is complete; the improvement of the vegetation cover through the proposed mitigation planting will serve to promote wildlife activities and further stabilize the dune area; the Title 5 sewage system will considerably enhance the groundwater quality in the area of

the cottages; the re-vegetation proposal includes plantings indigenous with coastal environments; the proposed septic systems are located so as to maximize the separation to Cape Cod Bay, while protecting as much of the existing vegetation on the property as possible; the repairs to the decks will be done within the exact footprints which presently exist; the posts which will support the decks will be 4x4 pressure treated lumber and will be supported by sono-tubes; all repairs to the deck including the sono-tubes will be done by hand; very minimal disturbance will be necessary for the repairs to the decks and as stated above will be temporary.

Wastewater. The project requires a Disposal Works Construction Permit from the Department of Environmental Protection under Title 5 of the State Environmental Code, set forth at 310 C.M.R. 15.00, et seq. Although located within a coastal dune, the systems proposed are fully compliant with Title 5 because those regulations do not require a setback distance from a coastal dune (see 310 C.M.R. 15.211) and because none of the work is proposed within a velocity zone (see 310 C.M.R. 15.213). Thus, the Disposal Works Permit sought from the Department of Environmental Protection will be granted without any requested or required variances from the Title 5 Sanitary Code.

Historical Site. The performance standards for the project site as related to the Historic and Archaeological Significance have been established. The project site was evaluated for significance through an Intensive Archaeological Survey (MHC #9612) which yielded the project site's in eligibility for a listing in the State and National Register of Historic Places (36CFR 60). MHC further concluded that no further archaeological testing was warranted for the project site. The two existing cottages are not presently listed on the State or National Register Historic Places.

**Conclusion:**

It is the opinion of BENNETT & O'REILLY, Inc. that the activities proposed will not have any adverse impact to the dune as it relates to its storm damage control, flood control and potential significance to wildlife habitat. Secondly, the project meets the requirements of MA Sanitary Code - Title 5 for subsurface disposal of sanitary sewage. Finally, the project site also has undergone an intensive archaeological study and was found not to be a significant site and was not included within the Register.

Furthermore, it is the opinion of BENNETT & O'REILLY, Inc. an Environmental Impact Report is not warranted for this project.

Attachments: Order of Condition from the Massachusetts Wetlands Protection Act  
ENSR Report, April 18, 2000  
MHC's May 7, 2002 letter of findings