

Commonwealth of Massachusetts
 Executive Office of Energy and Environmental Affairs
 Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: 15623

MEPA Analyst: Holly Johnson

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Lighthouse Inn Groin Improvements		
Street Address: 1 Lighthouse Road, West Dennis		
Municipality: West Dennis	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates:	Latitude: 41.501583	
	Longitude: 70.169314	
Estimated commencement date: April 2017	Estimated completion date: May 2017	
Project Type: Groin Improvements	Status of project design: 25 %complete	
Proponent: Lighthouse Inn Inc.		
Street Address: P.O. Box 128		
Municipality: West Dennis	State: MA	Zip Code: 02670
Name of Contact Person: Mark White		
Firm/Agency: Environmental Partners Group	Street Address: 1900 Crown Colony Dr., Suite 402	
Municipality: Quincy	State: MA	Zip Code: 02169
Phone: 617-657-0200	Fax: 617-657-0201	E-mail: mnw@envpartners.co

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	<input type="checkbox"/> Yes	<input type="checkbox"/> No
a Special Review Procedure? (see 301CMR 11.09)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
a Phase I Waiver? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
 3(b)1(a) – alteration of a costal bank

Which State Agency Permits will the project require?
 All permits required: Wetlands Protection Act permit, Chapter 91 permit
 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:
 Not Applicable.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	1.8		
New acres of land altered		0	
Acres of impervious area	0	0	0
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		1.4	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	NA		
Number of housing units	NA		
Maximum height (feet)	NA		
TRANSPORTATION			
Vehicle trips per day	NA		
Parking spaces	NA		
WASTEWATER			
Water Use (Gallons per day)	NA		
Water withdrawal (GPD)	NA		
Wastewater generation/treatment (GPD)	NA		
Length of water mains (miles)	NA		
Length of sewer mains (miles)	NA		
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The proposed project area comprises approximately 600 feet of ocean shorefront along the Lighthouse Inn shoreline. The shorefront includes three rock groins which are the westernmost of a broader field of ten groins. The groins extend between 130 and 240-feet in length from the upland. A shore parallel breakwater spans between the two center groins with a gap opening of about 25-feet. The small size of this gap does not allow sufficient wave energy into the embayment, behind the breakwater, to maintain a natural sand beach and it acts to trap detritus within the embayment.

Describe the proposed project and its programmatic and physical elements:

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

The proposed shorefront improvements, shown in the attached proposed improvements plan (Appendix D), would reconfigure the existing groins to a design that is more conducive to maintaining shore protection and a sand beach while improving natural tidal flow and flushing between the two western groins. These improvements would remove most of the breakwater and shorten the length of the two western groins. It would reconfigure the rock to a geometry that is more effective in stabilizing the beach, reducing detrital accumulation, and restoring more natural sand beach conditions along the shorefront. The proposed plan entails removal of about 200-ft of existing groin and breakwater structures and relocation to a more effective geometry as shown on the plans. The proposed plan likewise requires placement of beach compatible sand fill after reconfiguration of the rock structures, in order to establish and improve the sand beaches.

Specifically, the plan would decrease the length of the two existing groins at Lighthouse Inn, from 237-ft to 147-ft and from 187-ft to 140-ft, respectively, and it would remove about 77-ft of the existing breakwater between these two groins. Portions of the two groins would be lowered to improve alongshore flow. The plan would reconfigure the removed rock to construct a T-head groin between the 1st and 2nd groins and construct heads at the ends of each of the existing groins, to create four crenulated embayments, commonly referred to as pocket beaches. The resultant gap-openings between the groin structures, between 65- and 95-ft in length, are sufficient to develop and maintain a stable, predictable beach geometry within each pocket beach, while simultaneously reducing the seaward length of the groins along the shoreline.

An important principle of the proposed project is that it seeks to beneficially reconfigure the shoreline's existing structures. The existing groin structures have acted to promote and partly maintain shore protection and a sand beach since the adjacent inlets and shoreline were modified. The proposed plan improves and optimizes these structures through incorporation of contemporary advances and experience in the use of coastal structures; viz., these structures' ability to maintain a stable sand beach of predictable geometry, particularly where subject to the erosion stress from adjacent coastal inlets.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Several alternatives, including the 'no action' alternative, were evaluated with respect to improving tidal flow and protection of the shoreline. The 'no action' alternative was ruled out as the current groin configuration inhibits flow between groin structure and traps detritus within the embayment. This has resulted in a deteriorating shoreline.

Alternatives considered included various groin structure configurations. The selected alternative, as described above, will reduce detritus between the western groins in the project area while maintaining shoreline protection. The selected alternative will also provide beach nourishment and improve the recreational area.

NOTE: *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The proposed project will have temporary impacts to the costal resources in the project area as the groin geometry is reconfigured. However, at the completion of the project the groin structures and beach nourishment will provide improved shoreline protection and increased tidal flow and flushing between groin structures. These improvements will provide enhanced protection of the shoreline from future storm damage.

Effort will be made to minimize impacts to the costal resource during construction. All equipment and materials that come into contact with the water will be thoroughly inspected prior to construction to ensure that no foreign substances enter the water. Stormwater controls will be placed along the shoreline of the project area to ensure stormwater runoff up-gradient of the site does not impact the project area during construction.

If the project is proposed to be constructed in phases, please describe each phase:

The project will be completed in one phase of construction. Construction will include partial removal of existing groin structures, addition/extension of existing groin structures, and beach nourishment including sand fill.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify _____)
 No

if yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No;
if yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No;
if yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

*Lighthouse Inn Groin Improvements
West Dennis, Massachusetts
MEPA Environmental
Notification Form*

*Prepared For:
Lighthouse Inn Inc.
November 2016*

Environmental  Partners
GROUP

A partnership for engineering solutions

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1900 Crown Colony Drive, Suite 402, Quincy, MA 02169
TL 617.657.0200 • FX 617-657-0201

Hyannis Office:

396 North Street, Hyannis, MA 02601
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Woburn Office:

18 Commerce Way, Suite 2000, Woburn, MA 01801
TL 781.281.2542 • FX 781.281.2543

www.envpartners.com

November 28, 2016

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Environmental Notification Form
Lighthouse Inn Groin Improvements
West Dennis, Massachusetts

Dear Secretary Beaton:

On behalf of the LHI, Incorporated (LHI), Environmental Partners Group, Inc. is submitting this Environmental Notification Form for the Lighthouse Inn Groin Improvements project in accordance with the Massachusetts Environmental Protection Agency (MEPA) Statute (M.G.L. Chapter 30 Section 61-62I) and MEPA Regulations (301 CMR 11.00). In addition to the Environmental Notification Form (Appendix A), this submittal includes the following additional attachments:

- Appendix B: Massachusetts Endangered Species Act Review
- Appendix C: Environmental Notification Form Figures
- Appendix D: Permitting Design Plans
- Appendix E: Chapter 91 Licenses
- Appendix F: Massachusetts Historical Commission Response Letter
- Appendix G: Agencies Receiving ENF and Public Notice
- Appendix H: List of Municipal, State, and Federal Permit Requirements

The site is located in West Dennis, Massachusetts along the Lighthouse Inn shorefront. The proposed project will reconfigure the existing three rock groins along the Lighthouse Inn shorefront such that they are more conducive to maintaining shore protection and a sand beach, while improving natural tidal flow and flushing between the two western groins. These shoreline improvements will therefore provide better protection to the Inn, and will also preserve and protect a light house constructed in 1855 that is on the property and continues to this day to be permitted by the Coast Guard as a private aid to navigation.

If you should have any questions or require additional information, please do not hesitate to contact me at (617) 657-0200. I can also be reached via e-mail at mnw@envpartners.com.

Very Truly Yours,
Environmental Partners Group, Inc.



Mark N. White
Sr. Project Manager

Appendix A: Environmental Notification Form
Appendix B: Massachusetts Endangered Species Act Review
Appendix C: Environmental Notification Form Figures
Appendix D: Permitting Design Plans
Appendix E: Chapter 91 Licenses
Appendix F: Massachusetts Historical Commission Response Letter
Appendix G: Agencies Receiving ENF and Public Notice
Appendix H: List of Municipal, State, and Federal Permit Requirements

CC: Refer to Appendix E for Distribution List
Greg Stone, LHI Inc.
Kevin Bodge, PE, Olsen Associates
Robert M. Perry, PE, Cape Cod Engineering
File

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
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EEA#: _____

MEPA Analyst: _____

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(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

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Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	1.8		
New acres of land altered		0	
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Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		1.4	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	NA		
Number of housing units	NA		
Maximum height (feet)	NA		
TRANSPORTATION			
Vehicle trips per day	NA		
Parking spaces	NA		
WASTEWATER			
Water Use (Gallons per day)	NA		
Water withdrawal (GPD)	NA		
Wastewater generation/treatment (GPD)	NA		
Length of water mains (miles)	NA		
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Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

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NOTE: *The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

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If the project is proposed to be constructed in phases, please describe each phase:

The project will be completed in one phase of construction. Construction will include partial removal of existing groin structures, addition/extension of existing groin structures, and beach nourishment including sand fill.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____)

No

if yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No;

If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)

Yes (Specify Awaiting response from NHESP – see MESA request in Appendix B) 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

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify _____) No

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? ___ Yes X No; if yes, identify the ORW and its location. _____

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? ___ Yes No; if yes, identify the water body and pollutant(s) causing the impairment: _____

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ___ Yes X No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations: There will be no long-term stormwater impacts. Stormwater controls will be put in place during construction.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes ___ No X; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification): _____

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No X; if yes, describe which portion of the site and how the project will be consistent with the AUL: _____

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes ___ No X; if yes, please describe: _____

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood: No solid waste will be generated by the project.

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes ___ No X; if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment: The contractor will be required to submit a plan for anti-idling and emissions limiting measures taken for this project.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No X ;
if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River? Yes ___ No ___ ; if yes, specify name of river and designation: _____;
if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River.
Yes ___ No ___ ;
if yes, describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document. **See Cover Letter.**
2. U.S.G.S. map (good quality color copy, 8-1/2 x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries. **See Appendix C.**
- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities. **See Appendix D.**
- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts. **See Appendix C.**
5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase). **See Appendix D.**
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2). **See Appendix G.**
7. List of municipal and federal permits and reviews required by the project, as applicable. **See Appendix H.**

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))
 ___ Yes X No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>0</u>	<u>0</u>	<u>0</u>
Internal roadways	<u>0</u>	<u>0</u>	<u>0</u>
Parking and other paved areas	<u>0</u>	<u>0</u>	<u>0</u>
Other altered areas	<u>1.8</u>	<u>0.03</u>	<u>1.77</u>
Undeveloped areas	<u>0</u>	<u>0</u>	<u>0</u>
Total: Project Site Acreage	<u>1.8</u>	<u>0</u>	<u>1.77</u>

The project will re-configure the existing groin system by removing approximately 4,179 square feet of rock groin structures and adding approximately 4,225 square feet of rock groin structures. The net change in rock groin structure footprint is a reduction of 1,465 square feet from the existing rock groin structure footprint. Additionally, approximately 60,600 square feet will receive sand for beach re-nourishment purposes.

B. Has any part of the project site been in active agricultural use in the last five years?

___ Yes X No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?

___ Yes X No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes X No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? ___

Yes X No; if yes, does the project involve the release or modification of such restriction? ___ Yes ___ No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes X No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No X; if yes, describe:

III. Consistency

A. Identify the current municipal comprehensive land use plan

Title: Dennis Comprehensive Plan Date: September 2002

B. Describe the project's consistency with that plan with regard to:

1) economic development Please see below.

- 2) adequacy of infrastructure Please see below.
- 3) open space impacts Please see below.
- 4) compatibility with adjacent land uses Please see below.

B.1) The Dennis Comprehensive Plan indicates that the protection of Dennis beaches are an asset to the Dennis economy as they attract summer residents. The project will protect and improve the southern shoreline in front of the Lighthouse Inn and improve the aesthetics of the area.

B.2) The Comprehensive Plan also does not directly include a statement on adequacy of infrastructure. The proposed project will better protect shoreline infrastructure from future storm events.

B.3) The Comprehensive Plan aims to preserve and maintain a healthy and natural environment, encourage outdoor recreation and retain community character. The proposed project is in compliance with these goals as it proposes to improve the tidal flow between the groins, reduce the accumulation of detritus between the groins, and improve the aesthetics of the area.

B.4) The project is compatible with adjacent land uses as it will continue to be a part of the West Dennis recreational shoreline.

- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
 RPA: Cape Cod Commission

Title: Cape Cod Regional Policy Plan Date: August 2012

- D. Describe the project's consistency with that plan with regard to:

- 1) economic development Please see below.
- 2) adequacy of infrastructure Please see below.
- 3) open space impacts Please see below.

D.1) The proposed project is consistent with the Cape Cod economic development goals. The project will also provide better protection to the Lighthouse Inn and the lighthouse constructed in 1855, which is consistent with the Cape Cod economic development goal for the preservation of historic properties. Additionally, protecting the Lighthouse Inn will provide economic benefit to the Inn and surrounding community.

D.2) The Regional Plan also does not directly include a statement on adequacy of infrastructure. The project does not propose new infrastructure rather it will improve existing infrastructure to protect the shoreline and development beyond it. This is consistent with the Regional Plan as the project will improve public infrastructure longevity by protecting the shoreline and improving the coastal resources along it.

D.3) The proposed project will have very little impact to open space and aims to improve shore protection and provide beach nourishment. The project is consistent with the Cape Cod Regional Plan coastal resource goals which are to preserve and protect coastal areas. The project aims to revitalize the beach area between the existing groin structures.

In addition to the project's consistency with the Dennis Municipal Comprehensive Plan and the Cape Cod Commission's Regional Policy Plan, the project is in accordance with the recommendations of the Massachusetts Coastal Erosion Commission (*Report of the Massachusetts Coastal Erosion Commission, December 2015*), whose purpose was to develop strategies for reducing, minimizing or eliminating the magnitude and frequency of coastal erosion and its adverse impacts on property, beaches and dunes. Through this report, the Commission recommends groin structures and beach nourishment as shoreline management techniques to mitigate shoreline erosion.

RARE SPECIES SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes ___ No; if yes, specify, in quantitative terms:

Uncertain at this time. NHESP has been consulted; please refer to Appendix B for the Massachusetts Endangered Species Act review form submitted to NHESP.

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

- B. Does the project require any state permits related to **rare species or habitat**? ___ Yes X No

- D. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes ___ No.

Please refer to Figure 2 in Appendix C.

- D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

- A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? X Yes ___ No. If yes,
1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? X Yes ___ No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? ___ Yes X No; if yes, attach the letter of determination to this submission.

Please refer to Appendix B for the Massachusetts Endangered Species Act review form submitted to NHESP and to Figure 2 in Appendix C showing the project area in relation to the NHESP Priority and Estimated Habitat Area.

2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes X No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts

3. Which rare species are known to occur within the Priority or Estimated Habitat?

Uncertain at this time. NHESP has been consulted; please refer to Appendix B for the Massachusetts Endangered Species Act review form submitted to NHESP.

4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? ___ Yes X No

4. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes X No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No

- B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes X No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? X Yes ___ No; if yes, specify, in quantitative terms:

The project will re-configure the existing groin system by removing approximately 4,179 square feet of rock groin structures and adding approximately 4,225 square feet of rock groin structures. This will result in a net increase in 56 square feet of groin structure. Additionally, approximately 60,600 square feet will receive sand for beach re-nourishment purposes. The beach renourishment will return the beach to the conditions that existed prior to when the groin system was constructed (see photo circa. 1938 in Appendix C).

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? X Yes ___ No; if yes, specify which permit:

Massachusetts Conservation Commission.

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? X Yes ___ No; if yes, has a Notice of Intent been filed? ___ Yes X No; if yes, list the date and MassDEP file number: _____; if yes, has a local Order of Conditions been issued? ___ Yes ___ No; Was the Order of Conditions appealed? ___ Yes ___ No. Will the project require a Variance from the Wetlands regulations? ___ Yes ___ No.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

The proposed project will amend the existing groin structures along the shoreline of the site to a design more conducive for shoreline protection and tidal flow, and one that will enhance beach re-nourishment.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (square feet) or Length (linear feet)</u>	<u>Temporary or Permanent Impact?</u>
Land Under the Ocean	<u>4,225 square feet</u>	<u>Permanent</u>
Designated Port Areas	_____	_____
Coastal Beaches	_____	_____
Coastal Dunes	_____	_____
Barrier Beaches	_____	_____
Coastal Banks	<u>60,600 square feet</u>	<u>Permanent</u>
Rocky Intertidal Shores	_____	_____
Salt Marshes	_____	_____
Land Under Salt Ponds	_____	_____
Land Containing Shellfish	_____	_____
Fish Runs	_____	_____
Land Subject to Coastal Storm Flowage	_____	_____
<u>Inland Wetlands</u>		
Bank (If)	_____	_____

Bordering Vegetated Wetlands	_____	_____
Isolated Vegetated Wetlands	_____	_____
Land under Water	_____	_____
Isolated Land Subject to Flooding	_____	_____
Bordering Land Subject to Flooding	_____	_____
Riverfront Area	_____	_____

D. Is any part of the project:

1. proposed as a **limited project**? ___ Yes X No; if yes, what is the area (in sf)? _____
2. the construction or alteration of a **dam**? ___ Yes X No; if yes, describe: _____
3. fill or structure in a **velocity zone** or **regulatory floodway**? ___ Yes X No
4. dredging or disposal of dredged material? ___ Yes X No; if yes, describe the volume of dredged material and the proposed disposal site: _____
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? ___ Yes X No
6. subject to a wetlands restriction order? ___ Yes X No; if yes, identify the area (in sf): _____
7. located in buffer zones? ___ Yes X No; if yes, how much (in sf) _____

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ___ Yes X No
2. alter any federally-protected wetlands not regulated under state law? ___ Yes X No; if yes, what is the area (sf)? _____

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? X Yes ___ No; if yes, is there a current Chapter 91 License or Permit affecting the project site? X Yes ___ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

Provided in Appendix E:

- Chapter 91 License Number 641, April 1926
- Chapter 91 License Number 4831, June 1964
- Chapter 91 License Number 5377, May 1968.

C. Does the project require a new or modified license or permit under M.G.L.c.91? X Yes ___ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current ___ Change ___ Total ___
If yes, how many square feet of solid fill or pile-supported structures (in sf)? _____

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site: _____

Area of filled tidelands covered by buildings: None _____

For portions of site on filled tidelands, list ground floor uses and area of each use:

groin structure _____

Does the project include new non-water-dependent uses located over flowed tidelands?

Yes ___ No X

Height of building on filled tidelands N/A _____

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

Refer to the Existing Shorefront Conditions Figure in Appendix D.

D. Is the project located on landlocked tidelands? ___ Yes X No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ___ Yes X No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? ___ Yes X No;
(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? ___ Yes X No; if yes, answer the following questions:

What type of dredging? Improvement ___ Maintenance ___ Both ___

What is the proposed dredge volume, in cubic yards (cys) _____

What is the proposed dredge footprint ___ length (ft) ___ width (ft) ___ depth (ft);

Will dredging impact the following resource areas?

Intertidal Yes___ No___; if yes, ___ sq ft

Outstanding Resource Waters Yes___ No___; if yes, ___ sq ft

Other resource area (i.e. shellfish beds, eel grass beds) Yes___ No___; if yes ___ sq ft

If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?

If no to any of the above, what information or documentation was used to support this determination?

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). _____.

Sediment Characterization

Existing gradation analysis results? ___Yes ___No: if yes, provide results.

Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ___Yes ___No; if yes, provide results.

Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment ___

Unconfined Ocean Disposal ___

Confined Disposal:

Confined Aquatic Disposal (CAD) ___

Confined Disposal Facility (CDF) ___

Landfill Reuse in accordance with COMM-97-001 ___

Shoreline Placement ___

Upland Material Reuse ___

In-State landfill disposal ___

Out-of-state landfill disposal ___

(NOTE: This information is required for a 401 Water Quality Certification.)

IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? X Yes ___ No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

Groin structures and beach nourishment are recommended as a shoreline management techniques that aid in the protection of eroding shorelines in the December 2015 Report of the Massachusetts

Coastal Erosion Commission, Findings and Recommendations prepared for the Office of Coastal Zone Management (CZM). The project would re-configure the existing groin structures so that they can be used effectively for erosion control consistent with the policies of the CZM.

The project is located within a coastal zone and will have minimal impact during construction. Effort will be made to minimize impacts to the coastal zone during construction. All equipment and materials that come into contact with the water will be thoroughly inspected prior to construction to ensure that no foreign substances enter the water. At the completion of the project, the groin structures and beach nourishment will provide improved shoreline protection and increased tidal flow and flushing between groin structures. These improvements will protect the shoreline from future storm damage.

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes X No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? ___ Yes ___ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results. _____

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? _____ Will the project require an increase in that withdrawal? ___ Yes ___ No; if yes, then how much of an increase (gpd)? _____

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Permitted Flow</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ___ Yes ___ No
2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking

water supply for purpose of forest harvesting activities? ___ Yes ___ No

III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is the existing collection system at or near its capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No; if yes, describe as follows:

	<u>Permitted</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ___ Yes ___ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ___ Yes ___ No; if yes, what is the capacity (tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ___ Yes ___ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

C. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ___ Yes ___ No; if yes, describe if and how will the project will participate in the TMA:

D. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ___ Yes ___ No; if yes, generally describe:

E. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____
2. Cutting of living public shade trees (number)? _____
3. Elimination of stone wall (in linear feet)? _____

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
 Yes No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? Yes No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:
1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? Yes No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos?
 ___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? Yes ___ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ___ Yes No; if yes, attach correspondence

A Project Notification Form was submitted to the Massachusetts Historical Commission (MHC). In their response dated November 4, 2016, the MHC determined that the project is unlikely to affect significant historic or archaeological resources. The MHC response is included in Appendix F.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes No; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes ___ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

In their response dated November 4, 2016, the MHC determined that the project is unlikely to affect significant historic or archaeological resources. The MHC response is included in Appendix F.

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

Not applicable.

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

(Name) Dennis Register (Date) Dec. 1, 2016

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

<u>[Signature]</u>	<u>12/1/2016</u>	<u>[Signature]</u>	<u>12/1/2016</u>
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)

<u>Gregory H. Stone</u>	<u>MARLE W. WHITE</u>
Name (print or type)	Name (print or type)

<u>LHI, Inc, Lighthouse Inn, Inc.</u>	<u>Environmental Partners Group</u>
Firm/Agency	Firm/Agency

<u>1 Lighthouse Inn Rd.</u>	<u>1900 Crown Colony Drive, Suite 402</u>
Street	Street

<u>W. Dennis Mass 02670</u>	<u>Quincy, MA 02169</u>
Municipality/State/Zip	Municipality/State/Zip

<u>588-398-2244</u>	<u>617 657-0251</u>
Phone	Phone

Appendix B

Massachusetts Endangered Species Act Review Form

November 1, 2016

Massachusetts Division of Fisheries and Wildlife
Natural Heritage & Endangered Species Program
1 Rabbit Hill Road
Westborough, MA 01581

RE: Massachusetts Endangered Species Act
Lighthouse Inn Groin Improvements
West Dennis, Massachusetts

To Whom It May Concern:

On behalf of the LHI, Incorporated, located in West Dennis, Massachusetts, please find enclosed a completed Massachusetts Endangered Species Act (MESA) Review Checklist for a proposed groin reconfiguration and beach renourishment program at the Inn's shore front. The project consists of shoreline improvements to reconfigure the existing three rock groins along the Lighthouse Inn shorefront such that they are more conducive to maintaining shore protection and a sand beach while improving natural tidal flow and flushing in the area. These shoreline improvements will provide better protection to the Inn, and will also preserve and protect a light house constructed in 1855 that is on the property and continues to this day to be permitted by the Coast Guard as a private aid to navigation. A Site Locus Map and conceptual project plans are attached.

This form is being submitted in advance of several other environmental permitting submittals (i.e., Massachusetts Environmental Protection Act Environmental Notification Form, and US Army Corps of Engineers Individual Permit). If you should have any questions or require additional information, please do not hesitate to contact me at (617) 657-0200. I can also be reached via e-mail at mnw@envpartners.com.

Very Truly Yours,
Environmental Partners Group, Inc.



Mark N. White
Sr. Project Manager

Attachments: MESA Project Review Checklist

- A. Project Description
- B. Site Locus and Assessor's Information
- C. Project Plans
- D. Site Photos
- E. Statement of Record Owner

CC: Gregory Stone, LHI, Inc.
File



MESA PROJECT REVIEW CHECKLIST

Massachusetts Endangered Species Act M.G.L. c. 131A and Regulations (321 CMR 10.00)

Massachusetts Division of Fisheries & Wildlife
Natural Heritage & Endangered Species Program

~~~~ CONTACT INFORMATION ~~~~

If you already completed your Notice of Intent- Form 3, you can send page 1 of the NOI in place of questions 1 through 4 in this section

1. Project Location:

1 Lighthouse Road	West Dennis	02670
Street Address/Location	City/Town	Zip Code
12-7-0		
Assessors Map/Plat Number	Parcel	/Lot Number

2. Applicant:

Gregory	Stone	Lighthouse Inn, Inc.
First Name Last	Name	Company
P.O. Box 128		
Mailing Address		
West Dennis	MA	02670
City/Town	State	Zip Code
(508) 398-2244		gstone@lighthouseinn.com
Phone Number	Fax Number	Email address

3. Property owner (if different from applicant):

First Name Last	Name	Company	
Mailing Address			
City/Town	State	Zip Code	
Phone Number	Fax Number	Email address	

4. Representative (if any):

Environmental Partners Group, Inc.			
Company			
Mark White			
Contact Person First Name	Contact Person Last Name		
1900 Crown Colony Drive			
Mailing Address			
Quincy	MA	0.2169	
City/Town	State	Zip Code	
(617) 657-0200	(617) 657-0201	mnw@envpartners.com	
Phone Number	Fax Number	Email	address


~~~~ADDITIONAL INFORMATION ~~~~~

- 1. Will this project require a filing with the Conservation Commission and/or DEP?  No  Yes
- 2. Will this project meet any threshold for a MA Environmental Policy Act (MEPA) filing (excluding rare species, 301 CMR 11.03 (2))?  No  Yes
- 3. Has this project previously been issued a NHESP Tracking Number (either by previous NOI Submittal or MESA Information Request Form)?  No  Yes

If Yes - Tracking No. \_\_\_\_\_

~~~~PROJECT DESCRIPTION (attach separate sheet, as needed) ~~~~~

Please note, certain projects or activities are exempt from review, see 321 CMR 10.14. The MESA does not allow project segmentation. Your filing must reflect all anticipated work associated with the proposed project (CMR 321 10.16).

Project work includes shoreline improvements that would reconfigure the existing groins to a design that is more conducive to maintaining shore protection and the sand beach while improving natural tidal flow and flushing between the middle groins. A detailed project description is attached.

~~~~INCLUDE THE FOLLOWING INFORMATION ~~~~~

*The NHESP will notify the applicant within 30 days if the materials submitted do not satisfy requirements for a filing and request submission of any missing materials (321 CMR 10.18(1)).*

ALL Applicants must submit:

- USGS map (1:24,000 or 1:25,000) with property boundary clearly outlined
- Project plans for entire site (including wetland Resource Areas, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work)
- Assessor's map or right-of-way plan of site
- Project description
- Statement/proof that applicant is the Record Owner or that applicant is a person authorized in writing by the record owner to submit this filing
- Photographs representative of the site

Projects altering\* 10 or more acres, must also submit:

- A vegetation cover type map of the site
- Project plans showing Priority Habitat boundaries

The NHESP may request additional information, such as, but not limited to, species and habitat surveys, wetland reports, soil map and reports, and stormwater management reports (321 CMR 10.16).

\*Alteration: Any physical alteration of land, soils, drainage or destruction of plant life, see "Project or Activity" (321 CMR 10.02).

~~~~ FILING FEES ~~~~

See Fee Schedule below

a. Total MESA Fee Paid \$300 b. Acreage of Disturbance* 0.20 c. Total Site Acreage 0.33

~~~~ REQUIRED SIGNATURES ~~~~

I hereby certify under the penalties of perjury that the foregoing MESA filing and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

LHI, Inc 11/1/16  
 Signature of Property Owner/Record Owner of Property Date

[Signature] 11/1/16  
 Signature of Applicant (required, if different from Owner) Date

Please send form, required information, and filing fee (payable to "Comm. of MA - NHESP") to:

Regulatory Review  
 Natural Heritage & Endangered Species Program  
 1 Rabbit Hill Road  
 Westborough, MA 01581



Questions regarding this form should be directed according to the county that the property is located:

Berkshire, Essex, Franklin, Hampshire, Hampden, Middlesex & Worcester Counties call: 508-389-6361  
 Barnstable, Bristol, Dukes, Nantucket, Norfolk, Plymouth & Suffolk Counties call: 508-389-6385

| PROJECT REVIEWS<br>321 CMR 10.18 |                                                                          |                                             |                                               |
|----------------------------------|--------------------------------------------------------------------------|---------------------------------------------|-----------------------------------------------|
| Project Definition               | Project Criteria                                                         | Fee                                         | Response Time                                 |
| Simple                           | Less than 5 acres of disturbance*                                        | \$ 300.00                                   | 60 days from determination of complete filing |
| Intermediate<br>(Moderate)       | 5 to 20 acres of disturbance*                                            | \$ 1800.00                                  | 60 days from determination of complete filing |
| Complex                          | More than 20 acres of disturbance* or project requires wetlands variance | \$ 4000.00                                  | 60 days from determination of complete filing |
| Linear                           | Projects greater than 1 mile in length.                                  | \$ 4000.00 per Priority Habitat intersected | 60 days from determination of complete filing |

\* Disturbance means direct physical disturbance of the land surface or waterbody, soil and/or vegetation, if only a portion of the project site is located within Priority Habitat, indicate total area of disturbance for site as a whole.

**Attachment A**  
**Project Description**

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## **PROJECT DESCRIPTION**

The Lighthouse Inn, owned by LHI Inc., is located in West Dennis, Massachusetts (see the locus plan, Attachment B). The proposed project area comprises approximately 600-ft of ocean shorefront along the Lighthouse Inn shoreline. The shorefront, shown in the survey plan of existing conditions (Attachment C), includes three rock groins which are the westernmost of a broader field of ten groins. The groins extend between 130 and 240-ft in length from the upland. A shore parallel breakwater spans between the two center groins with a gap opening of about 25-ft. The small size of this gap does not allow sufficient wave energy into the embayment, behind the breakwater, to maintain a natural sand beach and it acts to trap detritus within the embayment.

The proposed shorefront improvements, shown in the proposed conditions plan (Attachment C) would reconfigure the existing groins to a design that is more conducive to maintaining shore protection and a sand beach while improving natural tidal flow and flushing between the two western groins. These improvements would remove most of the breakwater and shorten the length of the two western groins. It would reconfigure the rock to a geometry that is more effective in stabilizing the beach, reducing detrital accumulation, and restoring more natural sand beach conditions along the shorefront. The proposed plan entails removal of about 200-ft of existing groin and breakwater structures and relocation to a more effective geometry as shown on the plans. The proposed plan likewise requires placement of beach compatible sand fill after reconfiguration of the rock structures, in order to establish and improve the sand beaches.

Specifically, the plan would decrease the length of the two existing groins at Lighthouse Inn, from 240-ft to 150-ft and from 200-ft to 150-ft, respectively, and it would remove about 125-ft of the existing breakwater between these two groins. Portions of the two groins would be lowered to improve alongshore flow. The plan would reconfigure the removed rock to construct a T-head groin between the 1st and 2nd groins and construct heads at the ends of each of the existing groins, to create four crenulate embayments, commonly referred to as pocket beaches. The resultant gap-openings between the groin structures, between 65- and 95-ft in length, are sufficient to develop and maintain a stable, predictable beach geometry within each pocket beach, while simultaneously reducing the seaward length of the groins along the shoreline. The location of the shoreline within each cell is principally a function of the gap openings between the adjacent structures.

That is, the proposed plan replaces and augments the existing breakwater and straight groin structures with a T-head groin design that is well-known and proven successful in maintaining stable beach geometries since at least the early 1990's. Through dismantling of the existing breakwater and the addition of short rock spurs at the ends of the existing rock groins and intermediate T-groins, the proposed plan creates minor embayments (pocket beaches) for which the interior beach geometry is predicted through empirical coastal engineering means – and which has been observed to be very stable at both naturally occurring beach embayments and engineered project conditions.

This positive experience with similar shore protection and beach erosion control structures has been demonstrated by other projects throughout the world, including descriptions of the use of T groins and crenulate embayment beaches incorporated by the US Army Corps of Engineers in their June 2001 report "Chronic Beach Erosion Adjacent to Inlets."

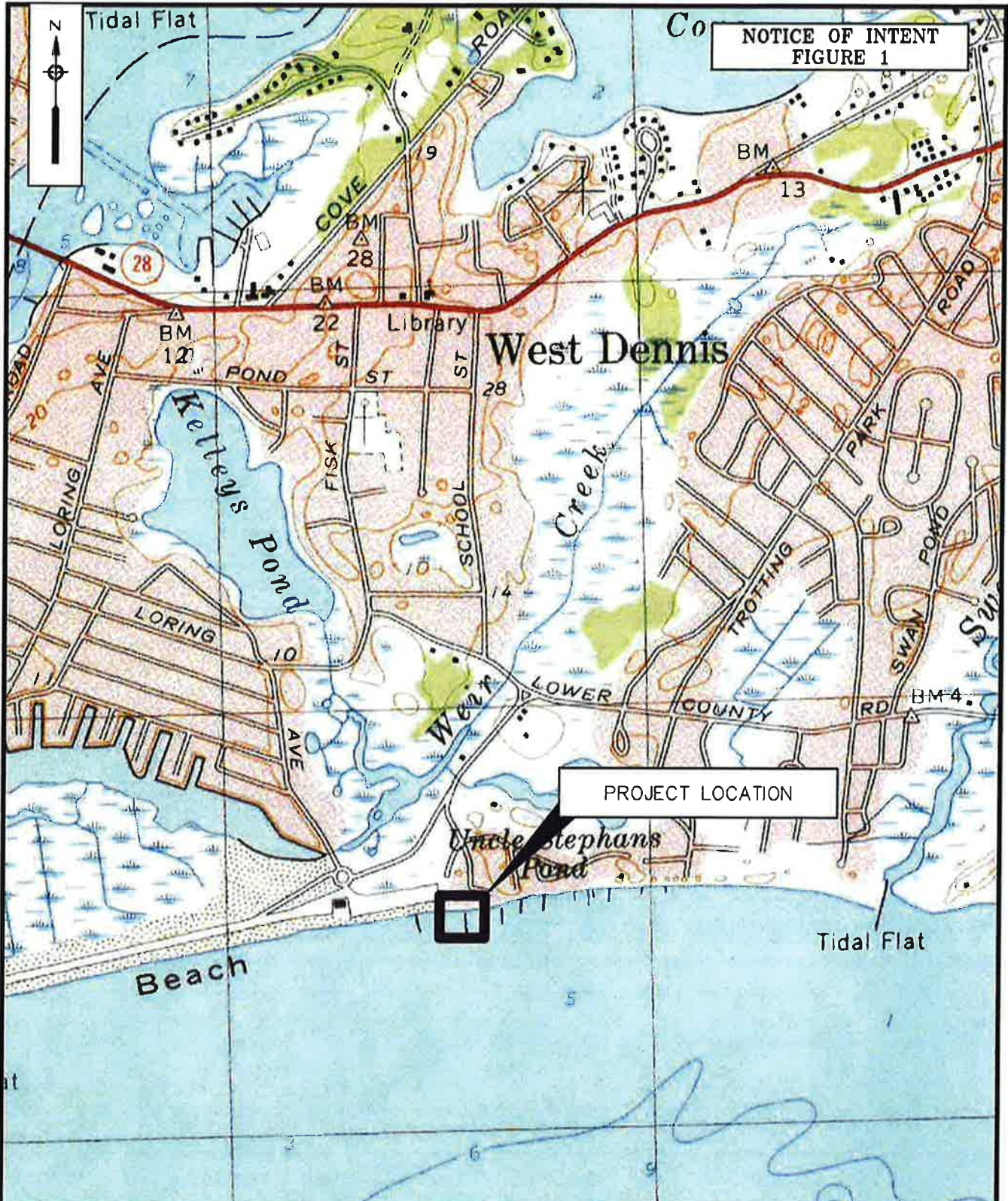
An important principle of the proposed project is that it seeks to beneficially reconfigure the shoreline's existing structures. The existing, historical groin structures have acted to promote and partly maintain shore protection and a sand beach since the adjacent inlets and shoreline were modified. The proposed plan improves and optimizes these structures through incorporation of contemporary advances and experience in the use of coastal structures; viz., these structures' ability to maintain a stable sand beach of predictable geometry, particularly where subject to the erosion stress from adjacent coastal inlets.

**Attachment B**  
**Site Locus and Assessor's Information**

---



**NOTICE OF INTENT  
FIGURE 1**



**PROJECT LOCATION**

Lighthouse Inn - Dennis, MA MEPA ENFLOCUS MAP/LOCUS MAP.DWG

**Environmental Partners Group**  
A PROFESSIONAL ENGINEERING CORPORATION  
 328-1601  
 111 FINESTREET DRIVE  
 WEST DENNIS, MA 01913  
 WWW.ENVIRONMENTALPARTNERSGROUP.COM

NOVEMBER 2016  
 328-1601  
 1" = 1,000'

APPLICANT: LIGHTHOUSE INN INC.  
 LIGHTHOUSE INN GROIN IMPROVEMENTS  
 USGS QUADS LOCUS MAP







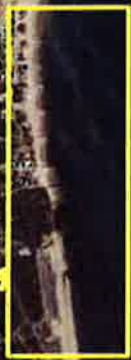
3000 feet

Swan Pond River

West  
Dennis

South  
Yarmouth

Bass River



google earth

©2005 U.S. NAVY NIMA, GEBCO

3000 ft

**Key: 113**

**Town of DENNIS - Fiscal Year 2016**

12/16/2015 12:06 pm SEQ # 115

| CLASS     | CLASS%     | DESCRIPTION      | BN ID        | BN      | CARD       |    |     |     |
|-----------|------------|------------------|--------------|---------|------------|----|-----|-----|
| 3020      | 100        | INNS, TOURIST HM |              | 1       | 1 of 26    |    |     |     |
| PMT NO    | PMT DT     | TY               | DESC         | AMOUNT  | INSP       | BY | 1st | %   |
| 2014-1419 | 06/30/2015 | 43               | IRE-RECEIVED | 10,000  | 06/01/2015 | IE | 0   | 0   |
| 2013-1736 | 09/30/2014 | 3                | ALTERATIONS  | 20,000  |            |    | 0   | 0   |
|           | 12/26/2013 | 3                | ALTERATIONS  |         |            |    | 0   | 0   |
| 2011-0360 | 06/13/2011 | 77               | CYCLICAL REV | 124,519 | 05/13/2011 | HD | 100 | 100 |
|           | 05/06/2011 | 3                | ALTERATIONS  |         | 05/13/2011 | HD | 100 | 100 |

| CD | TY  | ACRES/FLN | Nbhd  | FEMA | ADJ BASE | SAF | Imp2 | Lpl | VC   | CREDIT AMT | ADJ VALUE |
|----|-----|-----------|-------|------|----------|-----|------|-----|------|------------|-----------|
| L  | 103 | A         | 0.920 | 30   | 1.00     | AV  | 1.00 | DCK | 1.00 | 5.90       | 1,341,620 |
| L  | 203 | A         | 4.600 | 30   | 1.00     | AV  | 1.00 | 1   | 1.00 | 403,680    | 1,681,860 |
| N  | 303 | A         | 1.490 | 30   | 1.00     | AV  | 1.00 | 1   | 1.00 | 1,035      | 1,500     |
| D  |     |           |       |      |          |     |      |     |      | 0.90       |           |

| ASSESSED | CURRENT   | PREVIOUS  |
|----------|-----------|-----------|
| LAND     | 3,025,000 | 3,025,000 |
| BUILDING | 771,500   | 771,500   |
| DETACHED | 248,800   | 248,800   |
| OTHER    | 2,184,900 | 2,184,900 |
| TOTAL    | 6,230,200 | 6,230,200 |

| TY  | QUAL | COND | DIM/NOTE              | YB | UNITS  | RCNLD     |
|-----|------|------|-----------------------|----|--------|-----------|
| APV | A    | 1.00 | A+ 0.90 91 X 228      |    | 20,748 | 1.00      |
| CTA | A    | 1.00 | A 0.75                |    | 1      | 16,600    |
| SFC | A    | 1.00 | G 0.90 49X18          |    | 882    | 22,168.40 |
| PLH | A    | 1.00 | A+ 0.80 13X50         |    | 650    | 32.32     |
| PLH | A    | 1.00 | A+ 0.80 12X50         |    | 600    | 79.60     |
| SHF | A    | 1.00 | A 0.75 10X16          |    | 160    | 38,200    |
| SHF | A    | 1.00 | A 0.75 8X13           |    | 104    | 2,000     |
| SHF | A    | 1.00 | A 0.75 8X12           |    | 96     | 16.97     |
| SHF | A    | 1.00 | A 0.75 10X12          |    | 120    | 1,300     |
| SHF | A    | 1.00 | A 0.75 8X8            |    | 64     | 17.47     |
| PTD | A    | 1.00 | A 0.75 POOL AREA      |    | 2,550  | 800       |
| PPD | A    | 1.00 | A 0.75 5X22           |    | 110    | 4,900     |
| LH1 | A    | 1.00 | A 0.75 22 LIGHTS      |    | 22     | 732.12    |
| SW2 | G    | 1.18 | G 0.90 2X2            |    | 4      | 1,900.00  |
| DGF | A    | 1.00 | A 0.75 18X20, 6X8RFRN |    | 408    | 23.01     |
|     |      |      |                       |    |        | 21.80     |
|     |      |      |                       |    |        | 6,700     |

| FRNT           | 0 |
|----------------|---|
| RT 28 & SOUTH  |   |
| ACCEL VEL ZONE |   |
| DOCK           |   |

| MEASURE | 5/13/2011 | HD  |
|---------|-----------|-----|
| LIST    | 5/13/2011 | HD  |
| REVIEW  | 5/13/2011 | APK |

| BUILDING | CD | ADJ | DESC                   |
|----------|----|-----|------------------------|
| 5        |    |     | CIM                    |
| 44       |    |     | 1.30 HOTEL [100%]      |
| 1        |    |     | 1.00 AVERAGE [100%]    |
| 1        |    |     | 0.99 WOOD FRAME [100%] |

| YEAR BLT  | SIZE ADJ   | 1.000 | UNITS | ADJ   |
|-----------|------------|-------|-------|-------|
| 1650      | 15,110     | 1.000 | 3     | 1.000 |
| NET AREA  | DETAIL ADJ | 1.315 | 50    | .98   |
| SNLA(RCN) | OVERBALL   | 1.000 | 0     | 1.00  |
|           |            |       | 0     | 1.00  |
|           |            |       | 0     | 1.00  |
|           |            |       | 0     | 1.00  |

| STORIES | % HEATED | % A/C | % SPRINKLERS | RES UNIT CNT |
|---------|----------|-------|--------------|--------------|
| 3       | 0        | 0     | 0            | 0            |
| 50      | 0        | 0     | 0            | 0            |
| 0       | 0        | 0     | 0            | 0            |
| 0       | 0        | 0     | 0            | 0            |

| LOCATION            | 1 LIGHTHOUSE INN RD WD | WD | WD |
|---------------------|------------------------|----|----|
| 1 LIGHTHOUSE INN RD |                        |    |    |
| SALE PRICE          |                        |    |    |
| BK-PG (Cert)        |                        |    |    |
| (16724)             |                        |    |    |

| DESCRPTION     | ADJ  | S | BAT   | T |
|----------------|------|---|-------|---|
| BSMT WALL      | 1.00 | + | BMU   | N |
| VINYL          | 1.00 | + | BAS   | L |
| GABLE          | 1.00 | + | WDK   | N |
| ASPH/COMP SHIN | 1.00 | + | ASH   | N |
| WWW CARPET     | 1.00 | + | ATTU  | N |
| PLASTER        | 1.04 | + | G ENT | N |
| STEAM          | 1.01 | + | LLF   | L |
| OIL            | 1.00 | + | USF   | L |
| PRIVATE ROAD   | 1.00 | + | N OFA | N |
| HISTORIC DST   | 1.00 | + | FPL   | O |

| DESCRPTION     | ADJ  | S | BAT   | T |
|----------------|------|---|-------|---|
| FOUNDATION     | 1.00 | + | BMU   | N |
| EXTERIOR WALL  | 1.00 | + | BAS   | L |
| ROOF STRUCTURE | 1.00 | + | WDK   | N |
| ROOF COVER     | 1.00 | + | ASH   | N |
| FLOORING       | 1.04 | + | G ENT | N |
| INT FINISH     | 1.01 | + | LLF   | L |
| H.V.A.C.       | 1.00 | + | USF   | L |
| FUEL SOURCE    | 1.00 | + | N OFA | N |
| PRIVATE ROAD   | 1.00 | + | FPL   | O |
| HISTORIC DST   | 1.00 | + | FPL   | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| LOCATION            | 1 LIGHTHOUSE INN RD | WD | WD |
|---------------------|---------------------|----|----|
| 1 LIGHTHOUSE INN RD |                     |    |    |
| SALE PRICE          |                     |    |    |
| BK-PG (Cert)        |                     |    |    |
| (16724)             |                     |    |    |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN PORCH  | 1.00 | + | N OFA  | N |
| FIRE PLACE  | 1.00 | + | FPL    | O |

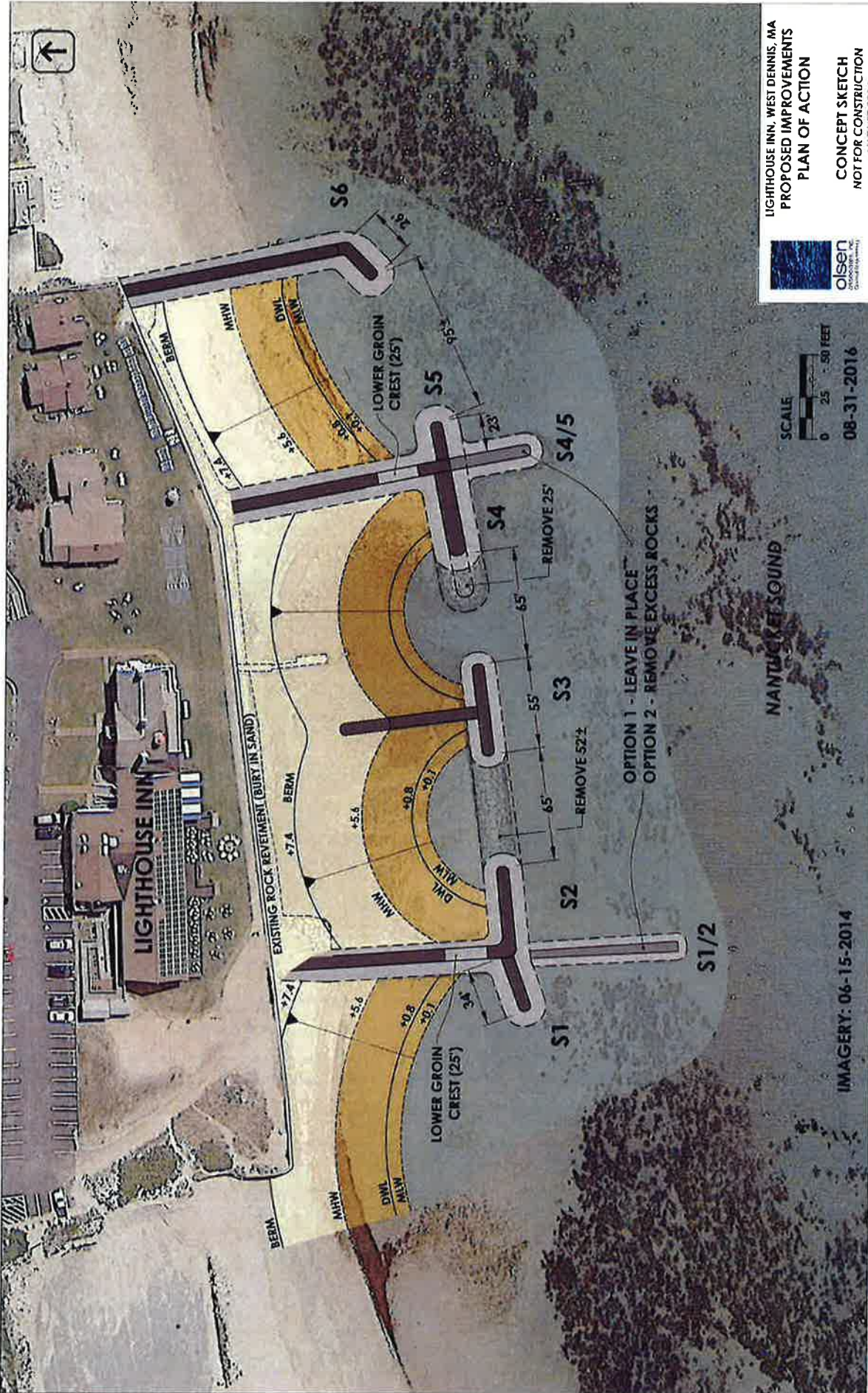
| DESCRPTION  | ADJ  | S | BAT    | T |
|-------------|------|---|--------|---|
| BSMT UNF    | 1.00 | + | BMU    | N |
| BASE AREA   | 1.01 | + | BAS    | L |
| WOOD DECK   | 1.00 | + | WDK    | N |
| ATT SHED    | 1.00 | + | ASH    | N |
| ATTIC UNF   | 1.00 | + | E ATTU | N |
| ENTRY       | 1.04 | + | G ENT  | N |
| LOW-LEV FIN | 1.01 | + | LLF    | L |
| UP-STRY FIN | 1.00 | + | USF    | L |
| OPEN        |      |   |        |   |

**Attachment C**  
**Project Plans**

---







LIGHTHOUSE INN, WEST DENNIS, MA  
 PROPOSED IMPROVEMENTS  
 PLAN OF ACTION



CONCEPT SKETCH  
 NOT FOR CONSTRUCTION  
 AUGUST 2016

SCALE  
 0 25 50 FEET  
 08-31-2016

OPTION 1 - LEAVE IN PLACE  
 OPTION 2 - REMOVE EXCESS ROCKS

IMAGERY: 06-15-2014

**Attachment D**

**Site Photos**

---





**EXISTING CONDITIONS**  
LIGHTHOUSE INN & DAVID  
BEACH RD., MA.



SCALE  
0 100 200 FEET  
09-23-2014

IMAGERY: 06-15-2014

**CONCEPT SKETCH**  
NOT FOR CONSTRUCTION



**EXISTING CONDITIONS**  
LIGHTHOUSE INN & DAVID  
BEACH RD. MA.



**CONCEPT SKETCH**  
NOT FOR CONSTRUCTION

SCALE  
0 30 60 FEET  
09-23-2014

NANTUCKET SOUND

IMAGERY: 06-15-2014



**Attachment E**  
**Statement of Record Owner**

---

LHI, Inc.  
1 Lighthouse Inn Road  
PO Box 128  
West Dennis, MA 02670

10/27/2016

RE: Pilot Project of the Groin Rehabilitation and Beach Nourishment at Lighthouse Inn

Lighthouse Inn, Inc. is a wholly owned subsidiary of LHI, Inc.

LHI, Inc. Has hired Environmental Partners of Quincy and Hyannis, MA to submit applications on behalf of LHI, Inc. for the project above. Any correspondence should be submitted to Mark White at Environmental Partners, [mnw@envpartners.com](mailto:mnw@envpartners.com) and cc to myself [gstone@lighthouseinn.com](mailto:gstone@lighthouseinn.com)

We look forward to working with you to complete this very important project.

Sincerely,

A handwritten signature in black ink that reads "G. Stone / Pres." The signature is written in a cursive style.

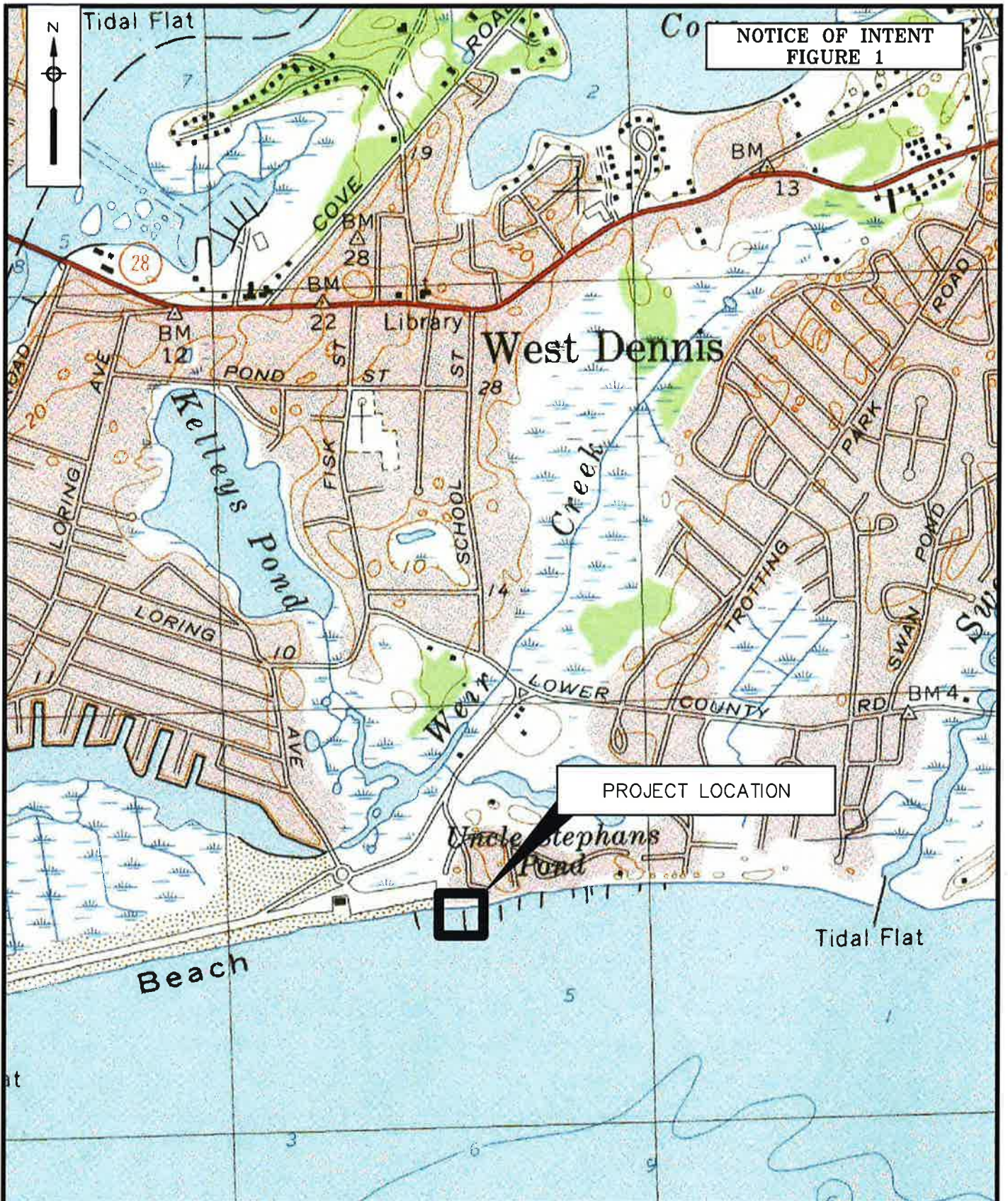
Gregory H. Stone  
President

## Appendix C

### Environmental Notification Form Figures

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NOTICE OF INTENT  
FIGURE 1

PROJECT LOCATION

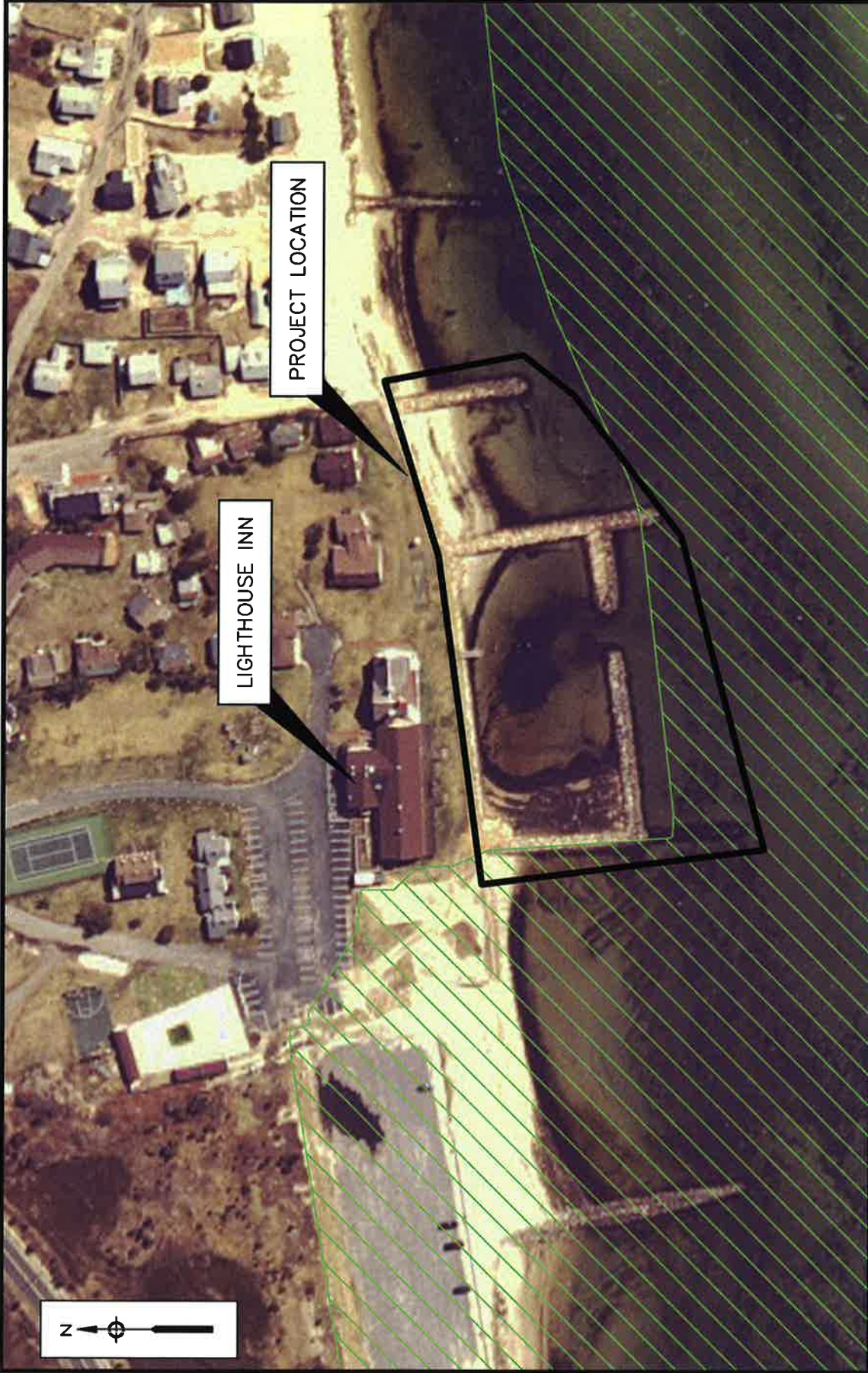
LIGHHOUSE - DENNIS, MA MEPA ENFLOCUS MAP LOCUS MAP.DWG

**Environmental Partners**  
A partnership for engineering solutions  
Quincy, MA Hyannis, MA Westport, MA  
Tel: 617-667-0900 www.enrpartners.com


NOVEMBER 2016  
328-1601  
1" = 1,000'

APPLICANT: LIGHTHOUSE INN INC.  
LIGHTHOUSE INN GROIN IMPROVEMENTS  
USGS QUADS LOCUS MAP





**LEGEND**

 PRIORITY AND ESTIMATED HABITAT AREA



SCALE IN FEET  
SCALE: 1"=40'

**FIGURE 2**

Lighthouse Inn Groin Improvements  
November 2016

**Environmental Partners** GROUP  
*A partnership for engineering solutions.*  
Quincy, MA [www.envpartners.com](http://www.envpartners.com)





NOTE: IMAGE TAKEN OF THE LIGHTHOUSE INN CIRCA 1921.

### FIGURE 3

Lighthouse Inn Groin Improvements

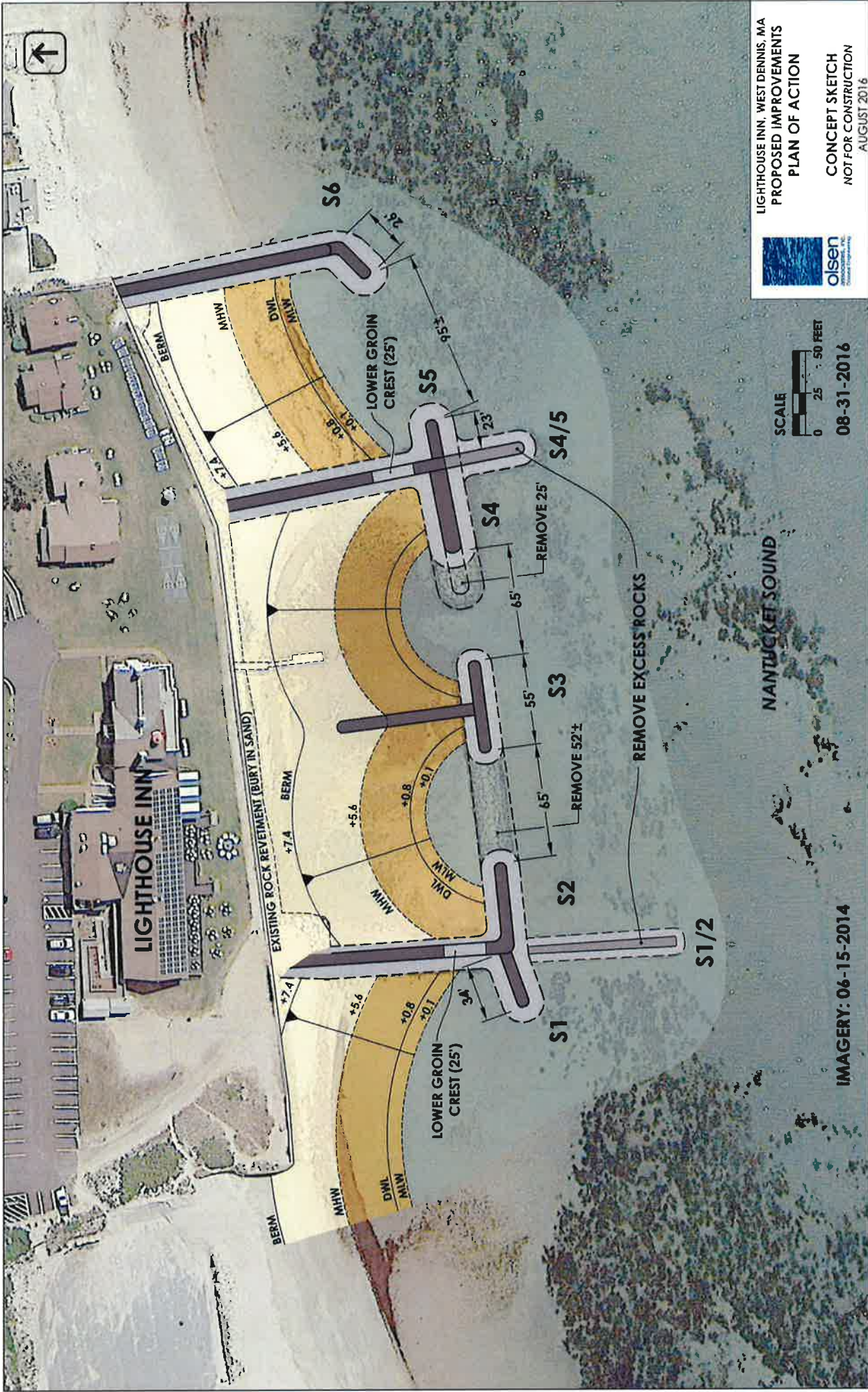
November 2016

**Environmental Partners**  
A PARTNERSHIP FOR ENGINEERING SOLUTIONS  
GROUP  
GUILDFORD, MA [www.envipartners.com](http://www.envipartners.com)

**Appendix D**  
**Permitting Design Plans**

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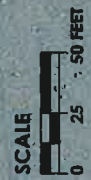




LIGHTHOUSE INN, WEST DENNIS, MA  
 PROPOSED IMPROVEMENTS  
 PLAN OF ACTION



CONCEPT SKETCH  
 NOT FOR CONSTRUCTION  
 AUGUST 2016



08-31-2016

IMAGERY: 06-15-2014



Lighthouse Inn, MA  
Worksheet 9/9/2016, Kevin Bodge

Area of Groins Being Added

|         |             |         |                              |
|---------|-------------|---------|------------------------------|
| S1      | 38' x 25' = | 950 sf  | } 4225 ft <sup>2</sup> added |
| S3 stem | 80' x 20' = | 1600 sf |                              |
| S5      | 27' x 25' = | 675 sf  |                              |
| S6      | 40' x 25' = | 1000 sf |                              |

Area of Groins Being Removed

|       |             |         |                                |
|-------|-------------|---------|--------------------------------|
| S2/S3 | 52' x 25' = | 1300 sf | } 4179 ft <sup>2</sup> removed |
| S3/S4 | 25' x 25' = | 625 sf  |                                |
| S1/2  | 90' x 16' = | 1440sf  |                                |
| S4/5  | 37' x 22' = | 814 sf  |                                |

Area of Groins Remaining the Same

|    |         |              |         |                                           |
|----|---------|--------------|---------|-------------------------------------------|
| #1 | S1-S2   | 147' x 22' = | 3234 sf | } 13,192 ft <sup>2</sup> remains the same |
|    | S2      | 50' x 25' =  | 1250 sf |                                           |
|    | S3 head | 68' x 25' =  | 1700 sf |                                           |
| #2 | S4      | 48' x 25' =  | 1200 sf |                                           |
|    | S5      | 140' x 22' = | 3080 sf |                                           |
| #3 | S6      | 124' x 22' = | 2728 sf |                                           |

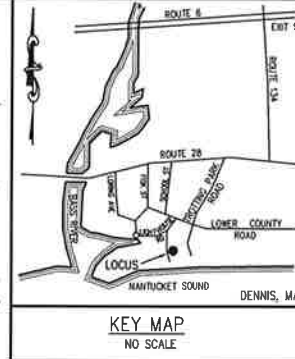
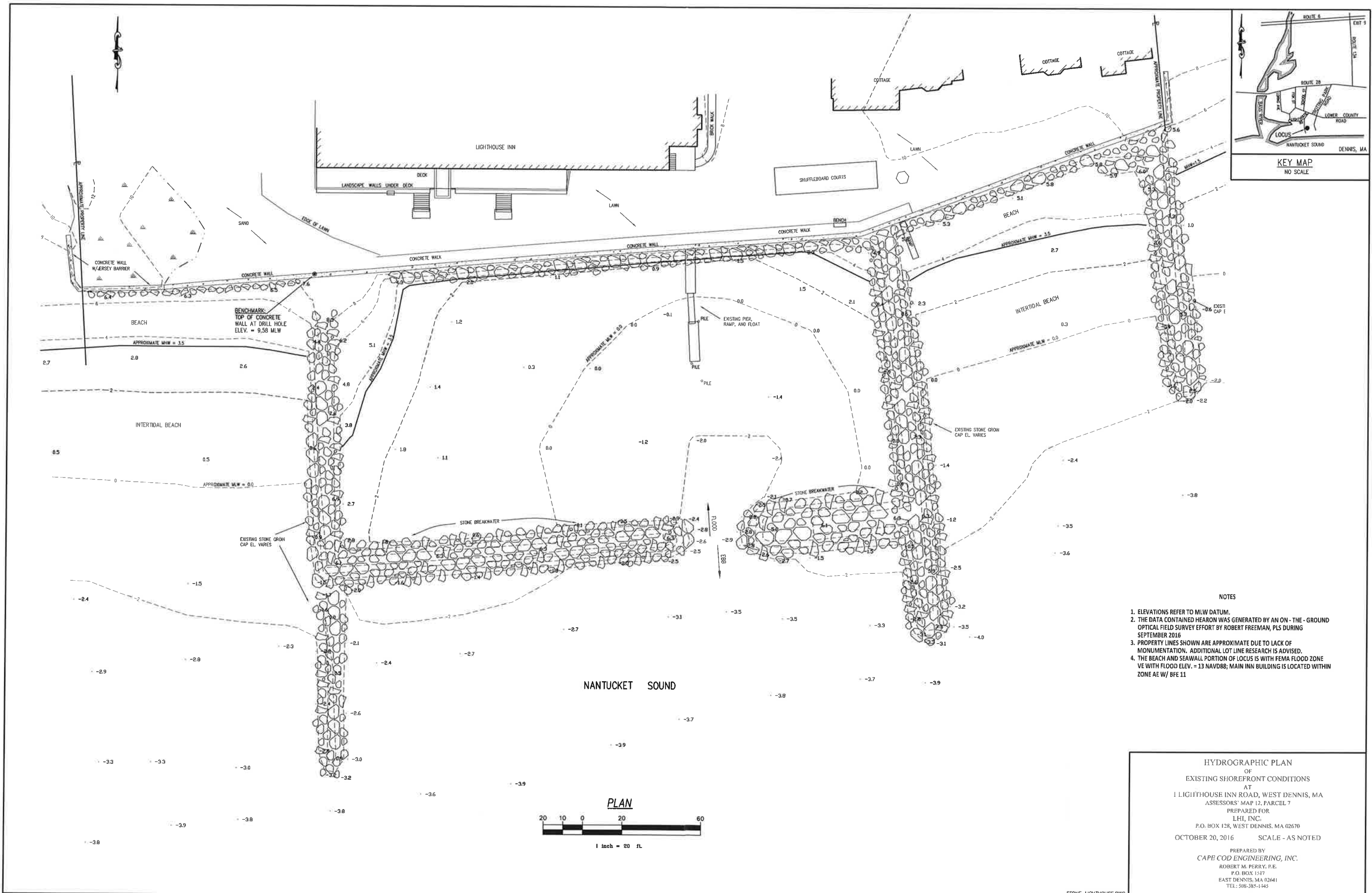
Area to Receive Sand for Beach Renourishing

|                     |               |           |                               |
|---------------------|---------------|-----------|-------------------------------|
| West of groin #1    | 120' x 75' =  | 9000 sf   | } 60,600 ft <sup>2</sup> sand |
| Between groins #1-2 | 270' x 140' = | 37,800 sf |                               |
| Between groins #2-3 | 120' x 115' = | 13,800 sf |                               |

Summary

|                                    |   |                        |
|------------------------------------|---|------------------------|
| Area of groins being added         | = | 4225 ft <sup>2</sup>   |
| Area of groins being removed       | = | 4179 ft <sup>2</sup>   |
| Area of groins remaining same      | = | 13,192 ft <sup>2</sup> |
| Area to receive sand renourishment | = | 60,600 ft <sup>2</sup> |

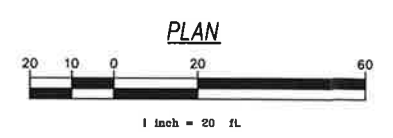
\*Does not include 1000 ft<sup>2</sup> where exiting groin will be lowered in elevation, but not removed



- NOTES
1. ELEVATIONS REFER TO MLW DATUM.
  2. THE DATA CONTAINED HEREON WAS GENERATED BY AN ON - THE - GROUND OPTICAL FIELD SURVEY EFFORT BY ROBERT FREEMAN, PLS DURING SEPTEMBER 2016
  3. PROPERTY LINES SHOWN ARE APPROXIMATE DUE TO LACK OF MONUMENTATION. ADDITIONAL LOT LINE RESEARCH IS ADVISED.
  4. THE BEACH AND SEAWALL PORTION OF LOCUS IS WITH FEMA FLOOD ZONE VE WITH FLOOD ELEV. = 13 NAVD88; MAIN INN BUILDING IS LOCATED WITHIN ZONE AE W/ BFE 11

HYDROGRAPHIC PLAN  
 OF  
 EXISTING SHOREFRONT CONDITIONS  
 AT  
 1 LIGHTHOUSE INN ROAD, WEST DENNIS, MA  
 ASSESSORS' MAP 12, PARCEL 7  
 PREPARED FOR  
 LHI, INC.  
 P.O. BOX 128, WEST DENNIS, MA 02670  
 OCTOBER 20, 2016 SCALE - AS NOTED

PREPARED BY  
 CAPE COD ENGINEERING, INC.  
 ROBERT M. PERRY, P.E.  
 P.O. BOX 1517  
 EAST DENNIS, MA 02641  
 TEL: 508-385-1445



**Appendix E**  
**Chapter 91 Licenses**

---

# The Commonwealth of Massachusetts



No. 6 4 1.

Whereas, H. K. Noyes and E. P. Noyes, - - - - -

of Dennis - - - - -, in the County of Barnstable - - - - and Commonwealth  
aforesaid, have applied to the Department of Public Works, Division of Waterways and Public Lands,  
for license to build and maintain bulkheads and jetties in Nantucket  
Sound at West Dennis in the town of Dennis, - - - - -

and have submitted plans of the same; and whereas due notice of said application, and of the time  
and place fixed for a hearing thereon, has been given, as required by law, to the Selectmen - -  
- - - - - of the town - of Dennis - - - - - ;

Now, said Department, Division of Waterways and Public Lands, having heard all parties desiring to  
be heard, and having fully considered said application, hereby, ~~subject to the approval of the Governor and  
Council,~~ authorizes and licenses the said H. K. Noyes and E. P. Noyes - - - - -  
- - - - - , subject to the provisions of the ninety-  
first chapter of the General Laws, and of all laws which are or may be in force applicable thereto, to  
build and maintain in Nantucket Sound on land and flats belonging  
to the said licensees bulkheads and jetties of timber and stone at  
West Dennis in the town of Dennis, in conformity with the accom-  
panying plan No. 641, which shows in detail the location and  
method of construction of said bulkheads and jetties.

This license is granted subject to the laws of the United  
States.

The plan of said work, numbered -----6 4 1----- is on file in the office of said Department, Division of Waterways and Public Lands, and a duplicate of said plan accompanies this License, and is to be referred to as a part hereof.

~~The amount of tide water displaced by the work hereby authorized shall be ascertained by said Department, Division of Waterways and Public Lands, and compensation therefor shall be made by the said ----- their successors.~~

Form WD 54  
FM sets-8-25 No. 221-1b.

~~and assigns, by paying into the treasury of the Commonwealth~~ -----  
cents for each cubic yard so displaced, being the amount hereby assessed  
by said Department, Division of Waterways and Public Lands.

This License is granted in consideration of the payment into the treasury of the Commonwealth  
by the said  
for the rights and privileges hereby granted in land of said Commonwealth, of the further sum of  
~~being the amount determined by the Governor and Council to be just and equitable therefor.~~

Nothing in this License shall be so construed as to impair the legal rights of any person.

This License shall be void unless the same and the accompanying plan are recorded within  
one year from the date hereof, in the Registry of Deeds for the -----  
District of the County of Barnstable.

In Witness Whereof, said Department of Public Works, Division of Waterways and Public Lands  
have hereunto set their hands this first----- day of April,----- in the  
year nineteen hundred and twenty-six.

William F. Williams -----  
Jesse B. Baxter.-----  
Richard K Hale-----  
} Department of  
Public Works,  
Division of  
Waterways and  
Public Lands

Approved,  
William F. Williams  
Commissioner of Public Works.

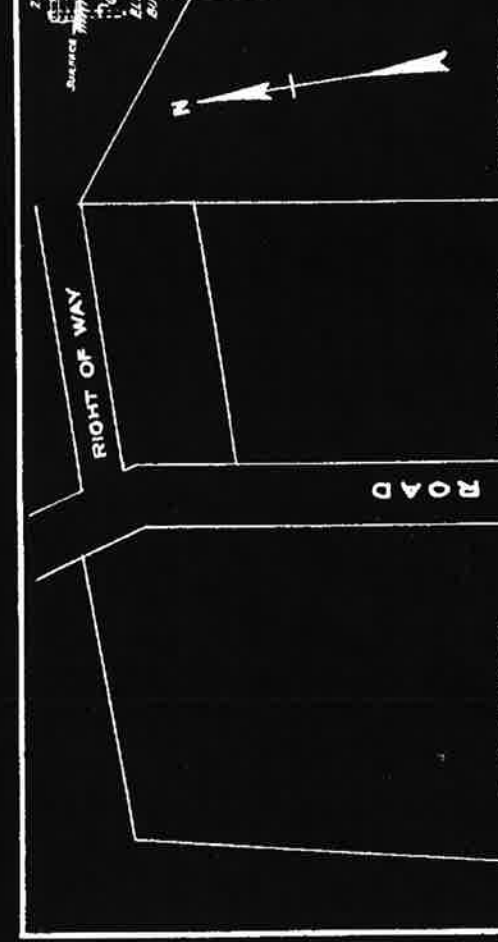
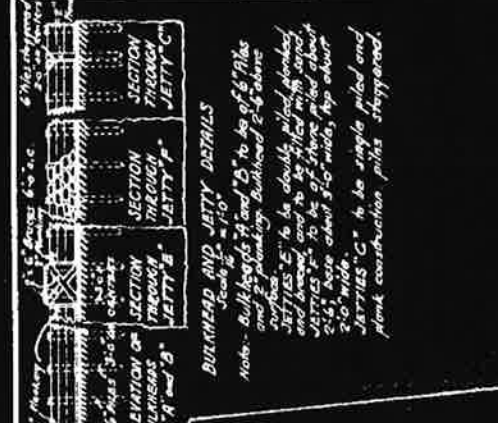
THE COMMONWEALTH OF MASSACHUSETTS

-----  
-BOSTON-

Approved by the Governor and Council

-----  
Executive Secretary.

A true copy. Attest: Edna J. Townsend, Recording Secretary.



**PLAN TO ACCOMPANY PETITION OF  
E. P. NOYES AND H. K. NOYES  
TO BUILD WOOD & STONE BULKHEADS AND JETTIES IN  
NANTUCKET SOUND, WEST DENNIS, MASS.**

NO. 641

APPROVED BY DEPARTMENT OF PUBLIC WORKS  
DIVISION OF WATERWAYS AND PUBLIC LANDS

APRIL 1, 1926

COMMISSIONER OF PUBLIC WORKS  
ASSOCIATE COMMISSIONERS

PLAN OF PROPOSED BULKHEADS AND JETTIES.  
SCALE 1" = 120'

RIGHT OF WAY

TOWN ROAD

H. K. NOYES.

E. P. NOYES.

H. K. NOYES.

MEAN HIGH WATER

MEAN LOW WATER

Notes - Bulk heads 'A' and 'B' to be of 6" Pilas and 2" planking. Bulkhead 'E' to be above surface. Jetties 'E' to be double pilas, rounded ends, 20' to 25' high, with about 2 1/2" base about 3' to 4' wide, top about 2-3" wide. Jetties 'C' to be single pilas and plank construction, pilas staggered.

## The Commonwealth of Massachusetts

No. 4831



Whereas, Lighthouse Inn, Inc. \_\_\_\_\_

of Dennis \_\_\_\_\_, in the County of Barnstable \_\_\_\_\_ and Commonwealth  
aforesaid, has applied to the Department of Public Works for license to reconstruct  
and maintain three stone groins in Nantucket Sound, at its property in the  
town of Dennis, \_\_\_\_\_  
and has submitted plans of the same; and whereas due notice of said application, and of  
the time and place fixed for a hearing thereon, has been given, as required by law, to the  
Selectmen \_\_\_\_\_ of the town \_\_\_\_\_ of Dennis \_\_\_\_\_;

Now said Department, having heard all parties desiring to be heard, and having fully  
considered said application, hereby, ~~subject to the approval of the Governor and Council,~~  
authorizes and licenses the said \_\_\_\_\_

Lighthouse Inn, Inc. \_\_\_\_\_, subject to the provisions of the ninety-  
first chapter of the General Laws, and of all laws which are or may be in force applicable  
thereto, to rebuild and maintain three stone groins in Nantucket Sound, at  
its property in the town of Dennis, in conformity with the accompanying plan  
No. 4831.

Three existing stone groins may be reconstructed so that the westerly  
groin extends into tidewater 220 feet from the mean high water line, the  
middle groin a distance of 163 feet, and the easterly groin a distance of



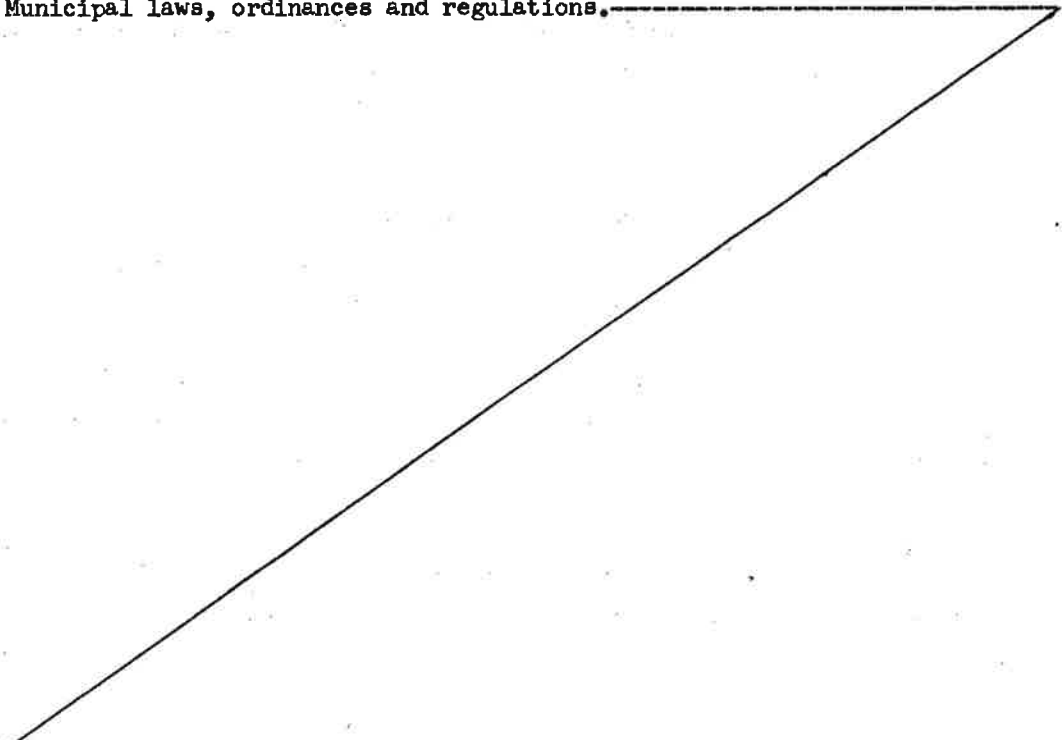
100 feet from the mean high water line, each with a top width of 5 feet and side and end slopes at  $1\frac{1}{2}$  to 1, in the locations shown on said plan with the westerly groin placed 115 feet easterly of the westerly property line, the middle groin a further distance of 290 feet to eastward and the easterly groin a further distance of 130 feet to eastward, and in accordance with the details there indicated.

The tops of said groins shall slope to elevation 6.4 feet above mean low water at the mean low water line, and shall continue and slope to the elevation of mean high water, amounting to 3.2 feet above mean low water at the outer ends, as shown on said plan.

The stone to be used shall be large, ranging in weight from 1 ton upwards.

Nothing in this license shall be construed as authorizing work on property not owned or controlled by the licensee except with the consent of the owner or owners thereof.

This license is granted subject to all applicable Federal, State, County and Municipal laws, ordinances and regulations.



The plan of said work, numbered 4 8 3 1, is on file in the office of said Department, and duplicate of said plan accompanies this License, and is to be referred to as a part hereof.

~~The amount of tide water displaced by the work hereby authorized shall be ascertained by said Department, and compensation therefor shall be made by the said~~  
heirs, successors

~~and assigns, by paying into the treasury of the Commonwealth~~  
cents for each cubic yard so displaced, being the amount hereby assessed by  
~~said Department.~~

Nothing in this License shall be so construed as to impair the legal rights of any person.

This License shall be void unless the same and the accompanying plan are recorded within one year from the date hereof, in the Registry-----of Deeds for the-----  
District of the County of Barnstable.

In Witness Whereof, said Department of Public Works have hereunto set their hands this-----ninth-----day of-----June,-----in the year nineteen hundred and sixty-four.

JTH

|                     |   |                               |
|---------------------|---|-------------------------------|
| James D. Fitzgerald | } | Department of<br>Public Works |
| Francis W. Sargent  |   |                               |
| Anthony C. Rosselli |   |                               |
| John D. Warner      |   |                               |
| D. R. Dwight        |   |                               |

~~THE COMMONWEALTH OF MASSACHUSETTS~~

~~This license is approved in consideration of the payment into the treasury of the Com-~~  
monwealth by the said  
of the further sum of

the amount determined by the Governor and council as a just and equitable charge for  
~~rights and privileges hereby granted in land of the Commonwealth.~~

~~Approved by the Governor and Council.~~

~~Boston,~~-----

~~Executive Secretary.~~

A true copy. Attest: Edward F. Dwyer Secretary.

License No. \_\_\_\_\_

DEPARTMENT OF PUBLIC WORKS

TO

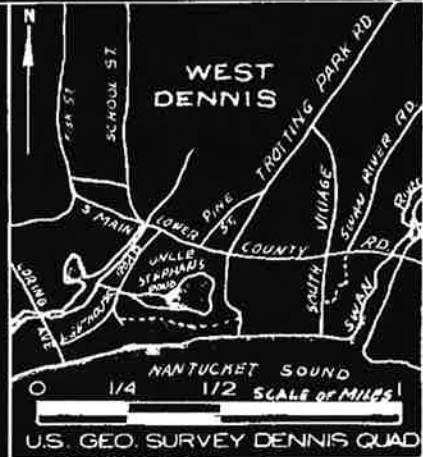
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
To \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Dated \_\_\_\_\_

*Recorded June 18, 1964*

WORK TO BE LICENSED SHOWN IN RED

MEAN RANGE OF TIDE = 3.20

REFERENCE - ELEVATIONS ARE IN FEET AND TENTHS AND SHOW HEIGHTS ABOVE THE PLANE OF MEAN LOW WATER MINUS FIGURES ARE SOUNDINGS AND SHOW DEPTHS BELOW THE PLANE OF MEAN LOW WATER



### PLAN



MHW 3.20  
MLW 0.00

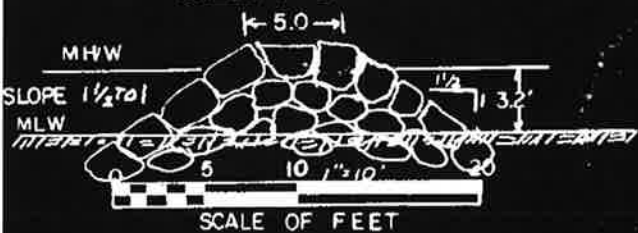
ELEV. 3.2

ELEV. 6.4

ELEV. 7.8

SLOPE 1 1/2 TO 1

### SECTION A-A



### PROFILE



PLAN ACCOMPANYING PETITION OF  
**LIGHTHOUSE INN INC.**  
 TO BUILD ANEW AND MAINTAIN THREE (3)  
 STONE GROINS IN  
**NANTUCKET SOUND**  
 IN  
**DENNIS (WEST)**

REF. TO ACC. NO. 02499 AND CONT. NO. 884

LICENSE PLAN NO 4831  
 APPROVED BY DEPARTMENT OF PUBLIC WORKS OF MASSACHUSETTS - JUNE 9, 1964

*Francis W. Anderson*  
 COMMISSIONER DEPT OF PUBLIC WORKS

*Anthony J. Corrales*  
*John W. Cairns*  
 ASSOCIATE COMMISSIONERS

The Commonwealth of Massachusetts

No. 5377



Whereas, Lighthouse Inn, Inc.-----

of Dennis-----, in the County of Barnstable----- and Commonwealth aforesaid, has applied to the Department of Public Works for license to build and maintain an offshore breakwater system in Nantucket Sound, at its property in the town of Dennis,-----

and has submitted plans of the same; and whereas due notice of said application, and of the time and place fixed for a hearing thereon, has been given, as required by law, to the Selectmen----- of the town ----- of Dennis-----;

Now said Department, having heard all parties desiring to be heard, and having fully considered said application, hereby, ~~subject to the approval of the Governor and Council,~~ authorizes and licenses the said -----

Lighthouse Inn, Inc.-----, subject to the provisions of the ninety-first chapter of the General Laws, and of all laws which are or may be in force applicable thereto, to build and maintain an offshore breakwater system in Nantucket Sound, at its property in the town of Dennis, in conformity with the accompanying plan No. 5377 (two sheets).

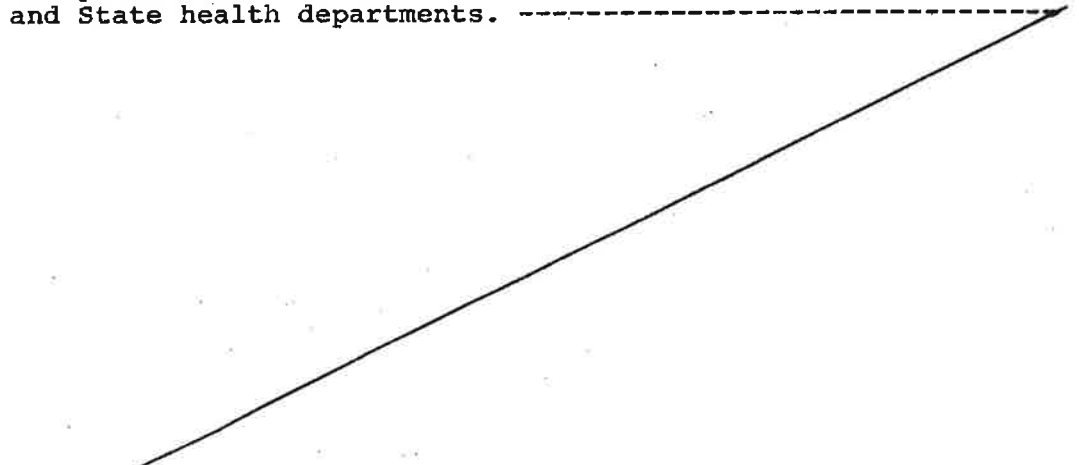
An offshore breakwater system of interlocking steel piling in three sections running a total length of 290 feet between two existing stone groins at a distance of 150 feet southerly in the

tidewaters of Nantucket Sound from a concrete shore retaining wall, may be built having two 8 foot openings located 80 feet from said groins. The top of the bulkhead with a stone berm along its seaward face sloping seaward at 1½ to 1 shall have a top width of 4 feet, including the bulkhead cap, at elevation not more than 6.2 above mean low water. The 8 foot openings may be screened only to exclude seaweed floatation onto the beach shore. All work hereby authorized is to be in the location shown on said plan between the existing groins built under license No. 4831 of the Department of Public Works, and in accordance with the details of construction indicated thereon.

A third existing groin to eastward, also on the petitioner's property may be maintained as built extending an additional 80 feet into the tidewaters of Nantucket Sound beyond the length of 100 feet from mean high water as authorized under said license No. 4831, subject to removal back to the original limits authorized under said license No. 4831, if so ordered by the Department.

Nothing in this license shall be construed as authorizing encroachment on property not owned or controlled by the licensee except with the consent of the owner or owners thereof.

This license is granted subject to all applicable Federal, State, County and Municipal laws, ordinances and regulations, and upon the express condition that use by boats or otherwise of the structures hereby licensed shall involve no discharge of sewage or other polluting matter into the adjacent tidewaters except in strict conformity with the requirements of the local and State health departments.



The plan of said work, numbered -----5 3 7 7,----- is on file in the office of said Department, and duplicate of said plan accompanies this License, and is to be referred to as a part hereof.

The amount of tide-water displaced by the work hereby authorized shall be ascertained by said Department, and compensation therefor shall be made by the said ----- Lighthouse Inn, Inc., its----- heirs; successors



and assigns, by paying into the treasury of the Commonwealth thirty-seven and one-half (37½) cents for each cubic yard so displaced, being the amount hereby assessed by said Department.

Nothing in this License shall be so construed as to impair the legal rights of any person.

This License shall be void unless the same and the accompanying plan are recorded within one year from the date hereof, in the Registry-----of Deeds for the-----District of the County of Barnstable.

In Witness Whereof, said Department of Public Works have hereunto set their hands this -----twenty-second ---- day of-----May,----- in the year nineteen hundred and sixty-eight.

Edward J. Ribbs

Department of  
Public Works

Peter E. Donadio

Robert S. Foster

J. T. H.

~~THE COMMONWEALTH OF MASSACHUSETTS~~

~~This license is approved in consideration of the payment into the treasury of the Commonwealth by the said of the further sum of~~

~~the amount determined by the Governor and council as a just and equitable charge for rights and privileges hereby granted in land of the Commonwealth~~

BOSTON,

Approved by the Governor and Council

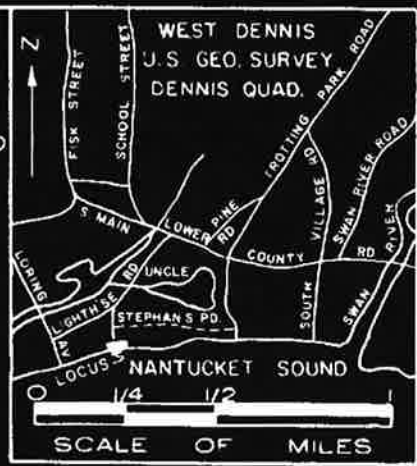
Executive Secretary

A true copy - Attest

Edward F. Page

Secretary

WORK TO BE LICENSED SHOWN IN RED  
 MEAN RANGE OF TIDE = 3.20  
 REFERENCE: ELEVATIONS ARE IN FEET AND TENTHS AND SHOW HEIGHTS ABOVE MLW PLANE. MINUS FIGURES ARE SOUNDINGS AND SHOW DEPTHS BELOW MLW PLANE

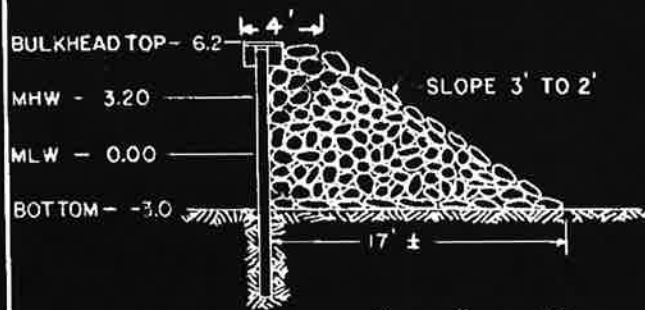
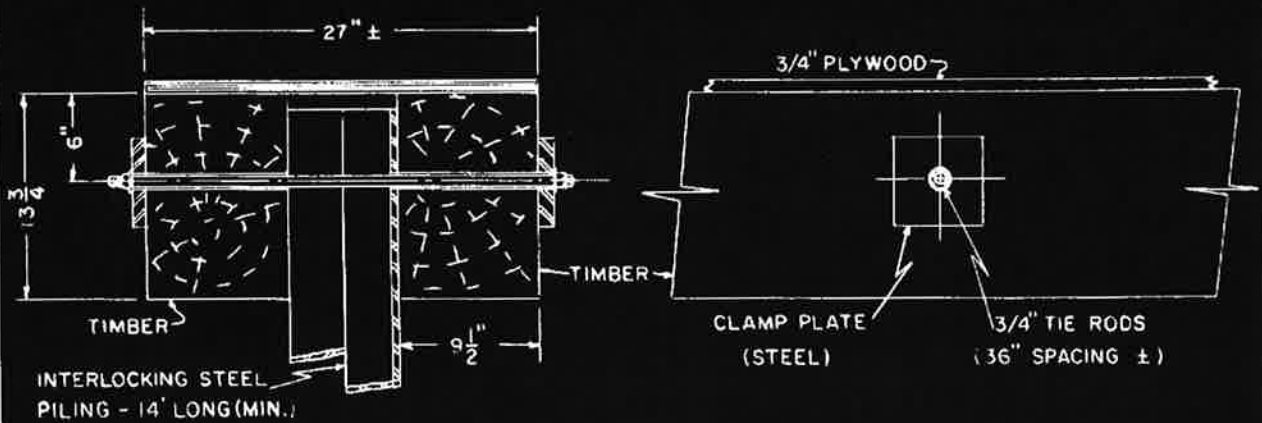


SHEET 1 OF TWO SHEETS

PLAN ACCOMPANYING PETITION OF  
**LIGHTHOUSE INN, INC.**  
 TO BUILD AN OFFSHORE BREAKWATER SYSTEM  
 AND TO MAINTAIN EXISTING GROIN EXTENSION  
 AN OFFSHORE BREAKWATER  
**NANTUCKET SOUND**  
 IN  
**DENNIS (WEST)**  
 NOVEMBER 1967

LICENSE PLAN NO. 5377  
 APPROVED BY DEPARTMENT OF PUBLIC WORKS OF MASSACHUSETTS MAY 22, 1968  
*David A. Holt*  
 COMMISSIONER - DEPT OF PUBLIC WORKS  
 ASSOCIATE COMMISSIONER  
*John E. Donadio*  
*Robert S. Foster*

DETAIL OF BULKHEAD TOP



BULKHEAD SECTION A-A (SHEET 1)



SHEET 2 OF TWO SHEETS  
 PLAN ACCOMPANYING PETITION OF  
**LIGHTHOUSE INN, INC.**  
 TO BUILD ANEW AND MAINTAIN  
 ONE BULKHEAD IN  
**NANTUCKET SOUND**  
 IN  
**DENNIS (WEST)**

LICENSE PLAN NO 5377  
 APPROVED BY DEPARTMENT OF PUBLIC WORKS  
 MAY 22 1968

**Appendix F**

**Massachusetts Historical Commission Response Letter**

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RECEIVED

NOV 01 2016

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

MASS. HIST. COMM

RC 61145

APPENDIX A  
MASSACHUSETTS HISTORICAL COMMISSION  
220 MORRISSEY BOULEVARD  
BOSTON, MASS. 02125  
617-727-8470, FAX: 617-727-5128

**PROJECT NOTIFICATION FORM**

After review of MHC files and the materials you submitted, it has been determined that this project is unlikely to affect significant historic or archaeological resources.

RC 61145

Project Name: Lighthouse Inn Groin Rehabilitation

Location / Address: 1 Lighthouse Road


City / Town: West Dennis

Project Proponent

Name: Gregory Stone

Address: P.O Box 128

City/Town/Zip/Telephone: West Dennis, Massachusetts 02670 (508) 398-2244

  
Jonathan K. Patton  
Archaeologist / Preservation Planner  
Massachusetts Historical Commission  
Date 11/4/16

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name

1. Executive Office of Environmental Affairs
2. National Heritage & Endangered Species Program
3. US Army Corp of Engineers

Type of License or funding (specify)

- Environmental Notification Form (ENF)
- Massachusetts Endangered Species Act (MESA) Review
- Individual Permit

**Project Description (narrative):**

Please refer to the attached project description.

**Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.**

No.

**Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.**

No.

**Does the project include new construction? If so, describe (attach plans and elevations if necessary).**

Yes. Please refer to the attached plans.

## **Appendix G**

### **Distribution List and Public Notice**

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**Lighthouse Inn Groin Improvements Project  
LHI, Incorporated  
Environmental Notification Form – Distribution List**

***Two Full Sized Copies:***

1. Secretary Matthew A. Beaton  
Executive Office of Environmental Affairs  
Attn: MEPA Office  
100 Cambridge Street, Suite 900  
Boston, MA 02114

***One copy to each of the following:***

2. Gregory Stone, Owner  
Lighthouse Inn Inc.  
P.O. Box 128  
West Dennis, MA 02670
3. Department of Environmental Protection  
Commissioner's Office  
One Winter Street  
Boston, MA 02108
4. Department of Environmental Protection  
Southeast Regional Office  
Attn: MEPA Coordinator  
20 Riverside Drive  
Lakeville, MA 02347
5. Massachusetts Department of Transportation  
Public/Private Development Unit  
10 Park Plaza  
Boston, MA 02116
6. Massachusetts Department of Transportation  
District #5  
Attn: MEPA Coordinator  
1000 County Street  
Taunton, MA 02780
7. Massachusetts Historical Commission  
The MA Archives Building  
220 Morrissey Boulevard  
Boston, MA 02125
8. Board of Underwater Archaeological Resources  
251 Causeway Street, Suite 800  
Boston, MA 02114
9. Metropolitan Area Planning Council  
60 Temple Place/6th floor  
Boston, MA 02111

**Lighthouse Inn Groin Improvements Project**  
**LHI, Incorporated**  
**Environmental Notification Form – Distribution List**

10. Dennis Board of Selectmen  
685 Route 134 (P.O. Box 2060)  
South Dennis, MA 02660
  
11. Dennis Planning Department  
685 Route 134 (P.O. Box 2060)  
South Dennis, MA 02660
  
12. Dennis Conservation Commission  
685 Route 134  
South Dennis, MA 02660
  
13. Dennis Board of Health  
685 Route 134  
South Dennis, MA 02660
  
14. Department of Public Health (DPH)  
Director of Environmental Health  
250 Washington Street  
Boston, MA 02115

***Commonwealth of Massachusetts  
Executive Office of Energy and Environmental Affairs***

***MEPA Office***

100 Cambridge St., Suite 900  
Boston, MA 02114  
Telephone 617-626-1020

The following has been submitted to the Dennis Register for advertisement on December 1, 2016.

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**PUBLIC NOTICE OF ENVIRONMENTAL REVIEW**

**PROJECT: Lighthouse Inn Groin Improvements**

**LOCATION: West Dennis, MA**

**PROPONENT: LHI, Incorporated**

**The undersigned submitted an Environmental Notification Form ("ENF") to the Secretary of Energy & Environmental Affairs on November 28, 2016.**

**This will initiate review of the above project pursuant to the Massachusetts Environmental Policy Act ("MEPA", M.G.L. c. 30, s.s. 61-62I). Copies of the ENF may be obtained through the Lighthouse Inn at 1 Lighthouse Road, West Dennis, MA 02670 or through Environmental Partners Group at 1900 Crown Colony Drive, Suite 402, Quincy, MA 02169.**

**Copies of the ENF are also being sent to the Dennis Board of Selectmen, Conservation Commission, Planning Department and Board of Health where they may be inspected.**

The Secretary of Energy & Environmental Affairs will publish notice of the ENF in the Environmental Monitor on December 7, 2016, will receive public comments on the project for up to December 27, 2016, and MEPA will issue their decision on the ENF on January 6, 2017. A site visit and consultation session on the project may also be scheduled. All persons wishing to comment on the project, or to be notified of a site visit or consultation session, should write to the Secretary of Energy & Environmental Affairs, 100 Cambridge St., Suite 900, Boston, Massachusetts 02114, Attention: MEPA Office, referencing the above project.

By: Gregory H. Stone, President, LHI Inc.

## **Appendix H**

### **List of Municipal, State, and Federal Permit Requirements**

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Permits Required to complete the Proposed Work:

1. MEPA Environmental Notification Form (310 CMR 11.00)
2. Massachusetts Historical Commission Project Notification Form (950 CMR 71.00)
3. Massachusetts Endangered Species Act (321 CMR 10.00)
4. MADEP Chapter 91 Waterways License (310 CMR 9.00)
5. United States Army Corps of Engineers General Permit (33 CFR 330)