1. Conservation Commission Pack 07/23/2020

    Documents:

    THE TOWN OF NANTUCKET _ 34 WASHINGTON STREET (42 2 3_2) SE48_3300.PDF
    MADAKET WHEELHOUSE LLC _ 13 MASSACHUSETTS AVE (60_75) SE48_3309.PDF
    5 SHERBURNE WAY LLC _ 5 SHERBURNE WAY (30_38) SE48_3321.PDF
    NANTUCKET ISLAND LAND BANK _ 73 WASHINGTON STREET (42 2 3_41 3) SE48_3313.PDF
    STEVEN AND MARTH PETERSON _ 11 EAST HALLOWELL LANE (30_17) SE48_3318.PDF
    ABH LLC _ 4 STONE BARN WAY (29_914) SE48_3315.PDF
    CEDAR VIEW POINT LLC _ 40 SHAWKEMO ROAD (27_4) SE48-3316.PDF
    BSS HUMMOCK POND LLC AND HUMMOCK POND HOLDINGS LLC _ 287 _ 289 HUMMOCK POND RD (83_4 39) SE48_3320.PDF
    RDA NANTUCKET WESTMOOR FARM LLC _ 8 OLD WESTMOOR FARM ROAD (41_822).PDF
    RDA CONAN LAUGHLIN AND BROOKE HEMMING LAUGHLIN_29 BAXTER ROAD (49 2 3_ 09).PDF
    MMOD REQUEST 262 POLPIS NOMINEE TRUST _ 262 POLPIS ROAD (25_1) SE48_3240.PDF
    COC REQUEST NANTUCKET CONSERVATION FOUNDATION INC _ 183 185 AND 187 EEL POINT ROAD SE48_2319.PDF
    COC REQUEST 77 EASTON STREET (42 4 1_35) SE48_1986.PDF
    COC REQUEST NANTUCKET HOTEL HOLDINGS LLC _ 77 EASTON STREET (42 4 1_35) SE48_2072.PDF
    NANTUCKET HOTEL HOLDINGS LLC _ 77 EASTON STREET (42 4 1_35) SE48_2442.PDF
    DRAFT CONCOM MINUTES 07_09_20.PDF

COASTAL
engineering co.

March 13, 2020

C19031.00

By Email & FedEx Delivery

Conservation Commission
Attn: Jeff Carlson, Natural Resources Director
2 Bathing Beach Road
Nantucket, MA 02554

Re: **Notice of Intent Application Filing Package**
Proposed Addition to Nantucket Harbormaster Building and Associated Site Improvements
Stephen Kelleher, Stephen Kelleher Architects
34 Washington Street
Nantucket, MA
Map: 42.2.3 Parcel: 2

On behalf of our client, Stephen Kelleher of Stephen Kelleher Architects, Inc., we are submitting an original plus 1 copy of a Notice of Intent Application Filing Package, 1 original check for legal ad fee, and 2 full size copies and 1 reduced size copy of the plan for the above referenced project. The following items are enclosed:

- Notice of Intent Application
- Project Description, Performance Standards Narrative, Construction Protocol
- NOI Wetland Fee Transmittal Form
- Copy of $335.10 check made payable to Inquirer and Mirror for the advertising fee (All other fees: state share of DEP fee, town share of DEP fee, town bylaw fee and reviewer fee are EXEMPT due to Town project)
- Certified Abutter List, Affidavit of Service, Abutter Notification Letter
- Copy of Certified Mail Receipts for Abutter Notification and MassDEP mailing
- USGS Map, identifying locus
- Coastal Engineering Co., Inc. Stormwater Report, Dated 3/12/2020
- Coastal Engineering Co., Inc. Plan Showing Existing Site Conditions, Dated 7/10/2019
- Stephen Kelleher Architects, Inc. Rendering, Dated 3/4/2020
- Stephen Kelleher Architects, Inc. Architectural Plan Set, Dated 2/25/2020 and 3/2/2020
- Stephen Kelleher Architects, Inc. Structural Plan Set, Dated 12/4/2019 and 12/5/2019
- Stephen Kelleher Architects, Inc. and Coastal Engineering Co., Inc. Civil Plan Set, Dated 3/12/2020

Please schedule this for the **April 1, 2020** public hearing. If you have any questions or require additional information, please give our office a call. Thank you.

Sincerely,

COASTAL ENGINEERING CO., INC.

Carla Davis

Enclosures: as stated

cc: Mass. DEP/SERO - Wetlands
Stephen Kelleher Architects, Inc.
Town of Nantucket
Tarja L. McGrail, Project Manager

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

34 Washington Street — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41° 16' 53.184" N — d. Latitude
70° 5' 43.404" W — e. Longitude

42.2.3 — f. Assessors Map/Plat Number
2 — g. Parcel /Lot Number

2. Applicant:

Stephen — a. First Name
Kelleher — b. Last Name
Stephen Kelleher Architects, Inc. — c. Organization
57 Alden Road — d. Street Address
Fairhaven — e. City/Town
MA — f. State
02719 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
Town of Nantucket — c. Organization
16 Broad Street — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Tarja L. — a. First Name
McGrail — b. Last Name
Coastal Engineering Co., Inc. — c. Company
260 Cranberry Highway — d. Street Address
Orleans — e. City/Town
MA — f. State
02653 — g. Zip Code
508-255-6511 — h. Phone Number
508-255-6700 — i. Fax Number
tmcgrail@coastalengineeringcompany.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

(EXEMPT) — a. Total Fee Paid
(EXEMPT) — b. State Fee Paid
(EXEMPT) — c. City/Town Fee Paid

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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A. General Information (continued)

6. General Project Description:

Proposed Addition to the Harbormaster Building and Associated Site Improvements

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☒ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Nantucket	C7858 Doc # 17777
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced

f. ☐ Riverfront Area

1. Name of Waterway (if available) - **specify coastal or inland**

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	1. square feet 2. cubic yards dredged	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☒ Coastal Dunes	450 1. square feet	25 cubic yards (900 s.f.) 2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☒ Land Subject to Coastal Storm Flowage	12,000 s.f. 1. square feet	

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

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C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. ☐ Yes ☒ No

If yes, include proof of mailing or hand delivery of NOI to:

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

2019
b. Date of map

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____ percentage/acreage

(b) outside Resource Area _____ percentage/acreage

2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) ☐ Photographs representative of the site

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* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

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C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only b. ☐ Yes ☒ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☒ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

      2. ☐ A portion of the site constitutes redevelopment

      3. ☒ Proprietary BMPs are included in the Stormwater Management System.

   b. ☐ No. Check why the project is exempt:

      1. ☐ Single-family house

      2. ☐ Emergency road repair

      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

      or

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☐ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

Plan Showing Proposed Layout & Materials Plan
a. Plan Title

Coastal Engineering Co., Inc.
b. Prepared By

Tarja L. McGrail, PE
c. Signed and Stamped by

03/12/2020
d. Final Revision Date

1" = 20'
e. Scale

Stephen Kelleher Architects, Inc. Architectural Plans 2/25/20 & 3/2/20
Stephen Kelleher Architects, Inc. Structural Plans 12/4/19 & 12/5/19

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☒ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

N/A
2. Municipal Check Number

EXEMPT
3. Check date

N/A
4. State Check Number

EXEMPT
5. Check date

6. Payor name on check: First Name

Coastal Engineering Co.,Inc.
7. Payor name on check: Last Name

Massachusetts Department of Environmental Protection
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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

X Stephen Kelleher, pres. A.I.A.	3/9/20
1. Signature of Applicant	2. Date
	March 9, 2020
3. Signature of Property Owner (if different)	4. Date
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Project Description

The proposed project includes redevelopment of the existing Harbormaster Facility that is located adjacent to Nantucket Harbor at the Town pier. The property has the following wetland resource areas: Coastal Beach, Coastal Dune, and Land Subject to Coastal Storm Flowage (Flood Zone VE El. 11). The entire property is located within land subject to coastal storm flowage, and the buffer to both coastal dune and beach resource areas. Currently, the project site is improved with a building (slab foundation), decks, steps, access ramps, parking area, walkways, and an access path with cobble stone edge that provides public access from the neighboring park to the pier and harbormaster building. The project site is not mapped as priority and/or estimated habitat for rare or endangered species by the Natural Heritage and Endangered Species program. Similarly, the project site is not located in an Area of Critical Environmental Concern (ACEC).

The applicant is proposing the following site improvements:

- Remove the existing Harbormaster Building and associated slab on grade foundation;
- Construct a new building on pile foundation that is designed to improve flood resilience and sized to meet the needs of the Town's Harbormaster and staff;
- Construct an accessory storage shelter (slab on grade with roof, see A-1.2) to the south of the new building that is sized to shelter a materials storage trailer;
- Improve the existing parking area and install ramps, decks, and stairs to provide access to the new building.
- Alterations to the existing pervious shell path from the neighboring park to the pier to maintain direct public access from the park to pier.
- Install 900 s.f. of dune restoration area to mitigate for installation of new pervious shell paths to connect the existing park to the pier. The dune restoration will include compatible sand and native plantings that will help to stabilize and nourish the dune resource area.
- Installation of stormwater practices to manage and infiltrate all roof runoff from the proposed buildings.

The proposed harbormaster building is a water dependent municipal safety building. Due to the use of the building, it is important for the building layout and orientation to provide the best possible visibility and accessibility to the Harbor for staff working in the building. As a result of this design objective, the Applicant is proposing a building that will be constructed on a pile foundation with a finish floor elevation of 9.9 +/- ft. The elevation of the finish floor allows for a single direction ramp to access the main entrance of the building from the pier. Since the site is located within a velocity flood zone having a base flood elevation of 11, the Applicant applied to the State Board of Building and successfully received a variance from the Massachusetts Building Code that allows the building to be constructed in the velocity zone at the proposed elevation utilizing a design that incorporates a steel pile foundation, an elevated ferro cement foundation, and flood resistant building materials up to the design flood elevation, elevation 13.

As a result of the proposed building and site improvements, the overall area of impervious ground cover located within the buffer to the Coastal Dune and within Land Subject To Coastal Storm Flowage will be reduced by 900 +/-± S.F. This proposed large reduction in impervious groundcover is attributed to removing the existing building's slab foundation and installing the

new building on a pile foundation system. In comparison with the existing slab foundation, the pile foundation raises the elevation of the lowest horizontal member of the building up to approximately 3 feet above the existing grade. Upon completion of the new building, the expected soil conditions beneath the building will be pervious sandy soils. The pervious soils will allow for natural infiltration/ recharge of stormwater runoff during a storm event. This will improve the ability of the land to absorb and contain flood waters, and buffer inland areas from flood damage.

In addition to reduction in impervious ground cover, the proposed redevelopment project includes stormwater management BMP's to manage and recharge/infiltrate stormwater runoff onsite from the roofs of the proposed buildings. In comparison with existing conditions, through reduction of impervious ground cover and onsite management of roof runoff, the proposed redevelopment will greatly reduce the peak flow and volume of runoff contributed to the offsite drainage system. This is described in more detail in the Stormwater Management Report submitted with this application.

Performance Standards Narrative

Wetland Performance Standards - (310 CMR) State WPA Regulations

The subject property has the following **State Defined resource areas**:

An explanation is provided to show how each performance standard is met.

310 CMR 10.04 Land Subject to Coastal Storm Flowage (LSCSF)

"land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater"

The entire project is located in Land Subject to Coastal Storm Flowage. The LSCSF does not have regulation performance standards to follow though it is a protected resource area and therefore approval is needed to perform work within the LSCSF. However, as a result of the proposed building and site improvements, the overall area of impervious ground cover located within Land Subject To Coastal Storm Flowage will be reduced by 900 +/- S.F. This will improve the ability of the land to absorb and contain flood waters, and buffer inland areas from flood damage. Therefore, no negative impacts to this interest are proposed.

310 CMR 10.27 Coastal Beaches

(3) Any project on a coastal beach, except any project permitted under 310 CMR 10.30(3)(a), shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or down drift coastal beach.

The proposed project is in the buffer to the coastal beach resource area and will not have an effect on erosion, volume, or the change of the form of any such coastal beach or an adjacent or down drift coastal beach.

(4) Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

No groin, jetty, solid pier, or other such solid fill structures are proposed at the site.

(a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, coastal engineering, physical oceanographic and/or coastal geologic information shall be considered.

(b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.

(c) Jetties trapping littoral drift material shall contain a sand by-pass system to transfer sediments to the down drift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that down drift or adjacent beaches are not starved of sediments.

(5) Notwithstanding 310 CMR 10.27(3), beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

N/A

WHEN A TIDAL FLAT IS DETERMINED TO BE SIGNIFICANT TO MARINEFISHERIES OR THE PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(6) SHALLAPPLY:

No tidal flats are located within the proposed project area, therefore 310 CMR 10.27(6) does not apply.

(6) In addition to complying with the requirements of 310 CMR 10.27(3) and (4), a project on a tidal flat shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries and wildlife habitat caused by:

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

(7) Notwithstanding the provisions of 310 CMR 10.27(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The subject property is not identified as an area for rare vertebrate or invertebrate species by the latest mapping by the Natural Heritage Endangered Species Program (NHESP).

310 CMR Section 10.28: Coastal Dune

(3) Any alteration of, or structure on, a coastal dune or within 100 feet of a coastal dune shall not have an adverse effect on the coastal dune by:

(a) affecting the ability of waves to remove sand from the dune;

A portion of the proposed shell walkway and building access steps are located within the dune; however, to mitigate for this encroachment, two dune restoration areas are proposed. The total combined area of the proposed dune restoration is 900 s.f., this exceeds a 2:1 mitigation rate. Additionally, the new building will be raised up on a pile foundation. Raising the building multiple feet above grade will allow for natural groundwater recharge of stormwater in an area that is currently impervious (occupied by a slab building foundation).

(b) disturbing the vegetative cover so as to destabilize the dune;

Vegetative cover will only be disturbed in the area of the dune which falls into the proposed shell walkway/ or steps, this will be mitigated with two proposed dune restoration areas that will include placement of sand that is compatible with the existing dune and through the installation of native plants. These areas of dune will exceed a 2:1 mitigation rate.

(c) causing any modification of the dune form that would increase the potential for storm or flood damage;

The proposed project will not increase the potential for storm or flood damage. The addition of enhanced plantings in the areas of dune restoration will improve stabilization of the dunal areas on the subject property. This will decrease the potential for storm and flood damage. Additionally, the shell path will be pervious; therefore, the stormwater flow and recharge conditions will not be altered.

(d) interfering with the landward or lateral movement of the dune;

The proposed project will not interfere with the landward or lateral movement of the dune it will still be able to react naturally. The proposed project will enhance the dunal area by increasing the overall size of the dune formation. The addition of native plants will improve dune stabilization.

(e) causing removal of sand from the dune artificially; or

A portion of the dune is located within the footprint of the proposed pervious shell walkway; however, to mitigate for the alteration two areas of dune restoration are proposed. Overall, the area of dune restoration will exceed a 2:1 mitigation rate. Compatible sand will be added in the dune restoration areas.

(f) interfering with mapped or otherwise identified bird nesting habitat.

The project locus is not within a mapped NHESP habitat.

(4) Notwithstanding the provisions of 310 CMR 10.28(3), when a building already exists upon a coastal dune, a project accessory to the existing building may be permitted, provided that such work, using the best commercially available measures, minimizes the adverse effect on the coastal dune caused by the impacts listed in 310 CMR 10.28(3)(b) through (e). Such an accessory project may include, but is not limited to, a small shed or a small parking area for residences. It shall not include coastal engineering structures.

N/A

(5) The following projects may be permitted, provided that they adhere to the provisions of 310 CMR 10.28(3):

(a) pedestrian walkways, designed to minimize the disturbance to the vegetative cover and traditional bird nesting habitat;

The proposed pervious shell walkway is designed to minimize the disturbance to the dune. To mitigate for the shell walkway improvement, two areas of dune restoration are proposed which will include the installation of native plants to enhance the vegetative cover.

(b) fencing and other devices designed to increase dune development; and

N/A

(c) plantings compatible with the natural vegetative cover.

In the proposed dune restoration areas native plantings will be installed.

(6) Notwithstanding the provisions of 310 CMR 10.28(3) through (5), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.37.

The subject property is not identified as an area for rare vertebrate or invertebrate species by the latest mapping by the Natural Heritage Endangered Species Program (NHESP).

Wetland Performance Standards – Local Nantucket Wetland Regulations

The subject property has the following have the following **Locally Defined Resource Areas and associated Performance Standards:**

An explanation is provided to show how each performance standard is met.

2.02 COASTAL BEACHES (and TIDAL FLATS)

B. PERFORMANCE STANDARDS

A Coastal Beach, Tidal Flat or Land within 100 feet of a Coastal Beach or Tidal Flat shall be presumed significant to the Interests Protected by the Bylaw, as referenced in Section A, therefore the following regulations shall apply.

1. The provisions of Section 2.01B (1-8) (Land Under the Ocean) shall apply to coastal beaches and tidal flats.

The proposed project does not fall within Land Under the Ocean, nor are there tidal flats within the project locus.

2. No new bulkheads or coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after 8/78. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem, including in appropriate cases the moving of the threatened building. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to 9/78, and not substantially improved, from imminent danger.

   N/A - The proposed project does not include new bulkheads or coastal engineering structures.

3. Dredging projects in flats must be done in accordance with such procedures as the Commission determines would disturb the absolute minimum amount of habitat possible for both the borrow site and the area in which spoils are placed.

   N/A - The proposed project does not include dredging.

4. Clean fill of compatible grain size may be used on a Coastal Beach but not on a Tidal Flat, only if the Commission authorizes its use, and only if such fill is to be used for a beach or dune nourishment project. All possible mitigation measures shall be taken, as determined by the Commission, to limit the adverse effects of the fill.

   N/A – The proposed project does not include beach or dune nourishment.

5. No part of any septic system shall be placed in shifting sands or on a coastal beach. The septic leach facility shall be at least 100 feet from the spring high tide line.

   N/A - The proposed project is connected to the public sanitary sewer system.

6. All work on projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to a coastal beach. All structures which are not water dependent shall be at least 50 feet from a coastal beach.

   The proposed Harbormaster building is a water dependent public safety facility. For quick response times in an emergency, it is critical that the building be positioned to provide the Harbormaster and staff with the best possible visibility of the harbor, and be located within close proximity to the pier to access the water/harbor.

7. In areas of eroding shoreline, the distance from all buildings to the coastal beach shall be at least 20 times the average annual shoreline erosion or 100 feet, whichever is the lesser. The average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 150 year period ending the date the NNOI was filed, or if no NNOI was filed, the date construction began. If erosion data is not available for the 150-year period, the Commission shall determine the average annual erosion rate from such lesser time period for which erosion data is available. In cases where documentation can be provided to show that the use of the 150-year period is inappropriate to existing shoreline characteristics and trends, alternate shoreline change rates may be used when based on a preponderance of credible evidence.

N/A

8. Vehicular access for existing houses or for recreational use shall be as unpaved ways and shall be done in accordance with such procedures as the Commission determines will minimize any adverse effect on the beach and the Interests of the Bylaw.

   N/A – There is no proposed vehicular access for existing homes or recreational use on the project site.

9. Fertilizers shall be used in accordance with the "Best Management Practices for Landscape Fertilizer Use on Nantucket Island" (a copy of which is attached to these regulations as appendix A).

   N/A – No Fertilizers will be used on the proposed project site.

10. The Commission may impose such additional requirements as are necessary to protect the Interests Protected by the Bylaw.

2.03 COASTAL DUNES

B. PERFORMANCE STANDARDS

A Coastal dune, coastal dune field, or land within 100 Feet of a coastal dune or coastal dune field, shall be presumed significant to the Interests Protected by the Bylaw as referenced in Section A, therefore the following regulations shall apply.

1. No coastal revetments or coastal engineering structures of any type shall be constructed, rebuilt, or repaired.

   N/A - The proposed project does not include new bulkheads or coastal engineering structures.

2. All projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to a coastal dune. All structures which are not water dependent shall be at least 50 feet from a coastal dune.

   The proposed Harbormaster building is a water dependent public safety facility. For quick response times in an emergency, it is critical that the building be positioned to provide the Harbormaster and staff with the best possible visibility of the harbor, and be located within close proximity to the pier to access the water/harbor.

3. No excavation or disturbance of vegetative cover shall be allowed on a coastal dune unless the area is completely restored, replanted, and stabilized to its original form and volume.

   Vegetative cover will only be disturbed in the area of the dune which falls into the proposed shell walkway/steps; this will be mitigated in two proposed dune restoration areas with the

installation of compatible sand and native plants. The proposed areas of restoration will exceed the area of disturbance at a 2:1 mitigation rate.

4. Fill may be used only if the Commission authorizes its use and only if such fill is to be used for beach and dune nourishment projects.

   The two dune restoration areas are proposed adjacent to the existing dunal formation. The addition of compatible sand to create the restoration areas will help to nourish the existing dunal area.

5. No part of any septic system shall be placed in shifting sands or on or in a coastal dune. The septic leach facility shall be at least 100 feet from the upland edge of a coastal dune or coastal dune field.

   N/A - The proposed project is connected to the public sanitary sewer system.

6. Any activity allowed on a coastal dune or within 100 feet of a dune shall be restricted to such activity that is determined by the Commission not to have any adverse effect on the dune by altering the ability of wind or waves to remove sand from or deposit sand on a dune; by disturbing vegetative cover in a manner sufficient to destabilize the dune; by causing any modification of the dune form and slope which would increase the potential for erosion, storm or flood damage; by interfering with landward or lateral movement of the dune; or by causing the rate of sand removal to increase through man-made means or structures.

   The proposed project will not have adversely effect the ability of wind or waves to remove sand from or deposit sand on a dune; by disturbing vegetative cover in a manner sufficient to destabilize the dune; by increasing the potential for erosion, storm or flood damage; by interfering with landward or lateral movement of the dune; or by causing the rate of sand removal to increase through man-made means or structures.

7. No activity shall be permitted, other than the maintenance and repair of a structure existing on the effective date of these regulations that will result in construction of a building upon a coastal dune or within 50 feet of any coastal dune.

   The proposed Harbor master building will replace the existing building that has a slab on grade foundation. The new building will be elevated on piles. By elevating the building on piles the area previously occupied by the slab on grade building will become pervious. This will greatly improve the ability of flood waters to flow beneath the building and reduce the risk of storm damage to the subject site and neighboring properties. Overall, the proposed re-development project will result in a great environmental benefit through the reduction of impervious ground cover area and enhancement of the dune on the subject site.

8. Any pedestrian or elevated walkway must be designed as determined by the Commission so as to minimize disturbances of vegetative cover.

   The proposed pedestrian shell walkway is designed to maintain public access between the existing park that is adjacent to the Harbormaster building and the existing pier. The pervious

shell walkway has been sited to minimize the disturbance to the dune. As mentioned previously, to mitigate for the walkway alteration, two areas of dune restoration are proposed which will include the installation of native plants to enhance the vegetative cover.

9. Fertilizers shall be used in accordance with the "Best Management Practices for Landscape Fertilizer Use on Nantucket Island" (a copy of which is attached to these regulations as appendix A).

   N/A – No Fertilizers will be used on the proposed project site.

10. Vehicular access for existing homes or recreational use shall be as unpaved ways and shall be done in accordance with such procedures as the Commission determines will minimize any adverse effect on the dune and the Interests of the Bylaw.

    N/A – There is no proposed vehicular access for existing homes or recreational use on the project site.

11. The Commission may impose such additional requirements as are necessary to protect the Interests Protected by the Bylaw.

2.10 LAND SUBJECT TO COASTAL STORM FLOWAGE

B. PERFORMANCE STANDARDS

Land Subject to Coastal Storm Flowage or Land within 100 feet of Land Subject to Coastal Storm Flowage shall be presumed significant to the Interests Protected by the Bylaw as referenced in Section A, therefore the following regulations shall apply:(Specific resource areas that lie within the area of land subject to coastal storm flowage, and the wetland values they protect, are otherwise addressed elsewhere in these regulations. The regulations concerning those areas are additional to the regulations set forth in this section.)

1. The work shall not reduce the ability of the land to absorb and contain flood waters, or to buffer inland areas from flooding and wave damage.

   The proposed project will reduce impervious ground cover on the property. Raising the building on a pile foundation will allow flood waters to move below the building; this reduces the risk of storm damage and debris from wave action. Therefore, the project does not reduce the ability of the land to absorb and contain flood waters, or to buffer inland areas from flooding and wave damage.

2. Projects shall not cause ground, surface, or salt water pollution triggered by coastal storm flowage. All septic tanks and leach facilities shall be located outside the 100-year floodplain.

   N/A - The proposed project is connected to the public sanitary sewer system.

3. All private underground fuel tanks shall be outside the 100-year floodplain. Commercial tanks shall be outside the 100-year floodplain, or if the Commission determines this is not practicable, the commercial tanks shall be secured so that they cannot float loose.

   The entire site is located within the 100-year floodplain, so it is not possible to locate the new propane tank outside of the 100-year flood plain. Currently, the existing Harbormaster facility utilizes a propane tank that is above ground and located adjacent to the building. The elevation of the tank is at existing grade (El. ~4.5). The proposed redevelopment project includes installation of a new thank that will be underground. The tank will be designed with a concrete slab and anchor system designed to provide ballast during a flood event and prevent the tank from becoming exposed.

4. Building upon areas subject to coastal storm flowage in locations where such structure would be subject to storm damage may not be permitted. If permitted, all construction must be in compliance with state and local building code regulations for flood hazard areas.

   The Applicant applied to the State Board of Building and successfully received a variance from the Massachusetts Building Code that allows the building to be constructed in the velocity zone at the proposed elevation utilizing a design that incorporates a steel pile foundation, an elevated ferro cement foundation, and flood resistant structure up to the design flood elevation, elevation 13.

5. Fertilizers shall be used in accordance with the "Best Management Practices for Landscape Fertilizer Use on Nantucket Island" (a copy of which is attached to these regulations as appendix A).

   N/A – No Fertilizers will be used on the proposed project site.

6. The Commission may impose such additional requirements as are necessary to protect the Interests Protected By the Bylaw.

Construction Protocol

Pre-Construction Requirements

- A sign bearing the MA DEP file number shall be posted in compliance with the Order of Conditions issued by the Nantucket Conservation Commission.
- Prior to any construction or site disturbance activity, the erosion and sedimentation barriers shall be installed in the location(s) shown on the plan. The Silt barrier will be a staked silt sock or silt fence as indicated on the plans.
- Prior to any site disturbance activity silt sacks shall be installed in all catch basins located down gradient of the project site.
- A copy of the approved plans and the Order of Conditions shall be provided to the Contractor and shall be on site at all times.
- A dewatering plan shall be provided to the Conservation Agent and Engineer by the Contractor.

On-Site Pre-Construction Conference

Prior to the start of any sitework or construction, a pre-construction meeting will be held on site to discuss the project requirements with the following parties represented:

- Sitework Contractor
- Coastal Engineering Co. Inc., Engineer
- Nantucket Conservation Agent

Topics to be discussed during the meeting:

- Maintenance of Erosion and Sedimentation Control barrier and protection of existing stormwater management systems
- Limit of Work
- Construction sequencing and schedule
- Material and Equipment Storage
- Project contacts

During the preconstruction conference, the Engineer and Conservation Agent shall inspect the erosion and sedimentation barrier. Any deficiencies shall be addressed prior to the commencement of work

Erosion Control

Areas outside of the construction work area shall be protected from erosion and sedimentation by the placement of an erosion and sedimentation barrier as shown on the site plan. The barrier shall be maintained in good condition at all times. The erosion and sedimentation control measures shall remain in place until stabilization of disturbed areas. The erosion control measures shall not be removed without the approval of the Conservation Agent.

Sediment shall be removed by hand anytime the erosion and sedimentation barrier has a thirty percent load of sediment, or as directed by the engineer or an agent of the Conservation Commission.

Limit of Work

The Sitework Contractor shall familiarize himself with the boundaries of the property and the limit of work. The Contractor shall exercise care in order to protect adjacent properties and wetland resource areas. The Contractor shall not operate heavy equipment outside the work limit as shown on the approved plan and delineated by the erosion and sedimentation control barrier.

The Contractor shall practice good housekeeping measures during the day-to-day operations at the site. The site should be policed daily to remove any litter or construction debris. Care shall be taken that no debris be allowed outside the work limit. Debris outside the work limit shall be picked up immediately.

Construction Access

Construction access shall be from the existing driveway. The staging area on the project site is to be the existing driveway/parking area.

Construction Operations

The contractor shall practice good housekeeping measures during the day-to-day operations at the site. The site shall be policed daily to remove any litter or construction debris. Care shall be taken that no debris be allowed outside the work limit. Debris outside the work limit shall be picked up immediately.

Any construction debris which will not be removed from the site at the end of the workday shall be placed in dumpsters. The dumpsters shall be located in the existing driveway or proposed driveway. The dumpsters shall be covered at the end of the workday and emptied when full. The Contractor shall police the site daily in order to prevent wind-blown material from entering abutting properties or resource areas.

Material stockpiles that are in place for an extended period of time shall be stabilized with vegetation, mulching, erosion control blankets, and other measures that are necessary to prevent the discharge of sediment from the project site.

Replanting of areas disturbed by construction activities shall be performed as early in the project as practicable.

Construction Dewatering

It is anticipated that groundwater will be encountered during installation of subsurface utilities. The Contractor shall provide the Engineer and Conservation Agent with a dewatering plan for review and approval prior to initiating de-watering activities. The Contractor should conduct dewatering (and discharging of water) in accordance with all applicable regulations.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Applicant Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. Location of Project:

34 Washington Street	Nantucket
a. Street Address	b. City/Town
EXEMPT	EXEMPT
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Stephen	Kelleher
a. First Name	b. Last Name

Stephen Kelleher Architects, Inc.
c. Organization

57 Alden Road
d. Mailing Address

Fairhaven	MA	02719
e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

a. First Name	b. Last Name

Town of Nantucket
c. Organization

16 Broad Street
d. Mailing Address

Nantucket	MA	02554
e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email Address

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat 3a (Site Preparation)	1	$1,050.00	EXEMPT (TOWN PROJECT)
Cat 3b (Building Construction)	1	$1,050.00	EXEMPT (TOWN PROJECT)

Step 5/Total Project Fee: EXEMPT

Step 6/Fee Payments:

Total Project Fee:	EXEMPT a. Total Fee from Step 5
State share of filing Fee:	EXEMPT b. 1/2 Total Fee **less** $12.50
City/Town share of filling Fee:	EXEMPT c. 1/2 Total Fee **plus** $12.50

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

COASTAL engineering co.

C19031.00/TLM

AFFIDAVIT OF SERVICE

Massachusetts Wetlands Protection Act

M.G.L., CH 131, Sec. 40

I, Carla Davis, of Coastal Engineering Co., Inc. hereby certify under the pains and penalties of perjury that on March 13, 2020 I sent notification to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131 Section 40 and the Department of Environmental Protection's Guide to Abutter Notification dated April 8, 1994 in connection with the following matter:

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act and the Nantucket Wetlands Protection By-law, by Stephen Kelleher of Stephen Kelleher Architects, Inc. with the Nantucket Conservation Commission on March 13, 2020 for property located at 34 Washington Street Map 42.2.3 Parcel 2 in Nantucket, MA. The project is for the Proposed Addition to the Harbormaster Building and Associated Site Improvements.

The form of the notification and a list of the abutters to whom the notice was given and their addresses are attached to this Affidavit of Service.

Very truly yours,

COASTAL ENGINEERING CO., INC.

Carla Davis

Enclosures

cc: Mass. DEP/ SERO – Wetlands
Nantucket Conservation Commission
Stephen Kelleher Architects, Inc.
Town of Nantucket
Tarja L. McGrail, Project Manager

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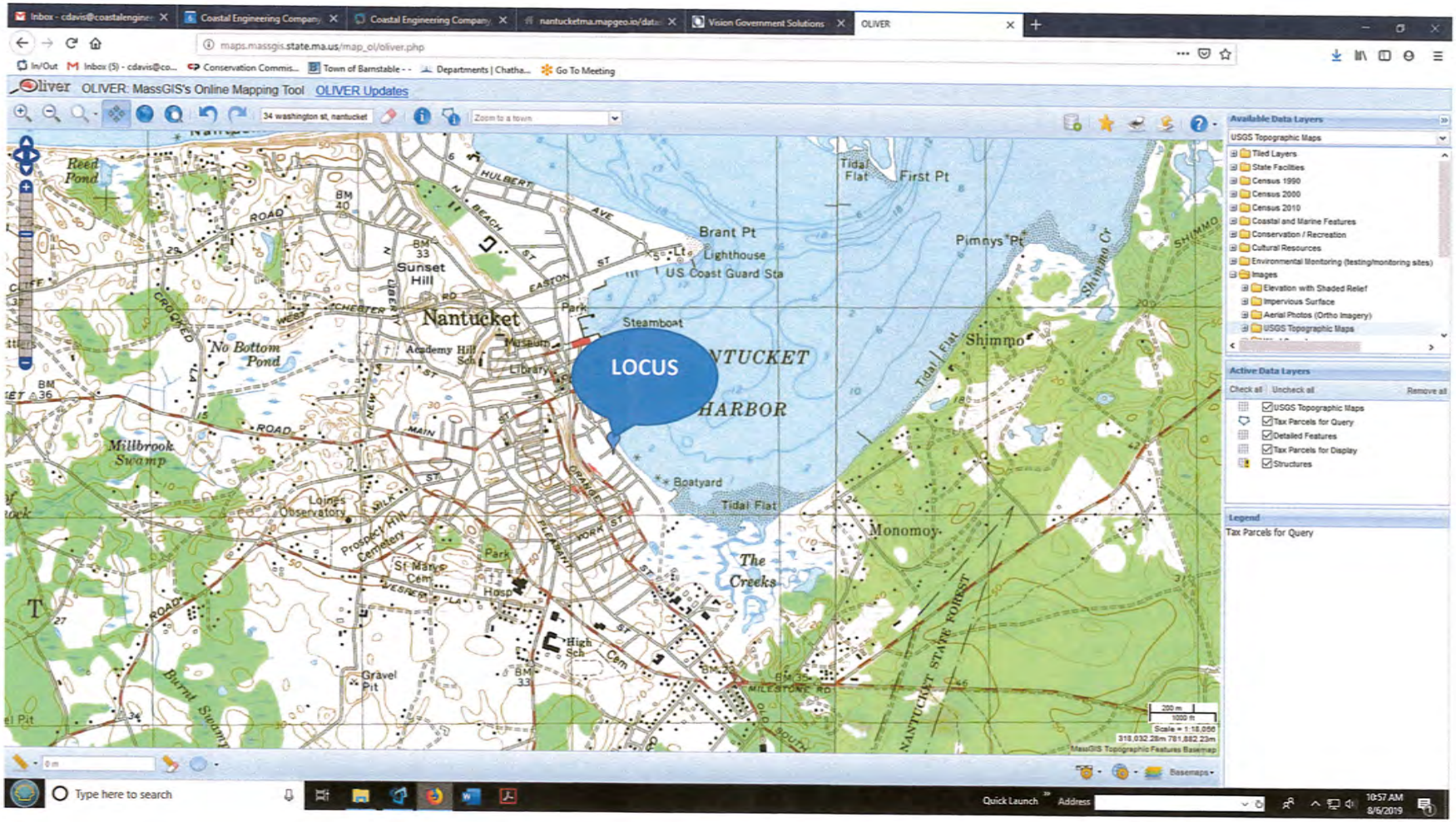

C19031.00, Stephen Kelleher / Nantucket Harbormaster
34 Washington Street, Nantucket, MA
Parcel ID: 42.2.3.2
41° 16' 53.184" N 70° 5' 43.404" W

FILE NO. C19031.00

STORMWATER MANAGEMENT REPORT

Nantucket Harbormaster Facility
34 Washington Street
Nantucket, MA

March 2020

Prepared for:

Town of Nantucket

Prepared by:

COASTAL ENGINEERING CO., INC.
260 Cranberry Highway
Orleans, MA 02653

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STORMWATER MANAGEMENT SYSTEM DESCRIPTION

The proposed project includes redevelopment of the existing Harbormaster Facility that is located adjacent to Nantucket Harbor at the Town pier. The property is situated within the following wetland resource areas and/or resource area buffer zones: Coastal Beach, Coastal Dune, and Land Subject to Coastal Storm Flowage (Flood Zone VE El. 11). The entire property is located within land subject to coastal storm flowage, and the buffer to both coastal dune and beach resource areas. Currently, the project site is improved with a building (on slab foundation), decks, steps, access ramps, parking area, walkways, and an access path with cobble stone edge.

The existing topography of the site where the proposed redevelopment work will take place varies in elevation; elevations within the project site range from 0 to 5 feet. Currently, the project site does not have a formal drainage system, and runoff from a majority of the roof of the existing Harbormaster building and the developed site flows towards the existing catch basins that are located in Washington Street. The catch basins located in Washington Street collect runoff from the roadway and adjacent properties, and the captured runoff is then conveyed via pipe to an outfall that is located to the east of the project site.

The proposed redevelopment includes the following site improvements:

- Remove the existing Harbormaster Building and associated slab on grade foundation;
- Construct a new building on pile foundation that is designed to improve flood resilience and sized to meet the needs of the Town's Harbormaster and staff;
- Construct an accessory storage shelter (slab on grade with roof, see A-1.2) to the south of the new building that is sized to shelter a materials storage trailer;
- Improve the existing parking area and install ramps, decks, and stairs to provide access to the new building.
- Alterations to the existing pervious shell path from the neighboring park to the pier to maintain direct public access from the park to pier.
- Install 900 s.f. of dune restoration area to mitigate for installation of new pervious shell paths to connect the existing park to the pier. The dune restoration will include native plantings that will help to stabilize the dune resource area.
- Installation of stormwater practices to manage and infiltrate/recharge all roof runoff from the proposed buildings.

As part of the proposed redevelopment design for the Harbormaster Facility, roof runoff from the proposed building and storage shelter will be captured and recharged onsite utilizing stone infiltration trenches. The stone infiltration trenches are shallow to maximize the separation between the bottom of trench and groundwater. The trenches are sized to manage and recharge runoff generated during the 2-year, 10-year, and 25-year-24 hour design storm events. Appendix E of this Stormwater Report includes HydroCAD sizing calculations for the infiltration trenches. By redeveloping the site and managing roof runoff onsite, there will be a reduction in runoff volume and peak flow contributed from the project site to the Washington Street drainage system and study point in the post development conditions. The proposed design will be a great improvement over the existing conditions.

In addition to capturing and managing roof runoff onsite, impervious ground cover on the site will be reduced by removal of the existing slab building foundation and installation of the new building on a pile foundation. Installed on a pile foundation the lowest horizontal member of the new harbormaster building will be approximately 3 feet above existing grade. Upon completion of the new building, it is anticipated that the soil conditions beneath the building will be pervious sandy soils. The pervious soils will allow for natural infiltration/ recharge of stormwater runoff during a

storm event. This will improve the ability of the land to absorb stormwater runoff, contain flood waters, and buffer inland areas from flood damage.

The proposed redevelopment project will provide on-site management and recharge of the stormwater runoff generated within the redevelopment site to the maximum extent practicable. In comparison with current site conditions, the proposed site improvements will result in a substantial reduction in the volume and peak flow of runoff contributed to the existing roadway drainage system.

The Stormwater Management Plan for this facility is based upon the source control of pollutants by the application of Best Management Practices (BMP's) and good housekeeping measures during the day to day operation of the facility.

Massachusetts Stormwater Management Design Standards

The following is a description of how the proposed project meets the Massachusetts Stormwater Handbook design Standards:

Standard 1: No new untreated discharges
This standard is met since there are no new untreated stormwater discharges proposed.

Standard 2: Maintain Pre-development peak discharge rate
This standard has been met. The overall area of impervious ground coverage on the project site has been reduce by 900 s.f.+/-. The proposed stone infiltration trenches are sized to manage and recharge runoff from the building roof onsite. As a result, there is a reduction in the post development peak discharge rate of runoff from the re-developed site during the 2 year-24 hour, and 10 year-24 hour design storm events. Reduction resulting from the redevelopment during the 100 year-24 hour storm event has not been evaluated since the site will be inundated with floodwaters during the 100 year storm event. Table 3.0 summarizes the resulting reduction of peak discharge rates for the pre-development and post-development conditions to the study point located in the Harbor to the east of the project site.

Standard 3: Groundwater Recharge
This standard has been met. The proposed stormwater management systems are sized such that the total recharge volume provided exceeds the minimum groundwater recharge volume specified in the handbook (see Table 3.0 for recharge volume calculation) and the proposed stormwater recharge basins will drawdown within 72 hours of a storm event (see Table 4.0 for drawdown calculation).
In accordance with MASWMS (Chapter 1, p.6), the required recharge volume factor required across the impervious area is 0.60 inches of runoff for hydraulic soil group A soils, sand soils (assumed). The assumed soil conditions are based on soil borings performed at the site for the building foundation design. Additional Soil testing will be performed prior to installation of the trenches to confirm soil conditions in area of proposed BMP's prior to installation of drainage systems.
HydroCAD stormwater modeling software was used to size the stone trench using the simple dynamic method, the results of this analysis for the 2 year, 10 year, and 25 year - 24 hour storm events are presented in the HydroCAD report included in Appendix E.

Standard 4: Water Quality
This standard has been met. The proposed infiltration trenches are receiving runoff from a non-metal roof.

Standard 5: Land uses with higher pollutant loads
This standard is not applicable.

Standard 6: Stormwater discharges within the Zone II or Interim Wellhead protection area of a public water supply, and stormwater discharges near or to any critical area
This standard is not applicable.

Standard 7: Redevelopment
This project is a redevelopment project.

Standard 8: Construction Erosion Control Plan

Erosion control measures are shown on the proposed site plan and discussed in the project construction protocol.

Standard 9: Long Term Operation and Maintenance Plan
A long-term operations and maintenance plan has been submitted with this report.

Standard 10: Illicit Discharges
This standard is met since there are no known illicit discharges at this site and no illicit discharges are proposed.

Owner and Responsible Party

The owner and responsible party for Stormwater Management System:

Owner / Operator:

Town of Nantucket
Harbormaster

Phone: (508) 228-7261

SCHEDULE OF INSPECTION AND MAINTENANCE OF SYSTEM

The stormwater system requires regular attention in order to ensure the effectiveness of the system.

1. Landscaped areas should be adequately maintained and vegetated to prevent the presence of exposed soil/eroded areas. In rain events, exposed soil will lead to a greater amount of sediment that can be transported by runoff toward the stormwater management systems.

LONG TERM POLLUTION PREVENTION PLAN

DESCRIPTION OF POLLUTANT SOURCES:

Source Control Best Management Practices

- Trash receptacles shall be covered. If leaks are found, the receptacle shall be replaced. Trash receptacle areas shall be kept clear of debris.
- Good housekeeping measures shall be implemented throughout the site in order to keep the driveways and parking lot areas clean of debris.
- Regularly sweep streets and driveways to remove debris and any other potential stormwater pollutants.
- The use of winter de-icing sand and salt materials shall be minimized to the maximum extent practicable.
- Winter de-icing sand and salt materials shall be stored in garage.
- Immediately clean up any spillage on paved areas and dispose of the wastes properly.
- Do not wash vehicles or equipment in a location where cleaning water, oil, fuel and grease can drain to the wetland resource areas.

Emergency Spill Cleanup Plans

1. The owner of the facility shall have a designated person with overall responsibility for spill response cleanup.
2. Key personnel shall be trained in the use of this plan and spill containment and cleanup methods. All employees should have basic knowledge of spill control procedures.
3. A summary of this plan shall be written and posted in a prominent location. The summary shall identify the spill cleanup coordinators, location of cleanup kit and phone numbers of regulatory agencies and individuals to be contacted in the event of a spill.
4. In the event of a spill the following shall be notified:
   A. Nantucket Fire Department..... (508) 228-2323
   (For a gasoline or hazardous material spill).....911
   B. Massachusetts Department of Environmental Protection
   Emergency Response.....(800) 304-1133
   C. Nantucket Health Department..... (508) 228-7200
5. Cleanup of spills shall begin immediately.
6. The emergency spill cleanup plan shall be updated regularly.

APPENDIX A

Drainage Areas & Calculations

- DA-1 Plan Showing Pre-Development Drainage Areas, Sheet 1 of 2
- DA-2 Plan Showing Post-Development Drainage Areas, Sheet 2 of 2
- Table 1.0: Pre-Development Subcatchment Areas and Peak Flow
- Table 2.0: Post-Development Subcatchment Areas and Peak Flow
- Table 3.0: Summary of Peak Flow Reduction Post Development
- Table 4.0: Post Development Recharge Volume Calculations
- Table 5.0: Infiltration Practice –Drawdown Calculations

MASS. COORD. SYSTEM NAD 1983 MAINLAND ZONE

ASSESSORS MAP 42.2.3
PARCEL 1
RICHARD E. KOTALOC
CTF.#16730

BENCHMARK:
SPIKE SET IN WALK
ELEV.=5.20 (NAVD88)

PRE DEVELOPMENT DRAINAGE AREA –1
IMPERVIOUS (BIT. CONC. WALKWAYS &
PARKING AREAS, BRICK WALKS) = 2363± S.F.
BUILDING ROOF = 1497± S.F.
PATIO= 125± S.F.
LANDSCAPE/DECK = 6741± S.F.

AREA TO MHW
29,440± S.F.

NANTUCKET HARBOR
(TIDAL)

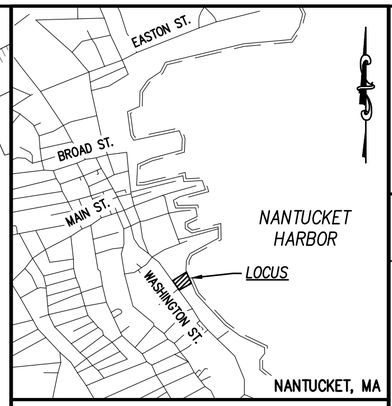
WASHINGTON STREET
(TOWN WAY)

FLOOD ZONE VE (EL 11)
FLOOD ZONE AE (EL 9)

ASSESSORS MAP 42.2.3
PARCEL 7
NANTUCKET ISLANDS
LAND BANK
CTF.#27203

LOT D4
LOT D5
LOT D5
LOT D6
LOT D6
LOT A3
LOT A3
LOT A4
CBRS AREA
ZONE RC
ZONE RMD

60.00'
157±
28.88'
100.22'
82.00'
147±



KEY MAP
NO SCALE

COASTAL
engineering co.
260 Cranberry Hwy. Orleans, MA 02653
508.255.6511 P 508.255.6700 F

NO.	DATE	REVISION	BY

SEAL

PROJECT
HARBOR MASTER BUILDING
34 WASHINGTON ST NANTUCKET, MA

SHEET TITLE
PRE DEVELOPMENT
DRAINAGE PLAN

SCALE	AS NOTED
DRAWING FILE	C19031.dwg
DATE	03-06-2020
DRAWN BY	DAV
CHECKED BY	TLM

DA-1

1 OF 1 SHEETS

PROJECT NO. C19031.00

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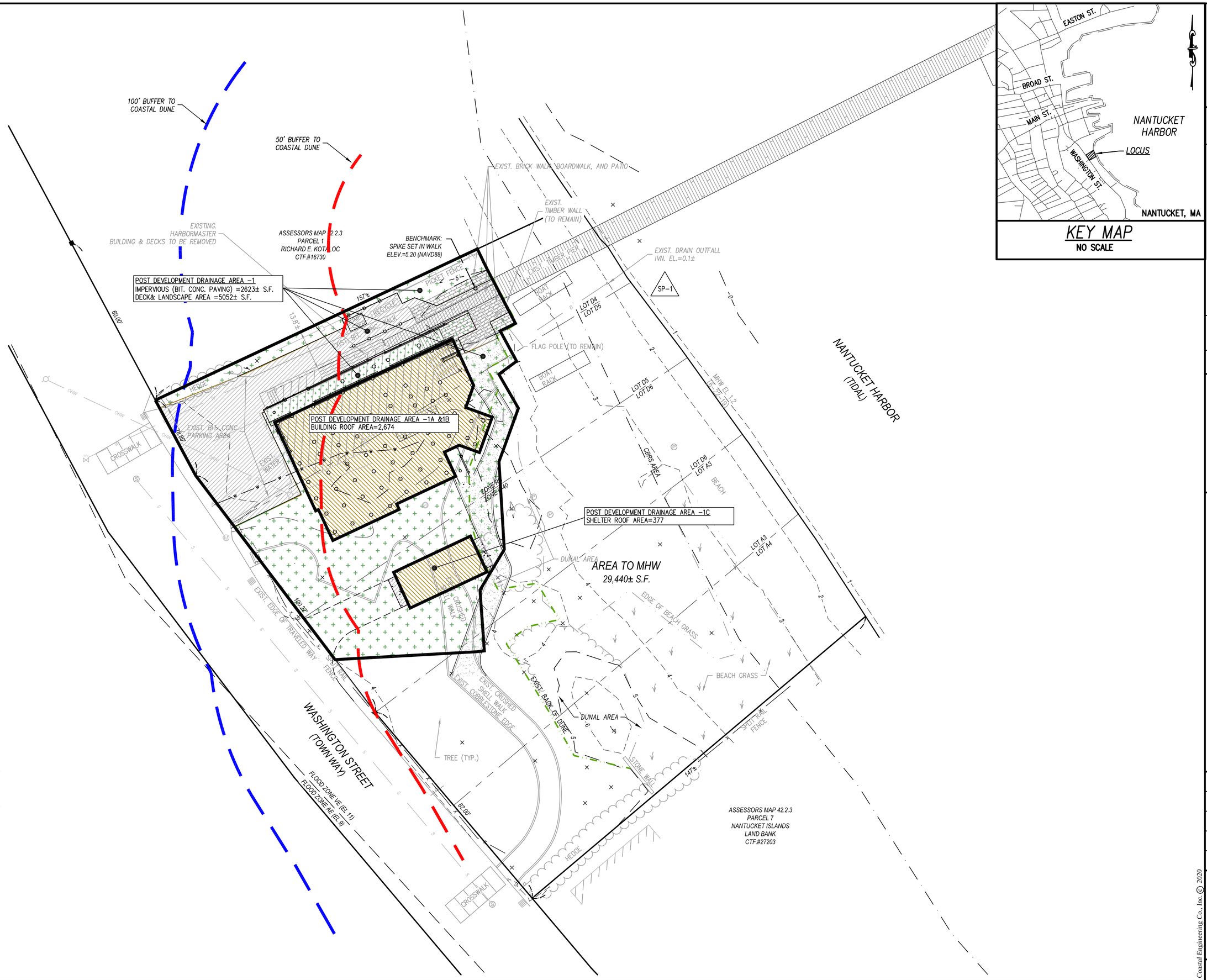


COASTAL engineering co.
260 Cranberry Hwy. Orleans, MA 02653
508.255.6511 P 508.255.6700 F

NO.	DATE	REVISION	BY

SEAL

PROJECT
HARBOR MASTER BUILDING
34 WASHINGTON ST NANTUCKET, MA

SHEET TITLE
POST DEVELOPMENT DRAINAGE PLAN

SCALE	AS NOTED
DRAWING FILE	C19031.dwg
DATE	03-06-2020
DRAWN BY	DAV
CHECKED BY	TLM

DA-2

1 OF 1 SHEETS

PROJECT NO. C19031.00

F:\SDSKPROJ\C19000\C19031\C19031-00\C19031-Drainage Areas.dwg Mar 13, 2020 - 8:50am

Table 1.0 Pre-Development Subcatchment Areas and Peak Flow

	AREA (S.F.)					PEAK FLOW (CFS)		
SUB-CATCHMENT AREA	BUILDING SLAB/ROOF	PATIO	LANDSCAPE/ DECK	IMPERVIOUS PAVING (PARKING, BRICK WALKS, BIT. CONC WALKS)	TOTAL AREA	2 YR/ 24-HOUR	10 YR/ 24-HOUR	25 YR/ 24-HOUR
PRE DA-1	1497	125	6,741	2363	10,726	0.11	0.30	0.44

Table 2.0 Post-Development Sub-Catchment Areas and Peak Flow

	AREA (S.F.)					PEAK FLOW (CFS)		
SUB-CATCHMENT AREA	ROOF	PATIO	LANDSCAPE/ DECK	IMPERVIOUS PAVING (PARKING, BRICK WALKS, BIT. CONC WALKS)	TOTAL AREA	2 YR/ 24-HOUR	10 YR/ 24-HOUR	25 YR/ 24-HOUR
DA-1 (OVERLAND)	0	0	5,052	2,623	7,675	0.06	0.18	0.28
DA-1A (HARBOR MASTER BLDG NORTHERN HALF)	1,337	0	0	0	1,337	0.00	0.00	0.00
DA-1B (HARBOR MASTER BLDG SOUTHERN HALF)	1,337	0	0	0	1,337	0.00	0.00	0.00
DA-1C (STORAGE SHELTER ROOF)	377	0	0	0	377	0.00	0.00	0.00
TOTAL AREA MANAGED	3,051	0	5,052	2,623	10,726	0.06	0.18	0.28

Table 3.0 Summary of Peak Flow Reduction Post Development

SUB-CATCHMENT AREA	TOTAL AREA	2 YR/ 24-HOUR	10 YR/ 24-HOUR	25 YR/ 24-HOUR
DA-1	10,726	0.05	0.12	0.16

Table 4.0:

Post-Development Recharge Volume Calculations

DRAINAGE AREA	Impervious Area (S.F.)	Impervious Area (Pavement) (Ac.)	Roof Area (S.F.)	Roof Area (Ac.)	Impervious Pavement & Roof Area (Ac.)	Re_v (C.F.)**	BMP	BMP Storage Volume (C.F.)
DA-1	2,623	0.06	0	0.00	0.06	131		0
DA-1a			1337.00	0.03	0.03	67	35'L x 6'Wx1'D	168
DA-1b			1337	0.03	0.03	67	58'Lx4'Wx1'D	93
DA-1c			377	0.01	0.01	19	56'L x 1'Wx 1'D	23
Total						284		284

****Re_v= Required recharge volume**

Re_v= F x impervious area

F = Target Depth Factor ; 0.6-inch (assumed for NRCS HSG A soils present on site)

Table 5.0:

Infiltration Practice - Drawdown Calculations

Time $_{drawdown}$ = (Rv) / (K)x(Surface Area); must be <72 hours				
	Surface Area (S.F.)	(R_v) Storage Volume (C.F.)	(K) Sat. Hydraulic Conductivity Rate (inches/hour)	Drawdown Time (hours)
DA-1a	210	168	8.27	1.16
DA-1b	232	93	8.27	0.58
DA-1c	56	23	8.27	0.60

APPENDIX B

TSS Removal Calculation

- TSS Removal Calculation Worksheet

INSTRUCTIONS:

Version 1, Automated: Mar. 4, 2008

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Location: roof

TSS Removal Calculation Worksheet

B BMP[1]	C TSS Removal Rate[1]	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Subsurface Infiltration Structure	**0.80**	**1.00**	**0.80**	**0.20**
	0.00	**0.20**	**0.00**	**0.20**
	0.00	**0.20**	**0.00**	**0.20**
	0.00	**0.20**	**0.00**	**0.20**
	0.00	**0.20**	**0.00**	**0.20**

Total TSS Removal = **80%**

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: c19031.00

Prepared By: cec

Date: 3/12/2020

*Equals remaining load from previous BMP (E) which enters the BMP

Non-automated TSS Calculation Sheet must be used if Proprietary BMP Proposed

1. From MassDEP Stormwater Handbook Vol. 1

APPENDIX C

Soil Information

- Geotechnical Report

GEOTECHNICAL ENGINEERING REPORT

PROPOSED HARBOR MASTER BUILDING

34 WASHINGTON STREET
NANTUCKET, MASSACHUSETTS

PREPARED FOR:
STEPHEN KELLEHER ARCHITECTS, INC.
57 ALDEN ROAD
FAIRHAVEN, MA 02719

PREPARED BY:
MCARDLE GANNON ASSOCIATES, INC.
300 OAK STREET, SUITE 460
PEMBROKE, MA 02359

MGA FILE NO:
W0760

DATE:
JULY 2019

McArdle Gannon Associates, Inc.
Engineers & Consultants

July 15, 2019
MGA File No. W0760

Stephen L. Kelleher, AIA
President / Principal Architect
Stephen Kelleher Architects, Inc.
57 Alden Road
Fairhaven, MA 02719

RE: Geotechnical Engineering Report – Proposed Harbor Master Building – 34 Washington Street, Nantucket, Massachusetts.

Stephen:

McArdle Gannon Associates, Inc. (MGA) is pleased to present the results of our geotechnical engineering studies performed for the referenced project. The purpose of our studies was to assess subsurface conditions within/near the footprint of the proposed harbor master building and provide recommendations for site development as they relate to building foundation design and related construction considerations.

Our geotechnical engineering studies have been performed in accordance with our proposal dated April 12, 2019 and are subject to the Statement of Limitations attached as Appendix A.

BACKGROUND

Our understanding of the current project is based on our discussions with you, our site visits, and a review of the following documents:

- A plan packet entitled "Nantucket Harbor Master Building Design Drawings Combined," by Stephen Kelleher Architects, Inc. (SKA), dated April 09, 2019,
- A plan entitled "Existing Site Conditions," dated July 10, 2019, by Coastal Engineering Company (Coastal)
- A PDF of an email provided by SKA from Coastal containing borehole drilling information from January 2015 at 26 Washington Street, Nantucket, MA, and
- A plan entitled "Surficial Geologic Map of the Nantucket, Tuckernuck, and Muskeget Islands, Massachusetts," by the United States Geological Survey (USGS), dated 2009.

The site is located at 34 Washington Street in Nantucket, Massachusetts. A Site Locus is attached as Figure 1. The site is bounded by Washington Street to the west, commercial properties to the north, residential properties to the south, and Nantucket Harbor to the east. The site is currently developed with an existing 2-story structure that we understand will be demolished.

A new 2-story new harbor master building is planned at the property. The majority of the new building will be located within the existing structure footprint and will be located within the VE flood zone vicinity. The first floor of the building will be elevated about 3.75 feet above existing site grade with a crawl space below. Existing site grades are relatively flat, ranging from about Elevation 4± to 5± feet in the area of the proposed building, sloping down to the east near Nantucket Harbor.

The preliminary foundation design consists of concrete piers supported on shallow foundations. To resist the anticipated uplift loads due to the structure being elevated, the foundations would be interconnected to provide additional dead weight.

SUBSURFACE EXPLORATIONS

A subsurface exploration program consisting of 4 soil test borings was completed as part of our studies to gather information on the subsurface conditions at the site. The purpose of the explorations was to assess subsurface soil and groundwater conditions within/near the proposed building footprint with particular emphasis on assessing the thickness and quality of existing fill soils, the density characteristics of the natural soils, and the depth to groundwater.

Technical Drilling Services of Sterling, Massachusetts performed four borings (MGA-1 through MGA-4) at the site on June 4 and 5, 2019 using an all-terrain vehicle mounted drill rig. The borings were advanced using 3 inch inside diameter flush jointed casing to a depth of 41± feet below existing ground surface elevations, terminating in natural sand soils.

Standard penetration testing (SPT) and split spoon samples were generally obtained at 5-foot intervals during advancement of the borings. The testing was performed by driving a standard 2 inch outside diameter split spoon sampler up to 24 inches using a standard 140 pound automatic hammer falling 30 inches. The number of hammer blows required to drive the sampler in 6 inch increments (or to refusal) are recorded on the boring logs attached in Appendix B.

The soil samples retrieved in the split spoon sampler during each SPT were visually described in the field by MGA using Burmister soil descriptions. It should be recognized that the inside diameter of the split spoon sampler is 1.4± inches. Therefore, soil samples obtained via Standard Penetration Testing do not account for soil fractions in excess of about 1.4± inches in diameter, which may be present in any given strata.

A 2-inch diameter groundwater monitoring well was installed in the completed borehole at boring location MGA-3 to measure stabilized groundwater levels at the site.

MGA personnel observed the explorations, visually described the conditions encountered and prepared the logs. The test boring locations are shown on the attached "Exploration Location Plan" (Figure No. 2). MGA estimated the test boring locations by taping and/or line of sight from existing site features. Ground surface elevations shown on the logs and discussed in this report were interpolated from ground surface contours or spot grades shown on the referenced "Existing Site Conditions" by Coastal. The exploration locations and elevations should be considered accurate to the degree implied by the methods used.

LABORATORY SOIL TESTING

A laboratory soil testing program consisting of 5 wash sieve, 2 organic content, and 7 moisture content analyses was performed on selected samples of the existing fill and natural sand soils collected during the exploration phase from borings MGA-1 through MGA-4. The testing was performed to aid in classifying the soil and assess grain size distribution which is useful in assessing engineering design parameters and predicting soil behavior. The results of these tests are provided in Appendix C.

SUBSURFACE CONDITIONS

Based on the subsurface conditions observed in the explorations, the vicinity of the proposed building is underlain by about 4± to 9± feet of existing fill over natural sand soils to the depths explored (41± feet).

Existing Fill: Fill was encountered at the ground surface at each boring location. The fill was about 4± to 9± feet thick at the boring locations. The existing fill generally consist of a very loose to loose, dark brown to brown to black, fine to medium/fine to coarse sand with about 10 to 40 percent silt, and up to about 20 percent debris (brick, organic matter, roots, seashells).

Refer to Appendix C for gradation curves of the 1-3/8 inch minus fraction of the existing fill soils collected from borings MGA-2 through MGA-4.

Natural Sand: Natural sand was encountered below the existing fill at about 4± to 9± feet below existing grade at the boring locations, corresponding to about Elevation -4± to 0.5± feet. The sand generally consists of loose to medium dense, brown/gray/gray-brown/olive, fine to medium/fine to coarse sand with up to about 10 percent silt.

Refer to Appendix C for gradation curves of the 1-3/8 inch minus fraction of the natural sand collected from borings MGA-1, MGA-3, and MGA-4.

Groundwater: Groundwater levels for our study were recorded in the completed test borings and test pits at the times and under the conditions noted on the logs. A stabilized groundwater reading was obtained in the monitoring well installed in boring MGA-3 at approximately 2.4± feet below existing ground surface on June 5, 2019, corresponding to about Elevation 2.1± feet.

Groundwater was measured in the remaining borings during drilling at about 2± to 4± feet below existing grades, corresponding to about Elevation 1± to 2.5± feet.

It should be expected that groundwater levels will fluctuate due to variations in temperature, tidal fluctuations, rainfall and other factors. Therefore, groundwater levels during construction and thereafter may be different than those reported herein.

GEOTECHNICAL ENGINEERING RECOMMENDATIONS

The existing fill soils are not considered suitable for support of the proposed foundation loads. The erratic density, composition, and thickness of these materials results in these soils being unpredictable as an engineering material. Constructing a shallow spread footing foundation on the current subsurface profile would likely result in intolerable settlement of the structure.

To support the building on shallow foundations as currently designed, the existing fill soils would need to be completely removed and replaced with compacted structural fill within the stress zone of the new foundations. Due to the depth of the existing fill soils (4± to 9± feet) and the presence of a shallow water table (2± feet below existing grade in the monitoring well), excavating and replacing the existing fill soils would likely require temporary excavation support and a significant dewatering effort during construction. While technically feasible, this option may be less economically attractive than supporting the new building loads on deep foundations extending through these unsuitable soils.

The type of deep foundation (pile) suitable for a particular project depends on the local subsurface soil conditions, the anticipated loading, the amount of allowable settlement and the compatibility of the chosen pile with site constraints and other construction requirements. Driven timber piles are a foundation support option that we consider technically and economically feasible for this project. Their use would eliminate the need for any significant excavation/dewatering.

Alternatively, if timber piles do not meet the project structural requirements (for instance impact loading), drilled mini-piles are an alternative pile option that could be considered. Drilled mini piles (DMPs) are small diameter structural deep foundation units consisting of high strength grout and steel installed by advancing a cased hole to a sufficient depth into a competent bearing stratum. The grout is then injected under pressure within the bearing stratum and the casing either removed or left in place. We anticipate that DMPs would be significantly more expensive than timber piles.

Shallow groundwater was encountered about 2.4± feet below existing grades in the monitoring well installed at the site. We anticipate a significant dewatering effort will be required for excavation of any planned below grade structures or utilities.

Our recommendations addressing design and earthwork construction issues are made in the following sections as outlined below:

- Building Foundations
- Seismic Design Criteria
- Dewatering

Building Foundations

As discussed above, deep foundations are recommended for support of the proposed building structural loads. Based on the subsurface conditions encountered, the size of the proposed structure, the elevated first floor level, and the anticipated foundation loads, we anticipate that driven timber piles bearing in the natural sand soils would be suitable for support of the proposed building. Alternatively, if timber piles do not meet the project structural requirements (for instance impact loading), drilled mini-piles could be used to support the proposed building. Piles should be designed in accordance with the applicable sections within Section 1810 of the Ninth Edition of The Massachusetts State Building Code (MSBC). Both pile options are discussed below.

Timber Piles

The timber piles for this project will derive their capacity through a combination of side friction and end-bearing in the natural sand soils. The pile tips should be driven through existing fill soils and for a minimum distance of 5 feet into natural sand soils or the distance estimated to derive the required capacity, whichever is greater. The approximate elevation of the bottom of fill soils is shown adjacent to each boring on the attached Figure No. 2.

Considering a pile butt diameter of 12 inches and a pile tip diameter of 8 inches, we estimate the following allowable pile capacities that can be used for preliminary design of the timber piles:

TABLE I. Timber Pile Allowable Design Capacities

Pile Embedment (feet)	Allowable Vertical Design Capacity (kips)
30	18.5
35	26
40	34

The maximum allowable load on an individual timber pile should not exceed 35 tons (70 kips). Based on Section 1810.3.3.1.1 of the MSBC, a pile load test is not required for pile design loads of less than 50 tons (100 kips) provided the allowable load capacity is determined based on final driving criteria obtained from an appropriate pile driving formula with appropriate factors of safety.

We recommend the design uplift capacity (if needed) of a single pile be taken as 1/3 of the net vertical design load for this project. If a tensile load test is performed for design confirmation, the design uplift load may be increased to ½ of the tensile load at failure.

We recommend the maximum lateral load capacity for a single pile be taken as 5 percent of the unfactored vertical design load. Higher loads could be utilized based upon satisfactory load tests results.

The minimum center-to-center pile spacing should be as required by Section 1810.3.14 of the MSBC.

Timber piles used for foundation support should consist of new Longleaf, Shortleaf, Loblolly or Slash species of Southern Pine or new Coastal species of Pacific Coast Douglas Fir, supplied to the jobsite in accordance with the requirements of ASTM D 25, latest revisions. Wood piling should be pressure treated in accordance with AWPA U1 and have a minimum of 1,200 psi allowable design strength and be capable of withstanding driving stresses of 3,000 psi. Pile cutoffs should be treated in the field in accordance with AWPA M4. CCA and ACZA piles that are frozen should not be driven. In addition, all requirements set forth in Section 1810 of the MSBC should be met.

Foundation piles for this project should be installed using impact equipment (pile-driving hammer). Jetting should not be permitted. The pile-driving hammer shall be capable of delivering a minimum of 35 percent of its energy to the pile. Pile hammer type, hammer base, cushion material and specifications should be submitted to the engineer for approval.

Leads are recommended and should be fixed at the top and adjustable at the bottom. Swinging leads may be allowed if job conditions merit their use. Final pile design capacities shall be determined by the structural engineer and provided to the geotechnical engineer for review.

All production piles shall be installed using the same equipment. Splices will not be permitted. If the head end of a timber pile brooms more than 2 inches, the broomed material should be cut off and the driving resumed. Wood piles should be installed as plumb as possible, or at the designated batter, with the pile, hammer and leads kept in alignment to prevent impact bowing action. Pile whiplash should be minimized using cables, chains, rabbits, etc. as required.

Pile heads should be cut perpendicular to the pile. The contractor may chamfer the head to minimize splitting. Pile head cut-off elevations should be within (3) inches of plan location. Furthermore, the as-driven center of gravity of any pile group at cut-off head elevation should be within 6 inches of the plan location center of gravity. Replacement or relocated pile requirements should be determined by the engineer based on survey, theoretical pile capacity, and structural analysis.

MGA should review the contractor's submittal and observe and document the timber pile installation in accordance with the requirements of the MSBC and this report.

Drilled Mini-Piles

The proposed building loads could be supported on drilled mini-piles (DMPs) bearing below the existing fill soils in the underlying natural sand deposits. The DMPs for this project would derive their capacity through friction in the natural sand soils. Piles should be cased and advanced through existing fill soils to a minimum distance of 5 feet into natural sand soils or the estimated embedment to derive the required capacity, whichever is greater. We anticipate the DMPs would consist of an upper length reinforced with permanent steel casing and central reinforcing bar and a lower pressure grouted bond length reinforced with a center reinforcing bar.

We recommend the following allowable frictional capacity per foot of embedment into the natural sand soils be used for preliminary design of the drilled mini-piles:

TABLE II. Drilled Mini-Pile Design Parameters	
Drilled Mini-Pile Grout Bond Zone Diameter (inches)	**Allowable Frictional Capacity (kips per foot)**
6	1.9
7	2.2
8	2.5

Installation of the drilled mini-piles should be performed by a specialty contractor who can demonstrate qualifications in regards to experience in work of this type and scope. The installation Contractor should be responsible for the mini-pile design and be required to submit a DMP design for review by the project team prior to construction. Drilled mini-piles should be designed in accordance with Section 1810.3.10 of the MSBC and stamped by a Professional Engineer registered in the state of Massachusetts.

A pile load test would need to be performed in accordance with the MSBC to verify the DMP design prior to production pile installation.

Scour

The effects of localized scour around the piles should be accounted for when determining the pile capacities. Localized scour adjacent to the pile foundations can be estimated as 2 times the pile diameter (for instance, 2 feet of scour for a 12 inch diameter timber pile). Pile capacities should be determined neglecting the soils within the calculated scour depth.

Seismic Design Criteria

Based on the results of our explorations, the site of the proposed building is considered a Site Class E soil site in accordance with Section 1613 of the MSBC. In accordance with table 1604.11 in the MSBC, maximum considered earthquake response accelerations factors of S_S=0.113 and S_1=0.047 should be utilized for the town of Nantucket.

The maximum considered earthquake spectral response accelerations adjusted for Site Class effects are S_{MS}=0.283 and S_{M1}=0.165 in accordance with Section 1613.3.3. Design spectral response accelerations of S_{DS}=0.188 and S_{D1}=0.110 (in accordance with Section 1613.3.4) should be used in determining the Seismic Design Category.

Dewatering

Due to the shallow groundwater at the site (2.4± feet below existing grade in the monitoring well), we anticipate that a significant dewatering effort will be required for excavation of any below grade structures or utilities. We recommend that groundwater be drawn down at least one foot below the base of any excavation to provide dry working conditions and to help minimize instability of the excavation bottom.

Dewatering by the use of sumps and submersible pumps should be adequate for shallow excavations where the depth of excavation below groundwater levels is only a few feet. It may be possible to manage the water on-site by pumping the water into other excavations at the site. For deeper excavations (possible deeper site utilities), well point systems or steel interlocking sheet piling may be required to ensure proper groundwater cutoff/control. Deeper utilities may need to be permanently waterproofed.

The Contractor should be solely responsible for the design, construction, and performance of dewatering systems. The Contractor should limit the size of the excavation open at any time to that which can be adequately handled by the Contractor's chosen dewatering methods.

Discharge of pumped water is subject to local, state and federal regulations. The contractor should conduct dewatering and discharge water in accordance with all applicable regulations. The contractor should implement temporary surface water runoff control measures during construction. Temporary measures should include, but are not necessarily limited to, the use of small earth berms or construction of a drainage ditch adjacent to the top of proposed excavations to divert and/or reduce the amount of surface water flowing over exposed slopes and into excavations during construction.

CONSTRUCTION OBSERVATION AND REVIEW

MGA should be retained to perform on-site construction observation and soil testing services during the installation of deep foundations. The purpose of our services is to assess the contractor's compliance with the project plans and specifications as well as our recommendations included in this report. Our on-site presence will allow us the opportunity to provide geotechnical engineering input on a timely basis if encountered subsurface conditions differ from those reported herein.

We also respectfully request the opportunity to review final site and foundation plans to see that our recommendations have been properly interpreted and included.

We appreciate the opportunity to assist you on this project and look forward to providing construction observation services as the project moves forward. Please feel free to contact us should you have any questions regarding this report or require additional information.

Very truly yours,

MCARDLE GANNON ASSOCIATES, INC.

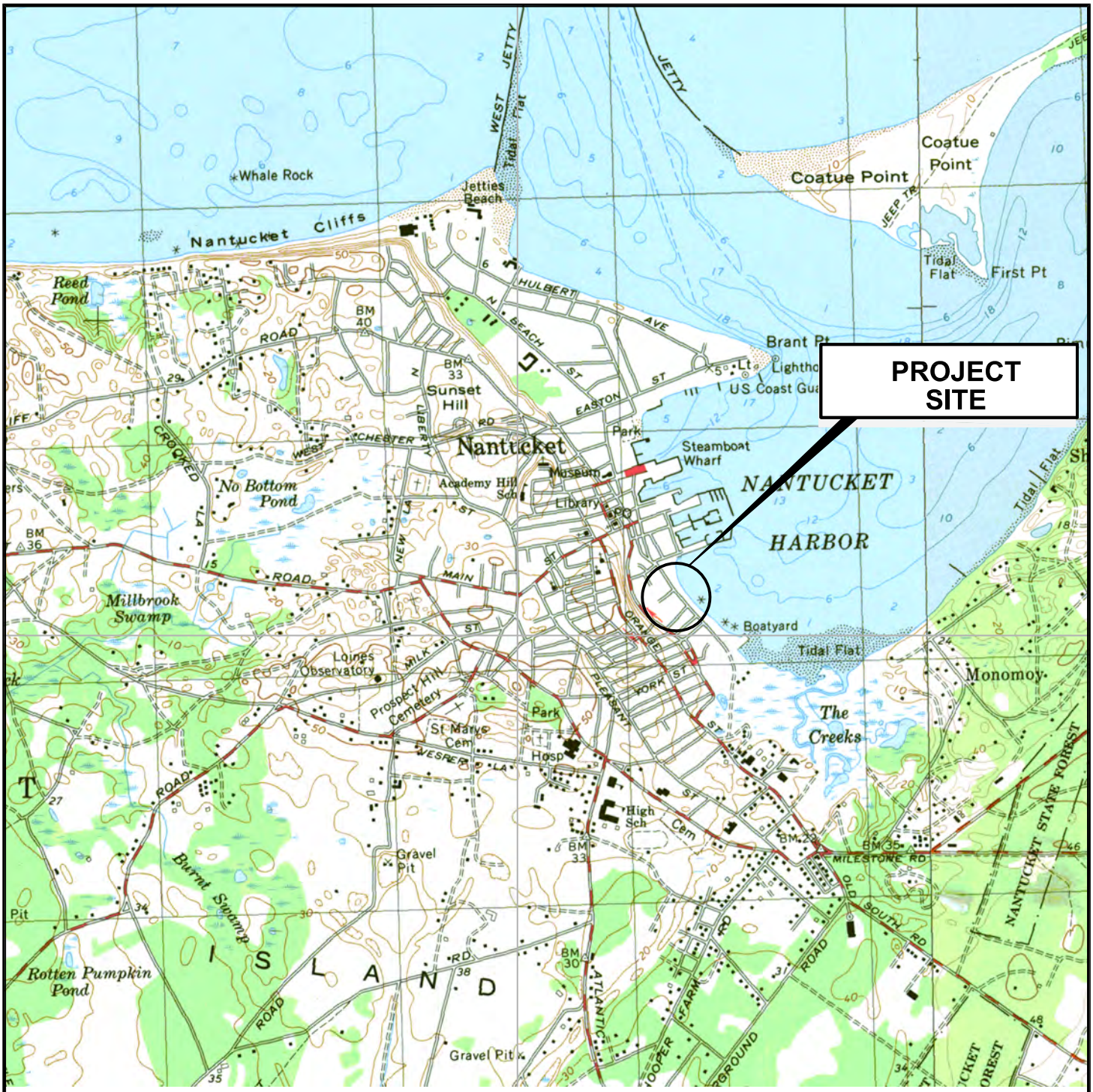
Wayne A. McArdle, P.E.
Principal

Sherry L. Holmes, P.E.
Geotechnical Engineer

WAM/slh

Attachments: Figure 1 – Site Locus
Figure 2 – Exploration Location Plan
Appendix A – Statement of Limitations
Appendix B – Test Boring Logs
Appendix C – Geotechnical Laboratory Test Results

FIGURES



McArdle Gannon Associates, Inc.
Engineers & Consultants
300 Oak Street, Suite 460
Pembroke, MA 02359
781.826.0040 phone
781.735.0418 fax

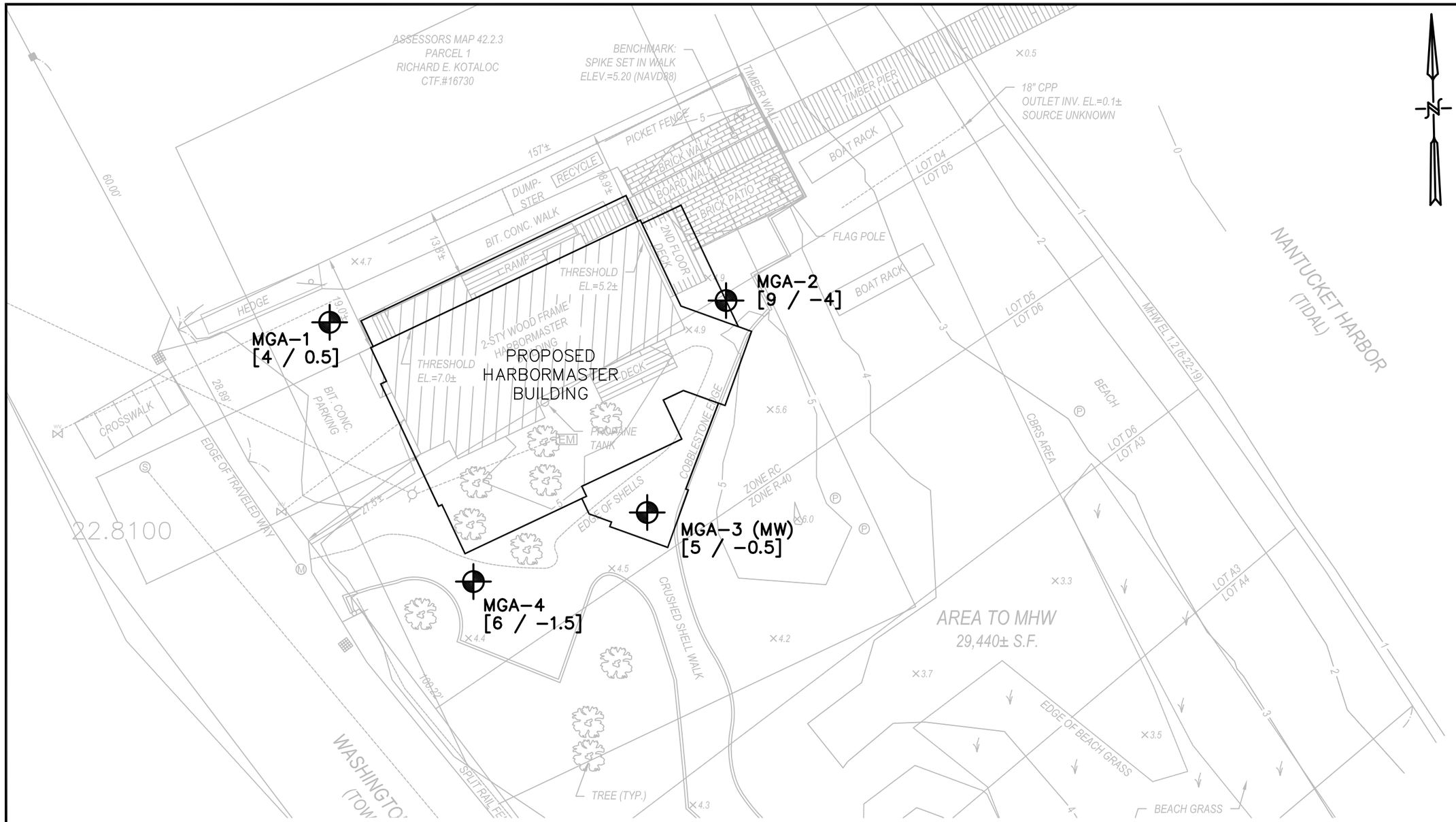
LOCUS PLAN
HARBOR MASTER BUILDING
34 WASHINGTON STREET
NANTUCKET, MASSACHUSETTS

PROJECT: W0760	DATE: 7/2019	SCALE: AS NOTED

SKETCH NO.:

FIG. No. 1

DRAWN: SLH
CHECKED: WAM



LEGEND:

⊕	TEST BORINGS PERFORMED BY TECHNICAL DRILLING SERVICES OF STERLING, MA ON JUNE 5, 2019.
[9 / −4]	INDICATES APPROXIMATE DEPTH / ELEVATION OF BOTTOM OF EXISTING FILL AT TEST BORING LOCATION.

NOTES:

1. BASE PLAN DEVELOPED FROM PLAN ENTITLED "EXISTING SITE CONDITIONS," SHEET C1.2.1, DATED JULY 10, 2019, BY COASTAL ENGINEERING CO.
2. THE BORING LOCATIONS SHOWN WERE DETERMINED BY TAPE MEASUREMENT AND/OR LINE OF SIGHT FROM EXISTING SITE FEATURES. BORING LOCATIONS ARE APPROXIMATE.
3. MGA OBSERVED AND LOGGED THE BORINGS SHOWN.

SCALE: 1"=20'

0 10 20 40

EXPLORATION LOCATION PLAN

HARBOR MASTER BUILDING
34 WASHINGTON STREET, NANTUCKET, MASSACHUSETTS

PROJECT:	W0760	SCALE:	AS NOTED
DATE:	07/2019	DRAWN:	RED
		CHECKED:	SLH

SKETCH NO.: FIG. No. 2

McArdle Gannon Associates, Inc.
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APPENDIX A: STATEMENT OF LIMITATIONS

STATEMENT OF LIMITATIONS

Explorations

The analysis and recommendations submitted in this report are based in part upon the data obtained from subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

The stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

Water level readings have been made in the explorations at the time and under the conditions stated on the logs. This data has been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, and other factors that are different from the time the measurements were made.

Review

In the event that any change in the nature, design or location of the proposed structure are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

It is recommended that this firm be provided the opportunity for a general review of final design and specifications in order that earthwork recommendations may be properly interpreted and implemented in the design and specifications.

Construction

It is recommended that this firm be retained to provide soil engineering services during the construction phase of the work. This is to observe compliance with design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

Use of Report

This report has been prepared for the exclusive use of Stephen Kelleher Architects, Inc. for specific application to the Proposed Harbor Master Building at 34 Washington Street in Nantucket, Massachusetts, in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

APPENDIX B: TEST BORING LOGS

McArdle Gannon Associates, Inc.
Engineers & Consultants

TEST BORING LOG

BORING MGA-1

PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA
CLIENT: Stephen Kelleher Architects, Inc.
CONTRACTOR: Technical Drilling Services

MGA NO. : W0760
SHEET NO. : 1 of 2
LOCATION N : See Plan
E :
ELEVATION : 4.5'±
DATE START : 6/4/19
END : 6/4/19
DRILLER : Brett Balyk
ENGINEER : Robert Drown

GROUNDWATER		DEPTH (ft) OF:			EQUIPMENT	CASING	SAMPLER	CORE
Date	Time	Water	Casing	Hole	Type	NW	Split Spoon	----
6/4/19	8:15	2	0	2.5	Size I.D.	3"	1-3/8"	----
					Hammer Wt.	140#	140#	- - - -
					Hammer Fall	30"	30"	- - - -

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recovery (in)	Elevation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS
0							4.3	-ASPHALT-
			4	S-1	0.5	14	0.2	Loose, dark brown, fine to coarse SAND, little Silt, trace (+) Seashells/ Brick. [Bottom 6± inches of sample wet]
			3		2.5			
			2					
			2					-FILL-
4							0.5	
		PUSH	5	S-2	4.0	10	4.0	Loose, brown, fine to medium SAND, trace (-) Silt, trace (-) fine Gravel.
		PUSH	4		6.0			
		PUSH	5					
		PUSH	5					
8		25						
		10	8	S-3	9.0	12		Medium dense, gray, fine to coarse SAND, trace (-) Silt.
		18	9		11.0			
		55	13					
12		67	13					-SAND-
		89						
		25	7	S-4	14.0	24		Medium dense, olive, fine to medium SAND, trace Silt.
		35	11		16.0			
16		55	15					
		54	14					
		59						
		33	7	S-5	19.0	18		Medium dense, olive-gray, fine to coarse SAND, trace (-) Silt.
20		47	10		21.0			
		65	12					
		69	15					

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION
- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- B - Bulk/Grab Sample

SUMMARY
Station:
Rock:
Samples:

BORING MGA-1

300 Oak Street, Suite 460 Pembroke, MA 02359 | Telephone 781.826.0040 | Fax 781.735.0418 | mcardlegannon.com

McArdle Gannon Associates, Inc. Engineers & Consultants	TEST BORING LOG	BORING MGA-1

PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA
CLIENT: Stephen Kelleher Architects, Inc.

MGA NO. : W0760
SHEET NO. : 2 of 2

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recov-ery (in)	Elev-ation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS
		75						
24		41	1 2 3 5	S-6	24.0 26.0	9		Loose, brown, fine to coarse SAND, trace Silt.
		51						
		75						
		80						
28		74						
		47	4 6 9 7	S-7	29.0 31.0	20		Medium dense, olive-brown, fine to medium SAND, trace (+) Silt.
		56						
		54						
32		66						-SAND-
		54						
		62	6 5 4 5	S-8	34.0 36.0	6		Loose, olive-brown, fine to coarse SAND, trace (-) Silt.
36		67						
		91						
		111						
		121						
			4 6 5 10	S-9	39.0 41.0	0		[No Recovery]
40							-36.5	
							41.0	BOTTOM OF BORING AT 41 FEET.
44								
48								

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION

- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- B - Bulk/Grab Sample

SUMMARY

Station:
Rock:
Samples:

BORING MGA-1

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McArdle Gannon Associates, Inc.
Engineers & Consultants

TEST BORING LOG

BORING MGA-2

PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA
CLIENT: Stephen Kelleher Architects, Inc.
CONTRACTOR: Technical Drilling Services

MGA NO. : W0760
SHEET NO. : 1 of 2
LOCATION N : See Plan
E :
ELEVATION : 5'±
DATE START : 6/4/19
END : 6/4/19
DRILLER : Brett Balyk
ENGINEER : Robert Drown

GROUNDWATER		DEPTH (ft) OF:			EQUIPMENT	CASING	SAMPLER	CORE
Date	Time	Water	Casing	Hole	Type	NW	Split Spoon	----
6/4/19	1:40	4	4	6	Size I.D.	3"	1-3/8"	----
					Hammer Wt.	140#	140#	- - - -
					Hammer Fall	30"	30"	- - - -

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recovery (in)	Elevation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS
0			1 2 2 5	S-1	0.0 2.0	16		Very loose to loose, dark brown to brown, fine to coarse SAND, little Silt, trace Seashells.
								-FILL-
4		2	1 1	S-2	4.0 5.0	12		Dark brown, fine to medium SAND, trace (-) Silt, trace (-) fine Gravel.
		2	1/12"	S-2A	5.0 6.0	2		Black, fine to medium SAND, some Silt, trace Roots/Seashells.
		2	1 2	S-3	6.0 8.0	12		Loose, dark brown to black, fine to coarse SAND, some (-) Silt, trace Organics, trace Brick.
8		6	3 6					
		14					-4.0	
			3 5 9 11	S-4	9.0 11.0	14	9.0	Medium dense, brown to olive-brown, fine to coarse SAND, trace (+) Silt.
12								
			6 6 9 12	S-5	14.0 16.0	20		Medium dense, dark gray, fine to medium SAND, trace Silt.
16								-SAND-
			4 2 2 9	S-6	19.0 21.0	12		Very loose to loose, gray-brown, fine to medium SAND, little Silt, trace Seashells.
20								

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION
- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- B - Bulk/Grab Sample

SUMMARY
Station:
Rock:
Samples:

BORING MGA-2

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McArdle Gannon Associates, Inc. Engineers & Consultants	TEST BORING LOG	BORING MGA-2

PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA
CLIENT: Stephen Kelleher Architects, Inc.

MGA NO. : W0760
SHEET NO. : 2 of 2

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recov-ery (in)	Elev-ation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS
24			7 8 12 11	S-7	24.0 26.0	12		Medium dense, gray-brown, fine to coarse SAND, trace Silt.
28			9 10 10 9	S-8	29.0 31.0	8		Medium dense, olive-brown, fine to coarse SAND, trace Silt. -SAND-
32			6 7 6 6	S-9	34.0 36.0	11		Medium dense, brown, fine to coarse SAND, trace Silt.
36			7 7 9 12	S-10	39.0 41.0	5		Medium dense, brown, fine to coarse SAND, trace Silt.
40							-36.0 41.0	BOTTOM OF BORING AT 41 FEET.
44								
48								

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION

- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- B - Bulk/Grab Sample

SUMMARY

Station:
Rock:
Samples:

BORING MGA-2

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McArdle Gannon Associates, Inc.
Engineers & Consultants

TEST BORING LOG

BORING MGA-3 (MW)

PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA
CLIENT: Stephen Kelleher Architects, Inc.
CONTRACTOR: Technical Drilling Services

MGA NO. : W0760
SHEET NO. : 1 of 2
LOCATION N : See Plan
E :
ELEVATION : 4.5'±
DATE START : 6/5/19
END : 6/5/19
DRILLER : Brett Balyk
ENGINEER : Robert Drown

GROUNDWATER		DEPTH (ft) OF:			EQUIPMENT	CASING	SAMPLER	CORE
Date	Time	Water	Casing	Hole	Type	NW	Split Spoon	----
6/5/19	8:15	4	4	6	Size I.D.	3"	1-3/8"	----
6/5/19	2:40	2.4	MW		Hammer Wt.	140#	140#	- - - -
					Hammer Fall	30"	30"	- - - -

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recovery (in)	Elevation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS	Well Schematic
-4							4.5		
0			1 2 3 3	S-1	0.0 2.0	18	0.0	Loose, dark brown to brown to beige, fine to coarse SAND, little (-) Silt. -FILL-	
4			2 3	S-2	4.0 5.0	8	-0.5	Black, fine to medium SAND and SILT, little Roots/Seashells.	
		22	10 13	S-2A	5.0 6.0	12	5.0	Dark brown to light brown, fine to medium SAND, trace Silt, trace fine Gravel.	
		26							
8		30							
		25							
		10	4 7 9 12	S-3	9.0 11.0	12		Medium dense, beige, fine to coarse SAND, trace Silt.	
		10							
		26						-SAND-	
12		42							
		53							
		18	6 10 14 14	S-4	14.0 16.0	12		Medium dense, gray-brown, fine to coarse SAND, trace Silt.	
		26							
16		52							
		56							

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION
- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- W - Wash Sample

SUMMARY
Overburden:
Rock:
Samples:

BORING MGA-3 (MW)

McArdle Gannon Associates, Inc. Engineers & Consultants	TEST BORING LOG	BORING MGA-3 (MW)
PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA **CLIENT:** Stephen Kelleher Architects, Inc.		**MGA NO. : W0760** **SHEET NO. : 2 of 2**

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recovery (in)	Elevation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS	Well Schematic
		45							
20		29 26	3 9 11 10	S-5	19.0 21.0	14		Medium dense, gray-brown, fine to coarse SAND, trace Silt.	
		29 21 34							
24		36 44	5 4 5 6	S-6	24.0 26.0	12		Loose, gray-brown, fine to coarse SAND, trace Silt.	
		63 72 79							
28		38 36	2 2 3 3	S-7	29.0 31.0	13		Loose, gray-brown, fine to coarse SAND, trace Silt.	
32		44 65 68						-SAND-	
36		44 49	5 5 6 7	S-8	34.0 36.0	24		Medium dense, brown, fine to coarse SAND, trace Silt.	
		52 63 65							
40			5 5 6 9	S-9	39.0 41.0	20		Medium dense, brown, fine to coarse SAND, trace Silt.	
							-36.5 41.0	BOTTOM OF BORING AT 41 FEET.	
44									

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION

- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- W - Wash Sample

SUMMARY

Overburden:
Rock:
Samples:

BORING MGA-3 (MW)

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McArdle Gannon Associates, Inc.
Engineers & Consultants

TEST BORING LOG

BORING MGA-4

PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA
CLIENT: Stephen Kelleher Architects, Inc.
CONTRACTOR: Technical Drilling Services

MGA NO. : W0760
SHEET NO. : 1 of 2
LOCATION N : See Plan
E :
ELEVATION : 4.5'±
DATE START : 6/5/19
END : 6/5/19
DRILLER : Brett Balyk
ENGINEER : Robert Drown

GROUNDWATER		DEPTH (ft) OF:			EQUIPMENT	CASING	SAMPLER	CORE
Date	Time	Water	Casing	Hole	Type	NW	Split Spoon	----
6/5/19	12:30	2	0	4	Size I.D.	3"	1-3/8"	----
					Hammer Wt.	140#	140#	- - - -
					Hammer Fall	30"	30"	- - - -

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recovery (in)	Elevation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS
0			2	S-1	0.0	17		Loose, beige, fine to coarse SAND, little (-) Silt.
			2		2.0			
			3					-FILL-
			4					
			4	S-2	2.0	9		Loose, wet, dark brown to black, fine to caorse SAND, little (+) Seashells, little (-) Silt, trace Organics.
			3		4.0			
			3					
4			3					
		1	4	S-3	4.0	16		Loose, dark brown, fine to medium SAND, trace fine Gravel, trace (-) Silt, trace (-) Fibrous Peat, trace (-) Seashells.
			3		6.0			
		1	4					
			4				-1.5	
		3	3	S-4	6.0	18	6.0	Loose, brown, fine to medium SAND, trace (-) Silt, trace (-) fine Gravel.
			4		8.0			
		7	5					
8			6					
		21						
		3	8	S-5	9.0	18		Medium dense, brown to gray, fine to coarse SAND, trace Silt.
			9		11.0			
		10	13					
			16					
		24						-SAND-
12								
		61						
		87						
		10	6	S-6	14.0	14		Medium dense, brown, fine to coarse SAND, trace Silt.
			9		16.0			
		12	9					
16			10					
		18						
		21						
		19						
		17	6	S-7	19.0	16		Medium dense, brown, fine to coarse SAND, trace fine Gravel, trace (-) Silt.
			9		21.0			
20		32	10					
			10					
		34						
		50						

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION
- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- B - Bulk/Grab Sample

SUMMARY
Station:
Rock:
Samples:

BORING MGA-4

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McArdle Gannon Associates, Inc. Engineers & Consultants	TEST BORING LOG	BORING MGA-4
PROJECT: Harbor Master Building, 34 Washington St, Nantucket, MA **CLIENT:** Stephen Kelleher Architects, Inc.		**MGA NO. : W0760** **SHEET NO. : 2 of 2**

Depth in Feet	Strata Change	Case BPF (Drill) (min/ft)	Sampler Blows Per 6" (RQD%)	Sample Number/ Type	Sample Depth Range (ft)	Sample Recov-ery (in)	Elev-ation/ Depth (ft)	FIELD CLASSIFICATION AND REMARKS
		62						
24		34	4 4 8 7	S-8	24.0 26.0	18		Medium dense, brown, fine to coarse SAND, trace fine Gravel, trace Silt.
		32						
		48						
28		45						
		58						
		45	3 4 5 7	S-9	29.0 31.0	14		Loose, brown, fine to coarse SAND, trace Silt.
		52						
32		63						-SAND-
		68						
		67						
		48	5 7 6 6	S-10	34.0 36.0	12		Medium dense, brown, fine to coarse SAND, trace Silt.
36		52						
		55						
		62						
		72						
			5 6 8 10	S-11	39.0 41.0	16		Medium dense, brown, fine to coarse SAND, trace Silt.
40								
							-36.5 41.0	BOTTOM OF BORING AT 41 FEET.
44								
48								

BLOWS/FT.	DENSITY
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
50 +	Very Dense

BLOWS/FT.	CONSISTENCY
0 - 2	Very Soft
2 - 4	Soft
4 - 8	Medium Stiff
8 - 15	Stiff
15 - 30	Very Stiff
30+	Hard

SAMPLE IDENTIFICATION

- S - Split Spoon
- T - Thin Wall Tube
- U - Undisturbed Piston
- C - Diamond Core
- B - Bulk/Grab Sample

SUMMARY

Station:
Rock:
Samples:

BORING MGA-4

300 Oak Street, Suite 460 Pembroke, MA 02359 | Telephone 781.826.0040 | Fax 781.735.0418 | mcardlegannon.com

KEY TO SYMBOLS

Symbol Description

Strata symbols

Asphalt

Fill

Sand

Soil Samplers

Split Spoon

Monitor Well Details

pipe riser

assorted cuttings

bentonite pellets

silica sand, blank PVC

slotted pipe w/ sand

end of well installation

Notes:

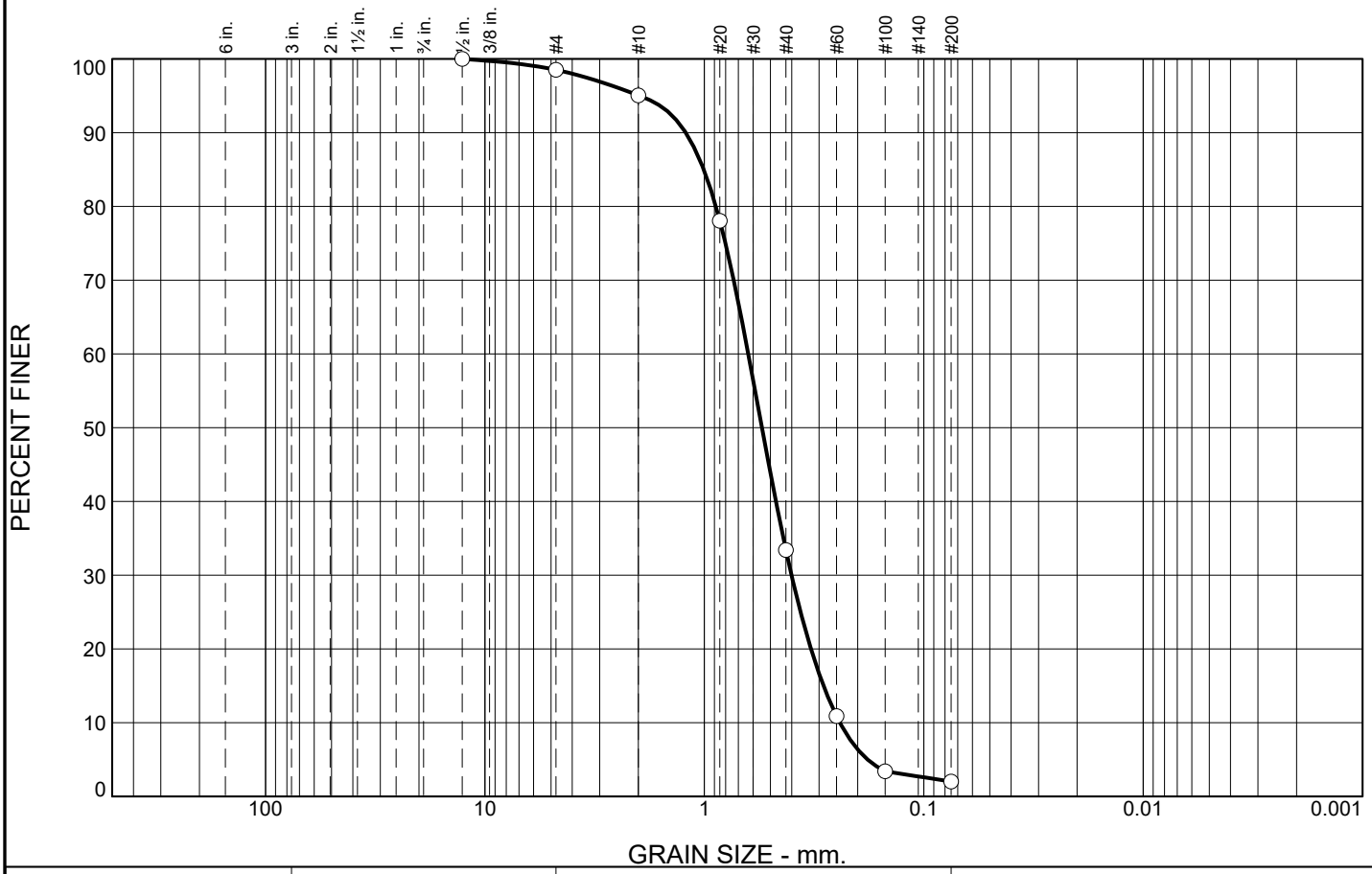
1. **Test borings performed by Technical Drilling Services on June 4 and 5, 2019 using a all terrain vehicle mounted drill rig equipped with a 140-pound automatic hammer.**

2. **Test boring elevations were estimated from ground surface contours and spot grades shown on a plan entitled "Existing Site Conditions," dated July 10, 2019, by Coastal Engineering Company.**

3. **Test borings observed and logged by MGA.**

APPENDIX C: GEOTECHNICAL LABORATORY TEST RESULTS

PARTICLE SIZE DISTRIBUTION REPORT



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.5	3.4	61.7	31.4	2.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
#4	98.5		
#10	95.1		
#20	78.1		
#40	33.4		
#60	10.9		
#100	3.4		
#200	2.0		

* (no specification provided)

Material Description

Brown, fine to medium SAND, trace (-) Silt, trace (-) fine Gravel.

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.2157 D_{85}= 1.0069 D_{60}= 0.6307
D_{50}= 0.5461 D_{30}= 0.4006 D_{15}= 0.2865
D_{10}= 0.2412 C_u= 2.61 C_c= 1.05

Classification

USCS= SP AASHTO=

Remarks

Natural Sand
Water Content: 20.5%

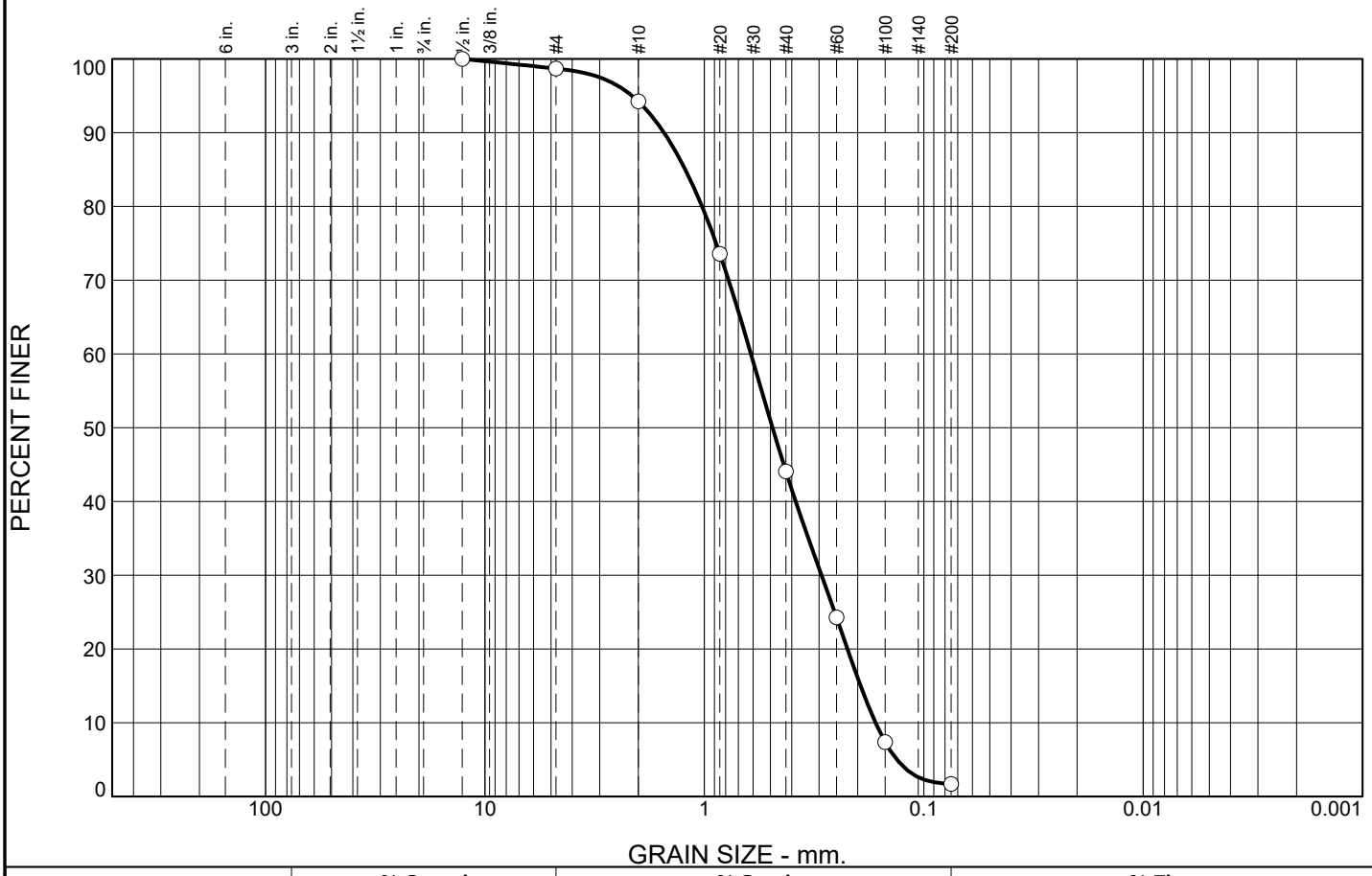
Source of Sample: MGA-1 **Depth:** 4-6'
Sample Number: S-2

Date: 06/06/2019

McArdle Gannon Associates, Inc.
Engineers & Consultants

Client: Stephen Kelleher Architects, Inc.
Project: Proposed Harbor Master Building
34 Washington Street, Nantucket, MA
Project No: W0760 **Figure**

PARTICLE SIZE DISTRIBUTION REPORT



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.3	4.4	50.2	42.4	1.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
#4	98.7		
#10	94.3		
#20	73.6		
#40	44.1		
#60	24.3		
#100	7.4		
#200	1.7		

* (no specification provided)

Material Description

Dark brown, fine to medium SAND, trace (-) Silt, trace (-) fine Gravel.

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.5258 D_{85}= 1.2217 D_{60}= 0.6132
D_{50}= 0.4890 D_{30}= 0.2926 D_{15}= 0.1939
D_{10}= 0.1659 C_u= 3.70 C_c= 0.84

Classification

USCS= SP AASHTO=

Remarks

Existing Fill
Water Content: 18.5%

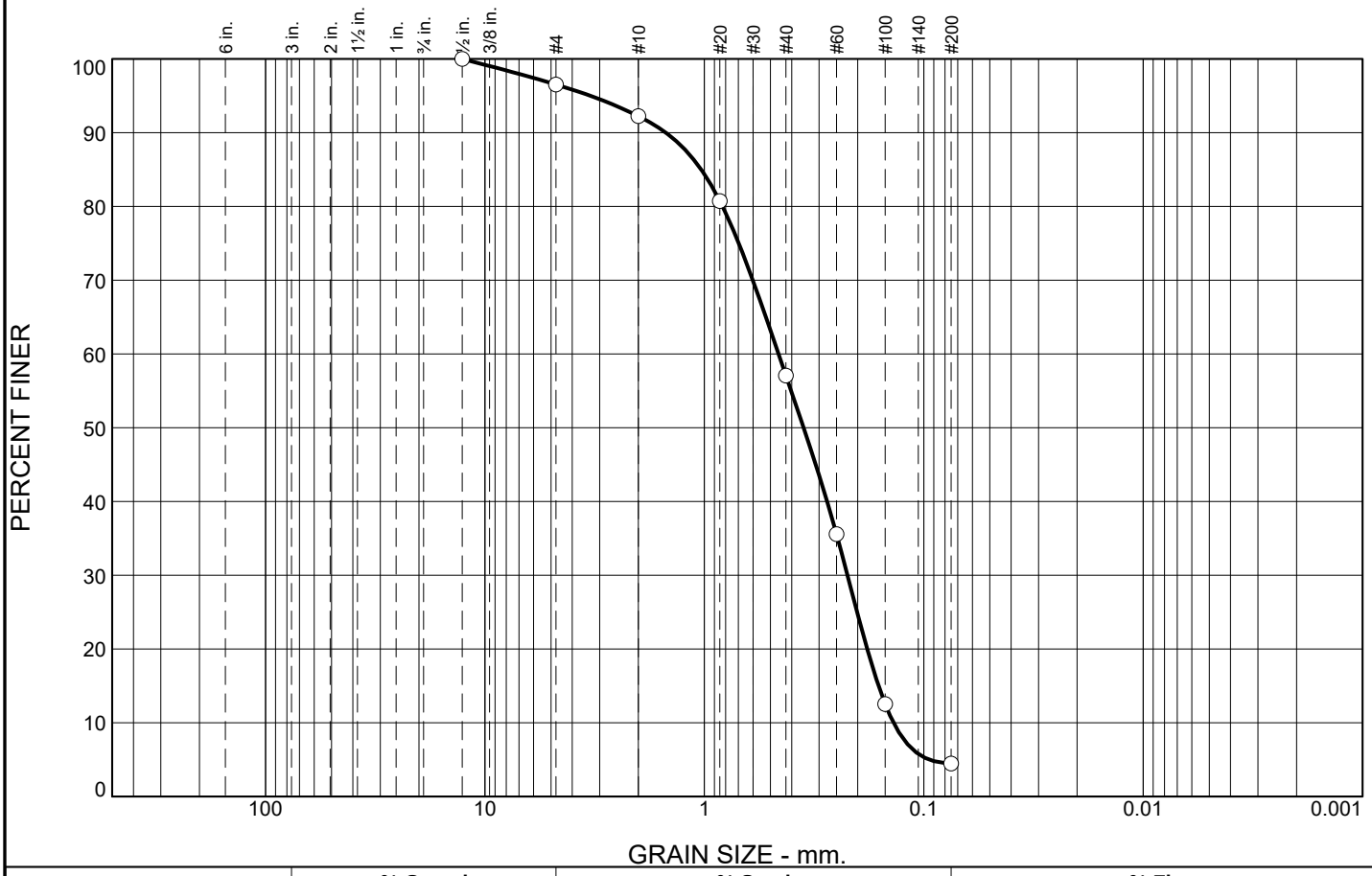
Source of Sample: MGA-2 **Depth:** 4-5'
Sample Number: S-2

Date: 06/06/2019

McArdle Gannon Associates, Inc.
Engineers & Consultants

Client: Stephen Kelleher Architects, Inc.
Project: Proposed Harbor Master Building
34 Washington Street, Nantucket, MA
Project No: W0760 **Figure**

PARTICLE SIZE DISTRIBUTION REPORT



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.5	4.3	35.1	52.6	4.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
#4	96.5		
#10	92.2		
#20	80.7		
#40	57.1		
#60	35.6		
#100	12.5		
#200	4.5		

* (no specification provided)

Material Description

Dark brown to light brown, fine to medium SAND, trace Silt, trace fine Gravel.

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.4962 D_{85}= 1.0341 D_{60}= 0.4590
D_{50}= 0.3529 D_{30}= 0.2227 D_{15}= 0.1607
D_{10}= 0.1373 C_u= 3.34 C_c= 0.79

Classification

USCS= SP AASHTO=

Remarks

Natural Sand
Water Content: 18.0%

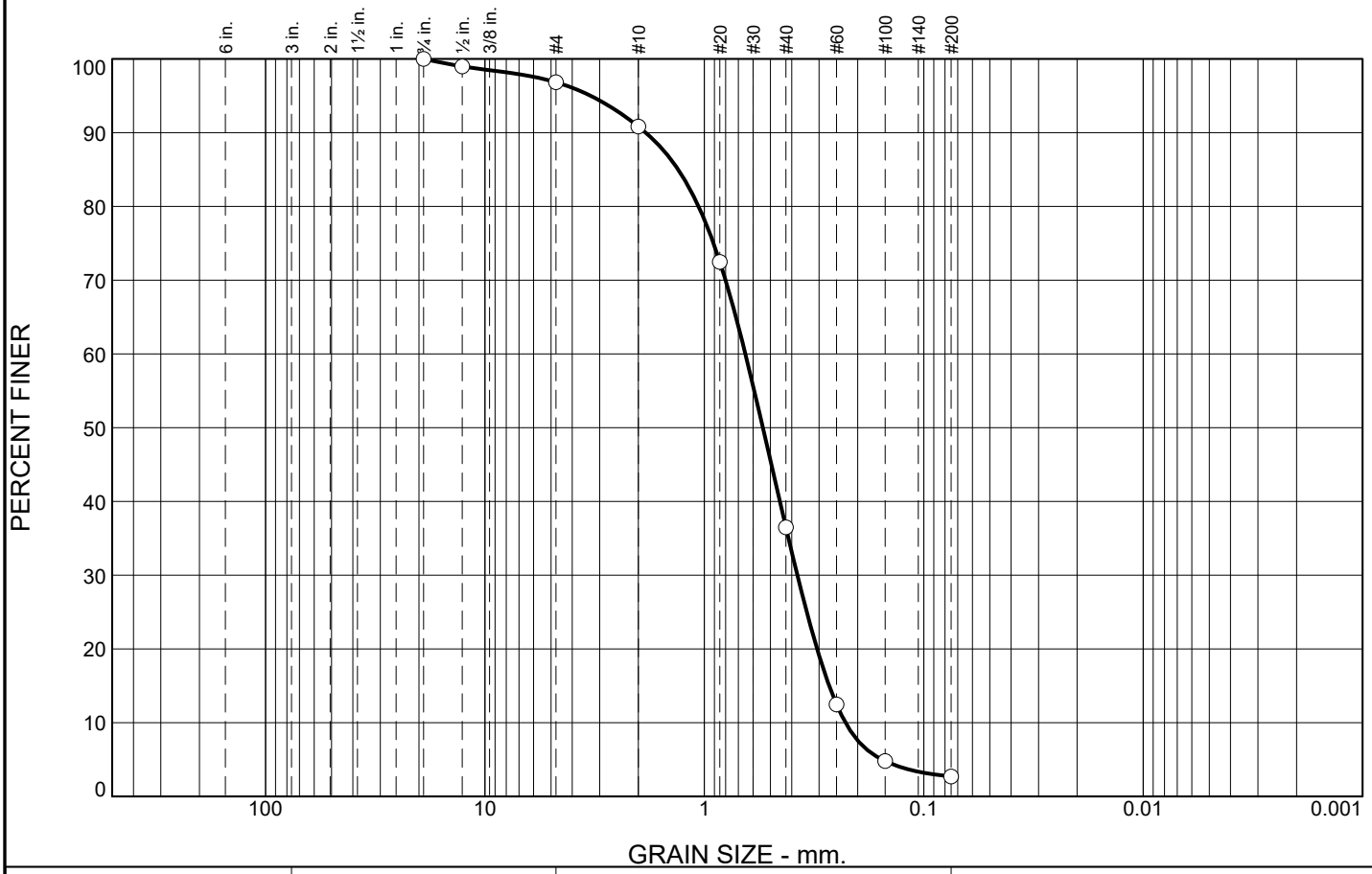
Source of Sample: MGA-3 **Depth:** 5-6'
Sample Number: S-2A

Date: 06/06/2019

McArdle Gannon Associates, Inc.
Engineers & Consultants

Client: Stephen Kelleher Architects, Inc.
Project: Proposed Harbor Master Building
34 Washington Street, Nantucket, MA
Project No: W0760 **Figure**

PARTICLE SIZE DISTRIBUTION REPORT



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.2	6.0	54.3	33.8	2.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	99.0		
#4	96.8		
#10	90.8		
#20	72.5		
#40	36.5		
#60	12.5		
#100	4.8		
#200	2.7		

* (no specification provided)

Material Description

Dark brown, fine to medium SAND, trace fine Gravel, trace (-) Silt.

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.8491 D_{85}= 1.3163 D_{60}= 0.6503
D_{50}= 0.5408 D_{30}= 0.3768 D_{15}= 0.2701
D_{10}= 0.2275 C_u= 2.86 C_c= 0.96

Classification

USCS= SP AASHTO=

Remarks

Existing Fill
Water Content: 18.4%

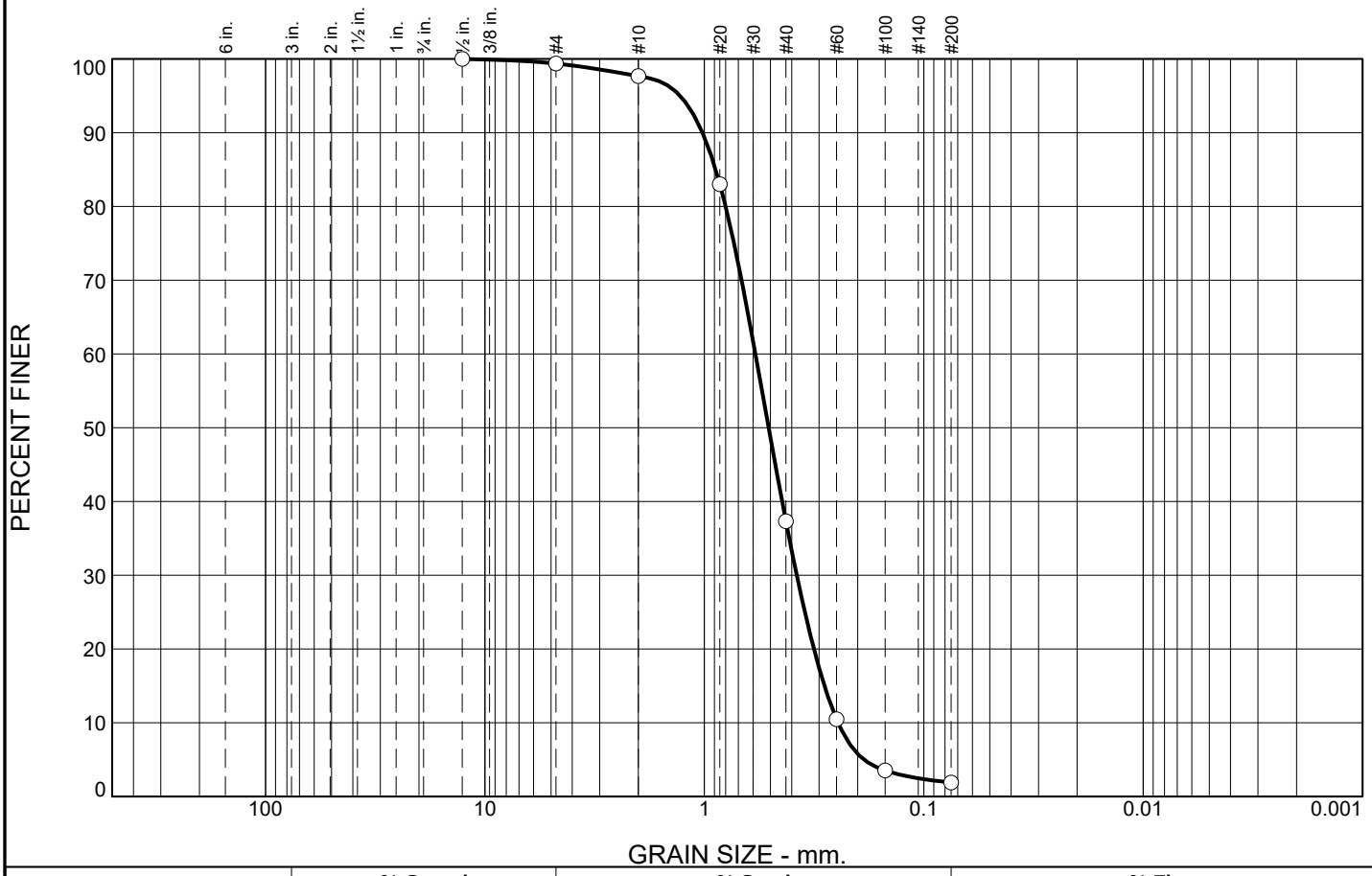
Source of Sample: MGA-4 **Depth:** 4-6'
Sample Number: S-3

Date: 06/06/2019

McArdle Gannon Associates, Inc.
Engineers & Consultants

Client: Stephen Kelleher Architects, Inc.
Project: Proposed Harbor Master Building
34 Washington Street, Nantucket, MA
Project No: W0760 **Figure**

PARTICLE SIZE DISTRIBUTION REPORT



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.6	1.7	60.4	35.4	1.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
#4	99.4		
#10	97.7		
#20	83.0		
#40	37.3		
#60	10.5		
#100	3.5		
#200	1.9		

* (no specification provided)

Material Description

Brown, fine to medium SAND, trace (-) Silt, trace (-) fine Gravel.

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.0207 D_{85}= 0.8885 D_{60}= 0.5850
D_{50}= 0.5091 D_{30}= 0.3792 D_{15}= 0.2838
D_{10}= 0.2460 C_u= 2.38 C_c= 1.00

Classification

USCS= SP AASHTO=

Remarks

Natural Sand
Water Content: 20.1%

Source of Sample: MGA-4 **Depth:** 6-8'
Sample Number: S-4

Date: 06/06/2019

McArdle Gannon Associates, Inc.
Engineers & Consultants

Client: Stephen Kelleher Architects, Inc.
Project: Proposed Harbor Master Building
34 Washington Street, Nantucket, MA
Project No: W0760 **Figure**

McArdle Gannon Associates, Inc.
Engineers & Consultants

Natural Water Content - Organic Content – pH
Laboratory Testing Results

PROJECT:	Proposed Harbor Master Building	**LAB JOB NO:**	SL-1169		
LOCATION:	34 Washington Street, Nantucket, MA	**TEST BY:**	CRB	**DATE:**	06/06/2019
CLIENT:	Stephen Kelleher Architects, Inc.	**CHECK BY:**	SLH	**DATE:**	06/06/2019
MGA FILE NO:	W0760				

INDENTIFICATION				**PROPERTIES**			**OTHER TESTS AND REMARKS**
Boring No.	Sample No.	Sample Depth (feet)	Soil Strata	Natural Water Content (%)	Organic Content (%)	pH	
MGA-2	S-3	6-8	Existing Fill	29.4	3.0		
MGA-3	S-2	4-5	Existing Fill	22.0	2.4		

300 Oak Street, Suite 460, Pembroke, MA 02359 Telephone: 781.826.0040 Fax: 781.735.0418 mcardlegannon.com

APPENDIX D

MassDEP Checklist for Stormwater Report

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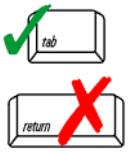
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.[1] This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8[2]
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

[1] The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

[2] For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature

3/12/2020

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

☐ New development

☒ Redevelopment

☐ Mix of New Development and Redevelopment

Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☐ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☒ Reduced Impervious Area (Redevelopment Only)
- ☐ Minimizing disturbance to existing trees and shrubs
- ☐ LID Site Design Credit Requested:
  - ☐ Credit 1
  - ☐ Credit 2
  - ☐ Credit 3
- ☐ Use of “country drainage” versus curb and gutter conveyance and pipe
- ☐ Bioretention Cells (includes Rain Gardens)
- ☐ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- ☐ Treebox Filter
- ☐ Water Quality Swale
- ☐ Grass Channel
- ☐ Green Roof
- ☐ Other (describe): _____

Standard 1: No New Untreated Discharges

- ☒ No new untreated discharges
- ☐ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- ☐ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.

Checklist for Stormwater Report

Checklist (continued)

Standard 2: Peak Rate Attenuation – N/A Redevelopment

☒ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.

☐ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

☐ Soil Analysis provided. NRCS Report

☒ Required Recharge Volume calculation provided.

☐ Required Recharge volume reduced through use of the LID site Design Credits.

☒ Sizing the infiltration, BMPs is based on the following method: Check the method used.

☐ Static ☒ Simple Dynamic ☐ Dynamic Field[1]

☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.

☒ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.

☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.

☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:

☐ Site is comprised solely of C and D soils and/or bedrock at the land surface

☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000

☐ Solid Waste Landfill pursuant to 310 CMR 19.000

☒ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.

☒ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.

☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

[1] 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.

Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

☐ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.

☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
- Provisions for storing materials and waste products inside or under cover;
- Vehicle washing controls;
- Requirements for routine inspections and maintenance of stormwater BMPs;
- Spill prevention and response plans;
- Provisions for maintenance of lawns, gardens, and other landscaped areas;
- Requirements for storage and use of fertilizers, herbicides, and pesticides;
- Pet waste management provisions;
- Provisions for operation and management of septic systems;
- Provisions for solid waste management;
- Snow disposal and plowing plans relative to Wetland Resource Areas;
- Winter Road Salt and/or Sand Use and Storage restrictions;
- Street sweeping schedules;
- Provisions for prevention of illicit discharges to the stormwater management system;
- Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
- Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
- List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.

☒ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.

☐ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:

- ☐ is within the Zone II or Interim Wellhead Protection Area
- ☐ is near or to other critical areas
- ☐ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
- ☐ involves runoff from land uses with higher potential pollutant loads.

☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.

☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.

Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

☒ The BMP is sized (and calculations provided) based on:

- ☐ The ½" or 1" Water Quality Volume or
- ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.

☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.

☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.

☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted ***prior to*** the discharge of stormwater to the post-construction stormwater BMPs.

☐ The NPDES Multi-Sector General Permit does ***not*** cover the land use.

☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.

☐ All exposure has been eliminated.

☐ All exposure has ***not*** been eliminated and all BMPs selected are on MassDEP LUHPPL list.

☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.

☐ Critical areas and BMPs are identified in the Stormwater Report.

Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

☒ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:

- ☐ Limited Project
- ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
- ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
- ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
- ☐ Bike Path and/or Foot Path
- ☒ Redevelopment Project
- ☐ Redevelopment portion of mix of new and redevelopment.

☐ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.

☒ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
- Construction Period Operation and Maintenance Plan;
- Names of Persons or Entity Responsible for Plan Compliance;
- Construction Period Pollution Prevention Measures;
- Erosion and Sedimentation Control Plan Drawings;
- Detail drawings and specifications for erosion control BMPs, including sizing calculations;
- Vegetation Planning;
- Site Development Plan;
- Construction Sequencing Plan;
- Sequencing of Erosion and Sedimentation Controls;
- Operation and Maintenance of Erosion and Sedimentation Controls;
- Inspection Schedule;
- Maintenance Schedule;
- Inspection and Maintenance Log Form.

☒ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.

Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has ***not*** been included in the Stormwater Report but will be submitted ***before*** land disturbance begins.

☒ The project is ***not*** covered by a NPDES Construction General Permit.

☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.

☐ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

☒ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:

- ☒ Name of the stormwater management system owners;
- ☒ Party responsible for operation and maintenance;
- ☒ Schedule for implementation of routine and non-routine maintenance tasks;
- ☒ Plan showing the location of all stormwater BMPs maintenance access areas;
- ☐ Description and delineation of public safety features;
- ☐ Estimated operation and maintenance budget; and
- ☒ Operation and Maintenance Log Form.

☐ The responsible party is ***not*** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:

- ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
- ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

☒ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;

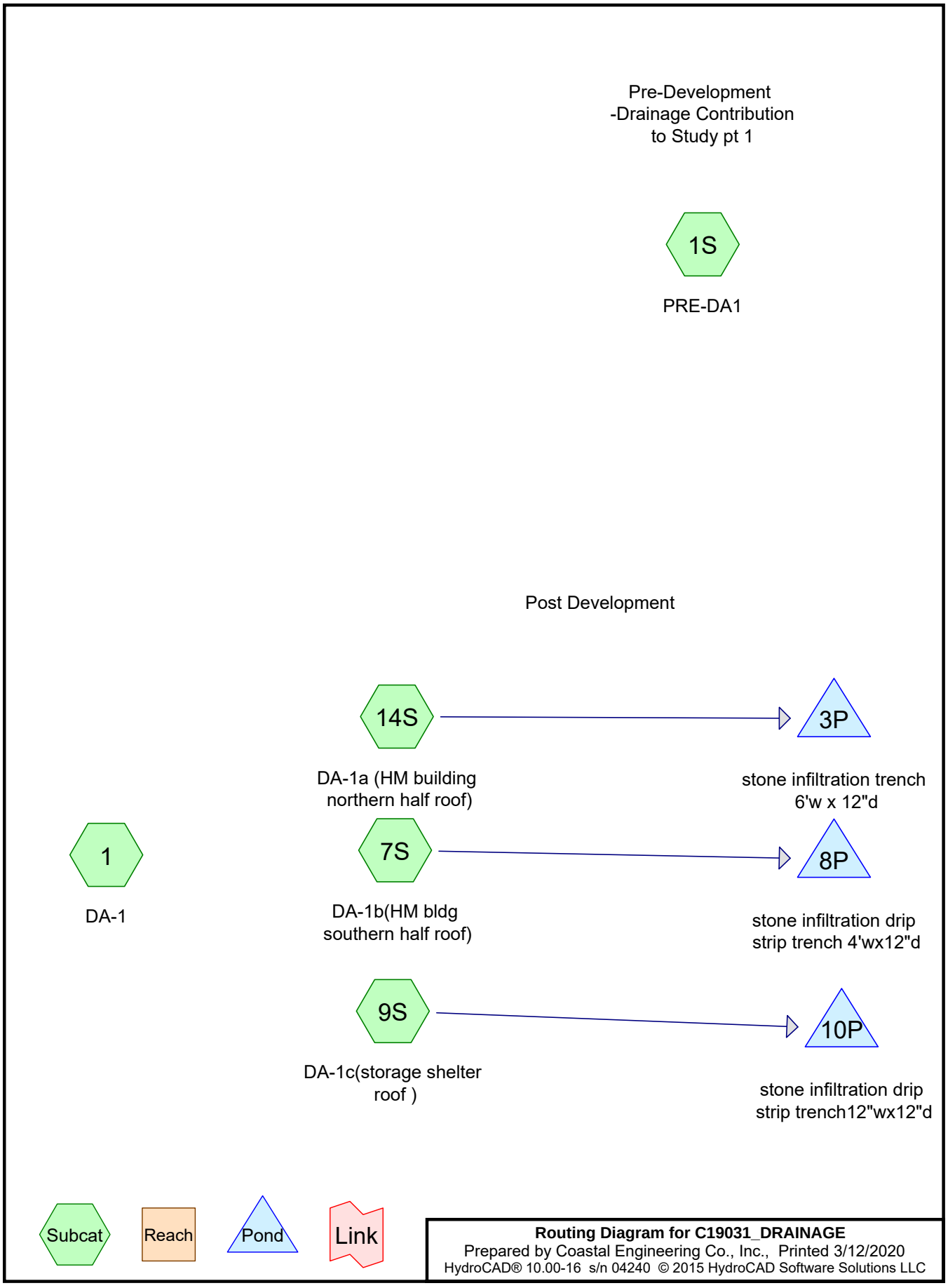
☐ An Illicit Discharge Compliance Statement is attached;

☒ NO Illicit Discharge Compliance Statement is attached but will be submitted ***prior to*** the discharge of any stormwater to post-construction BMPs.

APPENDIX E

Hydro-CAD CALCULATIONS

COASTAL
engineering co.



Routing Diagram for C19031_DRAINAGE
Prepared by Coastal Engineering Co., Inc., Printed 3/12/2020

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.271	39	>75% Grass cover, Good, HSG A (1, 1S)
0.114	98	Paved parking, HSG A (1, 1S)
0.104	98	Roofs, HSG A (1S, 7S, 9S, 14S)
0.003	98	patio (1S)

Summary for Subcatchment 1: DA-1

Runoff = 0.06 cfs @ 12.18 hrs, Volume= 0.007 af, Depth> 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Rainfall=3.60"

Area (sf)	CN	Description
2,623	98	Paved parking, HSG A
5,052	39	>75% Grass cover, Good, HSG A
7,675	59	Weighted Average
5,052		65.82% Pervious Area
2,623		34.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 1S: PRE-DA1

Runoff = 0.11 cfs @ 12.17 hrs, Volume= 0.011 af, Depth> 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Rainfall=3.60"

	Area (sf)	CN	Description
	6,741	39	>75% Grass cover, Good, HSG A
	1,497	98	Roofs, HSG A
	2,363	98	Paved parking, HSG A
*	125	98	patio
	10,726	61	Weighted Average
	6,741		62.85% Pervious Area
	3,985		37.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 7S: DA-1b(HM bldg southern half roof)

Runoff = 0.09 cfs @ 12.13 hrs, Volume= 0.008 af, Depth> 3.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Rainfall=3.60"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
1,337	98	Roofs, HSG A
1,337	98	Weighted Average
1,337		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 9S: DA-1c(storage shelter roof)

Runoff = 0.03 cfs @ 12.13 hrs, Volume= 0.002 af, Depth> 3.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Rainfall=3.60"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
377	98	Roofs, HSG A
377	98	Weighted Average
377		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 14S: DA-1a (HM building northern half roof)

Runoff = 0.09 cfs @ 12.13 hrs, Volume= 0.008 af, Depth> 3.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Rainfall=3.60"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
1,337	98	Roofs, HSG A
1,337	98	Weighted Average
1,337		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Pond 3P: stone infiltration trench 6'w x 12"d

Inflow Area = 0.031 ac,100.00% Impervious, Inflow Depth > 3.20" for 2 event
Inflow = 0.09 cfs @ 12.13 hrs, Volume= 0.008 af
Outflow = 0.08 cfs @ 12.19 hrs, Volume= 0.008 af, Atten= 14%, Lag= 3.7 min
Discarded = 0.08 cfs @ 12.19 hrs, Volume= 0.008 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 3.53' @ 12.19 hrs Surf.Area= 420 sf Storage= 5 cf

Plug-Flow detention time= 0.4 min calculated for 0.008 af (100% of inflow)
Center-of-Mass det. time= 0.4 min (730.0 - 729.6)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	168 cf	**6.00'W x 35.00'L x 1.00'H Prismatoid** x 2 420 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.08 cfs @ 12.19 hrs HW=3.53' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.08 cfs)

Summary for Pond 8P: stone infiltration drip strip trench 4'wx12"d

Inflow Area = 0.031 ac,100.00% Impervious, Inflow Depth > 3.20" for 2 event
Inflow = 0.09 cfs @ 12.13 hrs, Volume= 0.008 af
Outflow = 0.05 cfs @ 12.31 hrs, Volume= 0.008 af, Atten= 45%, Lag= 10.4 min
Discarded = 0.05 cfs @ 12.31 hrs, Volume= 0.008 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 3.82' @ 12.31 hrs Surf.Area= 232 sf Storage= 29 cf

Plug-Flow detention time= 2.4 min calculated for 0.008 af (100% of inflow)
Center-of-Mass det. time= 2.3 min (731.9 - 729.6)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	93 cf	**4.00'W x 58.00'L x 1.00'H Prismatoid** 232 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.05 cfs @ 12.31 hrs HW=3.82' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.05 cfs)

Summary for Pond 10P: stone infiltration drip strip trench12"wx12"d

Inflow Area = 0.009 ac,100.00% Impervious, Inflow Depth > 3.20" for 2 event
Inflow = 0.03 cfs @ 12.13 hrs, Volume= 0.002 af
Outflow = 0.02 cfs @ 12.25 hrs, Volume= 0.002 af, Atten= 33%, Lag= 7.2 min
Discarded = 0.02 cfs @ 12.25 hrs, Volume= 0.002 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 3.80' @ 12.25 hrs Surf.Area= 58 sf Storage= 7 cf

Plug-Flow detention time= 1.8 min calculated for 0.002 af (100% of inflow)
Center-of-Mass det. time= 1.7 min (731.3 - 729.6)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	23 cf	**1.00'W x 58.00'L x 1.00'H Prismatoid** 58 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.02 cfs @ 12.25 hrs HW=3.80' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.02 cfs)

Summary for Subcatchment 1: DA-1

Runoff = 0.18 cfs @ 12.16 hrs, Volume= 0.016 af, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Rainfall=4.90"

Area (sf)	CN	Description
2,623	98	Paved parking, HSG A
5,052	39	>75% Grass cover, Good, HSG A
7,675	59	Weighted Average
5,052		65.82% Pervious Area
2,623		34.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 1S: PRE-DA1

Runoff = 0.30 cfs @ 12.15 hrs, Volume= 0.024 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Rainfall=4.90"

	Area (sf)	CN	Description
	6,741	39	>75% Grass cover, Good, HSG A
	1,497	98	Roofs, HSG A
	2,363	98	Paved parking, HSG A
*	125	98	patio
	10,726	61	Weighted Average
	6,741		62.85% Pervious Area
	3,985		37.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 7S: DA-1b(HM bldg southern half roof)

Runoff = 0.13 cfs @ 12.13 hrs, Volume= 0.011 af, Depth> 4.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Rainfall=4.90"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
1,337	98	Roofs, HSG A
1,337	98	Weighted Average
1,337		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 9S: DA-1c(storage shelter roof)

Runoff = 0.04 cfs @ 12.13 hrs, Volume= 0.003 af, Depth> 4.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Rainfall=4.90"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
377	98	Roofs, HSG A
377	98	Weighted Average
377		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 14S: DA-1a (HM building northern half roof)

Runoff = 0.13 cfs @ 12.13 hrs, Volume= 0.011 af, Depth> 4.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Rainfall=4.90"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
1,337	98	Roofs, HSG A
1,337	98	Weighted Average
1,337		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Pond 3P: stone infiltration trench 6'w x 12"d

Inflow Area = 0.031 ac,100.00% Impervious, Inflow Depth > 4.44" for 10 event
Inflow = 0.13 cfs @ 12.13 hrs, Volume= 0.011 af
Outflow = 0.08 cfs @ 12.26 hrs, Volume= 0.011 af, Atten= 34%, Lag= 7.5 min
Discarded = 0.08 cfs @ 12.26 hrs, Volume= 0.011 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 3.64' @ 12.26 hrs Surf.Area= 420 sf Storage= 24 cf

Plug-Flow detention time= 1.1 min calculated for 0.011 af (100% of inflow)
Center-of-Mass det. time= 1.1 min (725.2 - 724.2)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	168 cf	**6.00'W x 35.00'L x 1.00'H Prismatoid** x 2 420 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.08 cfs @ 12.26 hrs HW=3.64' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.08 cfs)

Summary for Pond 8P: stone infiltration drip strip trench 4'wx12"d

Inflow Area = 0.031 ac,100.00% Impervious, Inflow Depth > 4.44" for 10 event
Inflow = 0.13 cfs @ 12.13 hrs, Volume= 0.011 af
Outflow = 0.06 cfs @ 12.36 hrs, Volume= 0.011 af, Atten= 54%, Lag= 13.8 min
Discarded = 0.06 cfs @ 12.36 hrs, Volume= 0.011 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 4.15' @ 12.36 hrs Surf.Area= 232 sf Storage= 60 cf

Plug-Flow detention time= 4.6 min calculated for 0.011 af (100% of inflow)
Center-of-Mass det. time= 4.6 min (728.7 - 724.2)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	93 cf	**4.00'W x 58.00'L x 1.00'H Prismatoid** 232 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.06 cfs @ 12.36 hrs HW=4.15' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.06 cfs)

Summary for Pond 10P: stone infiltration drip strip trench12"wx12"d

Inflow Area = 0.009 ac,100.00% Impervious, Inflow Depth > 4.44" for 10 event
Inflow = 0.04 cfs @ 12.13 hrs, Volume= 0.003 af
Outflow = 0.02 cfs @ 12.27 hrs, Volume= 0.003 af, Atten= 36%, Lag= 7.9 min
Discarded = 0.02 cfs @ 12.27 hrs, Volume= 0.003 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 4.04' @ 12.27 hrs Surf.Area= 58 sf Storage= 13 cf

Plug-Flow detention time= 2.7 min calculated for 0.003 af (100% of inflow)
Center-of-Mass det. time= 2.7 min (726.8 - 724.2)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	23 cf	**1.00'W x 58.00'L x 1.00'H Prismatoid** 58 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.02 cfs @ 12.27 hrs HW=4.04' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.02 cfs)

Summary for Subcatchment 1: DA-1

Runoff = 0.28 cfs @ 12.15 hrs, Volume= 0.023 af, Depth> 1.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 Rainfall=5.80"

Area (sf)	CN	Description
2,623	98	Paved parking, HSG A
5,052	39	>75% Grass cover, Good, HSG A
7,675	59	Weighted Average
5,052		65.82% Pervious Area
2,623		34.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 1S: PRE-DA1

Runoff = 0.44 cfs @ 12.15 hrs, Volume= 0.035 af, Depth> 1.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 Rainfall=5.80"

	Area (sf)	CN	Description
	6,741	39	>75% Grass cover, Good, HSG A
	1,497	98	Roofs, HSG A
	2,363	98	Paved parking, HSG A
*	125	98	patio
	10,726	61	Weighted Average
	6,741		62.85% Pervious Area
	3,985		37.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, Direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 7S: DA-1b(HM bldg southern half roof)

Runoff = 0.15 cfs @ 12.13 hrs, Volume= 0.014 af, Depth> 5.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 Rainfall=5.80"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
1,337	98	Roofs, HSG A
1,337	98	Weighted Average
1,337		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 9S: DA-1c(storage shelter roof)

Runoff = 0.04 cfs @ 12.13 hrs, Volume= 0.004 af, Depth> 5.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 Rainfall=5.80"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
377	98	Roofs, HSG A
377	98	Weighted Average
377		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Subcatchment 14S: DA-1a (HM building northern half roof)

Runoff = 0.15 cfs @ 12.13 hrs, Volume= 0.014 af, Depth> 5.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 Rainfall=5.80"

Area (sf)	CN	Description
0	98	Paved parking, HSG A
1,337	98	Roofs, HSG A
1,337	98	Weighted Average
1,337		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, direct**
6.0	0	Total, Increased to minimum Tc = 10.0 min			

Summary for Pond 3P: stone infiltration trench 6'w x 12"d

Inflow Area = 0.031 ac,100.00% Impervious, Inflow Depth > 5.30" for 25 event
Inflow = 0.15 cfs @ 12.13 hrs, Volume= 0.014 af
Outflow = 0.09 cfs @ 12.29 hrs, Volume= 0.014 af, Atten= 42%, Lag= 9.6 min
Discarded = 0.09 cfs @ 12.29 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 3.75' @ 12.29 hrs Surf.Area= 420 sf Storage= 41 cf

Plug-Flow detention time= 1.8 min calculated for 0.014 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (723.3 - 721.5)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	168 cf	**6.00'W x 35.00'L x 1.00'H Prismatoid** x 2 420 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.09 cfs @ 12.29 hrs HW=3.75' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.09 cfs)

Summary for Pond 8P: stone infiltration drip strip trench 4'wx12"d

Inflow Area = 0.031 ac,100.00% Impervious, Inflow Depth > 5.30" for 25 event
Inflow = 0.15 cfs @ 12.13 hrs, Volume= 0.014 af
Outflow = 0.07 cfs @ 12.39 hrs, Volume= 0.014 af, Atten= 57%, Lag= 15.2 min
Discarded = 0.07 cfs @ 12.39 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 4.41' @ 12.39 hrs Surf.Area= 232 sf Storage= 84 cf

Plug-Flow detention time= 6.2 min calculated for 0.014 af (100% of inflow)
Center-of-Mass det. time= 6.2 min (727.7 - 721.5)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	93 cf	**4.00'W x 58.00'L x 1.00'H Prismatoid** 232 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.07 cfs @ 12.39 hrs HW=4.41' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.07 cfs)

Summary for Pond 10P: stone infiltration drip strip trench12"wx12"d

Inflow Area = 0.009 ac,100.00% Impervious, Inflow Depth > 5.30" for 25 event
Inflow = 0.04 cfs @ 12.13 hrs, Volume= 0.004 af
Outflow = 0.03 cfs @ 12.27 hrs, Volume= 0.004 af, Atten= 37%, Lag= 8.1 min
Discarded = 0.03 cfs @ 12.27 hrs, Volume= 0.004 af

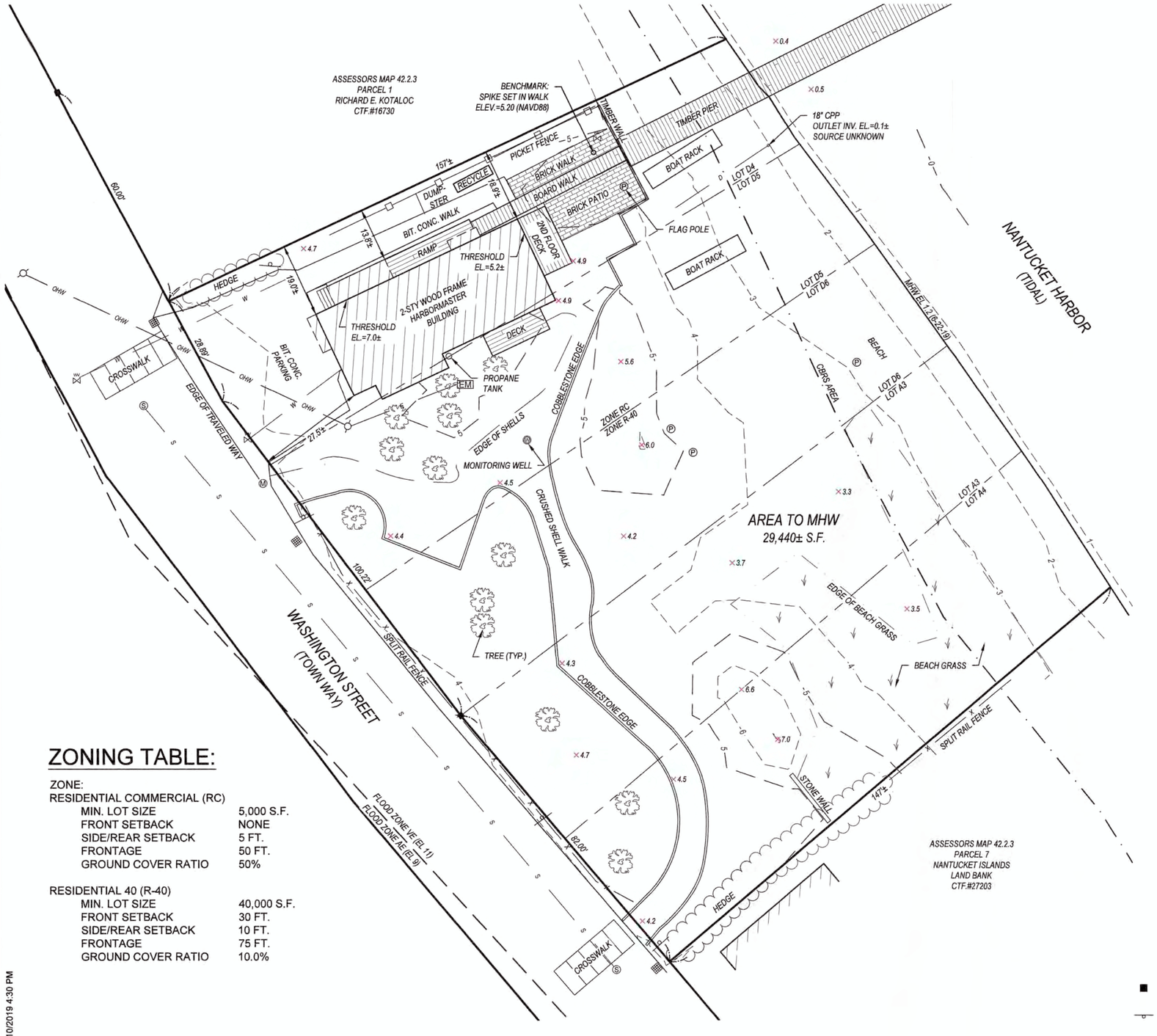
Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 4.21' @ 12.27 hrs Surf.Area= 58 sf Storage= 17 cf

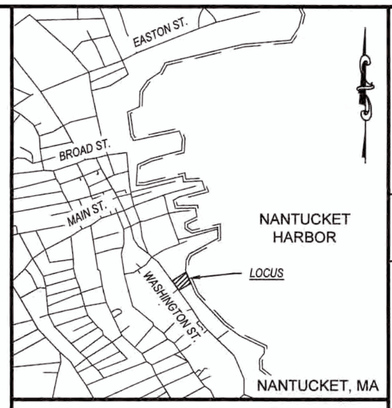
Plug-Flow detention time= 3.3 min calculated for 0.004 af (100% of inflow)
Center-of-Mass det. time= 3.2 min (724.8 - 721.5)

Volume	Invert	Avail.Storage	Storage Description
#1	3.50'	23 cf	**1.00'W x 58.00'L x 1.00'H Prismatoid** 58 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	3.50'	**8.270 in/hr Exfiltration over Wetted area**

Discarded OutFlow Max=0.03 cfs @ 12.27 hrs HW=4.21' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.03 cfs)





KEY MAP
NO SCALE

REFERENCE:

ASSESSORS MAP 42.2.3,
PARCELS 2 THROUGH 6

CTF. #7858
L.C.PLAN 9434-D
L.C.PLAN 10450-C

ZONING:
RESIDENTIAL COMMERCIAL (RC)
RESIDENTIAL 40 (R-40)
FLOOD HAZARD OVERLAY DISTRICT (FHOD)
TOWN OVERLAY DISTRICT

FLOOD ZONE:

FLOOD ZONE VE (EL 11) AND CBRS AREA (11-16-1990) AS SHOWN ON FEMA FIRM PANEL #25019C0086G EFFECTIVE DATE 6-9-2014. PLEASE NOTE THAT SITE SPECIFIC FLOODPLAIN BOUNDARIES MAY VARY DUE TO DIFFERENT INTERPRETATIONS OF THESE BOUNDARIES. USERS ARE ADVISED TO VERIFY LOCATION OF THESE BOUNDARIES WITH THE DESIGNATED COMMUNITY FLOODPLAIN MANAGERS PRIOR TO SITING ANY PROPOSED STRUCTURES.

DATUM:

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

ZONING TABLE:

ZONE:	
RESIDENTIAL COMMERCIAL (RC)	
MIN. LOT SIZE	5,000 S.F.
FRONT SETBACK	NONE
SIDE/REAR SETBACK	5 FT.
FRONTAGE	50 FT.
GROUND COVER RATIO	50%
RESIDENTIAL 40 (R-40)	
MIN. LOT SIZE	40,000 S.F.
FRONT SETBACK	30 FT.
SIDE/REAR SETBACK	10 FT.
FRONTAGE	75 FT.
GROUND COVER RATIO	10.0%

I HEREBY CERTIFY THAT THE CONDITIONS SHOWN HEREON ARE LOCATED AS THEY EXISTED ON THE GROUND AS OF 6-24-19.

DATE JULY 10, 2019

P.L.S. JOHN McELWEE No. 33602 COMMONWEALTH OF MASSACHUSETTS PROFESSIONAL LAND SURVEYOR

PLAN

20 10 0 20 60

1 inch = 20 ft.

LEGEND

■	BOUND	▦	CATCH BASIN
—o—	MISC. SIGN	Ⓓ	DRAIN MANHOLE
—x—x—	FENCE	Ⓦ	MONITORING WELL
—OHW—	OVERHEAD UTILITY LINE	WV	WATER VALVE
—W—	WATER LINE	—○—	UTILITY POLE
—D—	DRAIN LINE	EM	ELECTRIC METER
—S—	SEWAGE DISPOSAL	Ⓟ	POST
Ⓢ	SEWER MANHOLE	—5—	CONTOUR
Ⓜ	MANHOLE	X 4.7	SPOT GRADE

COASTAL engineering co.
260 Cranberry Hwy, Orleans, MA 02653
508.255.6511 P 508.255.6700 F

NO.	DATE	REVISION	BY

SEAL

PROJECT
NANTUCKET HARBORMASTER
34 WASHINGTON STREET
NANTUCKET, MA

SHEET TITLE
PLAN SHOWING
EXISTING SITE CONDITIONS

SCALE	AS NOTED
DRAWING FILE	C19031-X.dwg
DATE	7-10-19
DRAWN BY	JLH
CHECKED BY	JDM

C1.2.1

1 OF 1 SHEETS

PROJECT NO. C19031.00

F:\SDSKPROJ\C19000\C19031\C19031-00\C19031-X.dwg 7/10/2019 4:30 PM

VIEW FROM SOUTHEAST

SK
Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building

34 Washington Street
Nantucket, Massachusetts

RENDERING

Drawn By:	CF
Checked:	SLK
Date:	03-04-2020
Scale:	NOT TO SCALE

--

VIEW FROM NORTHEAST

SK
Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

RENDERING

Drawn By:	CF
Checked:	SLK
Date:	03-04-2020
Scale:	NOT TO SCALE

--

VIEW FROM NORTHWEST

Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

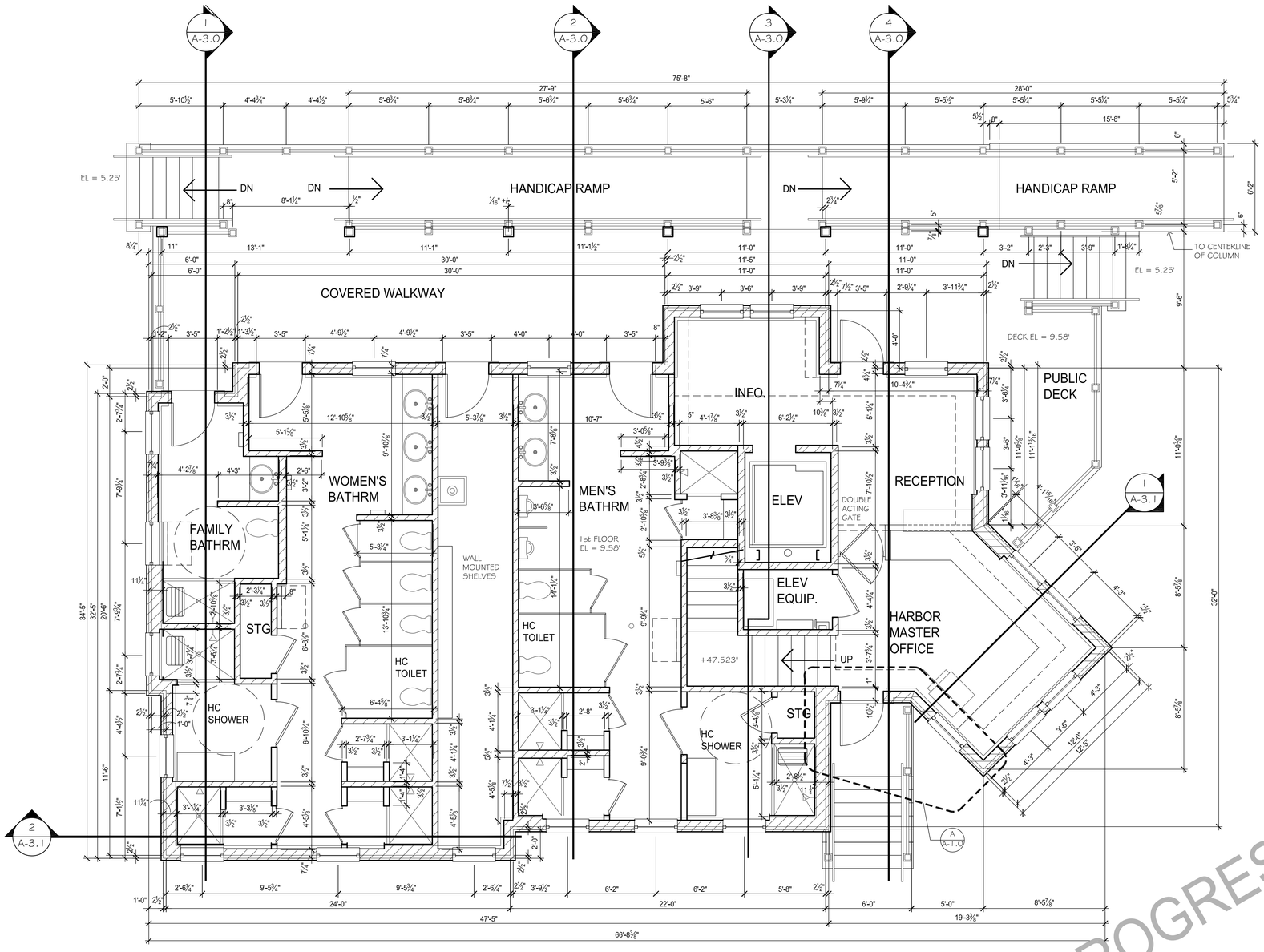
Harbormaster Building

34 Washington Street
Nantucket, Massachusetts

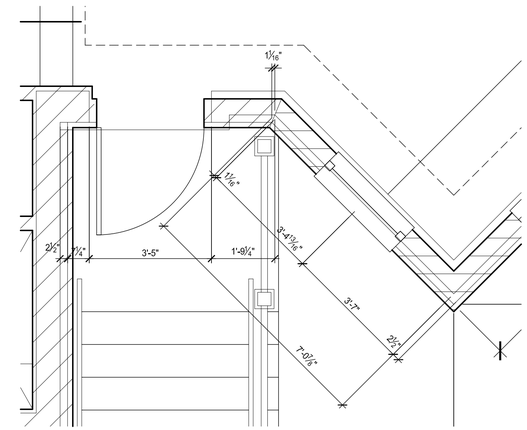
RENDERING

Drawn By:	CF
Checked:	SLK
Date:	03-04-2020
Scale:	NOT TO SCALE

--



1 **1st FLOOR PLAN**
1/4" = 1'-0"



2 **ENLARGED FLOOR PLAN**
1/2" = 1'-0"

ALL DIMENSIONS TO FACE OF STUD, FACE OF CONCRETE, CENTERLINE OF POST OR COLUMN OR TO OUTSIDE OF DECK

NORTH

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Fairhaven Center for Business
57 Alden Road
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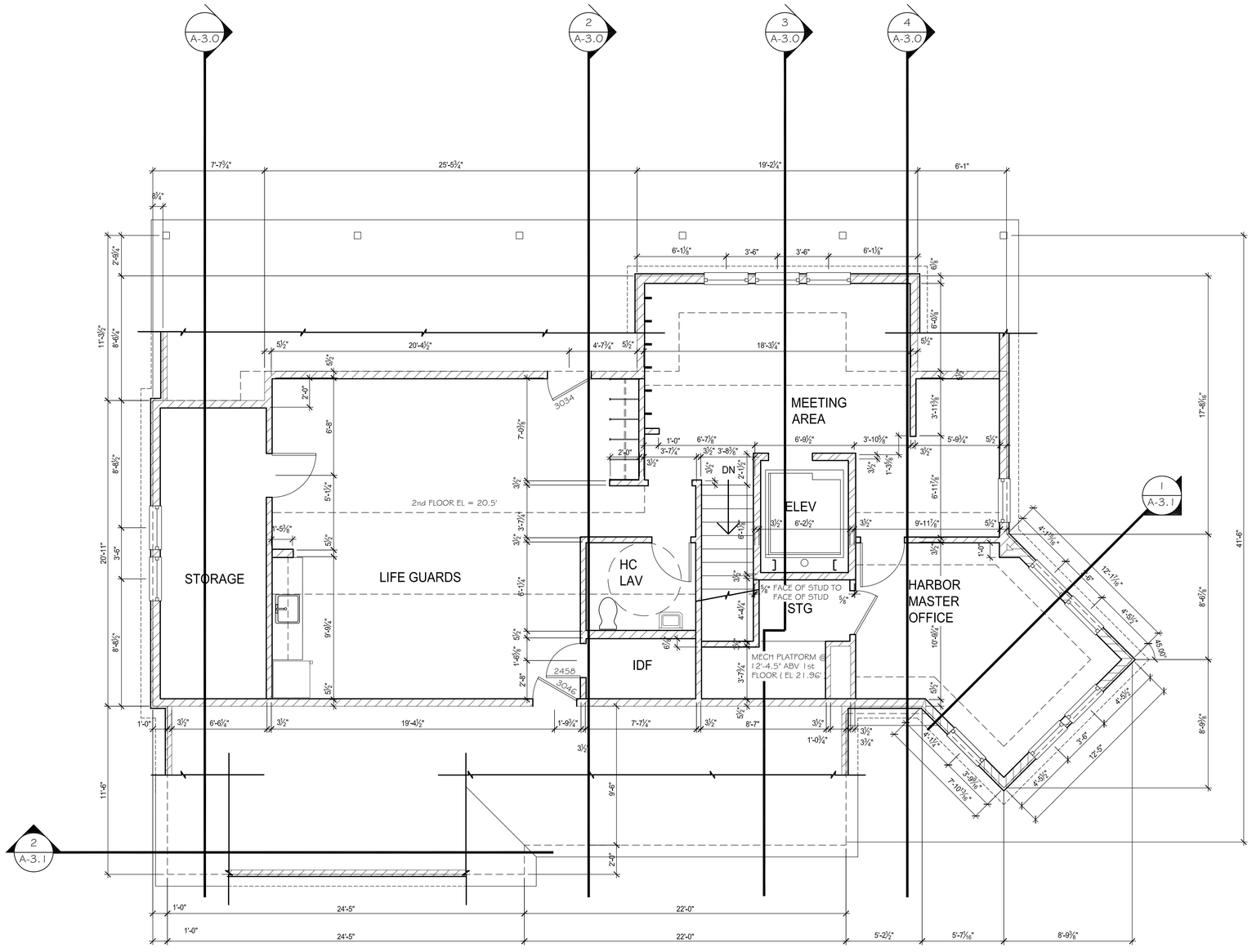
508-992-2007 Fax 992-2021

Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

First Floor Plan

Drawn By:	PQ
Checked:	SLK
Date:	03.02.2020
Scale:	AS NOTED

A-1.0



PROGRESS PRINT

NORTH

Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

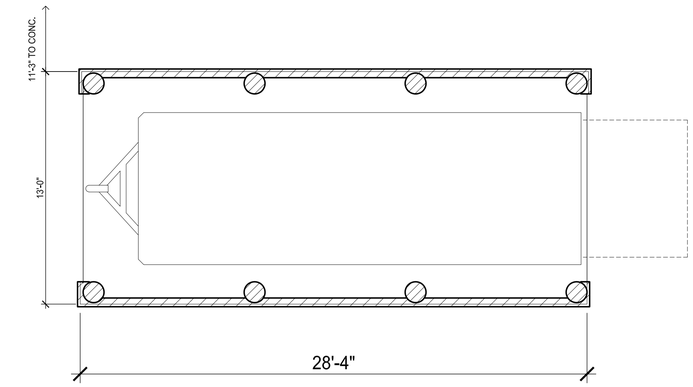
Harbormaster Building

34 Washington Street
Nantucket, Massachusetts

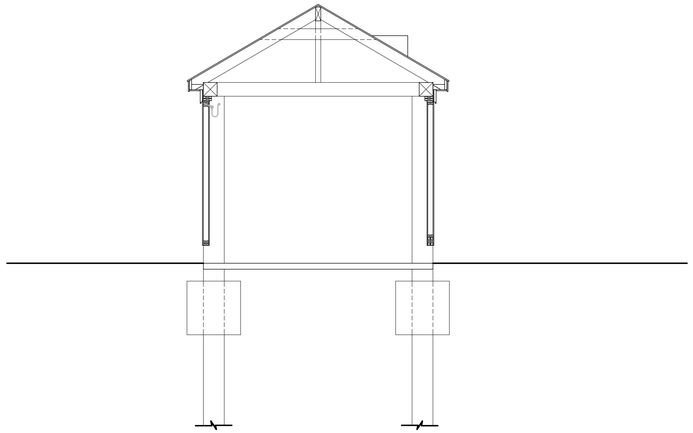
Second Floor Plan

Drawn By:	PQ
Checked:	SLK
Date:	03.02.2020
Scale:	¼" = 1'-0"

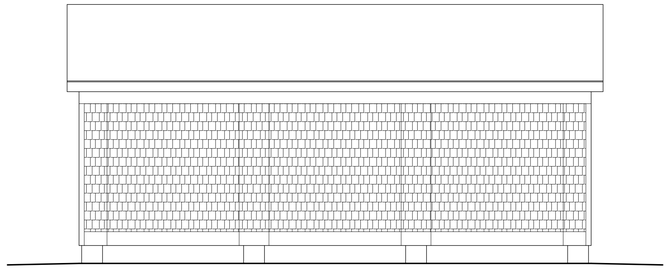
A-1.1



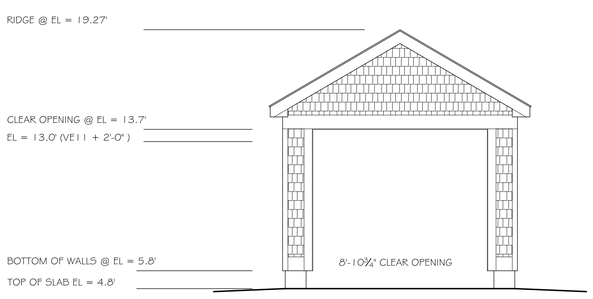
1 **PLAN**
1/4" = 1'-0"



2 **SECTION A**
1/4" = 1'-0"



3 **SOUTH ELEVATION**
1/4" = 1'-0" NORTH ELEVATION SIMILAR



4 **WEST ELEVATION**
1/4" = 1'-0" EAST ELEVATION SIMILAR

Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

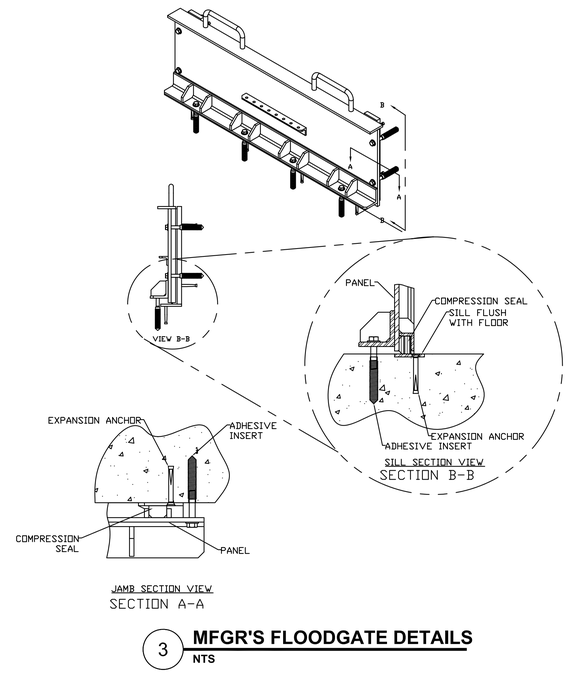
Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

Storage Building

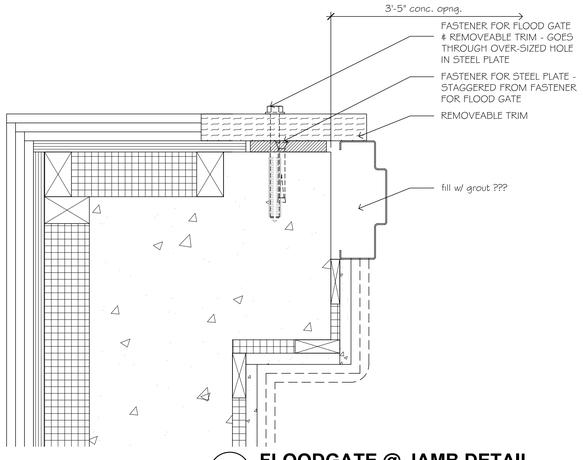
NORTH

Drawn By:	PQ
Checked:	SLK
Date:	02.25.2020
Scale:	¼" = 1'-0"

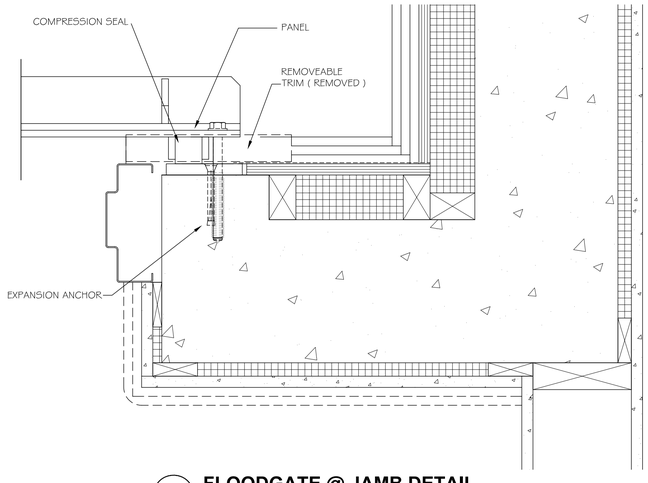
A-1.2



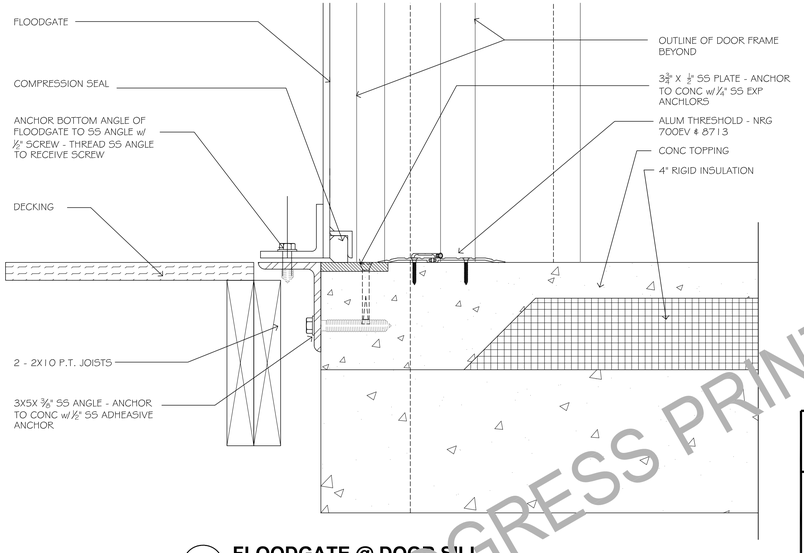
3 **MFGR'S FLOODGATE DETAILS**
NTS



4 **FLOODGATE @ JAMB DETAIL**
3" = 1'-0"



5 **FLOODGATE @ JAMB DETAIL**
3" = 1'-0"



6 **FLOODGATE @ DOOR SILL**
3" = 1'-0"

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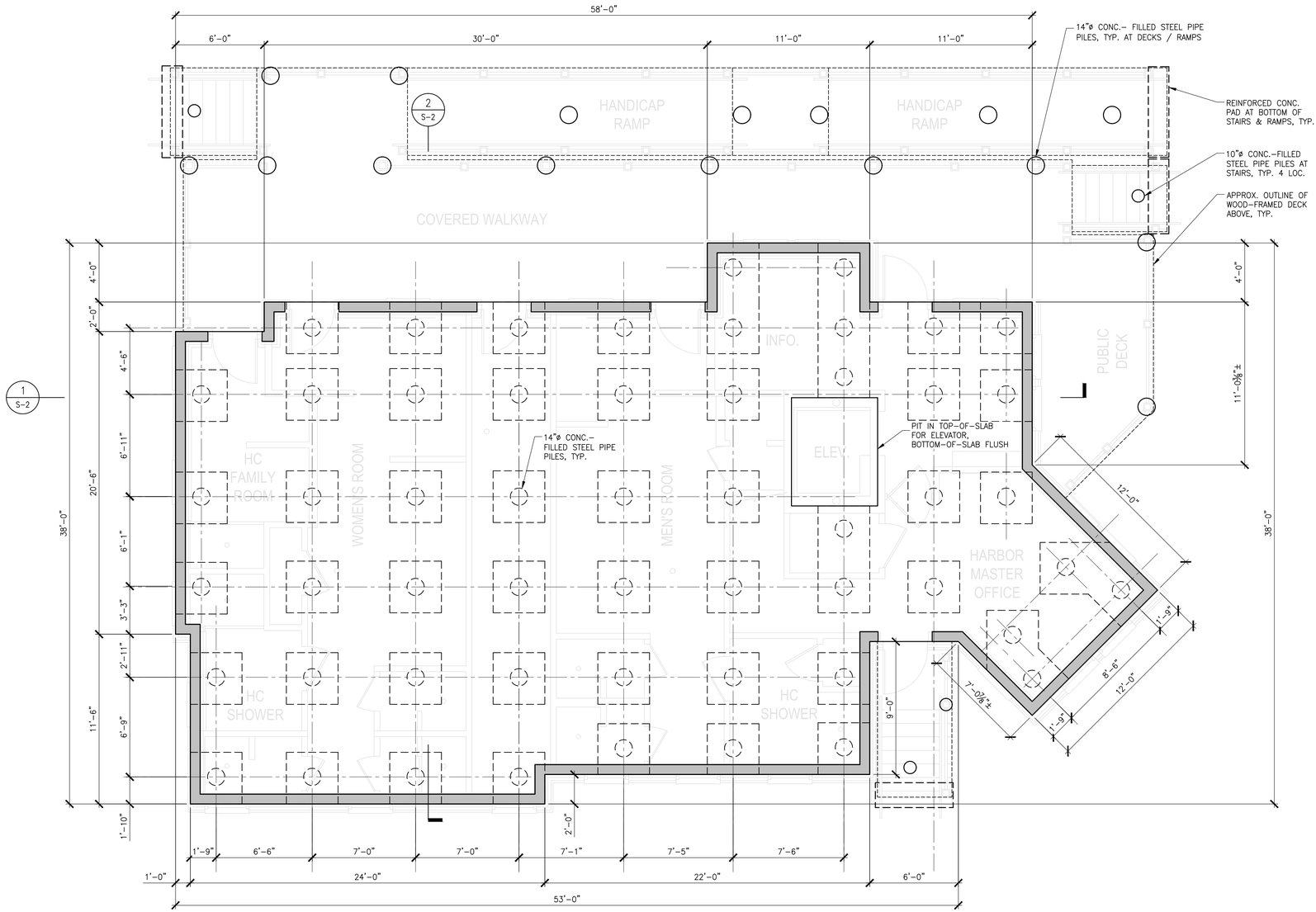
Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

Details

Drawn By:	PQ
Checked:	SLK
Date:	02.25.2020
Scale:	AS NOTED

A-5.1



PILE QUANTITIES:

70 – 14"ø STEEL PILES

4 – 10"ø STEEL PILES

FOUNDATION / PILE CAP LOCATION PLAN

1/4" = 1'-0"

NOT FOR CONSTRUCTION

TRIPI ENGINEERING SERVICES, LLC
433 MAIN STREET, SUITE 4
HUDSON, MASSACHUSETTS 01749
www.tripiengineering.com ■ 781-287-0077

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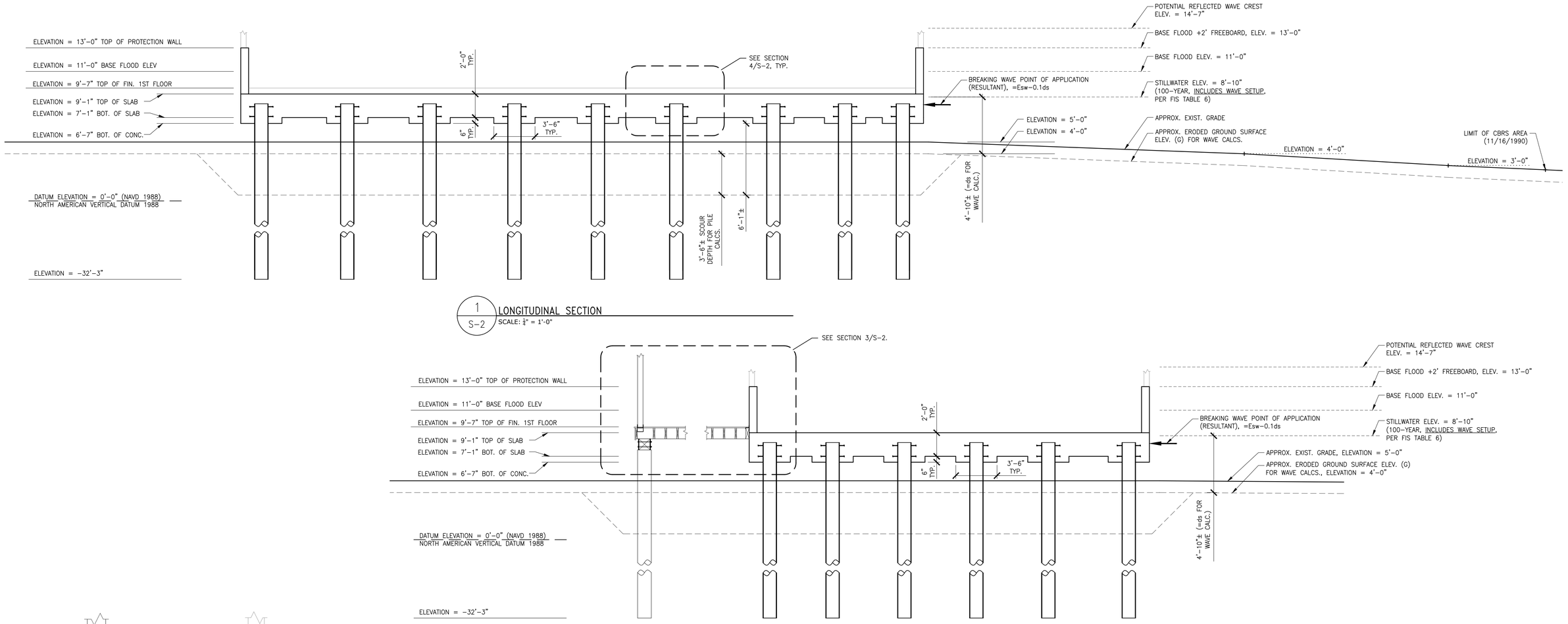
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

FOUNDATIONS / PILE LOCATION

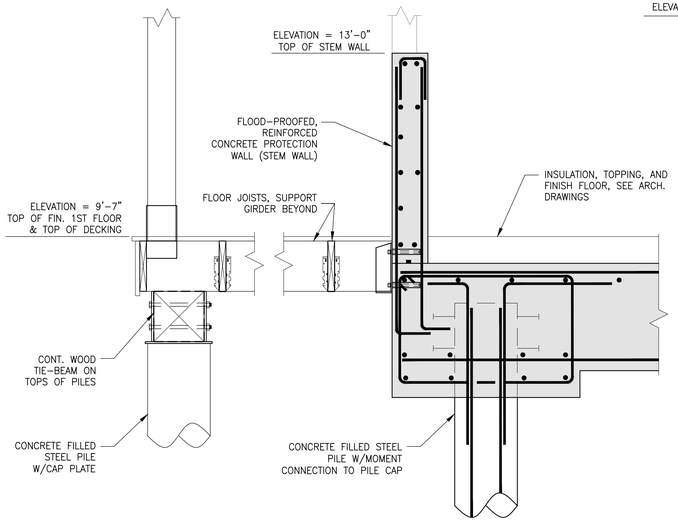
Drawn By:	SB / JMT
Checked:	JMT
Date:	12 / 04 / 2019
Scale:	AS NOTED

S-1

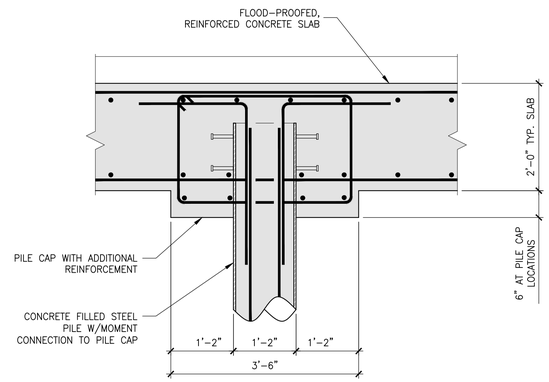


1/S-2 LONGITUDINAL SECTION
SCALE: 1/4" = 1'-0"

2/S-2 TRANSVERSE SECTION
SCALE: 1/4" = 1'-0"



3/S-2 SECTION THROUGH DECK FLOOR FRAMING
SCALE : NO SCALE



4/S-2 TYPICAL PILE CAP DETAIL
SCALE : NO SCALE

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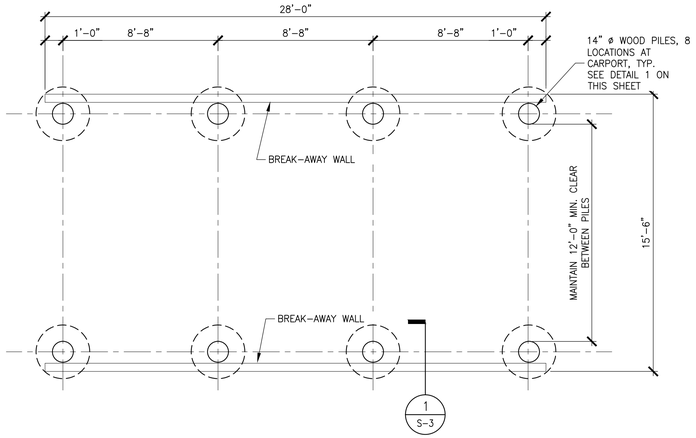
Nantucket, Massachusetts

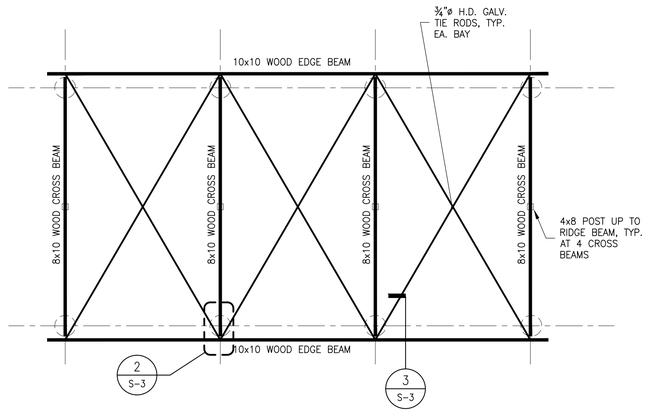
FOUNDATIONS / PILE LOCATION

Drawn By:	SB / JMT
Checked:	JMT
Date:	12 / 04 / 2019
Scale:	AS NOTED

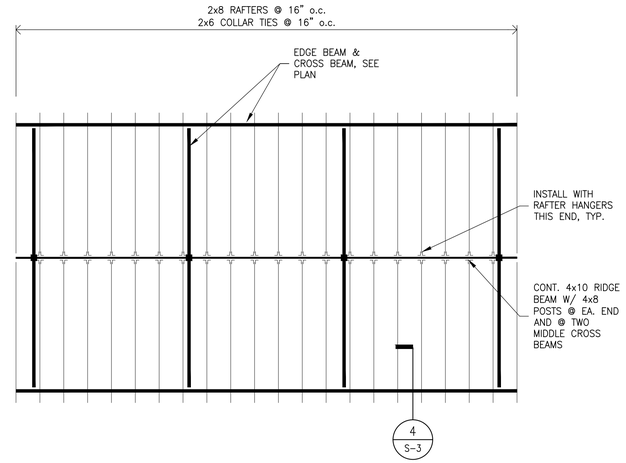
S-2



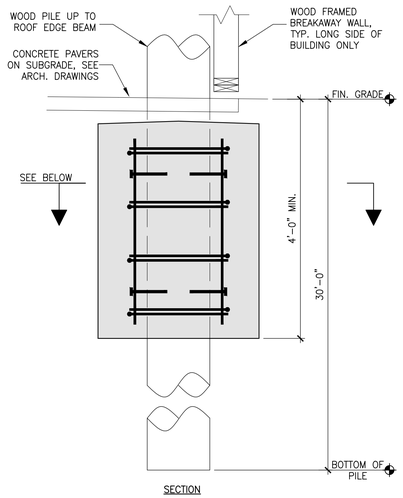
CARPORT PILE LOCATION PLAN
1/4" = 1'-0"



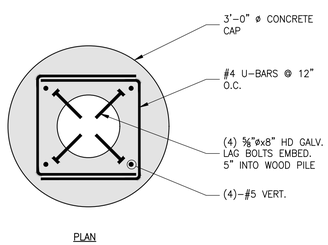
ROOF FRAMING BEAMS
1/4" = 1'-0"



ROOF FRAMING PLAN
1/4" = 1'-0"

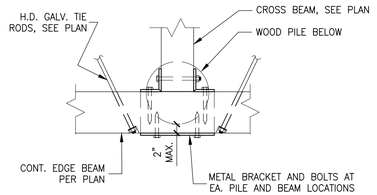


SECTION

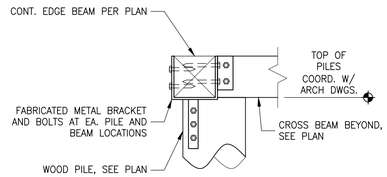


PLAN

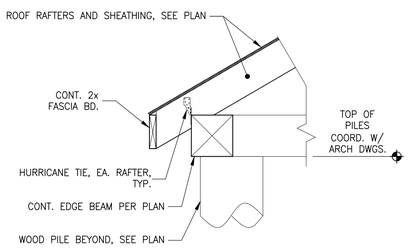
1 S-3 PILE DETAIL
SCALE : NO SCALE



2 S-3 PLAN DETAIL
SCALE : NO SCALE



3 S-3 BEAM TO PILE CONNECTION
SCALE : NO SCALE



4 S-3 TYPICAL RAFTER BEARING DETAIL
SCALE : NO SCALE

NOT FOR CONSTRUCTION

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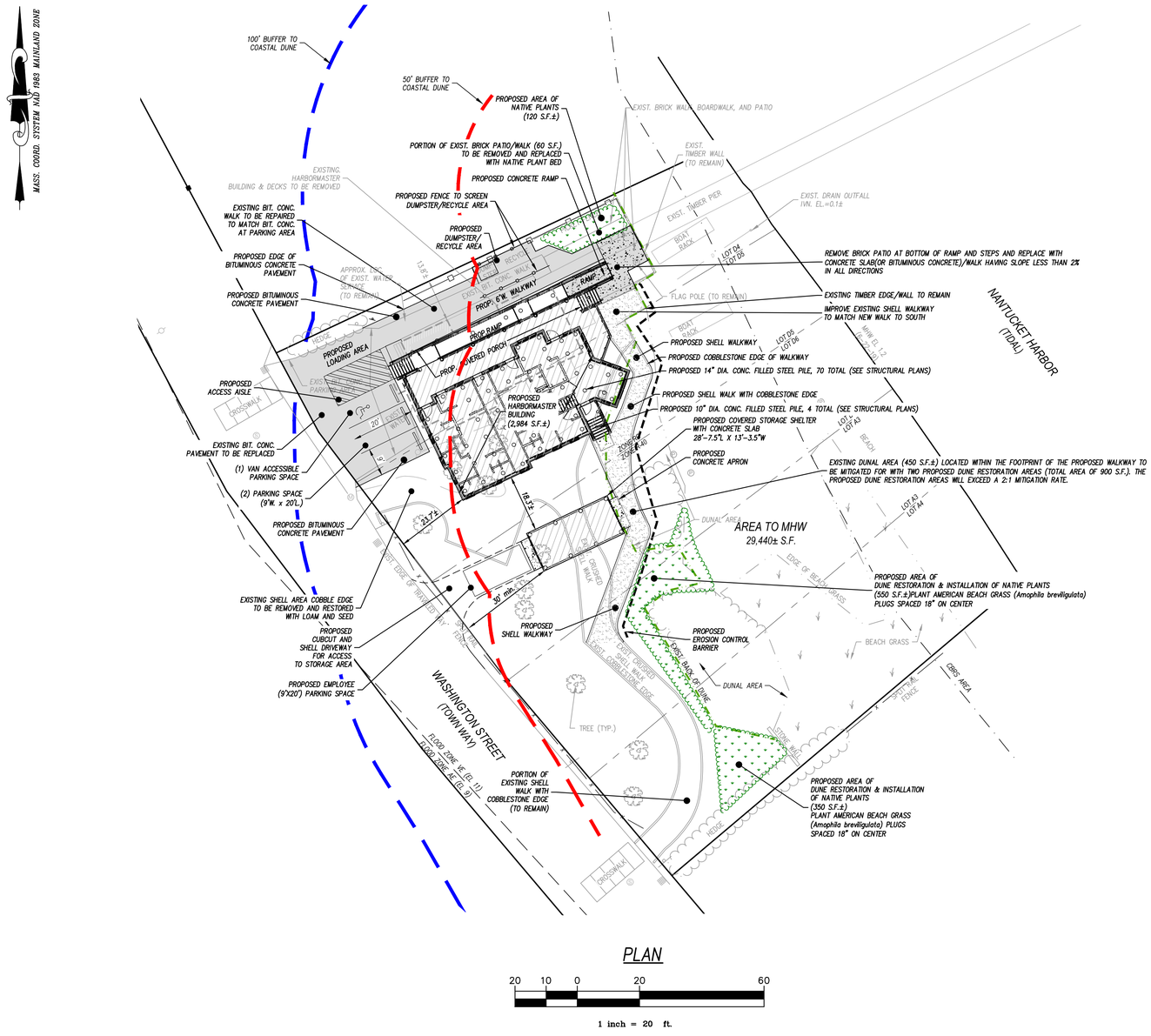
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

CARPORT PLANS AND DETAILS

Drawn By:	SB / JMT
Checked:	JMT
Date:	12 / 05 / 2019
Scale:	AS NOTED

S-3



PLAN

20 10 0 20 60

1 inch = 20 ft.

COVERAGE TABLE

SUBJECT	EXISTING	PROPOSED	CHANGE
BUILDING FOUNDATION AREA* (IMPERVIOUS FOOTPRINT)	1,497± S.F.	453 ± S.F.	1,044± S.F. REDUCTION
HARDSCAPES (PAVEMENT, WALLS, BRICK PATIO)	2,488± S.F.	2,623± S.F.	135± S.F. INCREASE
DECKS & STAIRS	679± S.F.	468± S.F.	211± S.F. REDUCTION
SHELL DRIVEWAY & WALKS (PERVIOUS)	2,809± S.F.	1,866± S.F.	943± S.F. REDUCTION
TOTAL COVERAGE	7,473± S.F.	5,410± S.F.	2,063± S.F. REDUCTION

*EXISTING BUILDING IS ON CONCRETE SLAB; PROPOSED HARBORMASTER BUILDING IS RAISED ABOVE EXISTING GRADE ON 74 PILES, AND PROPOSED STORAGE SHELTER IS ABOVE CONCRETE SLAB FOUNDATION

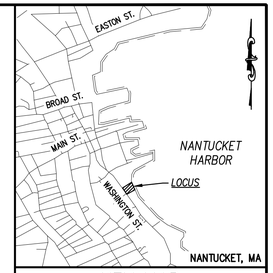
LEGEND

EXISTING

- BOUND
- MISC. SIGN
- FENCE
- OHW — OVERHEAD UTILITY LINE
- W — WATER LINE
- D — DRAIN LINE
- S — SEWAGE DISPOSAL
- SEWER MANHOLE
- MANHOLE
- CATCH BASIN
- DRAIN MANHOLE
- MONITORING WELL
- WATER VALVE
- UTILITY POLE
- ELECTRIC METER
- POST

PROPOSED

- DUNE RESTORATION AREA



KEY MAP

NO SCALE

REFERENCE:

ASSESSORS MAP 42.2.3,
PARCELS 2 THROUGH 6

CTF. #7858
L.C.PLAN 9434-D
L.C.PLAN 10450-C

ZONING:
RESIDENTIAL COMMERCIAL (RC)
RESIDENTIAL 40 (R-40)
FLOOD HAZARD OVERLAY DISTRICT (FHOD)
TOWN OVERLAY DISTRICT

FLOOD ZONE:

FLOOD ZONE VE (EL 11) AND CBRS AREA (11-16-1990) AS SHOWN ON FEMA FIRM PANEL #25019C0086G EFFECTIVE DATE 6-9-2014. PLEASE NOTE THAT SITE SPECIFIC FLOODPLAIN BOUNDARIES MAY VARY DUE TO DIFFERENT INTERPRETATIONS OF THESE BOUNDARIES. USERS ARE ADVISED TO VERIFY LOCATION OF THESE BOUNDARIES WITH THE DESIGNATED COMMUNITY FLOODPLAIN MANAGERS PRIOR TO SITING ANY PROPOSED STRUCTURES.

DATUM:

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

COASTAL engineering co.
260 Cranberry Hwy, Orleans, MA 02653
508.255.6511 P 508.255.6700 F

ISSUED FOR REGULATORY REVIEW 03-12-2020

Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

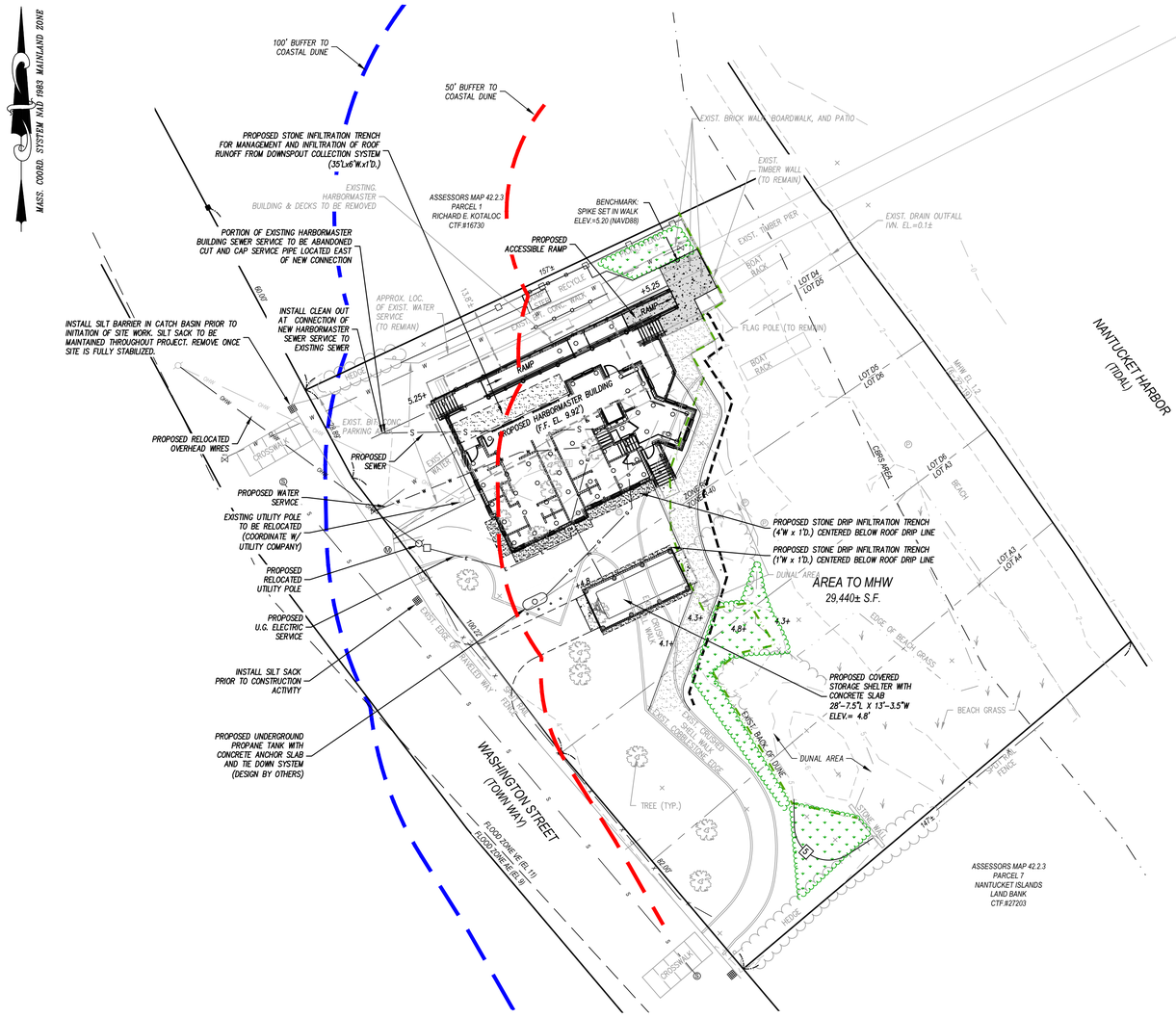
Harbormaster Building

34 Washington Street
Nantucket, Massachusetts

LAYOUT & MATERIALS PLAN

Drawn By:	MAP
Checked:	TLM
Date:	03-12-2020
Scale:	1"=20

C2.1.1



PLAN

20 10 0 20 60

1 inch = 20 ft.

UTILITY NOTE:

UTILITY DISCONNECTS AND NEW SERVICES TO BE INSTALLED IN ACCORDANCE WITH APPLICABLE ELECTRICAL, PLUMBING, AND WATER DEPARTMENT CODES AND REGULATIONS.

ROOF DOWNSPOUTS TO BE ROUTED VIA 4" DIA SCH 40 PVC PIPE FROM DOWNSPOUT TO PROPOSED STONE INFILTRATION TRENCH

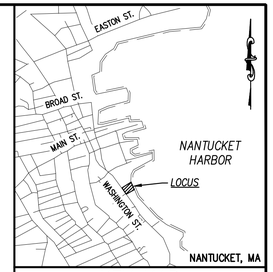
LEGEND

EXISTING

- BOUND
- MISC. SIGN
- FENCE
- OHW — OVERHEAD UTILITY LINE
- W — WATER LINE
- D — DRAIN LINE
- S — SEWAGE SERVICE
- SEWER MANHOLE
- MANHOLE
- CATCH BASIN
- DRAIN MANHOLE
- MONITORING WELL
- WATER VALVE
- UTILITY POLE
- ELECTRIC METER
- POST

PROPOSED

- DUNE RESTORATION AREA
- S — SEWER LINE
- W — WATER LINE
- E — UNDERGROUND ELECTRIC
- G — GAS UNDERGROUND PROPANE SERVICE
- 5 — CONTOUR
- 5.25+ SPOT GRADE



KEY MAP

NO SCALE

REFERENCE:

ASSESSORS MAP 42.2.3, PARCELS 2 THROUGH 6

CTF. #7858
L.C.PLAN 9434-D
L.C.PLAN 10450-C

ZONING:
RESIDENTIAL COMMERCIAL (RC)
RESIDENTIAL 40 (R-40)
FLOOD HAZARD OVERLAY DISTRICT (FHOD)
TOWN OVERLAY DISTRICT

FLOOD ZONE:

FLOOD ZONE VE (EL 11) AND CBRS AREA (11-16-1990) AS SHOWN ON FEMA FIRM PANEL #25019C0086G EFFECTIVE DATE 6-9-2014. PLEASE NOTE THAT SITE SPECIFIC FLOODPLAIN BOUNDARIES MAY VARY DUE TO DIFFERENT INTERPRETATIONS OF THESE BOUNDARIES. USERS ARE ADVISED TO VERIFY LOCATION OF THESE BOUNDARIES WITH THE DESIGNATED COMMUNITY FLOODPLAIN MANAGERS PRIOR TO SITING ANY PROPOSED STRUCTURES.

DATUM:

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

COMMONWEALTH OF MASSACHUSETTS TARJA L. McGRAIL CIVIL No. 47593 REGISTERED PROFESSIONAL ENGINEER

COASTAL engineering co.
260 Cranberry Hwy, Orleans, MA 02653
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Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building

34 Washington Street
Nantucket, Massachusetts

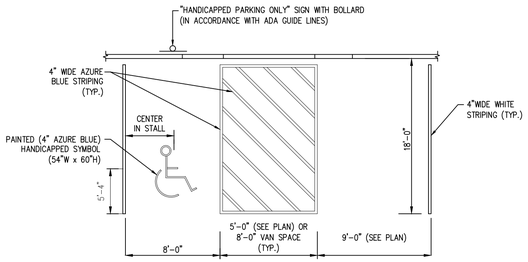
DRAINAGE, GRADING, UTILITY PLAN

ISSUED FOR REGULATORY REVIEW 03-12-2020

Drawn By:	MAP
Checked:	TLM
Date:	3-12-2020
Scale:	1"=20

C2.2.1

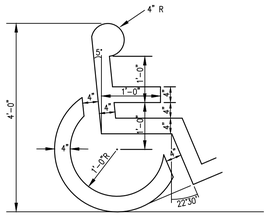
NOTE:
DETAIL IS SHOWN TYPICAL, SEE C2.1.1 FOR EXACT LAYOUT OF PARKING, CURB, RAMP, LOADING AND SIGN PLACEMENT



NOTE:
ALL PAVEMENT STRIPING AND MARKINGS SHALL CONSIST OF CHLORINATED RUBBER PAINT APPLIED TO A DRY SURFACE WHEN THE TEMPERATURE IS GREATER THAN 40°F. PAINT SHALL BE APPLIED AT A MINIMUM OF 0.015" (15 MIL) FILM THICKNESS

ADA ACCESIBLE STALL MARKINGS & PARKING LOT STRIPING DETAIL

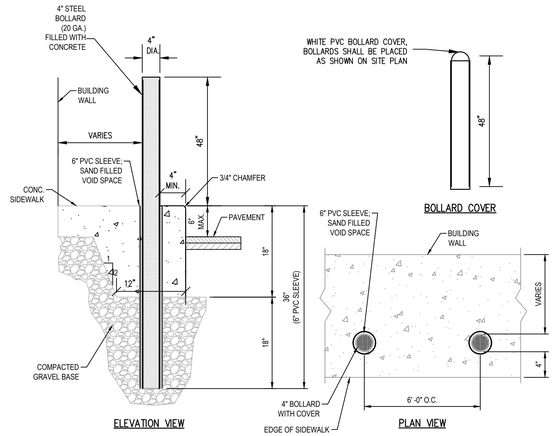
NOT TO SCALE



NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES.

PAINTED HANDICAP SYMBOL

NOT TO SCALE



BOLLARD DETAILS

NOT TO SCALE

EROSION & SEDIMENTATION CONTROL NOTES:

1. A TEMPORARY CHAN LINK CONSTRUCTION FENCE SHALL BE ERECTED AROUND THE PERIMETER OF THE WORK AREAS.

2. DEMOLITION AND SITEWORK CONTRACTOR TO ASCERTAIN THE LOCATION OF UNDERGROUND UTILITIES AND CONTACT DIG SAFE (AND PRIVATE UTILITY MARK OUT, IF NECESSARY) PRIOR TO EXCAVATION/DEMOLITION.

3. EROSION AND SEDIMENT CONTROL MEASURES TO BE IN COMPLIANCE WITH TOWN OF NANTUCKET REGULATIONS.

4. TO MINIMIZE EROSION ON SITE, TO THE EXTENT PRACTICAL, THE EXISTING PAVEMENT IS TO REMAIN ON SITE DURING DEMOLITION AND REMOVAL OF EXISTING BUILDING, CONCRETE, WALKS, WALLS, AND STEPS NOTED FOR REMOVAL.

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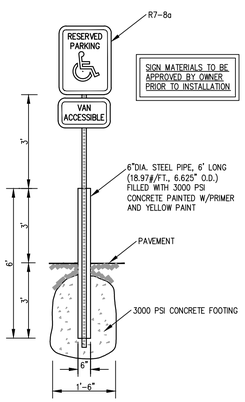
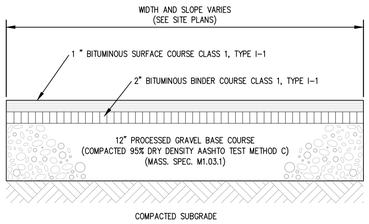


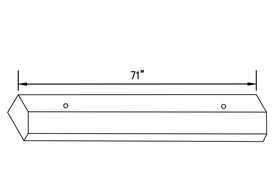
HANDICAP SIGN

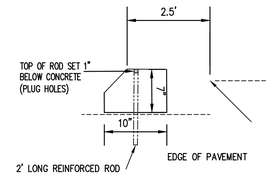
NOT TO SCALE



BITUMINOUS CONCRETE PAVEMENT

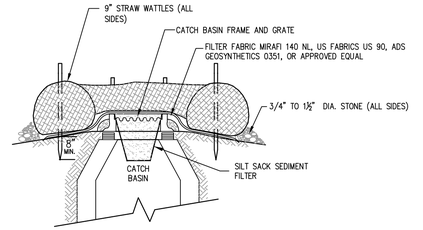
NOT TO SCALE





CONCRETE WHEEL STOP DETAIL

NOT TO SCALE



INLET PROTECTION NOTES:

1. ENCLOSE STRUCTURE WITH STRAW BALES OR RICE STRAW ROLLS IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING BINDER COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.

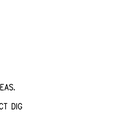
2. IF GRATE IS AGAINST EXISTING CURB THEN STRAW WATTLES ARE TO BE PLACED AROUND THREE SIDES OF GRATE ONLY. GRATE TO BE PLACED OVER FILTER FABRIC .

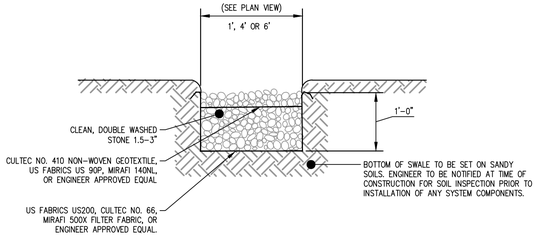
3. IN PLACES WHERE EXISTING CATCH BASIN IS SURROUNDED BY PAVEMENT, A SILT SACK SEDIMENT FILTER IS TO BE PLACED UNDER CATCH BASIN GRATE.

4. WATTLES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY IF NEEDED.

CATCH BASIN INLET PROTECTION DETAIL

NOT TO SCALE



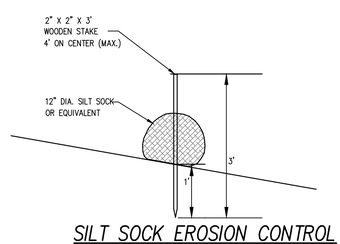


ROOF DRAINAGE INFILTRATION TRENCH/DRIP EDGE

NOT TO SCALE

GENERAL NOTE:

1. DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS



SILT SOCK EROSION CONTROL BARRIER DETAIL

NOT TO SCALE

ISSUED FOR REGULATORY REVIEW 03-12-2020

COASTAL engineering co.
260 Cranberry Hwy, Orleans, MA 02653
508.255.6511 P 508.255.6700 F

Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

SITE DETAILS

Drawn By:	MAP
Checked:	TLM
Date:	3-12-2020
Scale:	1"=20

C2.4.1

STEPHEN KELLEHER ARCHITECTS, INC.

April 24, 2020

Mr. Jeff Carlson, Director
Conservation Commission
Town of Nantucket
2 Bathing Beach Road
Nantucket, MA 02554

RE: **Nantucket Harbormaster Building**
34 Washington Street

Dear Mr Carlson,

I understand that the conservation commission had a few concerns regarding the size of the new Harbormaster Building. Therefore, I am forwarding you the building program that was prepared by Stephen Kelleher Architects during the study phase. Please see the attached. The majority of the first floor is dedicated to public restrooms and showers etc. that are necessary for serving the public and the boats utilizing the pier. The second floor is going to provide much needed office and meeting space for the Harbormaster and personnel.

I also understand that there are a few concerns about the storage carport / shelter. The town wanted a garage to store pumps, hoses, ropes and other equipment. But because the garage would be totally below the flood elevation and a tremendous cost to construct, we added the storage trailer for the equipment. The trailer would be removed from the site in the event of a storm. The carport was added to conceal the trailer, (for historic) The trailer will not store ATV's.

Please contact me should you have any questions or concerns regarding the above.

Sincerely,
Stephen Kelleher Architects

Patrick D. Quinlan, AIA, CSI
Architect

SK Main Office: 57 Alden Road • Fairhaven, MA 02719 • Phone: 508-992-2007 • Fax: 508-992-2021
Studio: P.O. Box 107 • Mattapoisett, MA 02739

STEPHEN KELLEHER ARCHITECTS, INC.

NANTUCKET HARBORMASTER BUILDING PROGRAM

The following program was developed 2014 during the study / existing conditions survey

1.01 The committee discussed the need for flexibility in the design as user needs are different times of the year. Sheila said that during the winter time it was basically just her, while during the summer season staff consisted of three (3) assistant harbormasters, six (6) pump-out workers, ten (10) dock boys, two (2) lifeguard supervisors, and fifty (50) lifeguards (off site).

1.02 The following is a list of boat related entities that the harbormaster building accommodates in the summer season.

- Transient boaters
- Forty (40) live aboard boaters
- One-hundred twenty-five (125) rental moorings, plus twenty-two hundred (2,200) regular moorings.
- One hundred (100) slip marina
- Eight (8) 35' charter sports fishing boats consisting of six (6) people (4 trips per day)
- Fifteen (15) fluke boats
- Forty to fifty (40-50) lobster boats
- Transient commercial boats consisting of 70' trawlers possible from 8-10 storms a year. Primarily off season.

1.03 List of requirements discussed based on existing use of employees and boaters.

- New Men's Room
  - Three (3) regular showers / One (1) handicapped accessible shower
  - One (1) regular toilet / One (1) handicapped accessible toilet / One (1) urinal
  - Four (4) sinks
- New Women's Room
  - Three (3) regular showers / One (1) handicapped accessible shower
  - Three (3) regular toilets / One (1) handicapped accessible toilet
  - Four (4) sinks
- One (1) Handicapped Accessible Family Bathroom with Shower
- One (1) Employee Bathroom (unisex)
- Employee Lunch Room and Storage
- Tourist Information Area and Center
- Upstairs Office larger enough for the harbormaster with views to all sides of the harbor
- Commercial fisherman all load at this pier / facility
- Ice freezer for all types of boaters

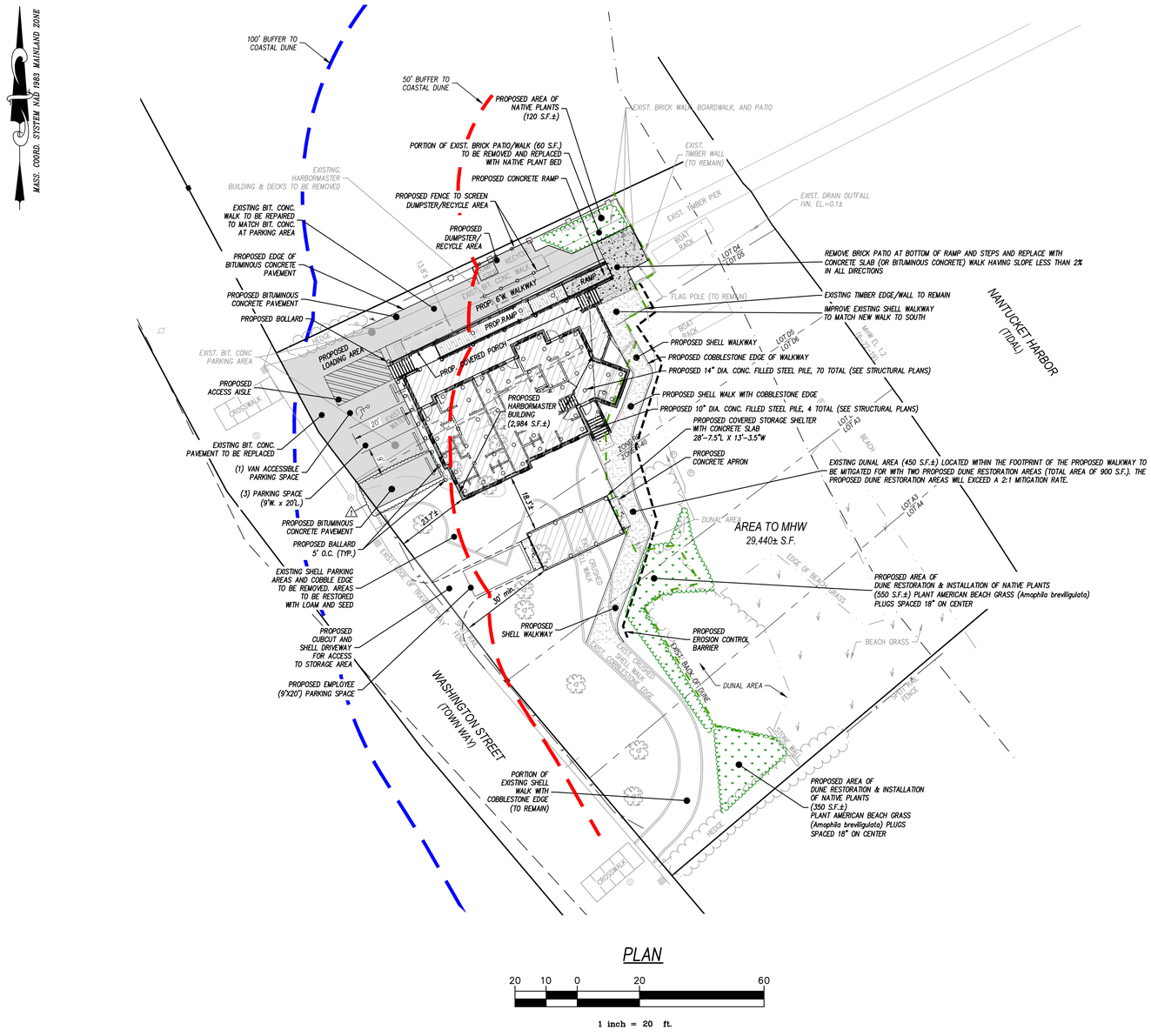
1.04 Town previously approved design criteria

- Handicapped accessibility
- 30' height limit
- 7/12 roof pitch (min)
- One (1) skylight per roof
- Natural white cedar shingle / natural red cedar trim
- True divided light windows

- Architecturally simple building with variance on flood proofing, energy code and glazing.

1.05 General Condition Notes

- Hot water systems need to be upgraded for extensive shower use.
- Materials used for public use should be vandal proof
- Trash and recycling must be adequate for boaters
- Building is on Town water and sewer
- Weather coverage is needed for bathrooms, stairs, and ramps.
- It is important that the building ties in with the park next door as this is the portal to the Town for most boaters, fishermen, and sailors.



PLAN

20 10 0 20 60

1 inch = 20 ft.

COVERAGE TABLE

SUBJECT	EXISTING	PROPOSED	CHANGE
BUILDING FOUNDATION AREA* (IMPERVIOUS FOOTPRINT)	1,497± S.F.	453 ± S.F.	1,044± S.F. REDUCTION
HARDSCAPES (PAVEMENT, WALLS, BRICK PATIO)	2,488± S.F.	3,021± S.F.	533± S.F. INCREASE
DECKS & STAIRS	679± S.F.	468± S.F.	211± S.F. REDUCTION
SHELL DRIVEWAY & WALKS (PERVIOUS)	2,809± S.F.	1,866± S.F.	943± S.F. REDUCTION
TOTAL COVERAGE	7,473± S.F.	5,808± S.F.	1,665± S.F. REDUCTION

*EXISTING BUILDING IS ON CONCRETE SLAB; PROPOSED HARBORMASTER BUILDING IS RAISED ABOVE EXISTING GRADE ON 74 PILES, AND PROPOSED STORAGE SHELTER TO BE SUPPORTED BY PILE FOUNDATION ABOVE A CONCRETE SLAB.

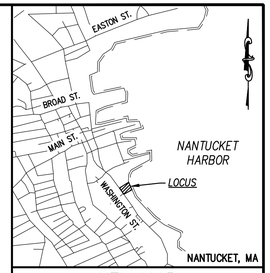
LEGEND

EXISTING

- BOUND
- MISC. SIGN
- FENCE
- OVERHEAD UTILITY LINE
- WATER LINE
- DRAIN LINE
- SEWAGE DISPOSAL
- SEWER MANHOLE
- MANHOLE
- CATCH BASIN
- DRAIN MANHOLE
- MONITORING WELL
- WATER VALVE
- UTILITY POLE
- ELECTRIC METER
- POST
- TREE

PROPOSED

- DUNE RESTORATION AREA



KEY MAP
NO SCALE

REFERENCE:

ASSESSORS MAP 42.2.3,
PARCELS 2 THROUGH 6

CTF. #7858
L.C.PLAN 9434-D
L.C.PLAN 10450-C

ZONING:
RESIDENTIAL COMMERCIAL (RC)
RESIDENTIAL 40 (R-40)
FLOOD HAZARD OVERLAY DISTRICT (FHOD)
TOWN OVERLAY DISTRICT

FLOOD ZONE:

FLOOD ZONE VE (EL 11) AND CBRS AREA (11-16-1990) AS SHOWN ON FEMA FIRM PANEL #25019C0086G EFFECTIVE DATE 6-9-2014. PLEASE NOTE THAT SITE SPECIFIC FLOODPLAIN BOUNDARIES MAY VARY DUE TO DIFFERENT INTERPRETATIONS OF THESE BOUNDARIES. USERS ARE ADVISED TO VERIFY LOCATION OF THESE BOUNDARIES WITH THE DESIGNATED COMMUNITY FLOODPLAIN MANAGERS PRIOR TO SITING ANY PROPOSED STRUCTURES.

DATUM:

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

COMMONWEALTH OF MASSACHUSETTS
TARJA L. MCGRAIL
CIVIL
No. 47593
REGISTERED PROFESSIONAL ENGINEER

COASTAL engineering co.
260 Cranberry Hwy, Orleans, MA 02653
508.255.6511 P 508.255.6700 F

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57 Alden Road
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508-992-2007 Fax 992-2021

Harbormaster Building

34 Washington Street
Nantucket, Massachusetts

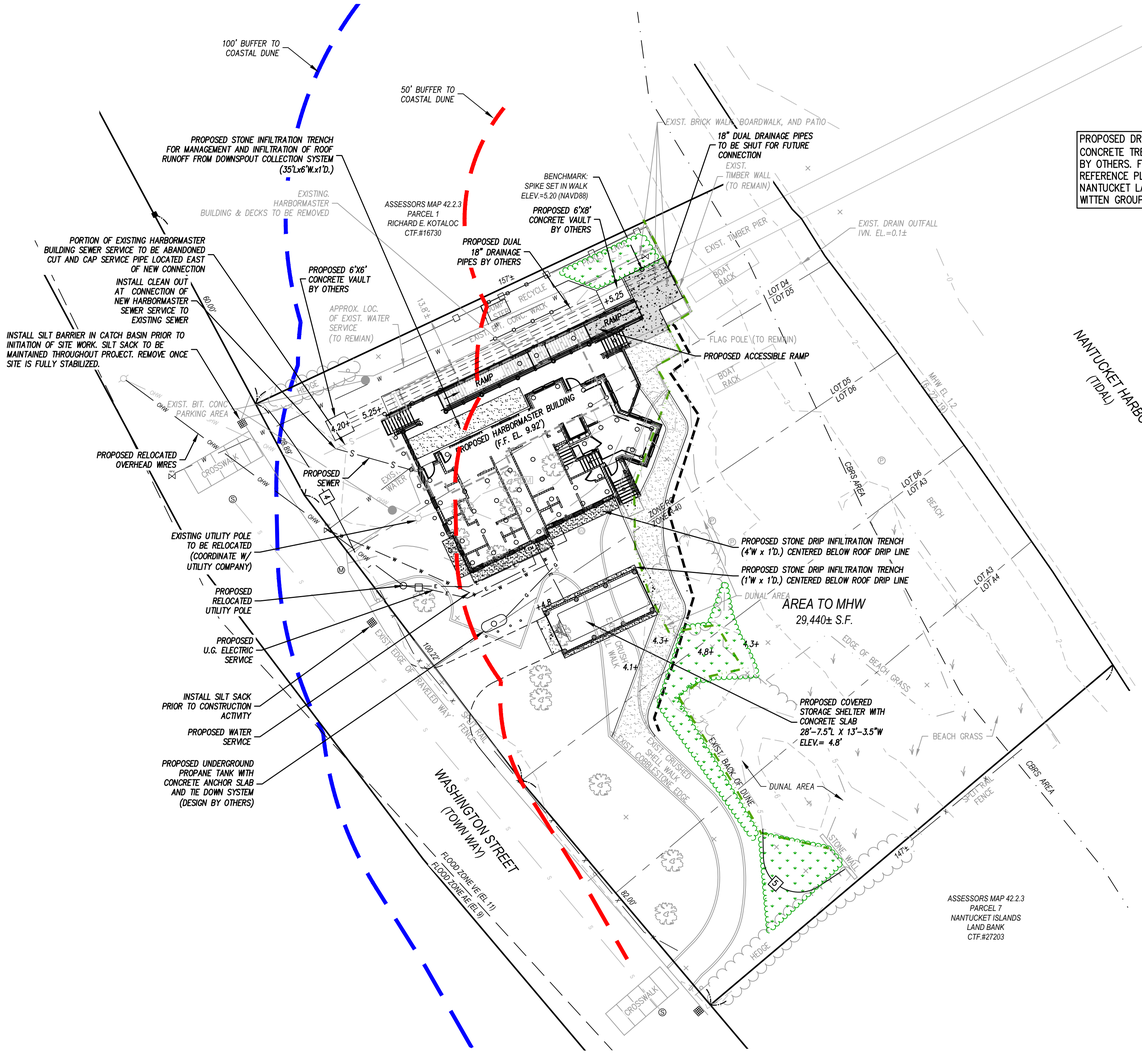
LAYOUT & MATERIALS PLAN

Drawn By:	MAP
Checked:	TLM, SMR
Date:	~~03-12-2020~~
Scale:	1"=20

C2.1.1

1 REV 1 DATE: 06/19/2020 : REV. PLAN TO INCLUDE AND IMPROVE EXISTING PARKING SPACE

ISSUED FOR REGULATORY REVIEW 06-19-2020



PROPOSED DRAINAGE OUTFALL PIPES AND CONCRETE TREATMENT/MONITORING VAULTS BY OTHERS. FOR SYSTEM DETAILS REFERENCE PLANS PREPARED FOR NANTUCKET LAND COUNCIL BY HORSLEY WITTEN GROUP, INC.

ROOF DOWNSPOUTS TO BE ROUTED VIA 4" DIA SCH 40 PVC PIPE FROM DOWNSPOUT TO PROPOSED STONE INFILTRATION TRENCH

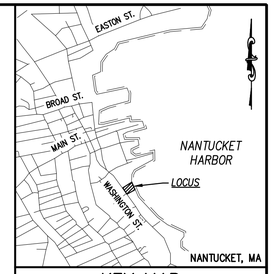
PLAN

20 10 0 20 60

1 inch = 20 ft.

UTILITY NOTE:

UTILITY DISCONNECTS AND NEW SERVICES TO BE INSTALLED IN ACCORDANCE WITH APPLICABLE ELECTRICAL, PLUMBING, AND WATER DEPARTMENT CODES AND REGULATIONS.



KEY MAP
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REFERENCE:

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CTF. #7858
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LEGEND

EXISTING

■	BOUND	▩	CATCH BASIN
—o—	MISC. SIGN	Ⓓ	DRAIN MANHOLE
— — —	FENCE	Ⓜ	MONITORING WELL
—OHW—	OVERHEAD UTILITY LINE	WV	WATER VALVE
—W—	WATER LINE		UTILITY POLE
—D—	DRAIN LINE	EM	ELECTRIC METER
—S—	SEWAGE SERVICE	Ⓟ	POST
Ⓢ	SEWER MANHOLE		
Ⓜ	MANHOLE		

PROPOSED

	DUNE RESTORATION AREA
—S—	SEWER LINE
—W—	WATER LINE
—E—	UNDERGROUND ELECTRIC
—G—	GAS UNDERGROUND PROPANE SERVICE
—5—	CONTOUR
5.25+	SPOT GRADE

TARJA I. MACRAE CIVIL No. 47593 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

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Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

DRAINAGE, GRADING, UTILITY PLAN

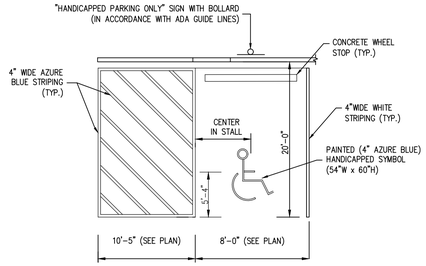
Drawn By:	MAP
Checked:	TLM
Date:	~~3-12-2020~~
Scale:	1"=20

C2.2.1

ISSUED FOR REGULATORY REVIEW 06-19-2020

F:\STSK\PROJ\C19000\C19031\C19031-00\C19031-P.dwg Jun 19, 2020 - 10:33am

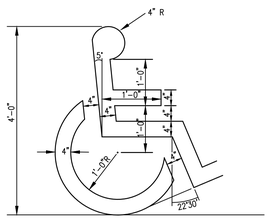
NOTE:
DETAIL IS SHOWN TYPICAL, SEE C2.1.1 FOR EXACT LAYOUT OF PARKING, CURB, RAMP, LOADING AND SIGN PLACEMENT



NOTE:
ALL PAVEMENT STRIPING AND MARKINGS SHALL CONSIST OF CHLORINATED RUBBER PAINT APPLIED TO A DRY SURFACE WHEN THE TEMPERATURE IS GREATER THAN 40°F. PAINT SHALL BE APPLIED AT A MINIMUM OF 0.015" (15 MIL) FILM THICKNESS

ADA ACCESIBLE STALL MARKINGS & PARKING LOT STRIPING DETAIL

NOT TO SCALE



NOTE: SYMBOL TO BE PAINTED IN ALL HANDICAPPED SPACES.

PAINTED HANDICAP SYMBOL

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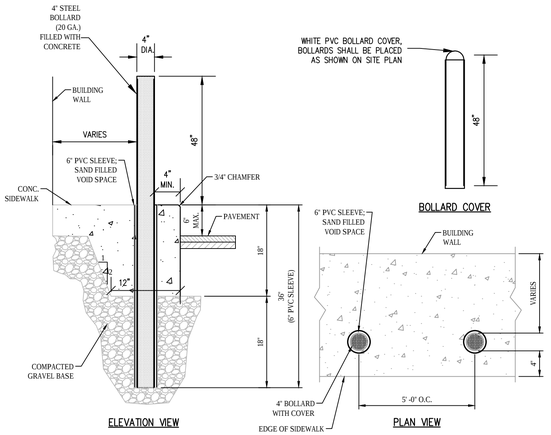

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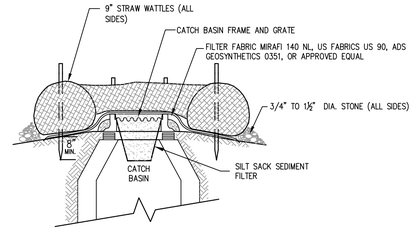


INLET PROTECTION NOTES:

1. ENCLOSE STRUCTURE WITH STRAW BALES OR RICE STRAW ROLLS IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING BINDER COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.

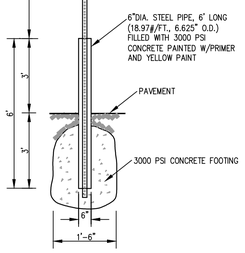
2. IF GRATE IS AGAINST EXISTING CURB THEN STRAW WATTLES ARE TO BE PLACED AROUND THREE SIDES OF GRATE ONLY. GRATE TO BE PLACED OVER FILTER FABRIC .

3. IN PLACES WHERE EXISTING CATCH BASIN IS SURROUNDED BY PAVEMENT, A SILT SACK SEDIMENT FILTER IS TO BE PLACED UNDER CATCH BASIN GRATE.

4. WATTLES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY IF NEEDED.

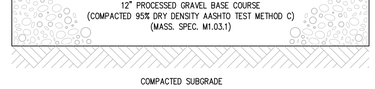
CATCH BASIN INLET PROTECTION DETAIL

NOT TO SCALE



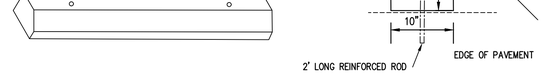
HANDICAP SIGN

NOT TO SCALE



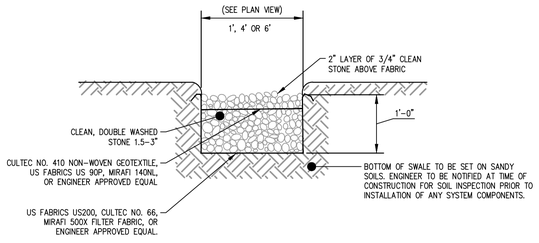
BITUMINOUS CONCRETE PAVEMENT

NOT TO SCALE



CONCRETE WHEEL STOP DETAIL

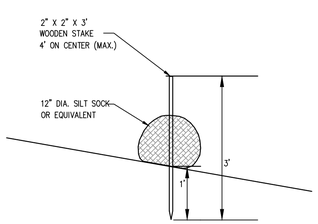
NOT TO SCALE



ROOF DRAINAGE INFILTRATION TRENCH/DRIP EDGE

NOT TO SCALE

GENERAL NOTE:
1. DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS



SILT SOCK EROSION CONTROL BARRIER DETAIL

NOT TO SCALE

ISSUED FOR REGULATORY REVIEW 06-19-2020

COASTAL engineering co.
260 Cranberry Hwy. Orleans, MA 02653
508.255.6511 P 508.255.6700 F

Stephen Kelleher Architects, Inc.
Fairhaven Center for Business
57 Alden Road
Fairhaven, Massachusetts 02719
508-992-2007 Fax 992-2021

Harbormaster Building
34 Washington Street
Nantucket, Massachusetts

SITE DETAILS

Drawn By:	MAP
Checked:	TLM
Date:	~~3-12-2020~~
Scale:	1"=20

C2.4.1

NOTICE OF INTENT APPLICATION

TO REPLACE THE SUPPORTS OF AN ELEVATED WALKWAY THROUGH THE RESOURCE AREA

At

13 MASSACHUSETTS AVE

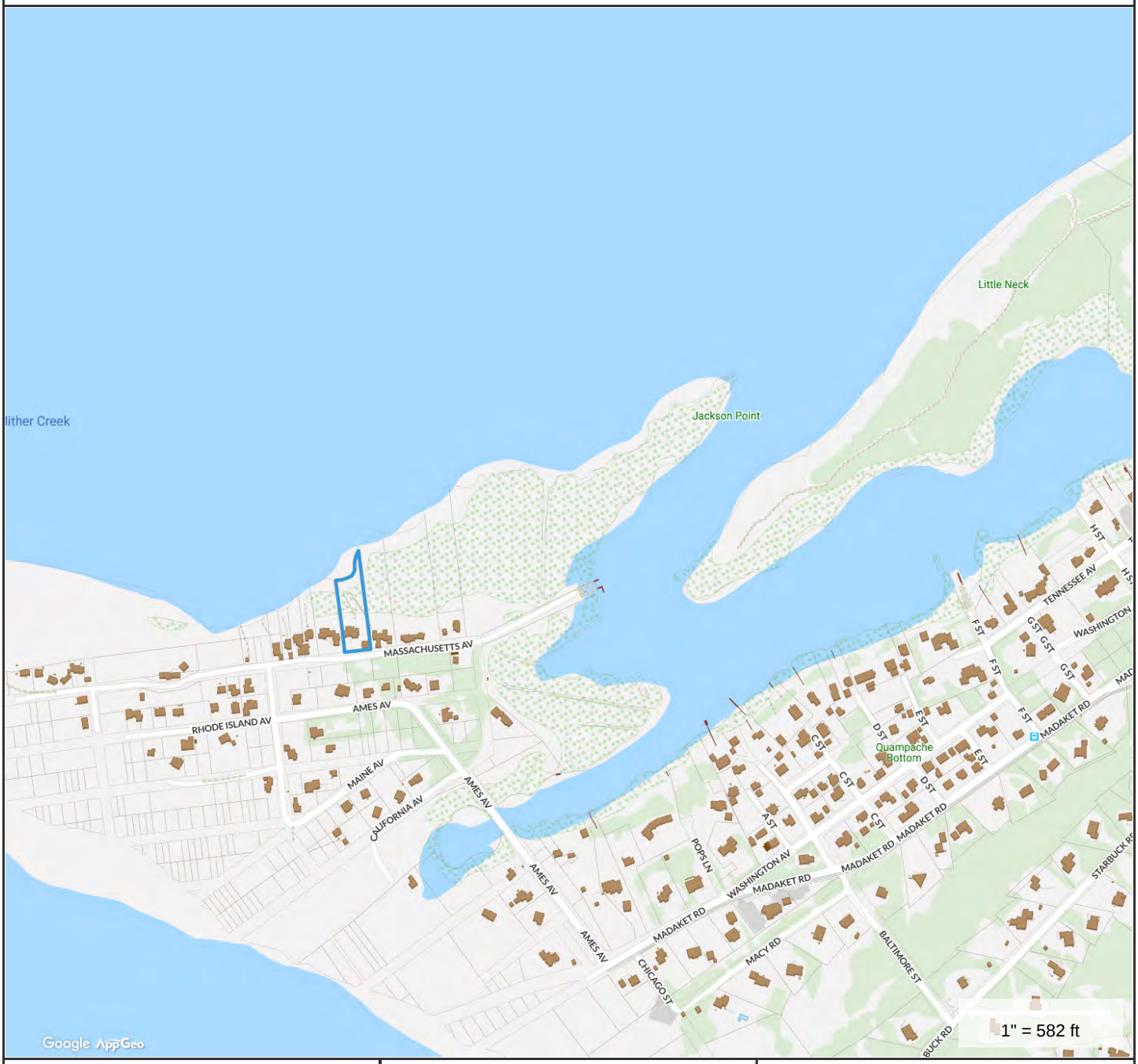
JUNE 2020

Prepared For

MADAKET WHEELHOUSE, LLC

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Locus Map



Property Information

Property ID	60 75
Location	13 MASSACHUSETTS AV
Owner	MADAKET WHEELHOUSE LLC

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 11/13/2018
Data updated 11/19/2018

NANTUCKET ENGINEERING & SURVEY, PC

June 19, 2020

Ms. Ashley Erisman, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent
13 Massachusetts Ave
Map 60 Parcel 75

Dear Ms. Erisman:

On behalf of the property owner, Madaket Wheelhouse LLC, Nantucket Engineering & Survey, P.C. is submitting this Notice of Intent (NOI) to the Nantucket Conservation Commission for proposed activities within Land Subject to Coastal Storm Flowage, and the Buffer Zone to a Coastal Dune at the above referenced property (the "Site") in Nantucket, Massachusetts.

Proposed activities at the Site consist of replacing the 4x4 timber posts that support the existing elevated walkway which provides access to the beach and Madaket Harbor with helical pile supports. The piles for the elevated walkway will be installed with a hand-carried hydraulic driver. The existing walkway is heaving with the timber posts coming up out of the ground. Attached are permit drawings, including plans showing a site locus, existing conditions including resource area locations, and proposed construction areas.

A completed WPA Form 3 – Notice of Intent is attached along with the NOI Wetland Fee Transmittal Form including checks for $42.50, $67.50, $25 and $200 to cover the WPA filing fee, Nantucket Wetland by-law fee and the Nantucket Expert Review fee. Also included is a check for $335.10 to the Inquirer & Mirror for publication of the notice of the public hearing. No waivers are required from the Town of Nantucket Bylaw Chapter 136 for the proposed project as it is a water dependent use.

Notification of this NOI filing was provided to all abutting property owners by certified mail. This property owner listing was obtained from the Town of Nantucket Assessor's office. Documentation of the notification is provided including a copy of the notification letter, the property owner listing and certified mail receipts.

SITE DESCRIPTION

The subject property is approximately three-quarters of an acre in size and is located in the Madaket section of Nantucket Island. The property contains two existing residential-use structures served by an on-site well and septic tight tank located within LSCSF and the buffer zone. The site is landscaped around the existing structures.

The wetland resource areas in the vicinity of the proposed work include Land Subject to Coastal Storm Flowage, which covers the entire property, and a Coastal Dune.

A review of the August 1, 2017 "Massachusetts Natural Heritage Atlas", prepared by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), indicates that the project area is within the known range of state listed rare wildlife species. A simultaneous filing has been made with NHESP.

CONCLUSION

The proposed installation of helical piles to support the existing walkway serving the existing residential-use of the property will not affect the ability of the Coastal Dune and Land Subject to Coastal Storm Flowage resource areas to function as they currently do, combined with a net-benefit that is recognized the elevating the structure through the resource areas. The project will not result in an adverse impact on the areas or the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution, wildlife, and wetland scenic views.

I plan to attend the Public Hearings for this application to address any questions, comments or concerns that the Commission may have.

Sincerely,

Arthur D. Gasbarro, PE, PLS

CC: Madaket Wheelhouse LLC
MassDEP

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

13 Massachusetts Ave — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41d 17'48"N — d. Latitude
70d 00'02"W — e. Longitude

60 — f. Assessors Map/Plat Number
75 — g. Parcel /Lot Number

2. Applicant:

a. First Name
b. Last Name
Madaket Wheelhouse, LLC — c. Organization
205 Stone Hill — d. Street Address
Pound Ridge — e. City/Town
NY — f. State
10576 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Arthur D. — a. First Name
Gasbarro, PE, PLS — b. Last Name
Nantucket Engineering & Survey, P.C. — c. Company
20 Mary Ann Drive — d. Street Address
Nantucket — e. City/Town
MA — f. State
02554 — g. Zip Code
508-825-5053 — h. Phone Number
i. Fax Number
art@nantucketengineer.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$110 + $25 + $200 — a. Total Fee Paid
$42.50 — b. State Fee Paid
$67.50 + $25 + $200 — c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

The Applicant proposes to replace 4x4 timber supports of the elevated beach access walkway with helical piles. The work will be done by hand labor with a portable installer carried to each location. The project as proposed will have no adverse impact on the interests protected by the Commission.

7a. Project Type Checklist:

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☒ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

NANTUCKET	25,696
a. County	b. Certificate # (if registered land)
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet	2. square feet
	3. cubic yards dredged	

MADAKET HARBOR

N

L.C.C. 2408-Y

OBSERVED SHORELINE 08/12/15 11:00 AM

COASTAL BEACH

EXISTING ELEVATED TIMBER WALKWAY

REPLACE 4x4 PRESSURE TREATED SUPPORTS WITH HELICAL PILES. SLEEVE EXPOSED PORTION WITH TIMBER

COASTAL DUNE

171'±

223'±

WLF-6 WLF-5 WLF-4 WLF-3 WLF-2 WLF-1

UNREGISTERED BROAD CREEK AREA
DEED BK. 1494 PG. 39

100.0' CERT. 25696

DECK

CONC. PAD W/ LP TANK

LP

A/C UNIT

10'

DECK

DECK

1 STY W/F STRUCTURE
2186± S.F. (FOUNDATION)
#13 MASSACHUSETTS AVENUE

DECK

PORCH

RAMP

DECK

100.0'

100.0'

DECK

1 STY W/F STRUCTURE
528± S.F. (FOUNDATION)

DECK

SHELL DRIVE

100.0'

40.00'

MASSACHUSETTS AVE.

EDGE OF DIRT ROAD

275.00'

60.3.1-317
N/F
ALAN SHIFF, TRUSTEE
CAROL SHIFF, TRUSTEE
15 MASSACHUSETTS AVE

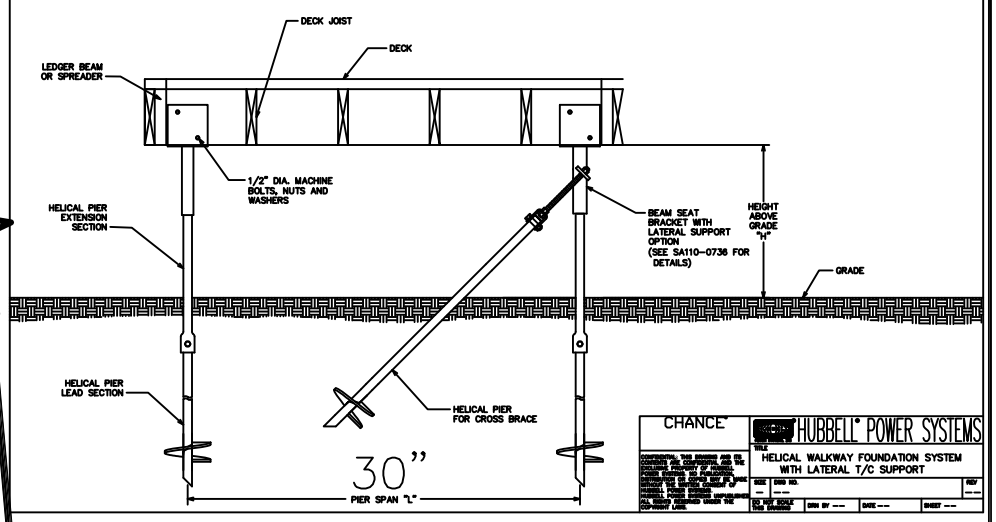
60-80
N/F
RICHARD W. & CATHARINE E. SNOWDON
#11 MASSACHUSETTS AVE
(SEPTIC ON #10 MASS. AVE)

ELEVATED WALKWAY DETAIL

N.T.S.

==NOTES==

1. THIS IS A CONCEPT DRAWING ONLY. ACTUAL DESIGN AND CONSTRUCTION OF WALKWAY AND HELICAL PIER SUPPORT SYSTEM IS LEFT TO OTHERS.
2. HELICAL PIERS CAN BE EITHER SINGLE OR MULTIHELIX. THE NUMBER AND SIZE OF HELIX PLATES VARY DEPENDING ON PIER LOAD AND SOIL CONDITIONS.
3. HELICAL PIERS ARE INSTALLED (SCREWED) TO A MINIMUN DEPTH AND TORQUE AS REQUIRED ON THE CONSTRUCTION PLANS.
4. HELICAL PIER SHAFTS FOR WALKWAY SUPPORT ARE TYPICALLY 1-1/2" OR 1-3/4" SQUARE SHAFT OR 2-7/8" O.D. PIPE SHAFT.



LEGEND

CB ■ FND DENOTES CONCRETE BOUND FOUND

COMMONWEALTH OF MASSACHUSETTS
ARTHUR D. GASBARRO
CIVIL
No. 45951
REGISTERED PROFESSIONAL ENGINEER

6/19/20

THIS PLOT PLAN WAS PREPARED FOR THE TOWN OF NANTUCKET CONSERVATION COMMISSION ONLY AND SHOULD NOT BE CONSIDERED A PROPERTY LINE SURVEY. THIS PLAN SHOULD NOT BE USED TO ESTABLISH PROPERTY LINES, FENCES, HEDGES OR ANY ANCILLARY STRUCTURES ON THE PREMISES. THE PROPERTY LINES SHOWN RELY ON CURRENT DEEDS AND PLANS OF RECORD.
THIS PLOT PLAN IS NOT A CERTIFICATION AS TO TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT ASSESSOR RECORDS.

ASSESSOR MAP: 60, PARCEL: 75

NOTICE OF INTENT SITE PLAN

OF LAND IN

NANTUCKET, MASS.

SCALE: 1"= 20' DATE: JUNE 19, 2020

Owner: ***MADAKET WHEELHOUSE, LLC***
L.C.C. 2408-Y

Cert. of Title: #25696 Plan: LOTS 12-15, BLOCK 29

Deed Bk./Pg.: 1494/39 Plan: NONE FOUND

Locus: #13 MASSACHUSETTS AVENUE

BASE PLAN BY:
BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9026

NANTUCKET ENGINEERING & SURVEY, PC
20 Mary Ann Drive Nantucket, MA 02554
NantucketEngineer.com 508-825-5053


60 8
60 75
60.3.1 317
15
Map data ©2020
50 ft

13 MASSACHUSETTS AV

MADAKET WHEELHOUSE LLC

C/O FOOSHEE BEN C/O SIR CAPITAL

620 8TH AVE 22ND FLOOR, NEW YORK, NY 10018

$2,316,500

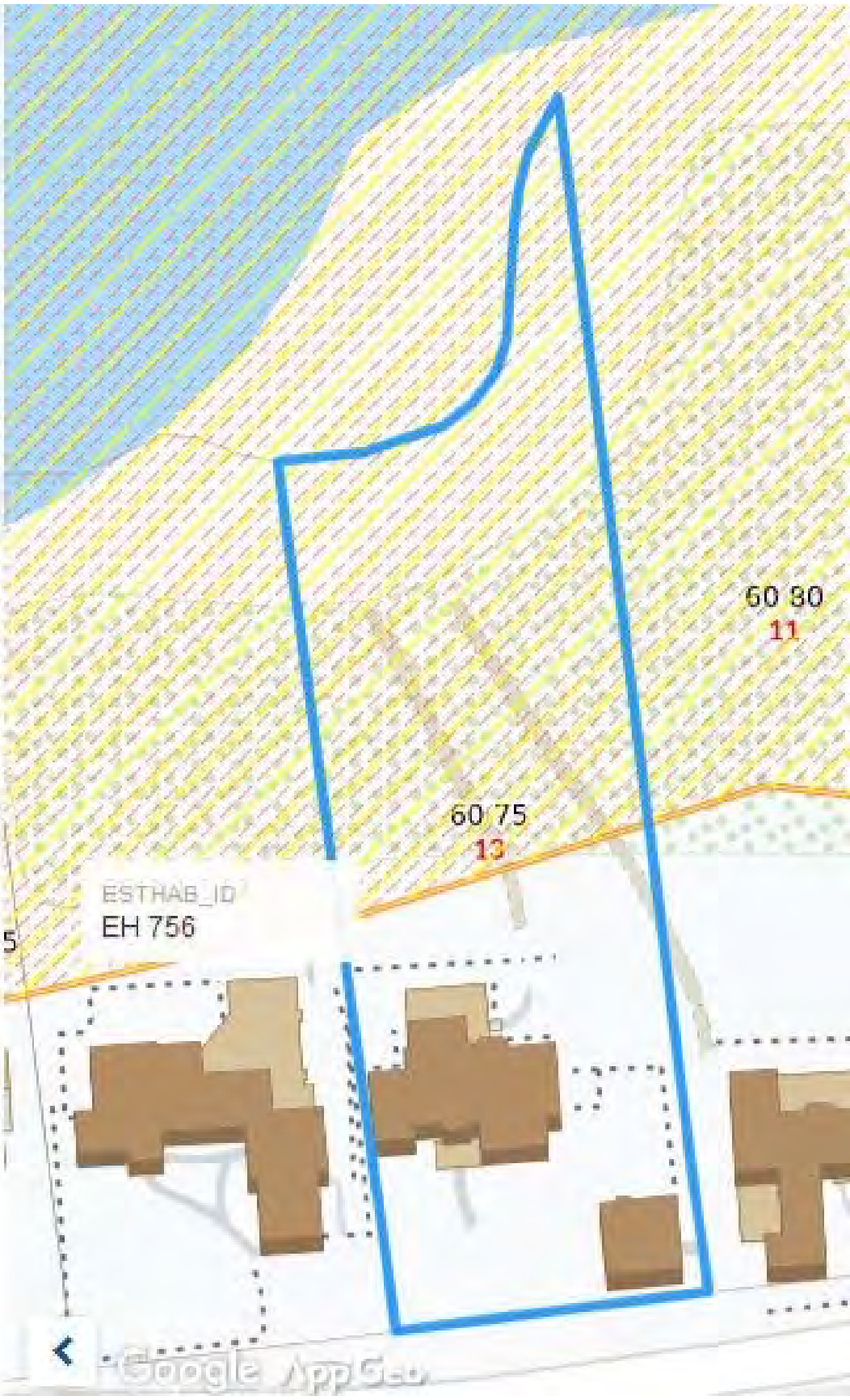
$1,000

$2,650,000 on 2015-07-30

C0025696/0

10,000.00

VR



INSTANT FOUNDATION® System for . . .

Environmentally Sensitive Areas

CHANCE™

Since 1912

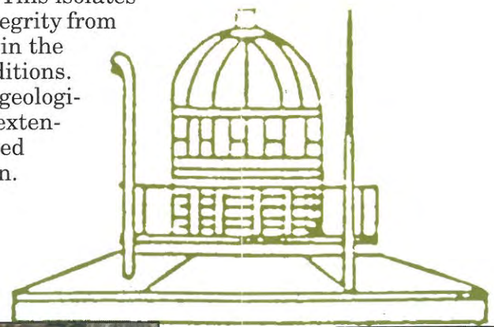
DOWN. RIGHT. SOLID.

The principles underlying the CHANCE® INSTANT FOUNDATION® System have been in use for more than 150 years. The system has proven most economical in sensitive soils and difficult terrain. Intrusive early installing equipment initially kept the INSTANT FOUNDATION System approach from areas its advantages now benefit most. Modern, compact hydraulic-driven drills have made it the method preferred by knowledgeable soils engineers and construction contractors.

Each year, Chance produces hundreds of thousands of screw foundations. They can, by design, solve such challenges as those posed by environmentally sensitive applications:

- No soil excavation,
- Minimal impact on vegetation,
- Install in limited-access areas.

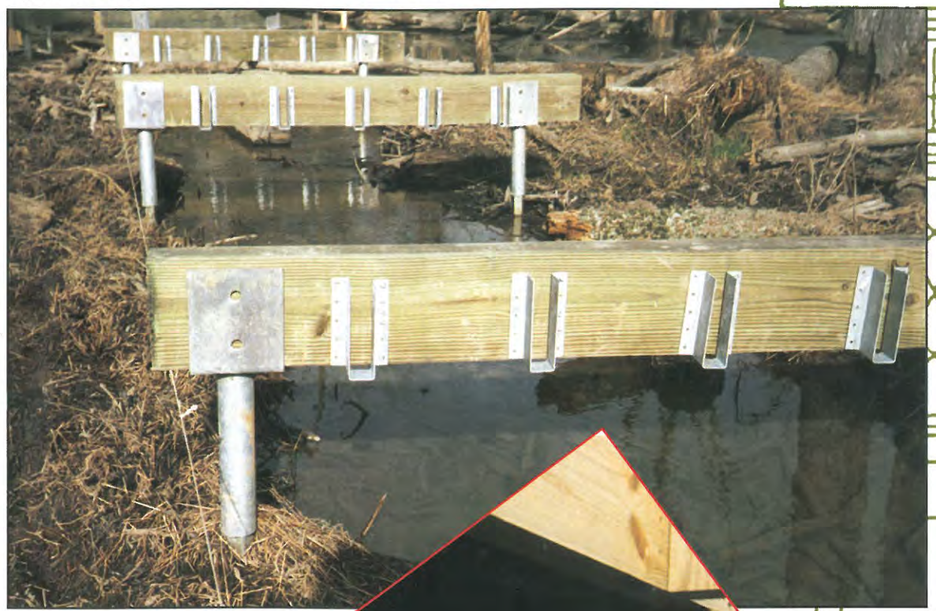
The galvanized-steel INSTANT FOUNDATION anchors are pre-engineered to transfer projected loads to bearing-capable strata below weak soils. This isolates the structure's integrity from seasonal changes in the surface-layer conditions. To reach a sound geological footing, shaft extensions may be added during installation.



Volunteers for Outdoor Colorado built 1,000-ft. of boardwalks, including spurs and outlooks, in a 1¼-mile wheelchair-accessible trail loop. Ecological concerns for rare alpine wetlands required low-damage methods and depths that would avoid frost heave.

U-shape bracket sleeves INSTANT FOUNDATION® shafts to mount lateral support beams for joist and deck structure.

Over wetlands at Huntley Meadows in Virginia, this 1½-mile boardwalk was built using the INSTANT FOUNDATION System.

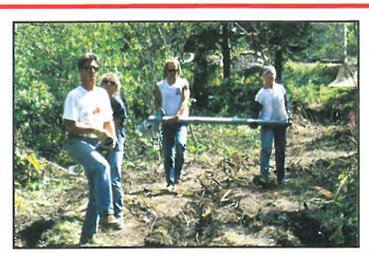


For each job, an INSTANT FOUNDATION® anchor is selected by shaft size and the size and number of helices.

To preserve the terrain, neither wheeled nor tracked vehicles were permitted on this project site by the Fairfax County Park Board.

For elevation changes, the screw foundation shaft "reveal" above grade was varied within plan range.

Portable equipment (hand-held or on ATV) rotates screw foundation into soil. Minimum soil disturbance results in maximum compression and uplift capacity.

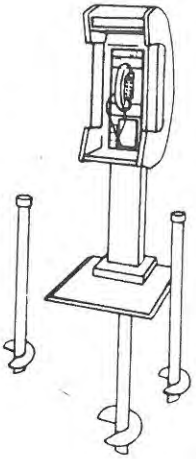


Teamwork saves natural ecology as modular components are easily carried to remote sites.

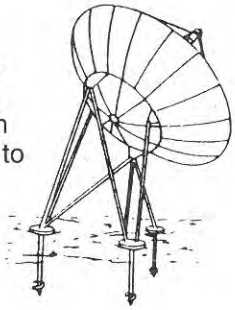
Other environment-enhancing INSTANT FOUNDATION® System uses

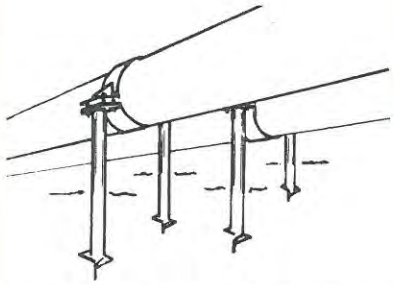
Emergency telephones and payphones get set into service faster with screw foundations pre-designed to connect to most station brands.

Plus, "bumper posts" help protect them from traffic hazards.

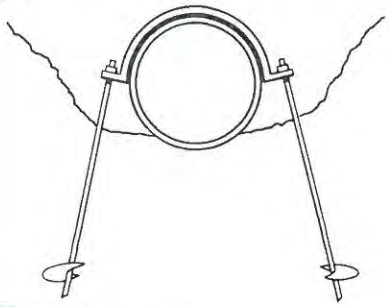


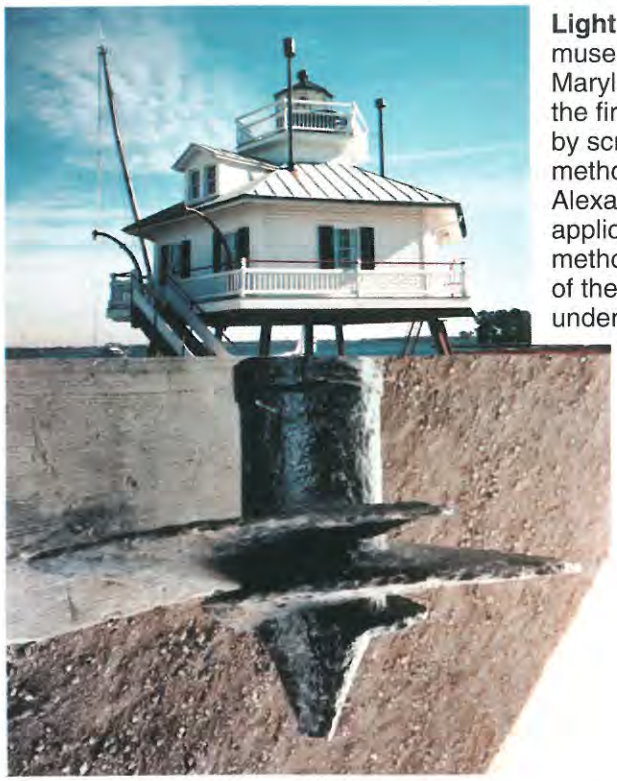
CATV stations and microwave towers mount on bases with proper bolt patterns to instantly go on-line.



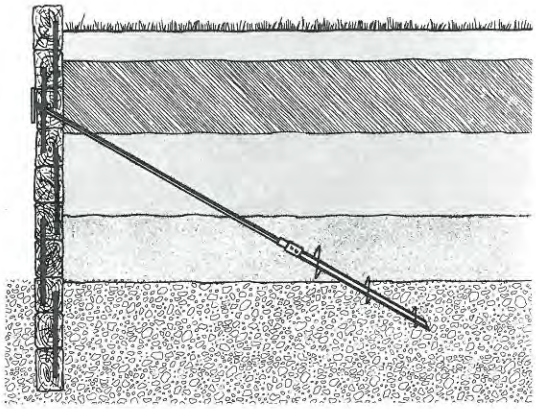


Pipelines and storage tanks, above and below grade are held down and supported by INSTANT FOUNDATION anchors are especially designed for each job.



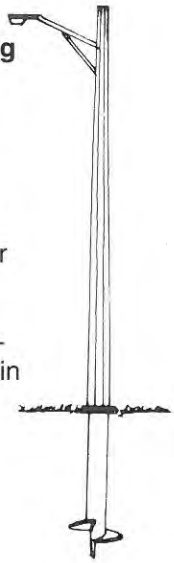


Lighthouse museum at Hooper's Strait, Maryland, commemorates the first structure supported by screw-type foundation method. Its originator, Alexander Mitchell, began applications in1832. Now this method is used in far reaches of the world, including undersea.

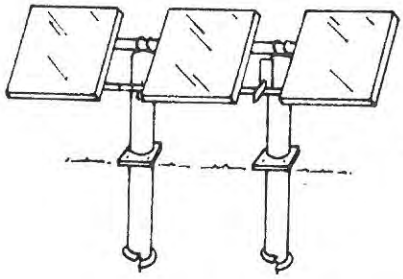


Tieback system for new construction and retaining walls puts load-bearing CHANCE® tieback screw anchors in solid, undisturbed subsurface layers.

Moorings for harbors keep chains off fragile eco-systems as alternative to scrubbing action of weights.



Area lighting foundations are ready-made for immediate mounting of nostalgic, decorative or standard streetlight standards — all with built-in cableways.



Solar-collector panels bolt atop INSTANT FOUNDATION anchors soon as installed, without another day's delay to alternative power.

NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

CHANCE™ Since 1912 DOWN. RIGHT. SOLID.

Chance Civil Construction, Hubbell Power Systems, Inc.
Centralia, MO 65240 Email: hpsliterature@hps.hubbell. com
Phone: 573-682-8414 Fax: 573-682-8660

www.abchance.com

Bulletin 04-9409
Revised 9/08

9/08RGS3M

Certified System™ ISO 9001 QMI-SAI Global CERT-0018053

NOTICE OF INTENT APPLICATION

FOR BEACH ACCESS
STAIRS AND WALKING PATH

At

5 SHERBURNE WAY

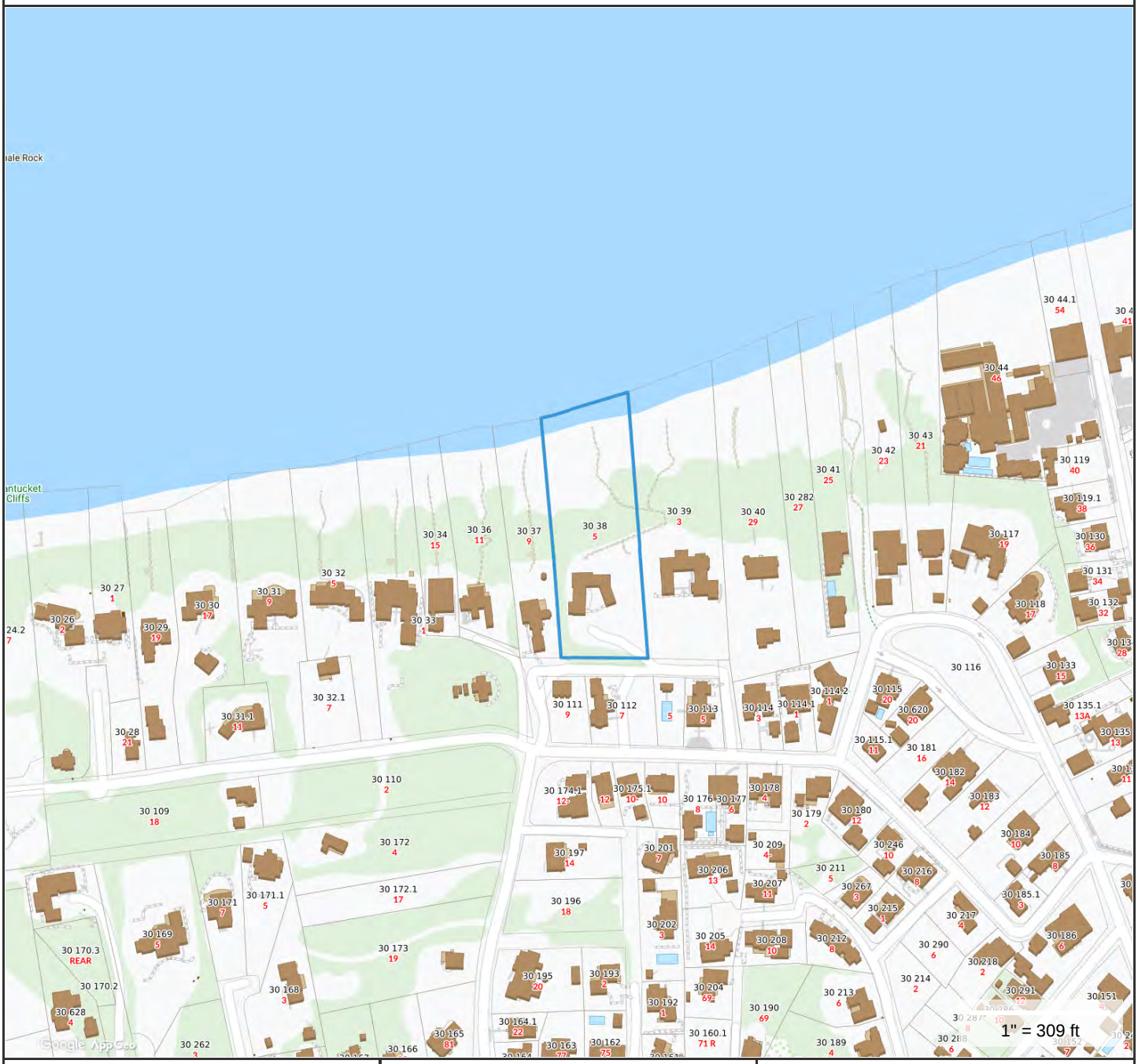
JULY 2020

Prepared For

5 SHERBURNE WAY, LLC

20 Mary Ann Drive • Nantucket, MA 02554
508-825-5053 • www.NantucketEngineer.com

Locus Map



Property Information

Property ID	30 38
Location	5 SHERBURNE WY
Owner	SPENCER GEORGE H JR &

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 11/13/2018
Data updated 11/19/2018

NANTUCKET ENGINEERING & SURVEY, PC

July 2, 2020

Ms. Ashley Erisman, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent
5 Sherburne Way
Map 30 Parcel 38

Dear Ms. Erisman:

On behalf of the Applicant, 5 Sherburne Way, LLC, Nantucket Engineering & Survey, P.C. is submitting this Notice of Intent (NOI) to the Nantucket Conservation Commission for proposed activities within the Buffer Zone, Coastal Bank, Coastal Dune and Land Subject to Coastal Storm Flowage resource areas at the above referenced property (the "Site") in Nantucket, Massachusetts.

Proposed activities at the Site consist of installing a set of timber stairs on the coastal bank and a walking path in the coastal dune in order to provide pedestrian access to the coastal beach and Nantucket Sound. Attached are permit drawings, including plans showing a site locus, existing conditions including resource area locations, and proposed construction areas.

A completed WPA Form 3 – Notice of Intent is attached along with the NOI Wetland Fee Transmittal Form including checks for $24.50, $67.50, $25 and $200 to cover the WPA filing fee, Nantucket Wetland by-law fee and the Nantucket Expert Review fee. Also included is a check for $335.10 to the Inquirer & Mirror for publication of the notice of the public hearing.

Notification of this NOI filing was provided to all abutting property owners by certified mail. This property owner listing was obtained from the Town of Nantucket Assessor's office. Documentation of the notification is provided including a copy of the notification letter, the property owner listing and certified mail receipts.

SITE DESCRIPTION

The subject property is approximately two-acres in size and is located in the Cliff area of Nantucket Island. The property is located at the northern end of a paved road in an area of residential development. The lot currently contains a single-family dwelling served by Town water and sewer service. There is an old asphalt pathway in the coastal bank that crisscrosses locus and the abutting property to the east. This path does not provide a safe means of access to the beach, especially for those with limited mobility. There is also a good amount of maintenance that would be needed to restore this path, which can be avoided by this proposal. The path also crosses onto an abutting property without a legal basis to continue to do so.

The Wetland Resource Areas on-site subject to jurisdiction of the Commission are Coastal Bank, Coastal Dune, Coastal Beach and Land Subject to Coastal Storm Flowage, and the respective Buffer Zones.

A review of the August 1, 2017 "Massachusetts Natural Heritage Atlas", prepared by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), indicates that a portion of the work area for the walking path is within the known range of state listed rare wildlife species defined by the Estimated Habitat mapping. A copy of this application with a filing fee have been sent to NHESP.

WORK DESCRIPTION

The access for the work will be from the existing driveway, through the yard, where materials will be stockpiled. Vegetation in the work area will be cut by hand from the top of the bank to the bottom, with care taken to minimize disturbance to the root structure. The timber supports will be installed by hand labor and the stairs constructed. All disturbed construction areas will be covered with a minimum of 6” of topsoil and planted with grass seed.

The portions of existing asphalt path shown on the plan will be broken with hand labor and the pieces carried to the top for loading into a truck and off-site disposal. The existing path in the bank will be planted with native species to match the surrounding area.

The new path to the beach will follow a route of least disturbance for the most direct route possible to the beach. This path will be cut and maintained with a string trimmer. The existing path will be planted with American Beach Grass.

CONCLUSION

The installation of a timber set of steps and more direct walking path, combined with the removal of the existing asphalt will provide an overall net benefit by decreasing the areas used by pedestrians within the resource area and by providing a more direct route through said areas. The work will not result in an adverse impact on the areas or the interests protected by the Commission including flood control, erosion control, storm damage prevention, prevention of pollution, wildlife, and wetland scenic views.

I plan to attend the Public Hearings for this application to address any questions, comments or concerns that the Commission may have.

Sincerely,

Arthur D. Gasbarro, PE, PLS

Cc: MassDEP
5 Sherburne Way, LLC
Sarah F. Alger, P.C.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
NANTUCKET
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

5 Sherburne Way (a. Street Address) | Nantucket (b. City/Town) | 02554 (c. Zip Code)

Latitude and Longitude: 41.293675 N (d. Latitude) | 70.111207 W (e. Longitude)

30 (f. Assessors Map/Plat Number) | 38 (g. Parcel /Lot Number)

2. Applicant:

a. First Name | b. Last Name

5 Sherburne Way, LLC
c. Organization

4 North Water Street
d. Street Address

Nantucket (e. City/Town) | MA (f. State) | 02554 (g. Zip Code)

h. Phone Number | i. Fax Number | j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name | b. Last Name

Cliffside Home Nominee Trust
c. Organization

251 Witchwood Lake
d. Street Address

Bluff (e. City/Town) | IL (f. State) | 60044 (g. Zip Code)

h. Phone Number | i. Fax Number | j. Email address

4. Representative (if any):

Arthur D. (a. First Name) | Gasbarro, PE, PLS (b. Last Name)

Nantucket Engineering & Survey, P.C.
c. Company

20 Mary Ann Drive
d. Street Address

Nantucket (e. City/Town) | MA (f. State) | 02554 (g. Zip Code)

508-825-5053 (h. Phone Number) | i. Fax Number | art@nantucketengineer.com (j. Email address)

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$110 (a. Total Fee Paid) | $42.50 (b. State Fee Paid) | $67.50 + $25 + $200 (c. City/Town Fee Paid)

A. General Information (continued)

6. General Project Description:

The applicants are proposing to construct a set of stairs and path to access the beach and Nantucket Sound from the existing single-family dwelling. The existing asphalt path on the bank on locus will be removed and restored with native species. The walking path in the dune will be replaced by a shorter path and planted with beach grass. The work constitutes a water dependent use within the coastal bank and coastal dune resource areas. Please refer to the attached Project Narrative and Site Plan for additional information.

7a. Project Type Checklist:

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities
7. ☐ Coastal Engineering Structure
8. ☐ Agriculture (e.g., cranberries, forestry)
9. ☐ Transportation
10. ☒ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☐ No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
NANTUCKET	C.15,870
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

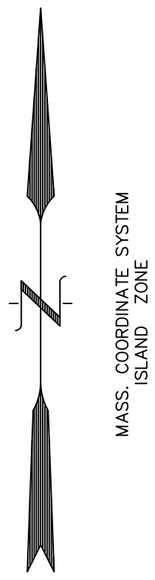
Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Existing Asphalt Path in Bank

Dune Path



NANTUCKET SOUND

approx. high water line (June 2020)

COASTAL BEACH

8.7

HIGH WATER MARK
L.C. PL.15781-B

EXISTING PATH TO BE PLANTED WITH AMERICAN BEACH GRASS 12" O.C.

17.0

NHESP MAP LIMIT

PROPOSED BEACH ACCESS PATH

Zone AE
Elev. 9
Zone X

COASTAL DUNE

sand path to beach

approx. flood zone line as scaled from FIRM

dirt path to beach

REMOVE ASPHALT PATH ON LOCUS & RESTORE BANK VEGETATION

10.9x

bottom of bank

9.9x

steps

asphalt path

steps

asphalt path

30–37
N/F THOMAS & EMMA GINLEY, TRST

PROPOSED BEACH ACCESS STAIRS

COASTAL BANK

granite steps

approx top of bank

60.2x
top of bank

REMOVE ASPHALT PATH TO STEPS & RESTORE BANK VEGETATION

brush

edge of brush

x65.8

463'±

30–39
N/F LYNN BRAITMAN &
GEORGE HENRY SPENCER JR,
CO–TRUSTEES et al

420.48'

PROPOSED PATH

x60.8

lawn

stoop

lawn

brush

1 STY W/F DWELLING

porch

62.6x

porch

lawn

deck

brick retaining wall

brush

x65.4

brush

BENCHMARK:
STONE
APRON EL.
59.50
NAVD88

driveway

brush

DHCB FND

179.92'

DHCB FND

179.91'

DHCB FND

edge pavement

SHERBURNE WAY

COMMONWEALTH OF MASSACHUSETTS
ARTHUR D. GASBARRO, III
No. 47149
PROFESSIONAL LAND SURVEYOR

7/2/20

Arthur D. Gasbarro

ZONING DISTRICT: (R–1)
RESIDENTIAL – 1
MINIMUM LOT SIZE: 5,000 S.F.
MINIMUM FRONTAGE: 50 FT.
FRONT YARD SETBACK: 10 FT.
REAR/SIDE SETBACK: 5 FT.
GROUND COVER % : 30%
EXISTING GC % : %±
LOT AREA= 79,000± S.F.
(lot area calculated to water line shown on on LCPL 15781–B)

THIS PLOT PLAN WAS PREPARED FOR PERMITTING PURPOSES ONLY AND SHOULD NOT BE CONSIDERED A PROPERTY LINE SURVEY. THIS PLAN SHOULD NOT BE USED TO ESTABLISH PROPERTY LINES, FENCES, HEDGES OR ANY ANCILLARY STRUCTURES ON THE PREMISES. THE PROPERTY LINES SHOWN RELY ON CURRENT DEEDS AND PLANS OF RECORD. THIS PLOT PLAN IS NOT A CERTIFICATION AS TO TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT ASSESOR RECORDS.

GRAPHIC SCALE
0 30 60 90
(IN FEET)
1 inch = 30 ft.

NANTUCKET ENGINEERING & SURVEY, PC
20 Mary Ann Drive Nantucket, MA 02554
NantucketEngineer.com 508-825-5053

SITE PLAN OF LAND TO ACCOMPANY A NOTICE OF INTENT
PREPARED FOR:
5 SHERBURNE WAY, LCC
ADDRESS: 5 SHERBURNE WAY
ASSESSOR'S MAP 30, PARCEL 38
CERT. OF TITLE #15870
L.C.C. 15781–B, LOT B
SCALE: 1"=30' JULY 2, 2020

MASS. COORDINATE SYSTEM
ISLAND ZONE

NANTUCKET SOUND

approx. high water line (June 2020)

COASTAL BEACH

HIGH WATER MARK
LC. PL.15781-B

EXISTING PATH TO BE PLANTED WITH AMERICAN BEACH GRASS 12" O.C.

NHESP MAP LIMIT

PROPOSED BEACH ACCESS PATH

Zone AE
Elev. 9
Zone X

COASTAL DUNE

sand path to beach

approx. flood zone line as scaled from FIRM

dirt path to beach

REMOVE ASPHALT PATH ON LOCUS & RESTORE BANK VEGETATION

30-37
N/F THOMAS & EMMA GINLEY, TRST

bottom of bank

steps

asphalt path

steps

asphalt path

PROPOSED BEACH ACCESS STAIRS

30 37

COASTAL BANK

30 38

30 39

granite steps

approx top of bank

top of bank

420.48'

REMOVE ASPHALT PATH TO STEPS & RESTORE BANK VEGETATION

PROPOSED PATH

brush

edge of brush

463'±

30-39
N/F LYNN BRAITMAN &
GEORGE HENRY SPENCER JR,
CO-TRUSTEES et al

lawn

stoop

1 STY W/F DWELLING

porch

lawn

deck

brick retaining wall

BENCHMARK:
STONE
APRON EL.
59.50
NAVD88

driveway

DHCB FND

179.92'

DHCB FND

179.91'

DHCB FND

edge pavement

SHERBURNE WAY

ZONING DISTRICT: (R-1)
RESIDENTIAL - 1
MINIMUM LOT SIZE: 5,000 S.F.
MINIMUM FRONTAGE: 50 FT.
FRONT YARD SETBACK: 10 FT.
REAR/SIDE SETBACK: 5 FT.
GROUND COVER % : 30%
EXISTING GC % : %±
LOT AREA= 79,000± S.F.
(lot area calculated to water line shown on on LCPL 15781-B)

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NANTUCKET ENGINEERING & SURVEY, PC
20 Mary Ann Drive Nantucket, MA 02554
NantucketEngineer.com 508-825-5053

GRAPHIC SCALE
0 30 60 90
(IN FEET)
1 inch = 30 ft.

SITE PLAN OF LAND TO ACCOMPANY A NOTICE OF INTENT
PREPARED FOR:
5 SHERBURNE WAY, LCC
ADDRESS: 5 SHERBURNE WAY
ASSESSOR'S MAP 30, PARCEL 38
CERT. OF TITLE #15870
L.C.C. 15781-B, LOT B
SCALE: 1"=30' JULY 2, 2020

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Intent
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1202076
City/Town:NANTUCKET

A.General Information

1. Project Location:

a. Street Address	73 WASHINGTON STREET		
b. City/Town	NANTUCKET	c. Zip Code	02554
d. Latitude	41.27989N	e. Longitude	70.09433W
f. Map/Plat #	42.2.3	g.Parcel/Lot #	41.3

2. Applicant:

☐ Individual ☑ Organization

a. First Name	RACHAEL	b.Last Name	FREEMAN		
c. Organization	NANTUCKET ISLANDS LAND BANK				
d. Mailing Address	22 BROAD STREET				
e. City/Town	NANTUCKET	f. State	MA	g. Zip Code	02554
h. Phone Number	508-228-7240	i. Fax		j. Email	rfreeman@nantucketlandbank.org

3.Property Owner:

☐ more than one owner

a. First Name		b. Last Name			
c. Organization	NANTUCKET ISLANDS LAND BANK				
d. Mailing Address	22 BROAD STREET				
e. City/Town	NANTUCKET	f.State	MA	g. Zip Code	02554
h. Phone Number	508-228-7240	i. Fax		j.Email	rfreeman@nantucketlandbank.org

4.Representative:

a. First Name		b. Last Name	
c. Organization			
d. Mailing Address			
e. City/Town	f. State		g. Zip Code
h.Phone Number	i.Fax		j.Email

5.Total WPA Fee Paid (Automatically inserted from NOI Wetland Fee Transmittal Form):

a.Total Fee Paid	0.00	b.State Fee Paid	0.00	c.City/Town Fee Paid	0.00

6.General Project Description:

THIS PROPERTY ORIGINALLY HAD FIVE SMALL COTTAGES, ALL OF WHICH WERE REMOVED. THE SITE IS CURRENTLY GRASS EDGED ALONG WASHINGTON STREET BY A BOARD FENCE. THE WORK PROPOSED IN THIS NOTICE OF INTENT INCLUDES REMOVAL OF THE EXISTING FENCE AND INSTALLATION OF AN IN-KIND, 4-FOOT HIGH BOARD FENCE ALONG THE WESTERN PROPERTY LINE, LANDSCAPING BEDS, PLANTINGS, BENCHES AND A BRICK WALKWAY THROUGH THE SITE.

7a.Project Type:

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Limited Project Driveway Crossing
4. ☐ Commercial/Industrial
5. ☐ Dock/Pier
6. ☐ Utilities

List of Plans and Supporting Documents
73 Washington Street
Nantucket, Massachusetts
Notice of Intent

1. Project Narrative, Resource Area Descriptions and Waiver Request
2. Landscape Design
3. Locus Map
4. Resource Area Flags
5. FEMA Flood Map
6. Topography Map
7. Quitclaim Deed
8. Property Plan

NANTUCKET LAND BANK

Project Narrative

The Nantucket Islands Land Bank purchased the property at 73 Washington Street in 2018 from the Nantucket Island School of Design and the Arts (NISDA). While it is only a tenth of an acre, it was purchased to create a public park and to allow the Town to expand the turning radius at the corner of Washington and Francis Streets for truck passage. A similar purchase of 50 Union Street was made in 2014, which resulted in the installation of a small park and the turning radius at the corner of Francis and Union Streets being expanded.

This property originally had five small cottages, all of which were removed. The site is currently grass edged along Washington Street by a board fence. The work proposed in this Notice of Intent includes removal of the existing fence and installation of an in-kind, 4-foot high board fence along the western property line, landscaping beds, plantings, benches and a brick walkway through the site (Fig. 2).

Resource Areas

Seventy-three Washington Street is located to the west and across the street from Nantucket Harbor. Areas on the property subject to protection under the Massachusetts Wetlands Protection Act are Coastal Beach and Land Subject to Coastal Storm Flowage (LSCSF). Although the property is located outside of the 50-foot buffer to a Coastal Beach, the entire site is located within Land Subject to Coastal Storm Flowage (LSCSF) (Fig. 4 and 5).

***Land Subject to Coastal Storm Flowage*:** Land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record, or storm of record, whichever is greater.

***Coastal Beach*:** Unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing human-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.

Waiver Request

As this site was previously single-family cottages, this project improves the capacity of this site to retain flood waters and meet the performance standards of LSCSF. We do not expect adverse effects to the Coastal Beach as the project site is outside of the 50-foot buffer.

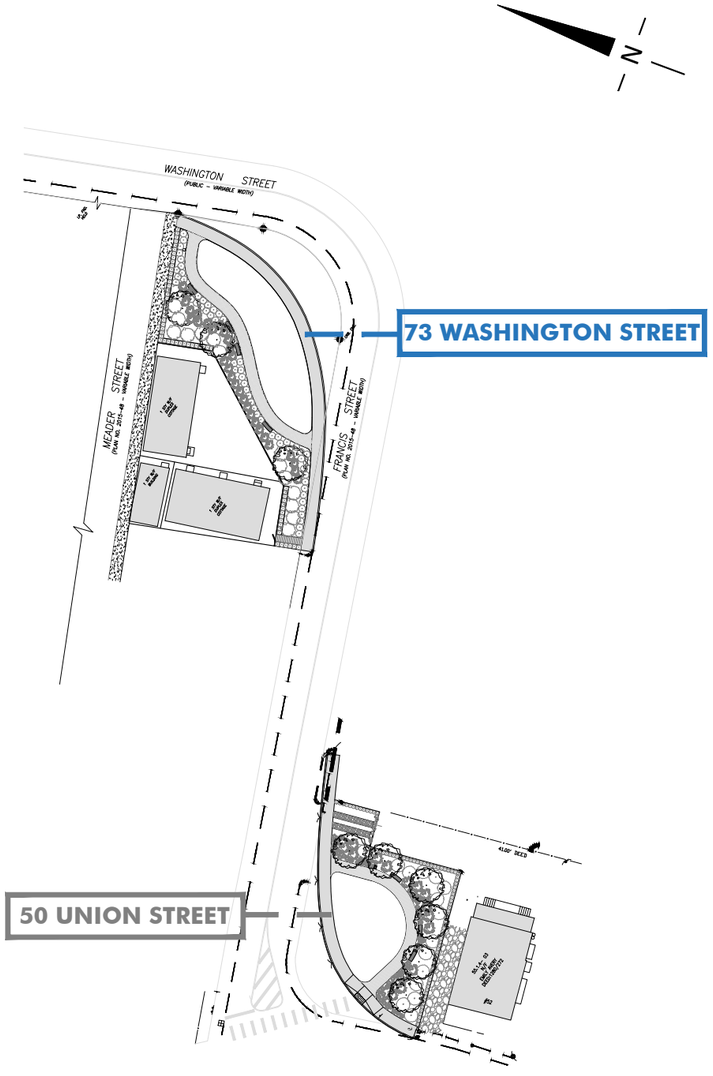
NANTUCKET LAND BANK

Massachusetts Natural Heritage and Endangered Species Review

The property at 73 Washington Street is not subject to Massachusetts Natural Heritage and Endangered Species Program Review as it is located outside of Estimated Habitat.

GIS MAP: 42.2.3 / 41.3

AERIAL MAP: 42.2.3 / 41.3



SCALE: 1/64" =1'-0"

AHERN LLC
LANDSCAPE DESIGN STUDIO
PO Box 2213, Nantucket MA 02584
T (508) 333-5138 F (508) 325-4616
design@ahernllc.com

73 WASHINGTON STREET

JUNE 3, 2020

Figure 3. Locus map

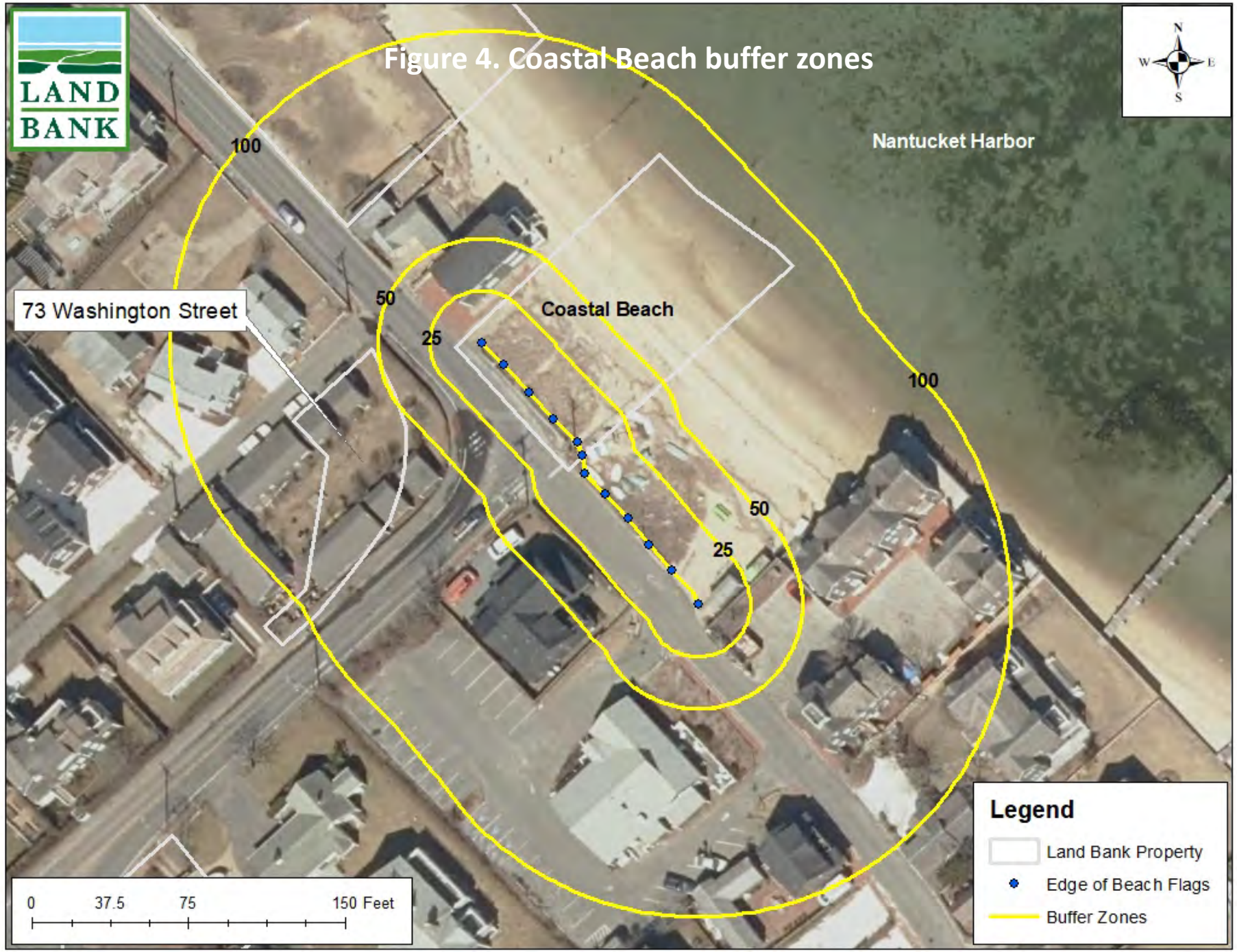
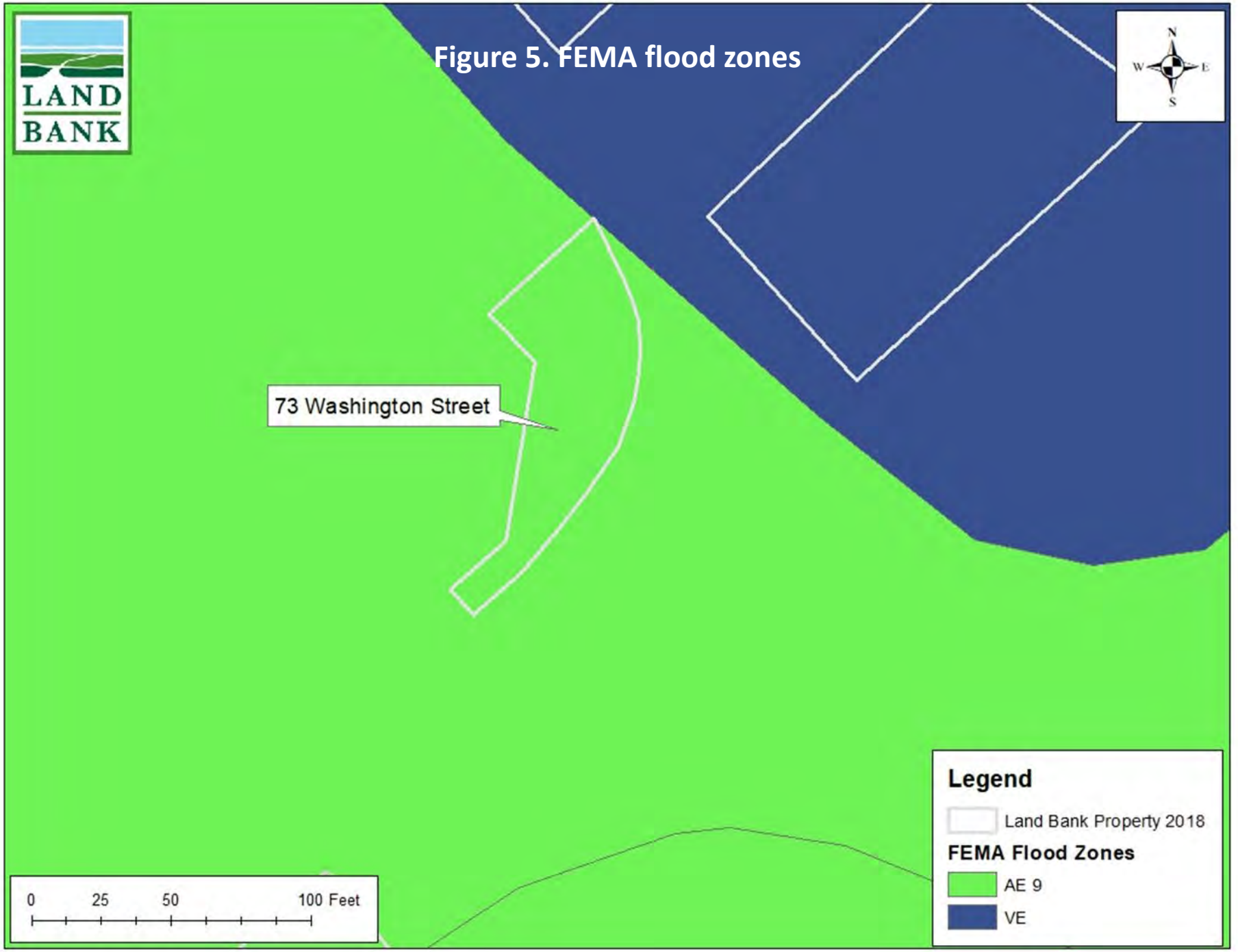
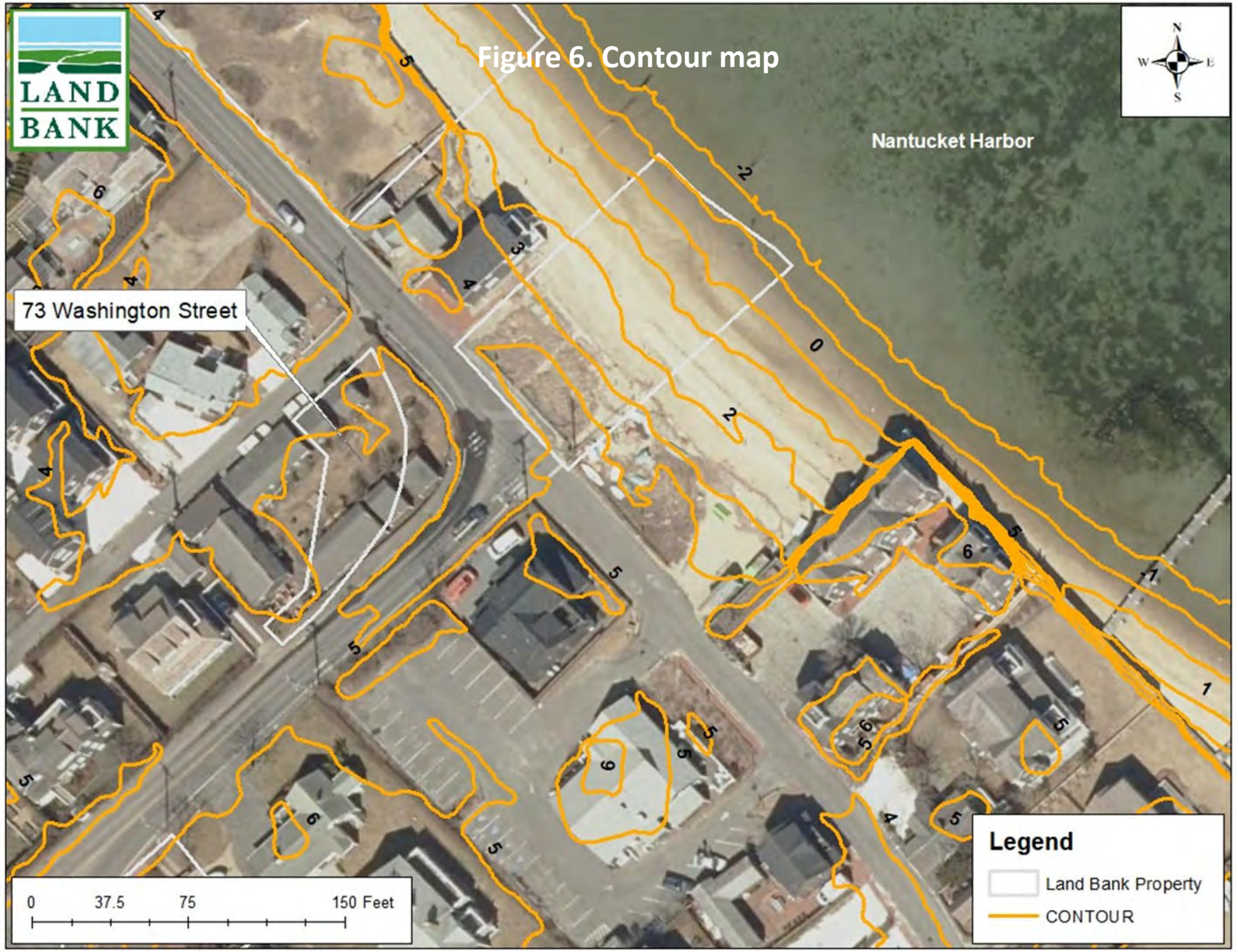
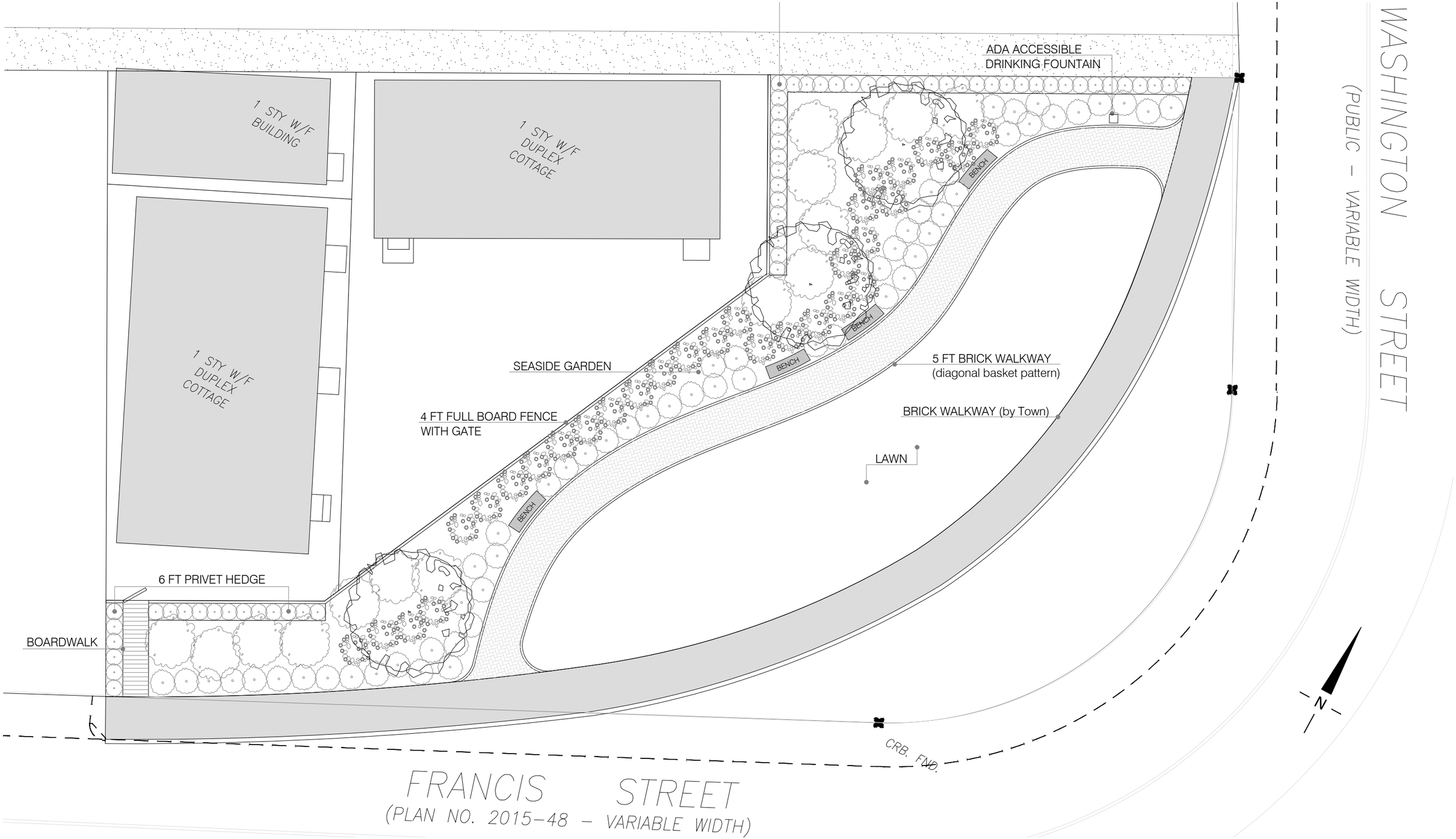


Figure 4. Coastal Beach buffer zones
LAND BANK
N
W
E
S
Nantucket Harbor
73 Washington Street
Coastal Beach
100
50
25
100
50
25
0
37.5
75
150 Feet
Legend
Land Bank Property
Edge of Beach Flags
Buffer Zones


LAND BANK
Figure 5. FEMA flood zones
N
W
E
S
73 Washington Street
0
25
50
100 Feet
Legend
Land Bank Property 2018
FEMA Flood Zones
AE 9
VE


LAND BANK
Figure 6. Contour map
N
W
E
S
Nantucket Harbor
73 Washington Street
0
37.5
75
150 Feet
Legend
Land Bank Property
CONTOUR



AHERN LLC
LANDSCAPE DESIGN STUDIO
PO Box 2213, Nantucket MA 02584
T (508) 333-5138 F (508) 325-4616
design@ahernllc.com

73 WASHINGTON STREET

SCHEMATIC SITE PLAN

SCALE: 3/32" = 1'-0"

JUNE 3, 2020

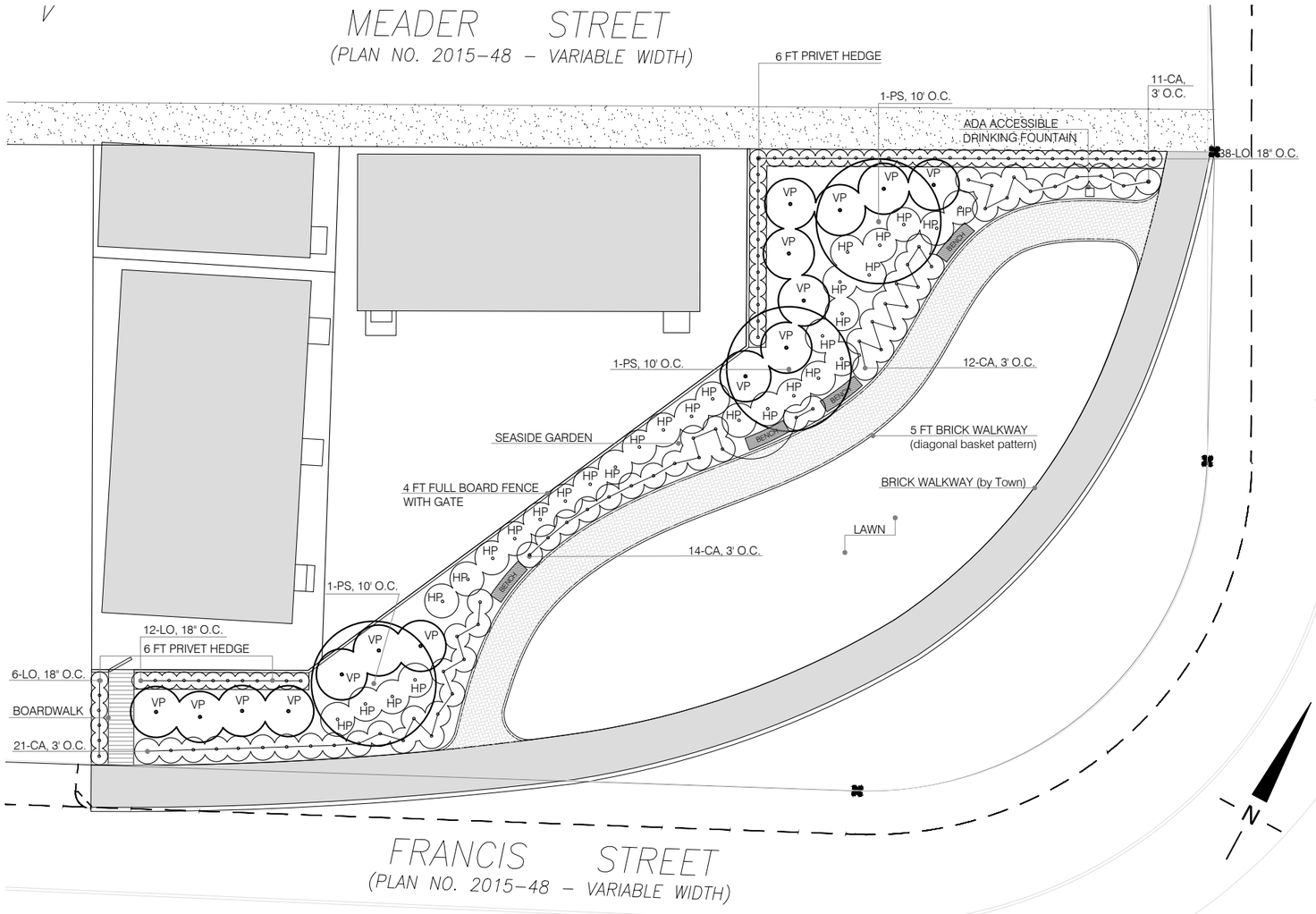
CA - CLETHRA

PS - KWANZAN CHERRY

LO - CALIFORNIA PRIVET

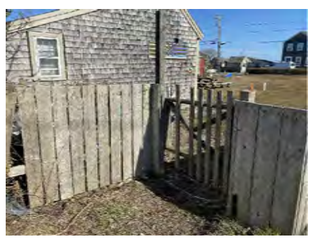
VP - VIBURNUM PLIC. 'MARIESII

HP - LIMELIGHT HYDRANGEA



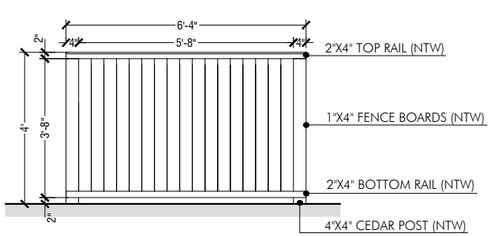
PLANTING SCHEDULE

Symbol	Amount	Botanical Name	Common name	Size	Spec.
CA	58	Clethra alnifolia 'Ruby Spice'	Ruby Spicce Summersweet	5 g.	3' o.c.
HP	30	Hydrangea pan. 'LimeLight'	LimeLight Hydrangea	10 g.	4' o.c.
LO	56	Ligustrum ovalifolium	California Privet	5/6' b&b HVY	18" o.c.
PS	3	Prunus serrulata "Kwanzan'	Kwanzan Cherry	3"/3.5" cal.	10' o.c.
VP	15	Viburnum plicatum 'Mariesii"	Mariesii Viburnum	4/5' b&b	6' o.c.



EXISTING FENCE

No scale



4 FT FULL BOARD FENCE (TME)

1/4" = 1'- 0"

AHERN LLC
LANDSCAPE DESIGN STUDIO
PO Box 2213, Nantucket MA 02584
T (508) 333-5138 F (508) 325-4616
design@ahernllc.com

73 WASHINGTON STREET

LAYOUT/PLANTING PLAN

SCALE: 1/16" = 1'

JUNE 3, 2020

Exhibit "A"

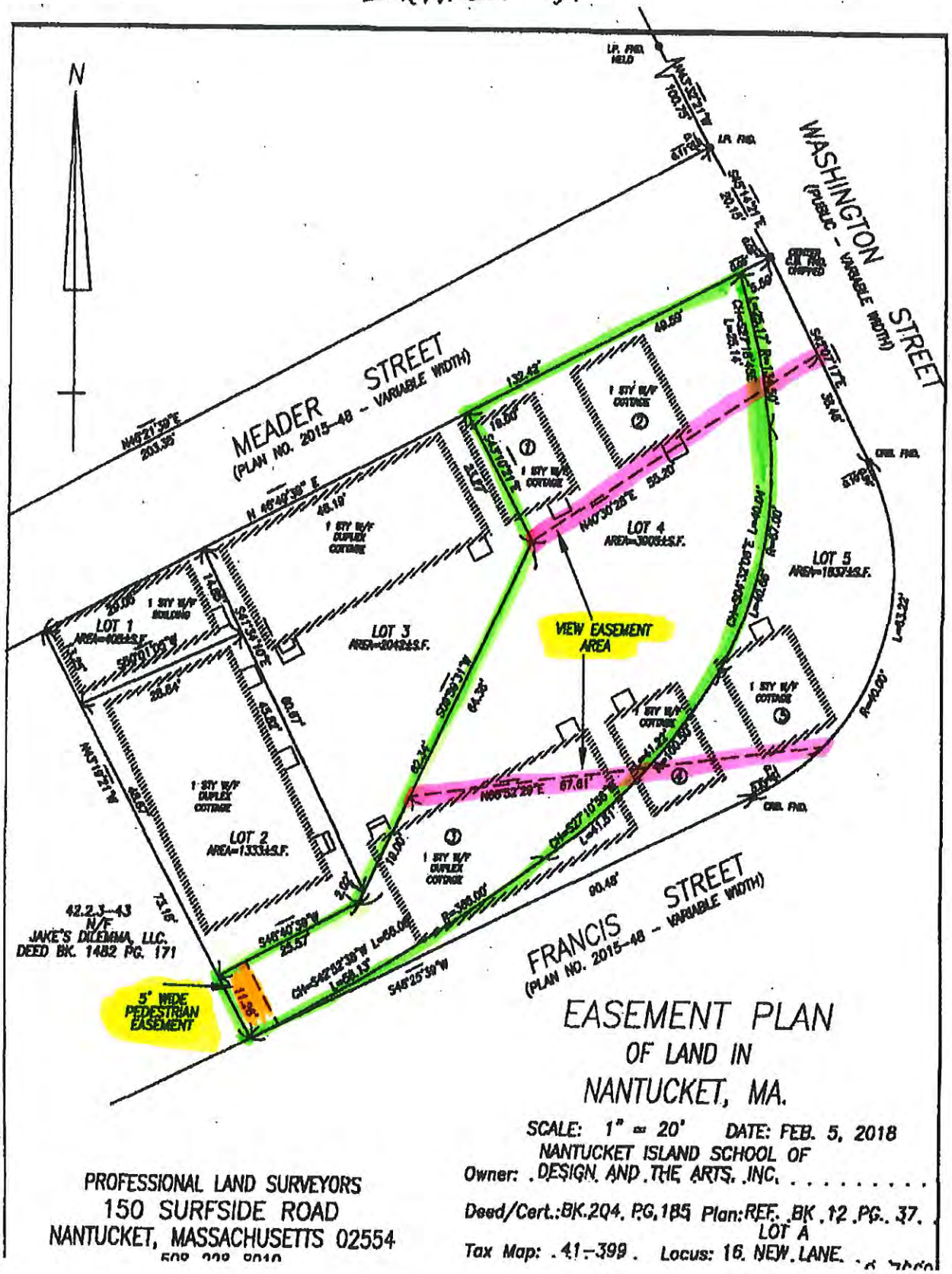


Exhibit A

Bk: 1689 Pg: 91 Page: 1 of 5
Doc: DD 04/05/2019 09:14 AM

DEED

NANTUCKET ISLAND SCHOOL OF DESIGN AND THE ARTS, INC., a Massachusetts not-for-profit corporation, having its principal place of business at 21 Wauwinet Road, Nantucket, MA, for consideration paid in the amount of $1,068,271.00, grant to TOWN OF NANTUCKET, a Massachusetts municipal corporation acting by and through its Board of Selectmen, with a mailing address of 16 Broad Street, Nantucket, Massachusetts 02554, with QUITCLAIM COVENANTS,

That certain parcel of land, being a portion of the land now known and numbered as 71 Washington Street, Nantucket, Nantucket County, Massachusetts, bounded and described as follows:

Lot 5 on a plan prepared by Michael Connolly & Associates, Inc., dated November 30, 2017, recorded with Nantucket Deeds as Plan No. 2018-12 (the "Plan"). Said land contains 1,837± square feet, more or less, according to said plan.

For title, see deed recorded with Nantucket Registry of Deeds in Book 204, Page 185.

This conveyance is made subject to a restriction, hereby imposed upon said Lot 5, for the benefit of Grantor's other land shown as Lots 1, 2 and 3 on the Plan (the "Benefitted Parcels"), that said Lot 5 may only be used for roadway purposes. The foregoing restriction is imposed in order to protect the view of Nantucket Harbor from the Benefitted Parcels and the structures now or in the future located thereon.

The Grantor hereby reserves, as appurtenant to the Benefitted Parcels, the following easements:

(a) A view easement hereby reserved by the Grantor as appurtenant to the Benefitted Parcels, over that portion of said Lot 5 shown as "View Easement Area" on the Easement Plan dated February 5, 2018, drawn by Michael Connolly & Associates, Inc., attached hereto as

Exhibit A (the "Exhibit Plan"). With the exception of street lights, poles, and other utilities and improvements generally used for roadway purposes, no vegetation or above-ground structures shall be permitted within the View Easement Area, except for vegetation or above-ground structures which are four feet (4') or less in height. In the event conditions arise which do not comply with the provisions of this paragraph, Grantor shall give written notice thereof to Grantee, and if thirty (30) days elapse after the notice is delivered to Grantee without Grantee curing said non-compliance, Grantor shall have the right to enter onto said Lot 5 to restore compliance with the view easement within a thirty (30) day period following the thirty (30) notice period. If Grantor fails to cure the breach within said thirty (30) day period, a new notice of breach to Grantee will be required. The foregoing view easement is reserved in order to protect the view of Nantucket Harbor from the Benefitted Parcels and the structures now or in the future located thereon.

(b) An easement, appurtenant to the Benefitted Parcels to maintain, repair, and replace currently existing underground utility systems, including wires, pipes, conduits and the like, serving the structures located on the Benefitted Parcels, to the extent that said underground utility systems are located on said Lot 5.

The foregoing easements and restrictions reserved to benefit Lots 1, 2 and 3 shall run with the title to the respective lots and shall be binding upon and inure to the benefit of the owners from time to time of each lot, and their heirs, successors, and assigns. In the exercise of the foregoing easements, each holder of a dominant estate by accepting title subject to and with the benefit of the easement, permanently undertakes and agrees to indemnify and save forever harmless the owner of the servient estate from and against all loss, liability, damage or expense which may be incurred by the holder of the servient estate as a result of the exercise of the easement by the holder of the dominant estate and those claiming by, through and under him or it. The foregoing indemnity shall run with the title to the land and bind and inure to the benefit of the parties hereto and their successors in title to their respective estates. Upon any disturbance of the surface of said easement areas in the exercise of an easement, the holder of the dominant estate shall restore the surface thereof to its condition immediately prior to such disturbance, as speedily as reasonably practicable thereafter.

This conveyance is further made subject to, and with the benefit of the foregoing:

1. Appurtenant Construction Easement set forth in Deed dated February 13, 2018, recorded with Nantucket Deeds at Book 1633, Page 314, to the extent in force and applicable.

2. Order of Taking by Eminent Domain dated June 24, 2015, recorded with Nantucket Deeds at Book 1492, Page 196.

The Grantor hereby certifies that the sale of the aforesaid premises does not constitute a sale of all, or substantially all, of the assets of the Grantor in the Commonwealth of Massachusetts.

Executed and sealed on April 3, 2019.

Nantucket Island School of
Design and the Arts, Inc.
By:
Kathy Kelm for NISDA
Kathy Kelm, President and
Treasurer

COMMONWEALTH OF MASSACHUSETTS

Nantucket, ss.

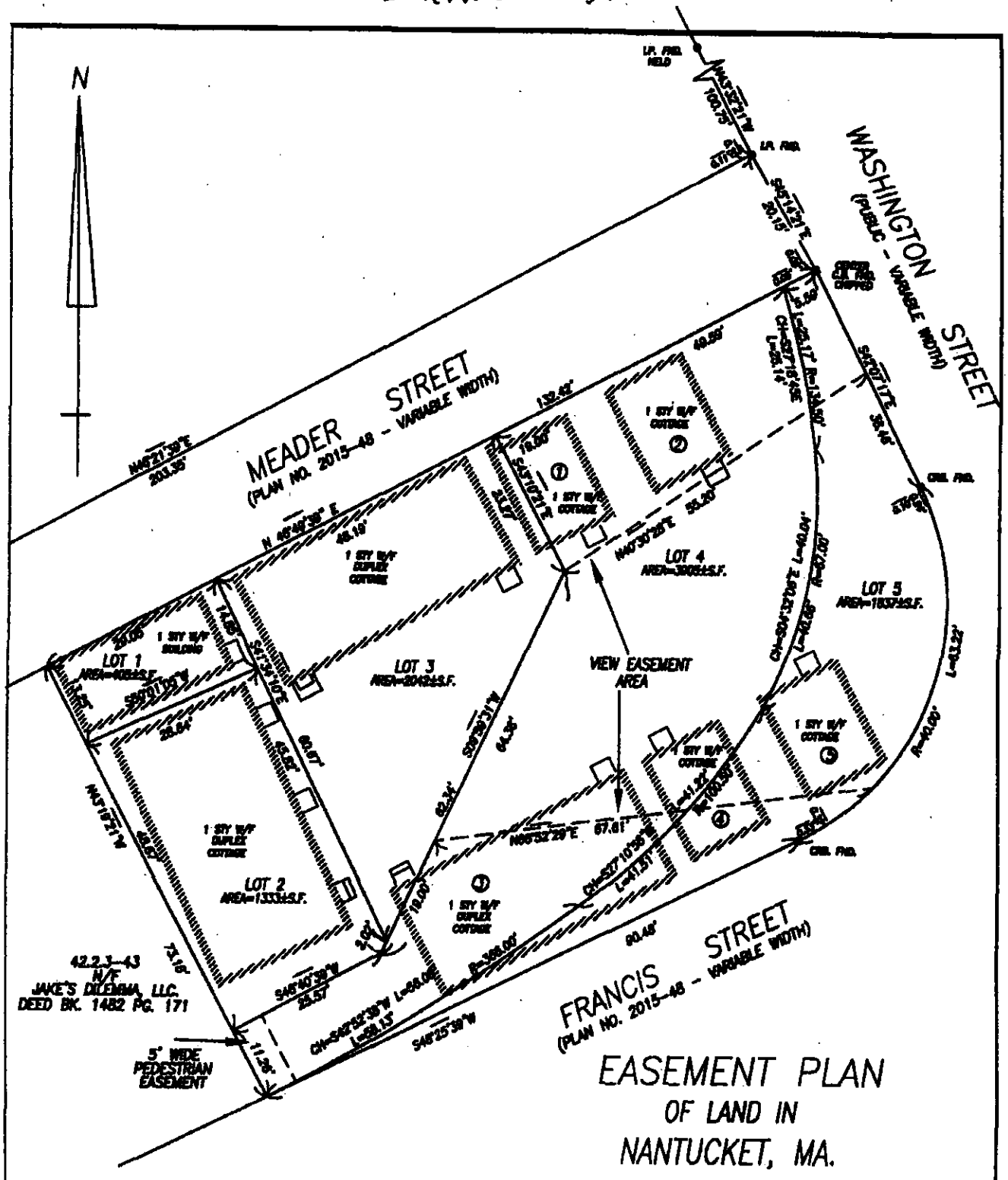
On this 3rd day of April, 2019, before me, the undersigned notary public, personally appeared Kathy Kelm, proved to me through satisfactory evidence of identification, which was personally known to me to be the person whose name is signed on the preceding or attached document, and acknowledged to me that she signed voluntarily, as her free act and deed and the free act and duly authorized deed of Nantucket Island School of Design and the Arts, Inc., for its stated purpose and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of her knowledge and belief.

Marianne Hanley
Notary Public
My commission expires:

MARIANNE HANLEY
Notary Public
Commonwealth of Massachusetts
My Commission Expires
September 21, 2023

NANTUCKET LAND BANK
CERTIFICATE
☐ Paid $
☑ Exempt A
☐ Non-applicable
40590 4/5/19
No. Date
Authorization

Exhibit "A"



EASEMENT PLAN
OF LAND IN
NANTUCKET, MA.

SCALE: 1" = 20' DATE: FEB. 5, 2018

NANTUCKET ISLAND SCHOOL OF
Owner: DESIGN AND THE ARTS, INC.

Deed/Cert.:BK.204, PG.185 Plan:REF. BK.12 PG. 37. LOT A

Tax Map: 41-399. Locus: 16 NEW LANE

PROFESSIONAL LAND SURVEYORS
150 SURFSIDE ROAD
NANTUCKET, MASSACHUSETTS 02554
508 228 2010

Exhibit A

ACCEPTANCE OF DEED

The undersigned Board of Selectmen of the Town of Nantucket hereby accept the foregoing deed of Lot 5, Washington Street, in said Nantucket, from Nantucket Island School of Design and the Arts, Inc., pursuant to the authority of Section 3.3 of Chapter 289 of the Acts of 1996, this 27 day of March, 2019.

TOWN OF NANTUCKET
BOARD OF SELECTMEN

Jason Bridges

Dawn E. Hill Holdgate

Matthew G. Fee

Rita Higgins

James R. Kelly

COMMONWEALTH OF MASSACHUSETTS

Nantucket, ss.

On this 27 day of March, 2019, before me, the undersigned Notary Public, personally appeared Jason Bridges, Dawn E. Hill Holdgate, Matthew G. Fee, Rita Higgins and James R. Kelly as Members of the Board of Selectmen of the Town of Nantucket who proved to me by satisfactory evidence of identification, which was personal knowledge of the undersigned, to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose, as the free act and deed of the Board of Selectman of the Town of Nantucket.

Notary Public
My Commission

ERIKA DAVIDSON MOONEY
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
November 1, 2024

661248NANT 19713/0055

NANTUCKET COUNTY Received & Entered
Attest: Jennifer H. Ferreira, Register of Deeds

LEC WETLANDS WILDLIFE WATERWAYS

Notice of Intent Application

July 1, 2020

Subject Property
11 East Hallowell Lane
Map 30, Parcel 17
Nantucket, Massachusetts

Applicant
Steven & Martha Peterson
109 Duke Street
Alexandria, VA 22314

Property Owner
Hope Scott Rogers, Janet P. Scott, & Elliot M. Scott
308 East 79th Street, Apt. 10L
New York, NY 10075

LEC Environmental Consultants, Inc.

12 Resnik Road, Suite 1
Plymouth, MA 02360
508-746-9491
508-746-9492 fax

www.lecenvironmental.com

July 1, 2020

Email/Overnight Mail

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application [LEC File #PetM\20-205.01]
11 East Hallowell Lane
Map 30, Parcel 17
Nantucket, Massachusetts

Dear Members of the Commission:

On behalf of the Applicants, Steven & Martha Peterson, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application for proposed lawn/landscaping within the 100-foot Buffer Zone to protectable Resource Areas on the above-referenced subject parcel. Resource Areas on the subject parcel include Coastal Bank, Coastal Dune, Coastal Beach, and Land Subject to Coastal Storm Flowage (LSCF) protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). The following provides a description of the existing conditions and proposed work activities as depicted on the *Site Plan to Accompany the Notice of Intent*, prepared by Blackwell & Associates., dated July 1, 2020.

Existing Conditions

The 44,430± square foot subject parcel is located at the north of East Hallowell Lane, affording frontage on Nantucket Sound (Appendix A, Figures 1 & 2). Single-family residential lots occur to the east and west. The subject parcel is currently improved by a single-family dwelling, accessed via a dirt/gravel driveway.

The dwelling is currently surrounded by low-growing vegetation dominated by Pennsylvania sedge (*Carex pensylvanica*), poison ivy (*Toxicodendron radicans*), orchard grass (*Dactylis glomerata*), and oxeye daisy (*Leucanthemum vulgare*), along with sporadic beach pea (*Lathyrus japonicus*), American beach grass (*Ammophila breviligulata*), seaside goldenrod (*Solidago sempervirens*), bayberry (*Myrica pensylvanica*), and eastern red cedar (*Juniperus virginiana*) and Japanese black pine (*Pinus thunbergii*) seedlings. A distinct bayberry patch is located within the northeasterly portion of the upland. Moderately dense woody vegetation, predominantly bayberry, along with bush honeysuckle (*Lonicera* sp.) and privet (*Ligustrum* sp.), occur along the westerly and easterly property perimeter. Based on the abutting dense vegetation, it appears that the low-growing vegetation has been historically mowed. Grassed paths are located north of the dwelling and connect to beach stairs extending over the Coastal Bank.

The Coastal Bank, Coastal Dune, Coastal Beach, and LSCSF boundaries were approved by the Nantucket Conservation Commission on April 25, 2018, through the issuance of a Determination of Applicability. Furthermore, a Determination of Applicability was issued on December 18, 2019, for a septic upgrade, which included septic tanks, pump chamber, and piping between the 50-100 foot Buffer Zone to the Coastal Bank.

FEMA Designation

According to the June 9, 2014 FEMA *Flood Insurance Rate Map* (Map Number 25019C0086G), Flood Zone VE (El. 9) occurs along the Coastal Dune/Coastal Beach interface (Appendix A, Figure 3). Remaining portions of the subject parcel are primarily located within Flood Zone X, *Areas determined to be outside the 0.2% annual chance flood*.

NHESP Mapping

According to the 14th Edition of the Massachusetts *Natural Heritage Atlas* (effective August 1, 2017) published by the Natural Heritage & Endangered Species Program (NHESP), Priority/Estimated Habitat occurs north of the dwelling along the seaward face of the Coastal Bank (Appendix A, Figure 4). All proposed work is located outside of mapped Priority/Estimated Habitat and therefore, NHESP review is not required.

Proposed Conditions

The Applicant is proposing lawn and landscaping surrounding the dwelling. As previously stated, these areas appear to have been historically mowed due to the lack of dense woody vegetation that surrounds the subject parcel. A portion of the lawn footprint overlaps with the septic tanks and pump chamber (to be installed). All work is proposed upgradient of the 25-foot Buffer Zone to the Coastal Bank. The aforementioned bayberry patch within the northeasterly portion of the upland will remain as will the low-growing vegetation within the 25-foot Buffer Zone and eastern portion of the subject parcel. The following vegetation may be intermittently planted along the edges of the lawn: American beachgrass, beach plum (*Prunus maritima*), bayberry, and seaside rose (*Rosa rugosa*).

The proposed project has been designed in compliance with the WPA and *Bylaw*. No Waivers are required.

Thank you for your consideration of this NOI. If you should have any questions or require additional information in advance of the July 23, 2020 Public Hearing, please do not hesitate to contact me.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

cc: DEP; Peterson

Appendices

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Nantucket
City/Town

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

11 East Hallowell Lane	Nantucket	02554
a. Street Address	b. City/Town	c. Zip Code

Latitude and Longitude: 41°17'37.61"N (d. Latitude) 70° 7'11.54"W (e. Longitude)

30	17
f. Assessors Map/Plat Number	g. Parcel /Lot Number

2. Applicant:

Steven & Martha	Peterson
a. First Name	b. Last Name

c. Organization

109 Duke Street
d. Street Address

Alexandria	VA	22314
e. City/Town	f. State	g. Zip Code

		marthashawpeterson@gmail.com
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

Hope Scott Rogers, Janet P. Scott, & Elliot M. Scott	
a. First Name	b. Last Name

c. Organization

308 East 79th Street, Apt. 10L
d. Street Address

New York	NY	10075
e. City/Town	f. State	g. Zip Code

		richard@gliddenandglidden.com
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

Brian	Madden
a. First Name	b. Last Name

LEC Environmental Consultants, Inc.
c. Company

12 Resnik Road, Suite 1
d. Street Address

Plymouth	MA	02360
e. City/Town	f. State	g. Zip Code

508-746-9491		bmadden@lecenvironmental.com
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$110.00	$42.50	$67.50
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

A. General Information (continued)

6. General Project Description:

Proposed lawn/landscaping within 100-foot Buffer Zone to Coastal Bank, Coastal Dune, Coastal Beach, and LSCSF.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
Nantucket	18048
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 1: USGS Topographic Map

11 East Hallowell Lane
Nantucket, Massachusetts

N

June 19, 2020

LEC Environmental Consultants, Inc.

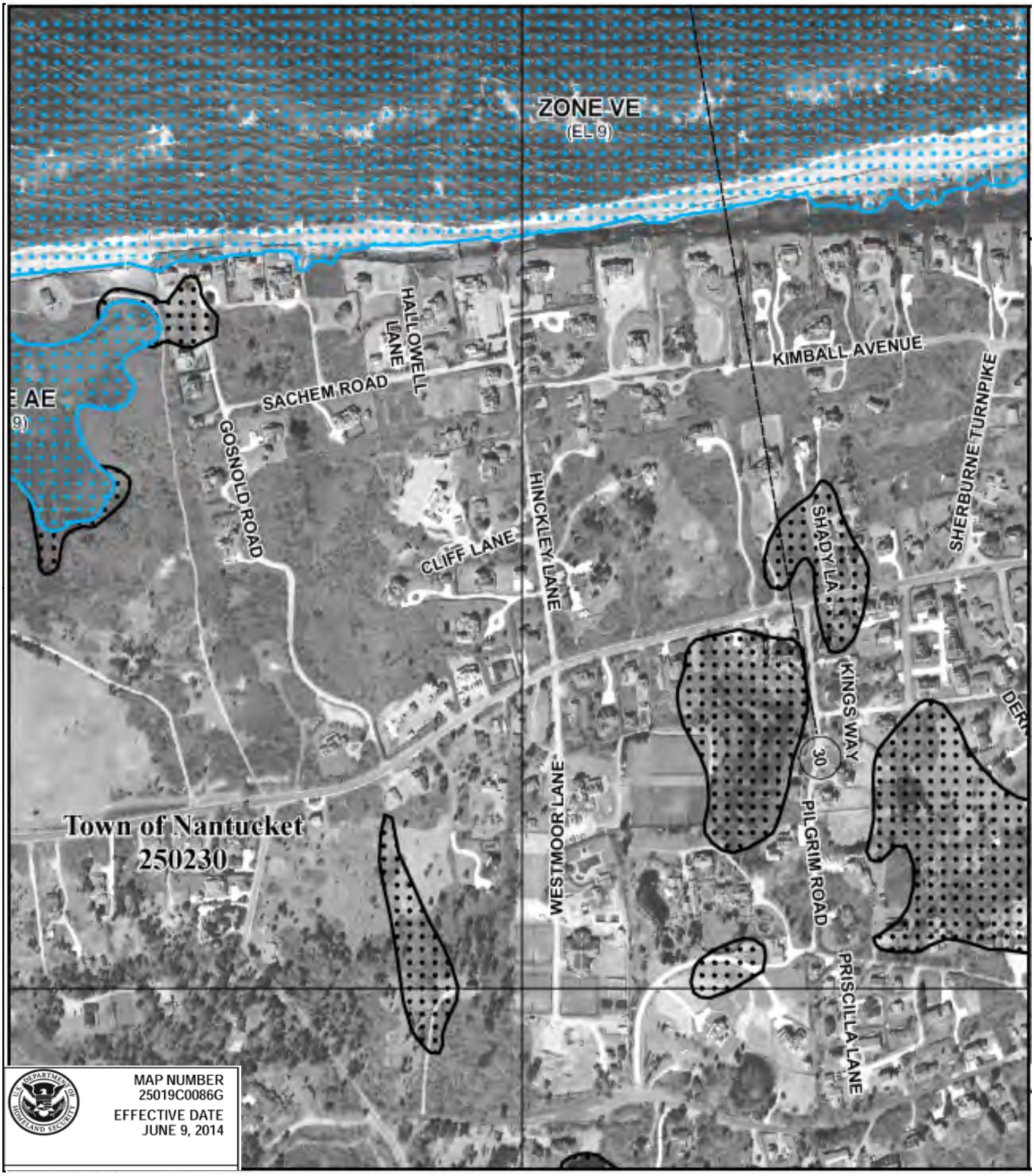
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 2: Aerial Orthophoto Map

11 East Hallowell Lane
Nantucket, Massachusetts

N

June 19, 2020



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 3: FEMA Flood Insurance Rate Map

11 East Hallowell Lane
Nantucket, Massachusetts

N

June 22, 2020

LEC Environmental Consultants, Inc.
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 4: NHESP Map

11 East Hallowell Lane
Nantucket, Massachusetts

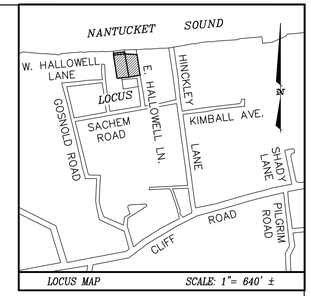
N

June 19, 2020


1BTA 63

CURRENT ZONING CLASSIFICATION:
Residential 20 (R–20)

MINIMUM LOT SIZE: 20,000 S.F.
MINIMUM FRONTAGE: 75 FT.
FRONT YARD SETBACK: 30 FT.
REAR/SIDE SETBACK: 10 FT.
GROUND COVER % : 12.5%



LOCUS MAP SCALE: 1"= 640' ±

NANTUCKET SOUND

11:00 A.M. 05/05/10

EXIST. SHORELINE PER L.C.C. 12022–D
EXIST. WATER LINE
EXIST. WOOD PILINGS (TYP.)
SHORELINE PER L.C.C. 12022–P
LOT 45
L.C.C. 12022–P
N/F
THOMAS JEWETT HALLOWELL
CERT. #1460
EXIST. WOOD GROIN
BEACH
EXIST. EDGE OF VEGETATION
EXIST. SAND PATH
DUNE
EXIST. BOTTOM OF BANK
EXIST. BEACH STEPS
EXIST. TOP OF BANK
LIMIT OF COASTAL WETLAND
DECK
EXIST. BEACH STEPS
EXIST. GRASS PATH
LOT 8A
LOT 9A
PROPOSED LAWN
PROPOSED LAWN
8,965 S.F.±
EXIST. 2 STY. W/F DWELLING
1,708 S.F.±
THRESHOLD ELEV.=31.9
#11
BENCHMARK
SRF
PF
BASEMENT STEPS
I–PIPE FND.
EXIST. GATE
EXIST. GRAVEL
HALLOWELL LANE (EAST)
155.00'
203'±
181.00'
106.30'
105.00'
100'
50'
25'
20'±
59'±
23'±
15'±
20'±
17.7'±
20.0'
143.04'

NOTE: THE WOOD GROINS ARE SHOWN ON WATERWAYS LICENSE #5190. DOC. #10357.

BENCHMARK:
SQUARE–CUT SET IN CONCRETE STEP.
EL.=27.86 '34 HTL

30–93
N/F
WILLIAM F. HOPKINS, TRUSTEE
CERT. #10930
L.C.C. 12022–B, LOTS 10, 12 & 14
L.C.C. 12022–H, LOT 7A

30–99
N/F
SACHEM KNOLL NOMINEE TRUST
CERT. #17243
L.C.C. 12022–B
LOTS 1 & 3

30–93
N/F
WILLIAM F. HOPKINS, TRUSTEE
CERT. #10930
L.C.C. 12022–B, LOTS 10, 12 & 14
L.C.C. 12022–H, LOT 7A

LEGEND

I–PIPE	DENOTES IRON PIPE FOUND
	DENOTES EXIST. WATER SHUT–OFF
SRF	DENOTES EXIST. SPLIT RAIL FENCE
PF	DENOTES EXIST. WOOD PLANK FENCE
—x—x—	DENOTES EXIST. SAND FENCE
10—	DENOTES EXIST. GRADE CONTOUR
5.3+	DENOTES EXIST. GRADE SPOT ELEVATION

LOT AREA TABLE

LOT	AREA	UPLAND AREA
8A	21,142 S.F.±	10,477 S.F.±
9A	20,385 S.F.±	8,591 S.F.±
45	2,658 S.F.±	N/A

NOTE: SITE CONDITIONS ARE BASED ON A 2010 SURVEY.

Site Plan of Land
in
Nantucket, Mass.
Prepared for
MARTHA PETERSON

Scale: 1"= 20' JULY 01, 2020

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228–9026

GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

OWNER INFORMATION

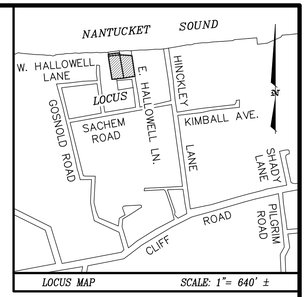
ROBERT MONTGOMERY SCOTT
HELEN ELLIOT SCOTT
CERT. OF TITLE #18048
L.C.C. 12022–D, LOT 8A
L.C.C. 12022–P, LOT 45
L.C.C. 12022–H, LOT 9A
ASSESSOR'S MAP 30, PARCEL 17
#11 E. HALLOWELL LN.

T:\JEFF 26 JOB 83
V:\DRAWFILES\B7264\SP.dwg 6/10/2010 11:22:37 AM EDT

B8797

CURRENT ZONING CLASSIFICATION:
Residential 20 (R–20)

MINIMUM LOT SIZE: 20,000 S.F.
MINIMUM FRONTAGE: 75 FT.
FRONT YARD SETBACK: 30 FT.
REAR/SIDE SETBACK: 10 FT.
GROUND COVER % : 12.5%



LOCUS MAP SCALE: 1"= 640' ±

NANTUCKET SOUND

NOTE: THE WOOD GROINS ARE SHOWN ON WATERWAYS LICENSE #5190. DOC. #10357.

30–93
N/F
WILLIAM F. HOPKINS, TRUSTEE
CERT. #10930
L.C.C. 12022–B, LOTS 10, 12 & 14
L.C.C. 12022–H, LOT 7A
#7 HALLOWELL LANE

30–99
N/F
SACHEM KNOLL NOMINEE TRUST
CERT. #17243
L.C.C. 12022–B
LOTS 1 & 3
#3–5 E. HALLOWELL LANE

30–98
N/F
STEVEN L. COHEN, TRUSTEE
SIX EAST HALOWELL LANE NOMINEE TRUST
DEED Bk./Pg.: 1731/116
L.C.C. 12022–B, LOT 11
#6 E. HALLOWELL LANE

BENCHMARK:
SQUARE–CUT SET
IN CONCRETE STEP.
EL.=27.86 '34 HTL

LEGEND

I–PIPE	*DENOTES IRON PIPE FOUND*
	DENOTES EXIST. WATER SHUT–OFF
SRF	*DENOTES EXIST. SPLIT RAIL FENCE*
PF	*DENOTES EXIST. WOOD PLANK FENCE*
	DENOTES EXIST. SAND FENCE
10	*DENOTES EXIST. GRADE CONTOUR*
5.3+	*DENOTES EXIST. GRADE SPOT ELEVATION*

OWNER INFORMATION

ROBERT MONTGOMERY SCOTT
HELEN ELLIOT SCOTT
CERT. OF TITLE #18048
NOTICE Doc. #160024
L.C.C. 12022–D, LOT 8A
L.C.C. 12022–P, LOT 45
L.C.C. 12022–H, LOT 9A
ASSESSOR'S MAP 30, PARCEL 17
#11 E. HALLOWELL LN.

Site Plan of Land
in
Nantucket, Mass.
Prepared for
MARTHA PETERSON

Scale: 1"= 20' JULY 16, 2020

BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TEASDALE CIRCLE
NANTUCKET, MASS. 02554
(508) 228–9026

GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

T:\JEFF 26 JOB 83
V:\DRAWFILES\B8797\SP.dwg 7/16/2020 8:11:38 AM EDT

B8797

LEC WETLANDS WILDLIFE WATERWAYS

Notice of Intent Application

July 1, 2020

Subject Property
4 Stone Barn Way
Map 29, Parcel 914
Nantucket, Massachusetts

Applicant/Property Owner
ABH LLC
74 Beard Way
Needham, MA 02492

LEC Environmental Consultants, Inc.

12 Resnik Road, Suite 1
Plymouth, MA 02360
508-746-9491
508-746-9492 fax

www.lecenvironmental.com

LEC WETLANDS WILDLIFE WATERWAYS

July 1, 2020

Email/FedEx Delivery

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application [LEC File #: BrEI\20-043.01]
4 Stone Barn Way
Map 29, Parcel 914
Nantucket, Massachusetts

Dear Members of the Commission:

On behalf of the Applicant, ABH LLC, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application to elevate and reconstruct the foundation to the existing single-family dwelling on the above-referenced subject parcel along with landscape updates. The foundation upgrade will require modifications to dwelling access and egress. Proposed work activities occur within the Land Subject to Coastal Storm Flowage and/or 100-foot Buffer Zone to an Isolated Vegetated Wetland (Freshwater Wetland) protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated June 29, 2020.

The following checks made payable to the Town of Nantucket will be sent under separate cover: One Hundred Twenty-Two Dollars and Fifty Cents ($122.50) for the town portion of the WPA filing fee; Two Hundred Dollars ($200.00) for the Town Consultant fee; and Twenty-Five Dollars ($25.00) for the *Bylaw* fee. A check made payable to *The Inquirer and Mirror* ($335.10) will also be submitted for the legal advertising fee. The state portion of the WPA filing fee ($97.50) has been forwarded to the DEP Lockbox.

Thank you for your consideration of this Application. We look forward to the July 23, 2020 Public Hearing to discuss the project further. If you should have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

cc: DEP SERO; ABH LLC; Bracken Engineering, Inc.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
Nantucket
City/Town

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

4 Stone Barn Way — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41°17'29.88"N — d. Latitude
70° 6'15.62"W — e. Longitude

29 — f. Assessors Map/Plat Number
914 — g. Parcel /Lot Number

2. Applicant:

ABH LLC — a. First Name
b. Last Name
c. Organization
74 Beard Way — d. Street Address
Needham — e. City/Town
MA — f. State
02492 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Brian — a. First Name
Madden — b. Last Name
LEC Environmental Consultants, Inc. — c. Company
12 Resnik Road, Suite 1 — d. Street Address
Plymouth — e. City/Town
MA — f. State
02360 — g. Zip Code
508-746-9491 — h. Phone Number
i. Fax Number
bmadden@lecenvironmental.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$220.00 — a. Total Fee Paid
$97.50 — b. State Fee Paid
$122.50 — c. City/Town Fee Paid

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

A. General Information (continued)

6. General Project Description:

Elevate & reconstruct foundation to single-family dwelling within LSCSF & 100-foot Buffer Zone potential IVW; and landscaping updates.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
Nantucket	25413
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

1. Introduction

On behalf of the Applicant, ABH LLC, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application to elevate and reconstruct the existing single-family dwelling's foundation and perform landscaping updates. The elevated dwelling will consequently require new stairs for access and egress. Proposed work activities occur within the Land Subject to Coastal Storm Flowage (LSCSF) and/or 100-foot Buffer Zone to an Isolated Vegetated Wetland (Freshwater Wetland) protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). The Applicant is concurrently requesting a Waiver from the wetland setbacks and separation to high groundwater.

The existing dwelling is currently situated on a below-grade crawlspace foundation that maintains a permanent dewatering system. The reconstructed foundation will be compliant with Flood Zone building codes and remove the dewatering system; thereby providing an improvement to existing site conditions.

The following NOI Application provides a description of the existing site conditions, Wetland Resource Areas, and proposed project designed to protect the interests and values of the Wetland Resource Areas. Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated June 29, 2020 (Appendix B).

2. General Site Description

The 5,062± square foot subject parcel is located at the corner of North Beach Street and Stone Barn Way proximate to downtown (Appendix A, Figures 1 and 2). The subject parcel is currently improved by a single-family dwelling surrounded by lawn/landscaping, brick patio, and cobble parking areas. No naturalized vegetation is present on the subject parcel and privet (*Ligustrum* sp.) occurs along the property lines. Scrub shrub wetland conditions occur to the south. An approximated boundary is depicted on the *Proposed Site Plan*.

2.1 Floodplain Designation

According to the June 9, 2014, Federal Emergency Management Agency Flood Insurance Rate Map for the Town of Nantucket (25019C0086G), the subject parcel is located within Flood Zone AE (El. 7) (Appendix A, Figure 3).

2.2 Natural Heritage and Endangered Species Program Designation

According to the 14th Edition of the Massachusetts *Natural Heritage Atlas* (effective August 1, 2017) published by the Natural Heritage & Endangered Species Program (NHESP), the subject parcel is not located within an Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Wildlife (Appendix A, Figure 4).

3. Wetland Resource Area Descriptions

On-site Wetland Resource Areas include Land Subject to Coastal Storm Flowage (LSCSF) and Vegetated (Freshwater) Wetlands, as described below.

3.1 Land Subject to Coastal Storm Flowage

LSCSF is defined at 310 CMR 10.04 as *land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, which ever is greater.*

As stated above, the subject parcel is located within Flood Zone AE (El. 7) per the June 9, 2014, Federal Emergency Management Agency Flood Insurance Rate Map for the Town of Nantucket (25019C0086G). Therefore, the entire subject parcel is within LSCSF.

3.2 Vegetated (Freshwater) Wetland

A vegetated Freshwater Wetland is defined within Section 1.02 of the Nantucket *Wetlands Protection Regulations* as a *wet meadow, freshwater marsh, swamp, bog, pond, lake, creek, or stream; an area of low topography where ground water, flowing water, standing surface water, or ice provides a significant part of the supporting substrate for a plant community for at least five months a year; characterized by emergent and submergent plant communities in inland waters; and/or where depth to high groundwater is within 18 inches of the ground surface, and/or exhibits hydric soil characteristics and includes that portion of any inland bank which touches any inland waters. Freshwater*

wetlands are not defined to include drainage facilities constructed to include wetland vegetation as treatment for stormwater runoff.

An Isolated Vegetated Wetland (IVW) appear to occur to the south and are primarily overgrown with groundsel tree (*Baccharis halimifolia*), bush honeysuckle (*Lonicera* spp.), multiflora rose (*Rosa multiflora*), and Asiatic bittersweet (*Celastrus orbiculata*).

4. Proposed Project

The Applicant is proposing to elevate and reconstruct the existing single-family dwelling's foundation (in place). The existing below-grade crawlspace foundation will be removed and replaced with an at-grade crawlspace foundation. The existing dewatering system will be removed. The first floor will be set at El. 8.0, one-foot above the Flood Zone AE El. 7 and the crawlspace foundation will contain flood vents per state and local building codes. Mechanicals will not be set within the crawlspace.

The elevated dwelling will require new stairs for access and egress as depicted on the *Proposed Site Plan*. The updates will result in a net decrease of 6± square feet of structure within the 25-foot Buffer Zone to the approximated off-site IVW.

The Applicant is also proposing to modify the brick patio area abutting the dwelling. Approximately 53± square feet of brick patio/walkway will be removed within the 25-foot Buffer Zone to the approximated off-site IVW.

The existing A/C unit will be elevated above the Flood Zone elevation.

No regrading is proposed on the subject parcel and all temporarily disturbed landscaped areas will be restored to pre-existing conditions. Utilities will also be reconnected.

5. Waiver Request

A Waiver is respectfully requested under Section 1.03 F.3. a) & c) of the Nantucket *Wetlands Protection Regulations* for the proposed project. Under existing conditions, portions of the dwelling and surrounding landscaped areas are located within the 25-foot and/or 50-foot Buffer Zone to the approximated off-site IVW. Furthermore, the existing below-grade crawlspace foundation appears to be located within high groundwater. Work activities within the approximated 25-foot Buffer Zone and structural work within the approximated 50-foot Buffer Zone are unavoidable, in addition to work within high

groundwater. Any temporary dewatering associated with the reconstructed foundation activities will be discharged to the abutting catch basin within North Beach Street, in coordination with DPW.

The elevated dwelling, reconstructed in compliance with state and local building codes, will improve interests relating to flood control and storm damage prevention. The project will also remove the permanent dewatering system. Furthermore, the project will result in a net decrease of structure and brick patio/walkway within the 25-foot Buffer Zone to the approximated off-site IVW.

6. Summary

On behalf of the Applicant, ABH LLC, LEC is submitting this NOI Application to elevate and reconstruct the foundation to the existing single-family dwelling and perform landscaping and access/egress improvements. As proposed, the project will result in an improvement over existing conditions and enhance LSCSF interests.

Federal Emergency Management Agency Flood Insurance Rate Map, Town of Nantucket (25019C0086G) effective June 9, 2014.

Massachusetts Natural Heritage Atlas, 14th Edition. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife, Route 135, Westborough, MA 01581, http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm..

Massachusetts Wetlands Protection Act (M.G.L. c. 131, §. 40) and its implementing *Regulations* (310 CMR 10.00), www.state.ma.us/dep.

Sorrie, B. and Dunwiddie, P. 1996. *The Vascular and Non-Vascular Flora of Nantucket, Tuckernuck, and Muskeget Islands*. Massachusetts Audubon Society, Massachusetts Natural Heritage and Endangered Species Program, Nantucket Maria Mitchell Association, and The Natural Conservancy.

Town of Nantucket Bylaw (Chapter 136) and *Wetlands Protection Regulations*.

United States Department of Agriculture, Soil Conservation Service, in cooperation with Massachusetts Agricultural Experiment Station, Soil Survey for Nantucket County, Massachusetts, issued June 1979.

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 1: USGS Topographic Map

4 Stone Barn Way
Nantucket, Massachusetts

N

June 26, 2020

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 2: Aerial Orthophoto Map

4 Stone Barn Way
Nantucket, Massachusetts

N

June 26, 2020

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 3: FEMA Flood Insurance Rate Map

4 Stone Barn Way
Nantucket, Massachusetts

N

June 26, 2020

LEC Environmental Consultants, Inc.
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 4: NHESP Map

4 Stone Barn Way
Nantucket, Massachusetts

N

June 26, 2020

N
W E
S
MA. COORD. SYSTEM ISLAND ZONE

MASS COORDINATE SYSTEM
ISLAND ZONE MERIDIAN
DETERMINED USING A
TOPCON HIPER SR GPS RTK UNIT
COLLECTION DATE 02/25/2020.

DMH RIM: 3.1±

C.BASIN RIM: 2.8±

CHARLES STREET

NORTH BEACH STREET
(VARIABLE WIDTH)

BUS SIGN POST

MAILBOX

BRICK SIDEWALK

R=25.00'
L=39.67'

#5A STONE BARN WAY
MAP 29 PARCEL 901

100' BUFFER TO IVW

STONE BARN WAY
(AKA. STUARTS WAY)
(25' WIDE)

N 40°52'04" E
47.38'

COBBLE PARKING AREA

UTILITY EASEMENT
SEE DOC. #42270

PROPOSED DECK and STEPS

HEDGE

ARBOR

STOOP

MAP 29
PARCEL 914
5,062± s.f.

S 48°12'32" E
50.60'

C.BASIN RIM: 2.6±

EX. TREE (TYP.)

PROP. PROPANE TANK

EXISTING HOUSE
(TO BE ELEVATED ABOVE FLOOD ZONE)
PROPOSED TOP FOUNDATION = 8.0
CRAWLSPACE FLOOR = 4.8

PROP. TRASH BIN

A.C. UNIT TO BE RELOCATED and ELEVATED ABOVE FLOOD ZONE.

50' BUFFER TO IVW

N 49°07'56" W
68.07'

PROPOSED PATIO

25' BUFFER TO IVW

EXISTING DECK & STEP
(TO BE REMOVED)

S 47°11'08" W
72.00'

WF 1
WF 2
WF 3
WF 4

EXISTING BRICK PATIO/WALK
(TO BE RECONFIGURED)

ISOLATED VEGETATED WETLAND FLAGGED BY LEC ENVIRONMENTAL CONSULTANTS, INC.

WETLAND LINE

EDGE OF CLEARING (TYP.)

SITE BENCHMARK:
DRAIN MANHOLE RIM
EL. = 2.86 (NAVD88)

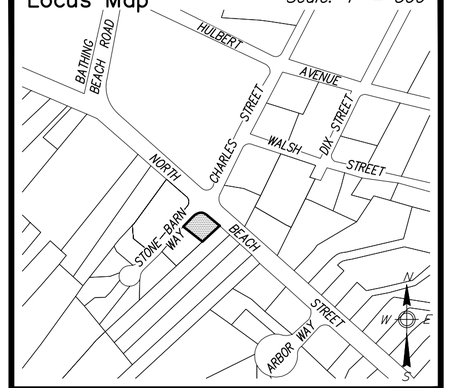
#6B STONE BARN WAY
MAP 29 PARCEL 912

#60 NORTH BEACH ROAD
MAP 29 PARCEL 86

PLAN SCALE
0 2 4 6 8 10 15 20 30
1 inch = 10 feet

Locus Map

Scale: 1" = 300'



Notes

1. LOCUS: #4 STONE BARN WAY
   MAP 29 PARCEL 914
2. OWNER: ABH, LLC
   c/o HOWARD APPLEBY, MANAGER
   74 BEARD WAY
   NEEDHAM, MA 02492
3. DEED REF: Cert. #25413
4. PLAN REF: L.C. Plan 16416–D (LOT 9)
5. LOCUS DOES FALL WITHIN SPECIAL FLOOD HAZARD ZONE "AE" (el. 7) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25019C–0086–G dated 06/09/2014.
6. LOCUS DOES NOT FALL WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF ESTIMATED HABITATS OF RARE WILDLIFE and PRIORITY HABITATS OF RARE SPECIES.
7. FOUNDATION TO BE CONSTRUCTED IN ACCORDANCE WITH ALL FEMA REGULATIONS REGARDING CONSTRUCTION WITHIN A FLOOD ZONE.

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

PROPOSED SITE PLAN
IN NANTUCKET, MASSACHUSETTS

Prepared For:
ABH, LLC
#4 STONE BARN WAY
MAP 29 PARCEL 914

No.	Date	Revision Description	By
–	–	–	–

Date:	Drawn:	Checked:	Sheet:
JUNE 25, 2020	RMM/ERC/BEI	DFB/AMG	1 of 1

S:\Autocad Drawings\Nantucket\Stone Barn Way\4 Stone Barn Way\4 Stone Barn Way – Site Plan.dwg

LEC WETLANDS WILDLIFE WATERWAYS

Notice of Intent Application

July 1, 2020

Subject Property
40 Shawkemo Road
Map 27, Parcel 4
Nantucket, Massachusetts

Applicant/Property Owner
CedarView Point, LLC
c/o Sarah F. Alger, P.C.
4 North Water Street
Nantucket, MA 02554

LEC Environmental Consultants, Inc.

12 Resnik Road, Suite 1
Plymouth, MA 02360
508-746-9491
508-746-9492 fax

www.lecenvironmental.com

LEC WETLANDS WILDLIFE WATERWAYS

July 1, 2020

Email / Overnight Mail

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application [LEC File #: BrEI\19-108.01]
40 Shawkemo Road
Map 27, Parcel 4
Nantucket, Massachusetts

Dear Members of the Commission:

On behalf of the Applicant, CedarView Point, LLC, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application for site regrading/driveway improvements and septic upgrade activities on the above-referenced subject parcel. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW) and/or Coastal Bank; Wetland Resource Areas protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). The existing guest house is proposed to be renovated outside of the 100-foot Buffer Zone along with a new 4-bedroom Soil Absorption System (SAS). Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated June 29, 2020.

The following checks made payable to the Town of Nantucket are being sent under separate cover: Two Hundred, Sixty-Two Dollars and Fifty Cents ($262.50) for the town portion of the WPA filing fee; Two Hundred Dollars ($200.00) for the Town Consultant fee; and Twenty-Five Dollars ($25.00) for the *Bylaw* fee. A check made payable to the *Inquirer and Mirror* ($335.10) will also be submitted for the legal advertising fee. The state portion of the WPA filing fee ($237.50) and MESA filing fee ($300.00) has been forwarded to the DEP Lockbox and NHESP, respectively.

Thank you for your consideration of this Application. We look forward to the July 23, 2020 Public Hearing to discuss the project further. If you should have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

cc: DEP SERO; NHESP; CedarPoint View, LLC; Bracken Engineering, Inc.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 &
The Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

40 Shawkemo Road	Nantucket	02554
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	41°17'42.32"N	70° 3'18.00"W
	d. Latitude	e. Longitude
Map 27	Parcel 4	
f. Assessors Map	g. Parcel /Lot Number	

2. Applicant:

CedarView Point, LLC	c/o Sarah F. Alger
a. First Name	b. Last Name

c. Organization

4 North Water Street
d. Street Address

Nantucket	MA	02554
e. City/Town	f. State	g. Zip Code

508-228-1118	508-228-8004	sfa@sfapc.com
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name	b. Last Name

c. Organization

d. Street Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

Brian	Madden
a. First Name	b. Last Name

LEC Environmental Consultants, Inc.
c. Company

12 Resnik Road, Suite 1
d. Street Address

Plymouth	MA	02360
e. City/Town	f. State	g. Zip Code

508-746-9491	508-746-9492	bmadden@lecenvironmental.com
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$500.00	$237.50	$262.50
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

Proposed site regrading/driveway improvements and septic upgrade within 100-foot Buffer Zone to BVW and/or Coastal Bank.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
Nantucket	27549
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

1. Introduction

On behalf of the Applicant, CedarPoint View, LLC, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application for site regrading/driveway improvements and septic upgrade activities at 40 Shawkemo Road. Proposed work activities occur within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW) and/or Coastal Bank; Wetland Resource Areas protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). The existing guest house is proposed to be renovated outside of the 100-foot Buffer Zone along with a new four-bedroom Soil Absorption System (SAS). No Waivers are required for the project.

The following NOI Application provides a description of the existing site conditions, Wetland Resource Areas, and proposed project designed to protect the interests and values of the Resource Areas identified within the above-referenced statutes. Details of the proposed project are depicted on the *Proposed Site Plan,* prepared by Bracken Engineering, Inc., dated June 29, 2020 (Appendix C).

2. General Site Description

The 9.1± acre subject parcel is located north of Shawkemo Road, affording frontage along Nantucket Harbor (Appendix A, Figures 1 & 2). Developed single-family residential properties abut to the east and west and south, across Shawkemo Road. The subject parcel is currently improved by a primary dwelling, pool, patios, garage/studio, and guest house, surrounded by lawn/landscaping, and accessed via a stone driveway.

BVW occupies the western portion of the property, transitioning to Salt Marsh abutting the Coastal Beach. A separate BVW minimally extends onto the central-eastern portion of the site. Coastal Bank and Coastal Beach occur within the northerly portion of the property.

Remaining upland areas are occupied by a mix of forested and mixed successional habitat conditions consisting of black cherry (*Prunus serotina*), eastern red cedar (*Juniperus virginiana*), and sassafras (*Sassafras albidum*) young trees and saplings along with a moderately dense shrub layer of groundsel tree (*Baccharis halimifolia*), arrowwood (*Viburnum dentatum*), bush honeysuckle (*Lonicera* spp.), and bayberry (*Myrica pensylvanica*), in addition to fox grape (*Vitis labrusca*) entanglements. Dewberry (*Rubus*

flagellaris), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), orchard grass (*Dactylis glomerata*), goldenrods (*Solidago* sp.), and seedlings from the shrub layer primarily occupy portions of the groundcover.

2.1 Flood Hazard Area Designation

According to the June 9, 2014, Federal Emergency Management Agency Flood Insurance Rate Map for the Town of Nantucket (25019C0091G), Flood Zone AE (El. 8) exists west and north of developed conditions, while Flood Zone VE (El. 9) occurs to the north/northeast (Appendix A, Figure 3). Developed portions of the subject parcel are located within Zone X, *Areas determined to be outside the 0.2% annual chance flood*.

2.2 Natural Heritage and Endangered Species Program Designation

According to the 14th Edition of the Massachusetts *Natural Heritage Atlas* (effective August 1, 2017) published by the Natural Heritage & Endangered Species Program (NHESP), the project does not occur within an Estimated Habitat of Rare Wildlife (Appendix A, Figure 4). Therefore, the project does not require NHESP review under the WPA Regulations.

Portions of work activities do however occur within a mapped Priority Habitat of Rare Species. While the majority of the proposed work activities are exempt (e.g., septic upgrade and guest house renovation within existing lawn/landscaped conditions), portions of the work extend into naturally vegetated areas, totaling 11,600± sf (0.27 acres). Consequently, LEC is filing for MESA review by NHESP.

3. Wetland Resource Area Descriptions

Wetland Resource Areas located on-site include BVW/Vegetated Wetlands, Coastal Bank, Land Subject to Coastal Storm Flowage (LSCSF), Salt Marsh, and Coastal Beach.

LEC conducted site evaluations in June and July (2019) to update the Wetland Resource Area boundaries. Specifically, LEC demarcated the boundaries of Bordering Vegetated Wetlands (BVW) in accordance with the WPA and *Bylaw*. The current Flood Zone boundaries and corresponding Coastal Bank boundaries were also re-established, as depicted on the *Existing Conditions Plan*, prepared by Bracken Engineering, Inc., dated November 13, 2019, submitted with the two recent Requests for Certificate of Compliance (DEP File #SE 48-1769 & DEP File #SE 48-1611).

The following provides a brief description of the most landward Resource Areas, BVW/Freshwater Wetlands and Coastal Bank.

3.1 Bordering Vegetated Wetland / Vegetated (Freshwater) Wetland

Bordering Vegetated Wetlands (BVW) are defined in 310 CMR 10.55(2) as *freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes. In these areas soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of BVW is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.*

A vegetated Freshwater Wetland is defined within Section 1.02 of the Nantucket *Wetlands Protection Regulations* as a *wet meadow, freshwater marsh, swamp, bog, pond, lake, creek, or stream; an area of low topography where ground water, flowing water, standing surface water, or ice provides a significant part of the supporting substrate for a plant community for at least five months a year; characterized by emergent and submergent plant communities in inland waters; and/or where depth to high groundwater is within 18 inches of the ground surface, and/or exhibits hydric soil characteristics and includes that portion of any inland bank which touches any inland waters. Freshwater wetlands are not defined to include drainage facilities constructed to include wetland vegetation as treatment for stormwater runoff.*

LEC determined the on-site BVW/Vegetated Wetlands boundary through observations of the existing plant communities, using the "fifty percent criteria" to determine dominance of wetland/upland vegetation, the interpretation of soil characteristics, and other indicators of hydrology, in accordance with the principals of DEP's handbook, *Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act* (March 1995), the *Field Indicators for Identifying Hydric Soils in New England-Version 4, May 2017*, and the criteria set forth in 310 CMR 10.55(2) and the *Bylaw*, specifically analyzing the depth of high groundwater within 18 inches of the ground surface.

The BVW/Vegetated Wetlands are generally occupied by a relatively dense scrub-shrub plant community, containing scattered groundsel tree, arrowwood, bush honeysuckle, winterberry (*Ilex verticillata*), elderberry (*Sambucus canadensis*), highbush blueberry (*Vaccinium corymbosum*), bayberry, sweet pepperbush (*Clethra alnifolia*), and Virginia rose, along with fox grape entanglements. Poison ivy, cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Onoclea sensibilis*), and jewelweed (*Impatiens capensis*)

occupy portions of the groundcover, while cattails (*Typha* spp.) occur along the wetland interior.

3.2 Coastal Bank

Coastal Bank is defined at (310 CMR 10.30 (2)) as *the seaward face or side of any elevated landform, other than a Coastal Dune, which lies at the landward edge of a Coastal Beach, land subject to tidal action, or other wetland.*

Coastal Bank is defined in the *Bylaw* (Section 1.02) as *the seaward face or side of any elevated landform, other than a Coastal Dune, which lies at the landward edge of a Coastal Beach, Coastal Dune, land subject to tidal action or coastal storm flowage, or other coastal wetland. Any minor discontinuity of the slope notwithstanding, the top of the bank shall be the first significant break in slope as defined by site specific topographic plan information, site inspection, wetland habitat evaluation, geologic origin, and/or relationship to coastal storm flowage. A bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel, stone, or sand. A bank may be created by man and/or made of man-made materials. A bank may or may not contribute sediment to coastal dunes, beaches and/or to the littoral drift system. A bank may be significant as a major source of sediment, as a vertical buffer, for wildlife habitat and for wetland scenic views.*

The top of the Coastal Bank was established by Bracken Engineering, Inc., in accordance with DEP's *Wetlands Program Policy 92-1: Coastal Banks*. The northerly Coastal Bank is defined by a moderate to steep embankment, while the westerly boundary extends concurrent to Flood Zone AE (El 8) or the upgradient slope that ceases to be 4:1. The westerly Coastal Bank is well-vegetated Coastal Bank by the above-referenced species.

4. Proposed Project

The Applicant is proposing regrading/driveway improvements and septic upgrade activities within the 100-foot Buffer Zone to BVW and/or Coastal Bank, as depicted on the *Proposed Site Plan* (Appendix C).

The existing guest house is proposed to be renovated outside of the 100-foot Buffer Zone, along with a new four-bedroom Soil Absorption System (SAS). The parking court associated with the guest house will be reconfigured and result in minimal work activities (regrading) into the 100-foot Buffer Zone to the Coastal Bank. All regraded slopes will be stabilized by a native seed mix.

The proposed septic upgrade work activities around the primary dwelling include pumping and backfilling or removing three septic tanks and installing a Microfast Unit, along with new gravity lines and force main.

No Waivers are required for the project.

5. Summary

On behalf of the Applicant, CedarView Point, LLC, LEC is submitting this NOI Application for site regrading/driveway improvements and septic upgrade activities within the 100-foot Buffer Zone to Bordering Vegetated Wetlands (BVW) and/or Coastal Bank. The project has been designed in compliance with the WPA and *Bylaw*.

Federal Emergency Management Agency Flood Insurance Rate Map, Town of Nantucket (25019C0091G) effective June 9, 2014.

https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Massachusetts Natural Heritage Atlas, 14th Edition. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife, Route 135, Westborough, MA 01581, http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm..

Massachusetts Wetlands Protection Act (M.G.L. c. 131, §. 40) and its implementing *Regulations* (310 CMR 10.00), www.state.ma.us/dep.

Sorrie, B. and Dunwiddie, P. 1996. *The Vascular and Non-Vascular Flora of Nantucket, Tuckernuck, and Muskeget Islands*. Massachusetts Audubon Society, Massachusetts Natural Heritage and Endangered Species Program, Nantucket Maria Mitchell Association, and The Natural Conservancy.

Town of Nantucket Bylaw (Chapter 136) and *Wetlands Protection Regulations*.

United States Department of Agriculture, Soil Conservation Service, in cooperation with Massachusetts Agricultural Experiment Station, Soil Survey for Nantucket County, Massachusetts, issued June 1979.

LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 1: USGS Topographic Map

40 Shawkemo Road
Nantucket, Massachusetts

N

June 30, 2020

LEC Environmental Consultants, Inc.

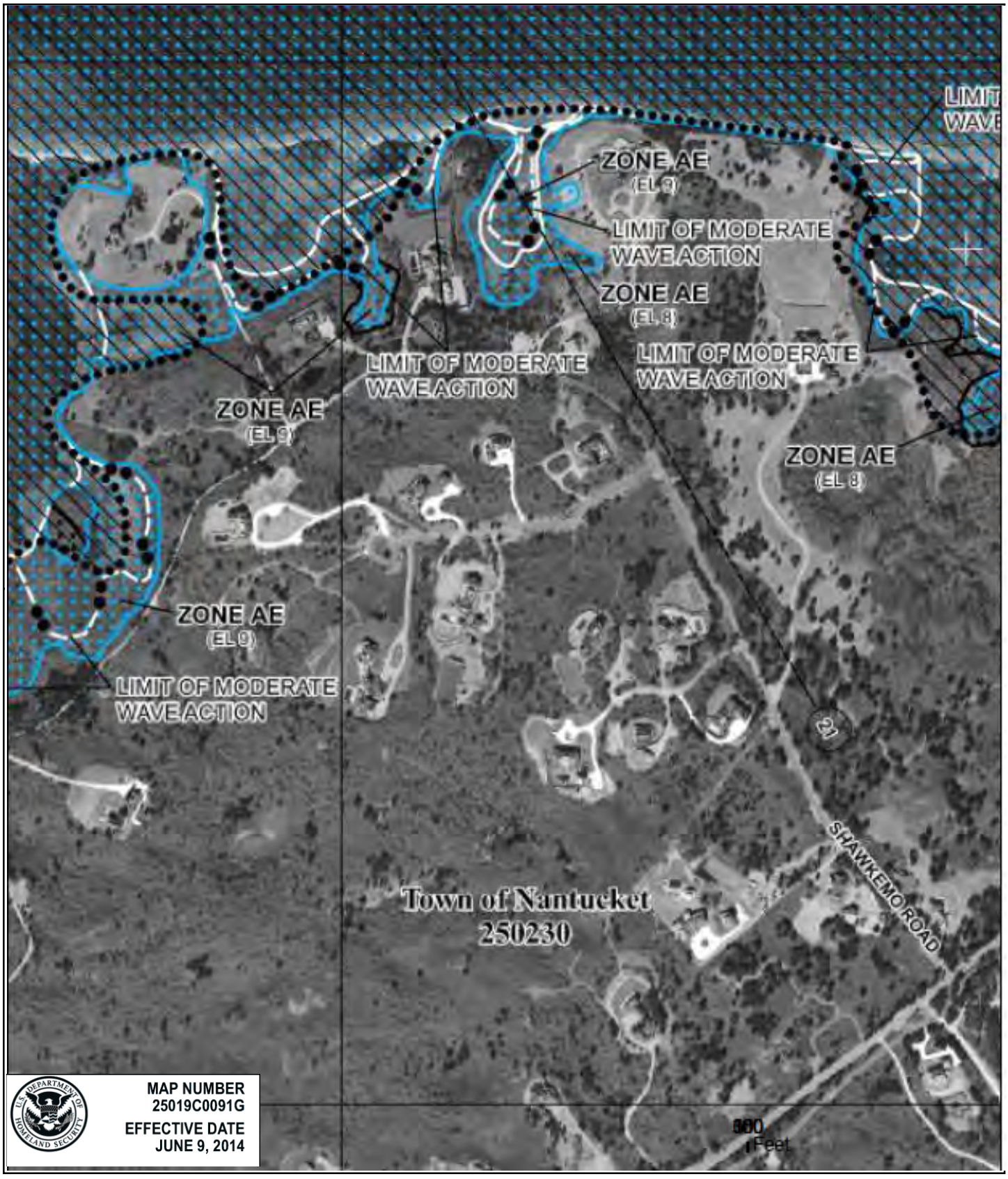
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 2: Aerial Orthophoto Map

40 Shawkemo Road
Nantucket, Massachusetts

N

June 30, 2020



LEC Environmental Consultants, Inc.

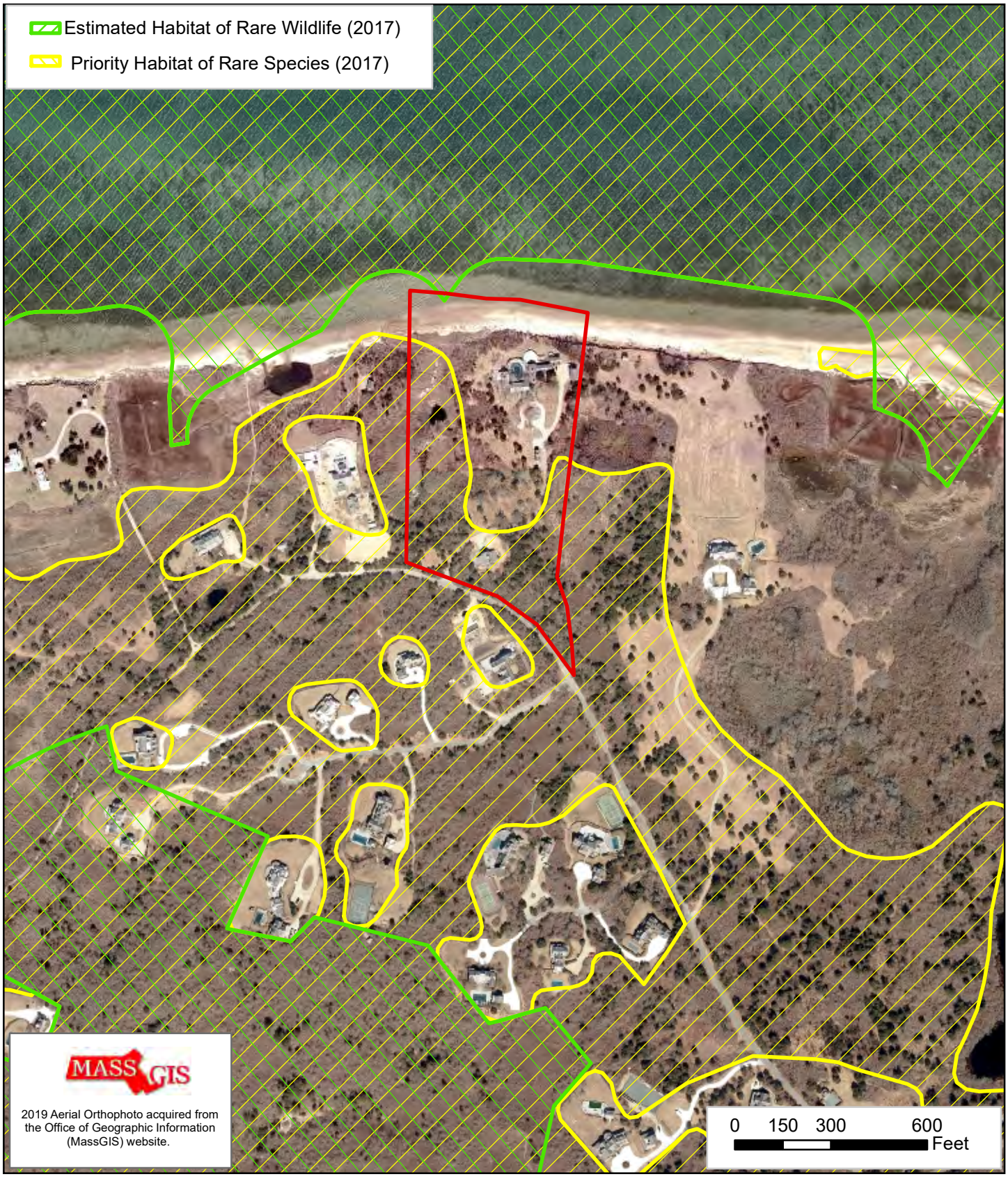
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 3: FEMA Flood Insurance Rate Map

40 Shawkemo Road
Nantucket, Massachusetts

N

June 30, 2020



LEC Environmental Consultants, Inc.
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 4: NHESP Map

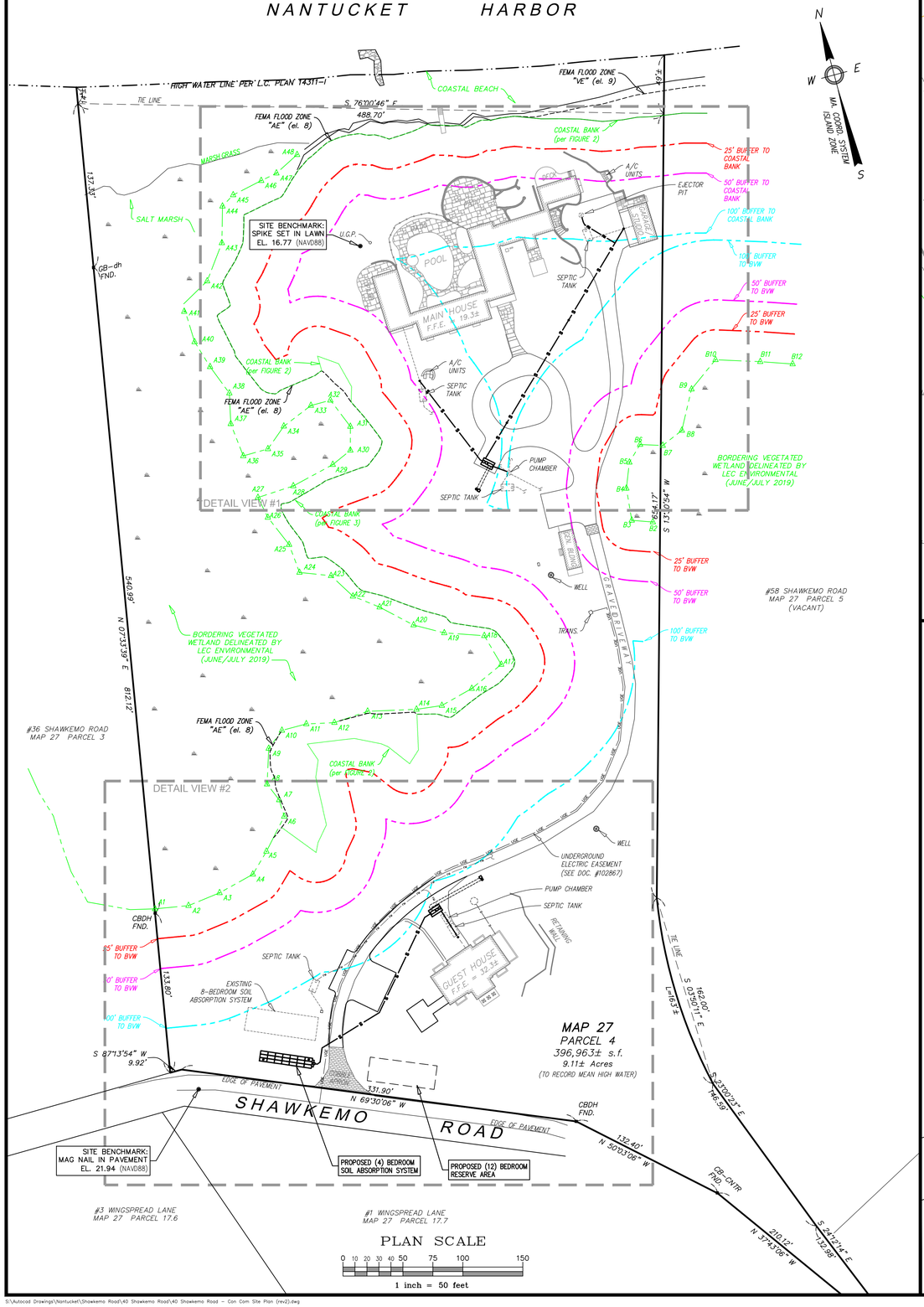
40 Shawkemo Road
Nantucket, Massachusetts

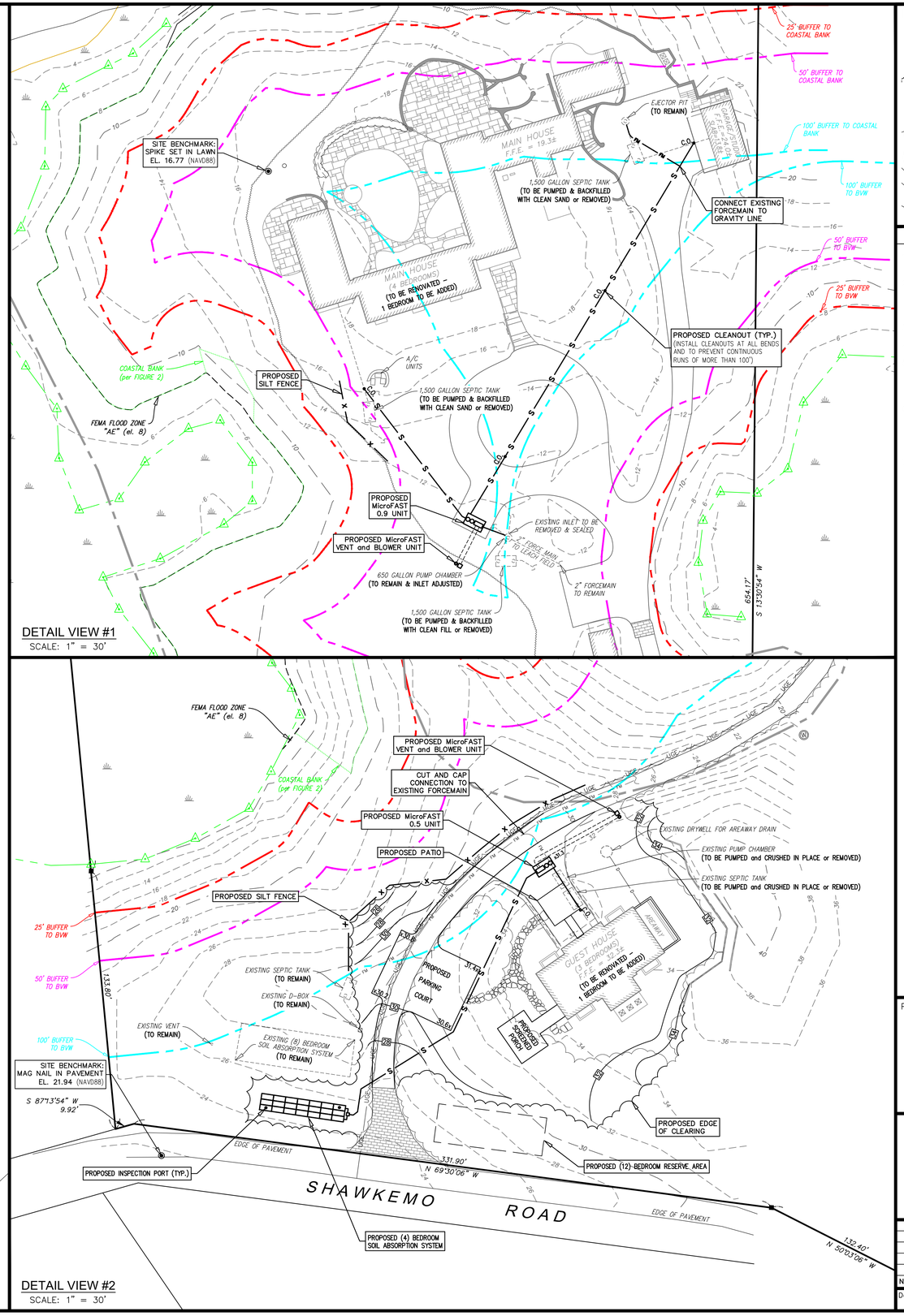
N

June 30, 2020

Photographs 1 & 2: Existing conditions surrounding primary dwelling & garage/studio.

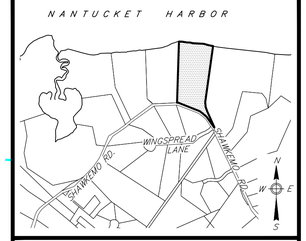
Photographs 3 & 4: Guest cottage.





Locus Map

Scale: 1" = 1000'



GENERAL NOTES

1. LOCUS: #40 SHAWKEMO ROAD
   MAP 27 PARCEL 4
2. OWNER: CEDARVIEW POINT, LLC
   c/o SARAH F. ALGER, P.C.
   4 NORTH WATER STREET
   NANTUCKET, MA 02554
3. DEED REF: Cert. #27549
4. PLAN REF: L.C.C. #14311-I (LOT 1)
5. LOCUS FALLS WITHIN SPECIAL FLOOD HAZARD ZONES "AE" (el. 8) & "VE" (el. 9) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25019C-0091-G dated 06/09/2014.
6. LOCUS FALLS WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF PRIORITY HABITATS OF RARE SPECIES, BUT NOT ESTIMATED HABITATS OF RARE WILDLIFE.
7. WETLANDS DELINEATED BY LEC ENVIRONMENTAL IN JUNE & JULY OF 2019.

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

COMMONWEALTH OF MASSACHUSETTS
ALAN M. GRADY
No. 37732
REGISTERED
PROFESSIONAL ENGINEER

Prepared By:
BRACKEN ENGINEERING, INC.
49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282
19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

PROPOSED SITE PLAN IN NANTUCKET, MASSACHUSETTS

Prepared For:

CEDARVIEW POINT, LLC

#40 SHAWKEMO ROAD

MAP 27 PARCEL 4

No.	Date	Revision Description	By

Date:	Drawn:	Checked:	Sheet:
JUNE 29, 2020	RMM/BEI	DFB/AMG	1 of 1

S:\Autocad Drawings\Nantucket\Shawkemo Road\40 Shawkemo Road\40 Shawkemo Road – Con Com Site Plan (rev2).dwg

Notice of Intent Application

July 1, 2020

Subject Property
287 & 289 Hummock Pond Road
Map 83, Parcels 39 & 4
Nantucket, Massachusetts

Applicant/Property Owner
BSS Hummock Pond, LLC &
Hummock Pond Holdings, LLC
591 West Putnam Avenue
Greenwich, CT 06830

LEC Environmental Consultants, Inc.

12 Resnik Road, Suite 1
Plymouth, MA 02360
508-746-9491
508-746-9492 fax

www.lecenvironmental.com

LEC WETLANDS WILDLIFE WATERWAYS

July 1, 2020

Email / Overnight Mail

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Notice of Intent Application [LEC File #: FSPI\06-136.01]
287 & 289 Hummock Pond Road
Map 83, Parcels 39 & 4
Nantucket, Massachusetts

Dear Members of the Commission:

On behalf of the Applicants, BSS Hummock Pond, LLC & Hummock Pond Holdings, LLC, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent Application to demo/move off an existing dwelling (#287), relocate/renovate a dwelling (#289), relocate a garage and driveway, install a fiberglass pool, upgrade a septic system, update utilities, and perform restoration activities on the above-referenced subject parcels. Proposed work activities will occur within the 100-foot Buffer Zone to Coastal Bank, Coastal Beach, Coastal Dune, Bordering Vegetated Wetlands/Freshwater Wetlands, and Land Subject to Coastal Storm Flowage; Resource Areas protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations*. Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated June 30, 2020.

Enclosed please find three checks made payable to the Town of Nantucket for the following: Three Hundred, Seventeen Dollars and Fifty Cents ($317.50) for the town portion of the WPA filing fee; Two Hundred Dollars ($200.00) for the Town Consultant fee; and Twenty-Five Dollars ($25.00) for the *Bylaw* fee. A check made payable to *The Inquirer and Mirror* ($335.10) has also been submitted for the legal advertising fee. The state WPA filing fee ($292.50) and MESA filing fee ($300.00) has been forwarded to the DEP Lockbox and NHESP, respectively.

Thank you for your consideration of this Application. We look forward to discussing the project further at the July 23, 2020 Public Hearing to discuss the project further. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

cc: DEP SERO; NHESP; BSS Hummock Pond, LLC; Hummock Pond Holdings, LLC; Bracken Engineering, Inc.; Steven Cohen, Esq.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

287 & 289 Hummock Pond Road — a. Street Address
Nantucket — b. City/Town
02554 — c. Zip Code

Latitude and Longitude:
41°15'16.34"N — d. Latitude
70° 9'36.90"W — e. Longitude

83 — f. Assessors Map/Plat Number
4 & 39 — g. Parcel /Lot Number

2. Applicant:

a. First Name
b. Last Name
BSS Hummock Pond, LLC & Hummock Pond Holdings, LLC — c. Organization
591 West Putnam Avenue — d. Street Address
Greenwich — e. City/Town
CT — f. State
06830 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Brian — a. First Name
Madden — b. Last Name
LEC Environmental Consultants, Inc. — c. Company
12 Resnik Road, Suite 1 — d. Street Address
Plymouth — e. City/Town
MA — f. State
02360 — g. Zip Code
508-746-9491 — h. Phone Number
508-746-9492 — i. Fax Number
shumphrey@lecenvironmental.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$610.00 — a. Total Fee Paid
$292.50 — b. State Fee Paid
$317.50 — c. City/Town Fee Paid

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Nantucket
City/Town

A. General Information (continued)

6. General Project Description:

Proposed redevelopment and restoration activities on two single-family residential parcels within 100-foot Buffer Zone to Coastal Bank, Dune, Beach, LSCSF, and BVW.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☒ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☐ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land)
Nantucket	27523 & 26027
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☒ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

1. Introduction

On behalf of the Applicants, BSS Hummock Pond, LLC & Hummock Pond Holdings, LLC, LEC Environmental Consultants, Inc., (LEC) is submitting this Notice of Intent (NOI) Application to demo/move off an existing dwelling (#287), relocate/renovate a dwelling (#289), relocate a garage and driveway, install a fiberglass pool, upgrade a septic system, update utilities, and perform restoration activities on 287 & 289 Hummock Pond Road. Proposed work activities will occur within the 100-foot Buffer Zone to Coastal Bank, Coastal Beach, Coastal Dune, Bordering Vegetated Wetlands (BVW)/Freshwater Wetlands, and Land Subject to Coastal Storm Flowage (LSCSF); Resource Areas protected under the *Massachusetts Wetlands Protection Act* (M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations*.

The proposed project will result in a significant net benefit to the surrounding Resource Areas through a reduction in structures/footprint, increasing setbacks to the eroding Coastal Bank, and restoring significant Buffer Zone areas. A Waiver is requested for the restoration work activities within the 25-foot Buffer Zone to the Coastal Bank, Beach, and Dune; structural renovations within 50 feet of the BVW/Freshwater Wetlands and Buffer Zone to an eroding Coastal Bank; and septic system within 100 feet of the Coastal Bank.

The following NOI Application provides a description of the existing site conditions, Wetland Resource Areas, and proposed project designed to protect and enhance the interests and values of the Resource Areas. Details of the proposed project are depicted on the *Proposed Site Plan* prepared by Bracken Engineering, Inc., dated June 30, 2020 (Appendix D).

2. General Site Description

The two subject parcels are situated at the southeastern tip of Hummock Pond, affording frontage on the Atlantic Ocean west of Cisco Beach (Appendix A, Figure 1). The properties are accessed via a shared driveway/easement extending westerly off Mothball Way. Additional residential properties exist to the east. A rolling Coastal Dune/Barrier Beach system is located west of the #289 Hummock Pond Road in between Hummock Pond and the Atlantic Ocean.

Parcel 4 (#289 Hummock Pond Road) is improved by the previously relocated/renovated dwelling and a small shell driveway/parking area. Naturalized vegetation surrounds the dwelling and driveway/parking area. The dwelling is situated on the seaward tip of a short peninsula of younger Nantucket outwash deposits and Evesboro sand confined to the eastern portion of the property. As such, topography slopes gently to moderately downgradient to the north and west. Erosion has eliminated the pre-existing Coastal Dune south of the dwelling, exposing the now vertical Coastal Bank.

In 2007, the former Property Owner received in Order of Conditions (DEP File #SE48-2030) to relocate/renovate the pre-1978, single-family dwelling. On February 6, 2013, the Commission issued an Order (DEP File #SE48-2517) approving the installation of dune nourishment material with beachgrass plantings and a sand drift fencing immediately seaward of the Coastal Bank. A NOI was submitted in November 2018 for a fiber roll reinforced lift system to further stabilize the Coastal Bank, but was ultimately withdrawn following lack of support from the Commission.

The Applicant subsequently purchased the easterly abutting property and began to design the project under this NOI. The property at #287 Hummock Pond Road contains a single-family dwelling, deck, patio, outdoor shower, utilities, and detached garage, connected to the dwelling via an at-grade boardwalk and accessed via a pervious driveway. The southerly portion of the driveway has been abandoned as it currently sits against the Coastal Bank.

The majority of the vegetation surrounding developed conditions on both subject parcels consists of American beachgrass (*Ammophila breviligulata*), seaside goldenrod (*Solidago sempervirens*), seaside rose (*Rosa rugosa*), bayberry (*Myrica pensylvanica*), bush honeysuckle (*Lonicera* sp.), and poison ivy (*Toxicodendron radicans*).

2.1 Flood Hazard Area Designation

According to the June 9, 2014, Federal Emergency Management Agency *Flood Insurance Rate Maps* for the Town of Nantucket (*Community Panel 25019C0068G*), Flood Zone VE (Elevation 9) exists along the southern portion of the site, nearly concurrent with the Coastal Bank (Appendix A, Figure 3), while Flood Zone AE (Elevation 9); *Special Flood Hazard Areas inundated by 100-year flood, base flood elevations determined* and Flood Zone X (shaded); *Areas of 500-year flood*, are associated with Hummock Pond to the north/northwest. Remaining portions of the site are located within Zone X; *Areas determined to be outside 500-year floodplain*.

2.2 Natural Heritage and Endangered Species Program Designation

According to the 14th edition of the Massachusetts *Natural Heritage Atlas* (effective August 1, 2017) published by the Natural Heritage & Endangered Species Program (NHESP), the redevelopment does not occur within an Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species (Appendix A, Figure 4). However, work activities associated with the house relocation and restoration activities will extend into Priority/Estimated Habitat. A copy of the NOI is being submitted to NHESP for Streamlined MESA/WPA review.

3. Wetland Resource Area Descriptions

Wetland Resource Areas located on or proximate to the site include Coastal Beach, Coastal Bank, Coastal Dune, LSCSF, and BVW/Freshwater Wetlands. A brief description of each Resource Area is provided below.

3.1 Coastal Beach

Coastal Beach is defined at 310 CMR 10.27(2) and Section 1.02 of the *Byla*w as *unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing man-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.*

Coastal Beach extends landward from Mean Low Water (MLW) of the Atlantic Ocean to the toe of the Coastal Bank. The Coastal Beach/Coastal Bank interface is devoid of vegetation.

3.2 Coastal Bank

Coastal Bank is defined at (310 CMR 10.30 (2)) as *the seaward face or side of any elevated landform, other than a Coastal Dune, which lies at the landward edge of a Coastal Beach, land subject to tidal action, or other wetland.*

Coastal Bank is defined in the *Byla*w (Section 1.02) as *the seaward face or side of any elevated landform, other than a Coastal Dune, which lies at the landward edge of a Coastal Beach, Coastal Dune, land subject to tidal action or coastal storm flowage, or other coastal wetland. Any minor discontinuity of the slope notwithstanding, the top of*

the bank shall be the first significant break in slope as defined by site specific topographic plan information, site inspection, wetland habitat evaluation, geologic origin, and/or relationship to coastal storm flowage. A bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel, stone, or sand. A bank may be created by man and/or made of man-made materials. A bank may or may not contribute sediment to coastal dunes, beaches and/or to the littoral drift system. A bank may be significant as a major source of sediment, as a vertical buffer, for wildlife habitat and for wetland scenic views.

The exposed, vertical Coastal Bank extends approximately 2-7± feet in height across the properties and parallel to the Atlantic Ocean. Glacial soils are evident along the seaward face of the Coastal Bank (see Appendix B, Photographs). The bank face is devoid of vegetation. An overhanging vegetated berm, consisting of American beach grass, seaside rose, and bayberry, exists at the top of the bank and is continually sloughing off as the bank erodes.

Coastal Bank erosion has been documented on average at 3.6 ft/yr via instrument survey conducted by Bracken Engineering over the last 8 years.

3.3 Land Subject to Coastal Storm Flowage

LSCSF is defined at 310 CMR 10.04 as *land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, which ever is greater.*

According to the FEMA Flood Insurance Rate Map (FIRM), LSCSF extends to El. 9 as depicted on the *Proposed Site Plan*.

3.4 Coastal Dune

Coastal Dune is defined under the Nantucket *Wetlands Protection Regulations* as *any hill, mound, ridge, or field of ridges, hills, or mounds, composed of sediment, any portion or component of which over the course of a year touches upon, exchanges sediment with, and is landward of a coastal beach deposited by wind action, storm overwash, and/or is man-made*. Additionally, a Coastal Dune Field is *an assemblage or grouping of coastal dunes, at least a portion of which over the course of a year touches upon, exchanges sediment with, and is landward of a coastal beach, that may or may not be oriented parallel to the shoreline or in response to a dominant wind direction but has been deposited by wind action, wave action, and/or storm overwash* (*Bylaw* Section 1.02).

Coastal Dune is defined at (310 CMR 10.28 (2)) as *any natural hill, mound or ridge of sediment landward of a coastal beach deposited by wind action or storm overwash. Coastal Dune also means sediment deposited by artificial means and serving the purpose of storm damage prevention or flood control.*

Coastal Dune existing west of the dwelling on #289 primarily consists of an unconsolidated mix of medium-coarse grained sand, and is dominated by beach grass, along with seaside goldenrod and patches of bayberry and seaside rose. The extent of Coastal Dune was determined through review of topography, depth of windblown sand, and vegetative cover to delineate the Coastal Dune's landward extent.

3.5 Barrier Beach

According to 310 CMR 10.29(2), a Barrier Beach is *a narrow low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast. It is separated from the mainland by a narrow body of fresh, brackish or saline water or a marsh system. A barrier beach may be joined to the mainland at one or both ends.*

According to the Massachusetts Barrier Beach Inventory Project (December 1982) and the Mass GIS Barrier Beach Datalayer, a Barrier Beach (Barrier Beach Unit Nt-34) is located west of the dwelling on #289.

3.6 Bordering Vegetated Wetland/Vegetated (Freshwater) Wetland

Bordering Vegetated Wetlands (BVW) are defined in 310 CMR 10.55(2) as *freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes. In these areas soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of BVW is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.*

A vegetated Freshwater Wetland is defined within Section 1.02 of the Nantucket *Wetlands Protection Regulations* as a *wet meadow, freshwater marsh, swamp, bog, pond, lake, creek, or stream; an area of low topography where ground water, flowing water, standing surface water, or ice provides a significant part of the supporting substrate for a plant community for at least five months a year; characterized by emergent and submergent plant communities in inland waters; and/or where depth to high groundwater is within 18 inches of the ground surface, and/or exhibits hydric soil characteristics and*

includes that portion of any inland bank which touches any inland waters. Freshwater wetlands are not defined to include drainage facilities constructed to include wetland vegetation as treatment for stormwater runoff.

BVW/Vegetated Wetlands occur along Hummock Pond and is predominated by common reed (*Phragmites australis*), seaside rose, and groundsel tree (*Baccharis halimifolia*). Wetland conditions contain Salt Marsh vegetation off-site to the west.

4. Proposed Project

The following reviews the proposed work activities on the subject parcels:

- Demolish or move off the existing single-family dwelling on #287;
- Relocate the dwelling on #289 to the house footprint of #287 with renovations and addition;
- Install shallow fiberglass pool within renovated deck;
- Relocate the garage outside of the 50-foot Buffer Zone to the eroding Coastal Bank;
- Reconfigure the existing pervious driveway;
- Install upgraded septic system with MicroFast tank and remove existing septic components on #287 & #289, as feasible (see below);
- Discontinue utilities to #289 and reconnect water, electric, and telephone lines to relocated/renovated dwelling; and
- Perform restoration activities, including the existing house footprint of #289 and existing driveway to be abandoned. Additionally, temporarily disturbed areas within the Limit of Work will be restored in kind (see below).

The proposed project will result in a significant net benefit to the surrounding Resource Areas through a reduction in structures, increasing setbacks to the eroding Coastal Bank, and restoring significant portions of the Buffer Zone.

5. Waiver Request

A Waiver is respectfully requested under Section 1.03 F.3. a) & c) of the Nantucket *Wetlands Protection Regulations*. The Waiver is requested for the restoration work

activities within the 25-foot Buffer Zone to the Coastal Bank, Beach, and Dune; structural renovations within 50 feet of the BVW/Freshwater Wetlands and Buffer Zone to an eroding Coastal Bank; and septic system within 100 feet of the Coastal Bank.

As proposed, the project will provide a structural net reduction of:

- 317± sf within the 25-foot Buffer Zone;
- 1,599± sf within the 50-foot Buffer Zone; and
- 899± sf within the 100-foot Buffer Zone (overall).

Under existing conditions, the existing dwelling on #289 is located 12± feet from the top of the Coastal Bank. At its closet point, the relocated/renovated dwelling will be located 63± feet away, a 50 foot increase. The relocated/renovated dwelling will increase no closer to the BVW/Freshwater Wetland than existing and provide greater than a 2-foot separation to high groundwater (El. 5-6) with the crawlspace to store mechanicals (floor at El. 13.0).

Furthermore, the garage is being relocated from 33± feet to 51± feet from the top of the Coastal Bank with the entire structural footprint moved outside of the 50-foot Buffer Zone.

The shallow, fiberglass pool represents the only "new" structure proposed. The 12'x24' fiberglass pool has been designed to minimize impacts and maximize the setbacks to the Coastal Bank. The shallow, fiberglass pool is prefabricated and has been proposed in lieu of a standard pool with a poured concrete foundation. The fiberglass pool is proposed 75 feet from the top of the eroding Coastal Bank, representing greater 20 times the average annual erosion rate of 3.6 ft/yr documented via instrument survey over the last 8 years.

The septic system will be upgraded with a MicroFast Unit. A 4-bedroom system is proposed to replace the existing 3-bedroom system on #287 and 2-bedroom tight tank on #289. All existing septic components will be removed. The former septic tank for #289 that is partially exposed on the Coastal Bank will be removed when further exposed to avoid excavation into the Coastal Bank and potential destabilization. The tank can be lifted from the Coastal Beach when exposed thereby limiting disturbance and impacts. The proposed Soil Absorption System (SAS) has been specifically located to maximize setbacks to Hummock Pond (100 feet from the BVW/Freshwater Wetlands) and Coastal Bank. The upgraded system with denitrification will provide an improvement over existing.

Removing the dwelling, deck, well house, etc., from #289 will remove all structures within 100 feet of the Barrier Beach and enhance the interests of the Coastal Dune (i.e., ability to move laterally/landward).

The cumulative Restoration Area totals 5,472± sf, including 2,912± sf within the 25-foot Buffer Zone, comprised of the #289 house footprint and driveway to be abandoned. American beachgrass and seaside rose will be planted within the Restoration Area and left to naturalize. Furthermore, temporarily disturbed areas west of the relocated garage will be restored. Existing topsoil within work areas will be redistributed throughout the Restoration Areas. Additional areas abutting the reconfigured driveway and relocated/renovated dwelling will also be planted with American beachgrass.

Best Management Practices (BMPs) will be implemented during all work activities to ensure potential adverse impacts to the surrounding Resource Areas are avoided. Erosion control barriers will be maintained as necessary throughout construction.

As proposed, the project will result in a significant net benefit to the surrounding Resource Areas through structural reductions within the Buffer Zones, increasing setbacks to the eroding Coastal Bank, and restoring existing developed areas within close proximity to sensitive Resource Areas.

6. Summary

On behalf of the Applicants, BSS Hummock Pond, LLC & Hummock Pond Holdings, LLC, LEC is submitting this NOI Application for the redevelopment and restoration activities described above. The project will significantly improve existing site conditions and enhance the interests and protection of the surrounding Resource Areas: Coastal Bank, Coastal Beach, Coastal Dune, BVW/Freshwater Wetlands, and LSCSF protected under the WPA and *Bylaw*.

Federal Emergency Management Agency Flood Insurance Rate Map, Town of Nantucket (25019C0068G) effective June 9, 2014.

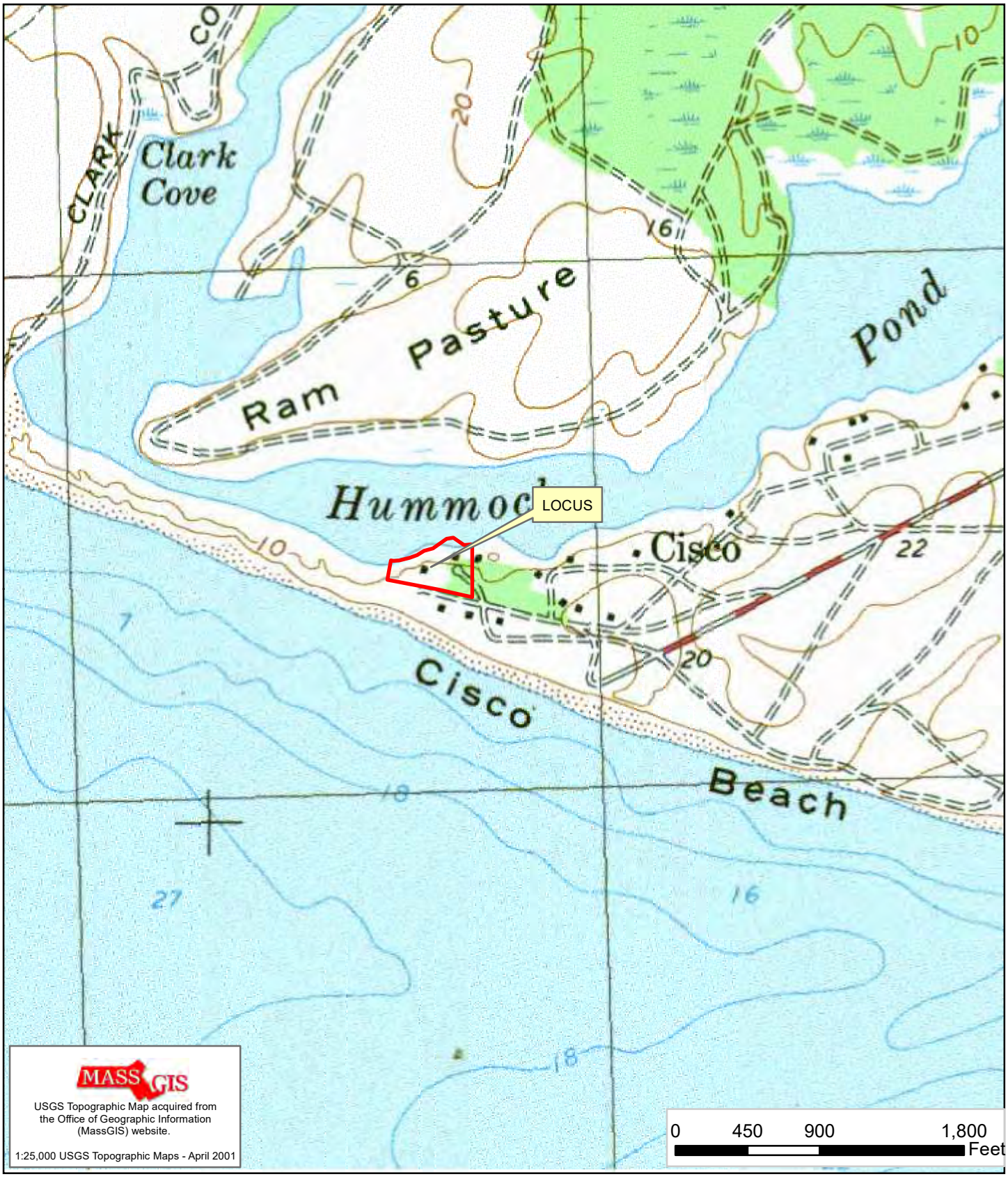
https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Massachusetts Natural Heritage Atlas, 14th Edition. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries and Wildlife, Route 135, Westborough, MA 01581, http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm..

Massachusetts Wetlands Protection Act (M.G.L. c. 131, §. 40) and its implementing *Regulations* (310 CMR 10.00), www.state.ma.us/dep.

Sorrie, B. and Dunwiddie, P. 1996. *The Vascular and Non-Vascular Flora of Nantucket, Tuckernuck, and Muskeget Islands*. Massachusetts Audubon Society, Massachusetts Natural Heritage and Endangered Species Program, Nantucket Maria Mitchell Association, and The Natural Conservancy.

Town of Nantucket Bylaw (Chapter 136) and *Wetlands Protection Regulations*.



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 1: USGS Topographic Map

287 & 289 Hummock Pond Road
Nantucket, Massachusetts

N

July 1, 2020

LEC Environmental Consultants, Inc.

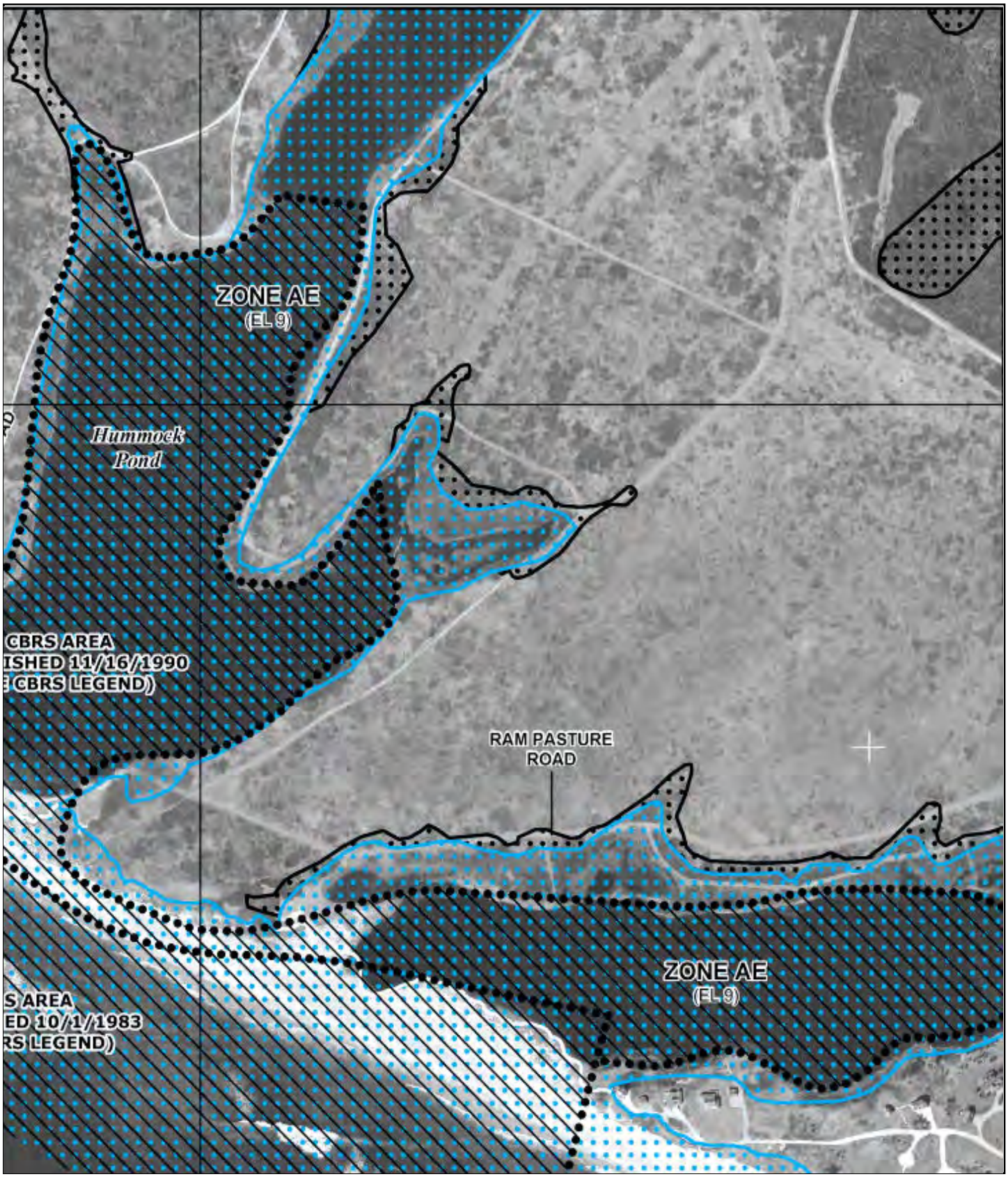
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 2: Aerial Orthophoto Map

287 & 289 Hummock Pond Road
Nantucket, Massachusetts

N

July 1, 2020



LEC Environmental Consultants, Inc.

Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 3: FEMA Flood Insurance Rate Map

287 & 289 Hummock Pond Road
Nantucket, Massachusetts

N

July 1, 2020

LEC Environmental Consultants, Inc.
Plymouth, MA
508.746.9491
www.lecenvironmental.com

Figure 4: NHESP Map

287 & 289 Hummock Pond Road
Nantucket, Massachusetts

N

July 1, 2020

Photograph 1: Westerly view of Coastal Bank, dwelling & driveway on 289 Hummock Pond Rd, including partially exposed (former) septic tank.

Photograph 2: Existing Coastal Bank; partially exposed septic tank in background.

Photograph 3: Westerly view of dwelling to be relocated; footprint & driveway to be restored.

Photograph 4: Southwesterly view of garage (#287) & dwelling (#289) to be relocated.

Photograph 3: Westerly view of existing three structures & driveway.

Photograph 6: Easterly view of existing dwelling at #287.

MassDEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: BSS Hummock Pond LLC & Hummock Pond Holdings, LLC Prepared by: LEC Environmental Project location: 287 & 289 Hummock Pond Rd, Nantucket DEP File #:_____

Check all that apply:

- ❑ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ❑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ❑ Method other than dominance test used (attach additional information)

Section I.

Vegetation	Observation Plot Number: **2**		Transect Number: **1**	Date of Delineation: **4/25/19**
A. Sample Layer & Plant Species (by common/scientific name)	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Seaside rose (*Rosa rugosa*)	38.0	100%	Yes	FACU-
Sapling				
Seaside Rose	38.0	35.5	Yes	FACU-
Bayberry (*Myrica pensylvanica*)	38.0	35.5	Yes	FAC *
Bush Honeysuckle (*Lonicera* sp.)	20.5	19.2	No	
Virginia Rose (*Rosa virginiana*)	10.5	9.8	No	
Sapling				
Black Cherry (*Prunus serotina*)	20.5	100	Yes	FACU

* *Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.*

Vegetation conclusion:

Number of dominant wetland indicator plants: **1** Number of dominant non-wetland indicator plants: **3**

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes **NO**

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

MassDEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: BSS Hummock Pond LLC & Hummock Pond Holdings, LLC Prepared by: LEC Environmental Project location: 287 & 289 Hummock Pond Rd, Nantucket DEP File #:_____

Check all that apply:

- ❑ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ❑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ❑ Method other than dominance test used (attach additional information)

Section I.

Vegetation	Observation Plot Number: **1**		Transect Number: **1**	Date of Delineation: **4/25/19**
A. Sample Layer & Plant Species (by common/scientific name)	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Seaside rose (*Rosa rugosa*)	20.5	100%	Yes	FACU-
Shrub				
Seaside rose	38.0	55.1	Yes	FACU-
Groundsel tree (*Baccharis halimifolia*)	20.5	29.7	Yes	FACW *
Bush honeysuckle (*Lonicera* sp.)	10.5	15.2	No	

* *Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.*

Vegetation conclusion:

Number of dominant wetland indicator plants: **1**

Number of dominant non-wetland indicator plants: **2**

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes **NO**

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? **YES**
title/date: **NRCS Web Soil Survey**
map number:
soil type mapped: **Evesboro sand**
hydric soil inclusions:**N/A**

Are field observations consistent with soil survey? **Generally**
Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
O	**0.5-0”**		
A	**0-2”**	**10 YR 2/1**	
B1	**2-6”**	**10 YR 3/6**	
B2	**6-18”**	**10 YR 4/4**	

Remarks:
Plot taken with hand-held auger upgradient of wetland flags 2 & 3.

3. Other:

Conclusion: Is soil hydric? **NO**

Other Indicators of Hydrology: (check all that apply & describe)
N/A

- ❑ Site Inundated: _____
- ❑ Depth to free water in observation hole: _____
- ❑ Depth to soil saturation in observation hole: _____
- ❑ Water marks: _____
- ❑ Drift lines: _____
- ❑ Sediment Deposits: _____
- ❑ Drainage patterns in BVW: _____
- ❑ Oxidized rhizospheres: _____
- ❑ Water-stained leaves: _____
- ❑ Recorded Data (streams, lake, or tidal gauge; aerial photo; other):
  _____
  _____
  _____
- ❑ Other: _____

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	____	**X**
Wetland hydrology present:		
Hydric soil present	_____	**X**
Other indicators of hydrology present	_____	**X**
Sample location is in a BVW	_____	**X**

Submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? **YES**
title/date: **NRCS Web Soil Survey**
map number:
soil type mapped: **Evesboro sand**
hydric soil inclusions:**N/A**

Are field observations consistent with soil survey? **Generally**
Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
O	**0.5-0”**		
A	**0-2”**	**10 YR 2/1**	
B1	**2-12”**	**10 YR 4/4**	
B2	**12-20”**	**10 YR 6/2**	

Remarks:
Plot taken with hand-held auger downgradient of wetland flags 2 & 3.

3. Other:

Conclusion: Is soil hydric? **YES**

287 & 289 Hummock Pond Road, Nantucket (T1/P1-wetland)

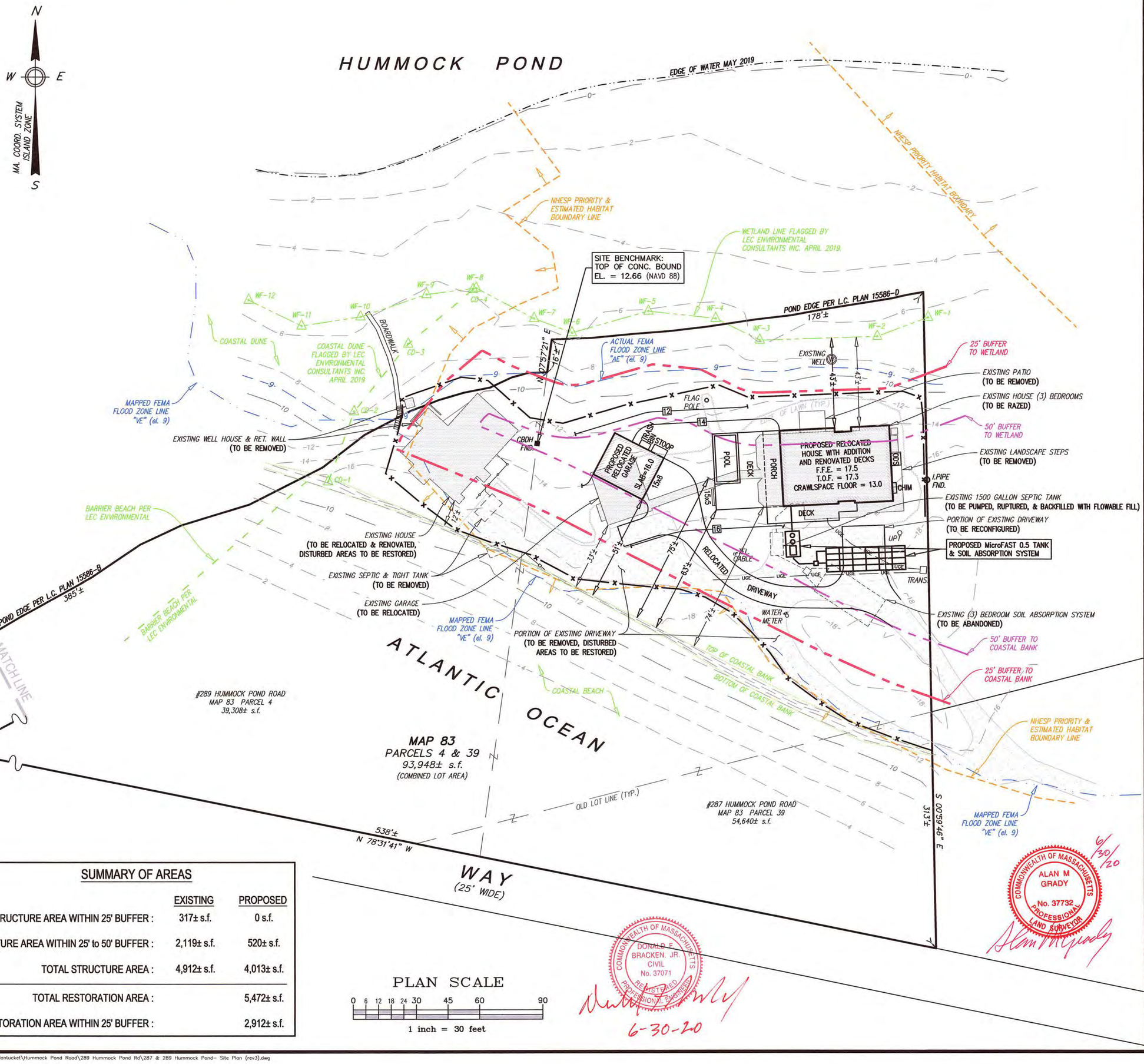
Other Indicators of Hydrology: (check all that apply & describe)

- ❑ Site Inundated: _____
- ❑ Depth to free water in observation hole: **12”**
- ❑ Depth to soil saturation in observation hole: **6”**
- ❑ Water marks: **Pond--interior**
- ❑ Drift lines: _____
- ❑ Sediment Deposits: _____
- ❑ Drainage patterns in BVW: _____
- ❑ Oxidized rhizospheres: _____
- ❑ Water-stained leaves: **YES**
- ❑ Recorded Data (streams, lake, or tidal gauge; aerial photo; other):
  _____
  _____
  _____
- ❑ Other: _____

Vegetation and Hydrology Conclusion

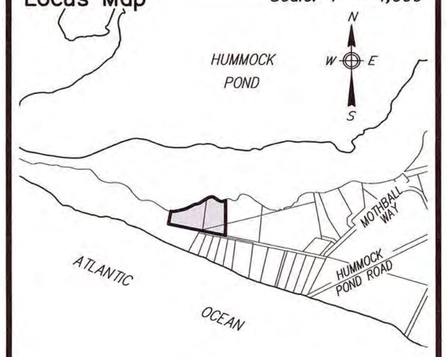
	Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	____	**X**
Wetland hydrology present:		
Hydric soil present	**X**	_____
Other indicators of hydrology present	**X**	_____
Sample location is in a BVW	**X**	_____

Submit this form with the Request for Determination of Applicability or Notice of Intent.



Locus Map

Scale: 1" = 1,000'



Notes

1. LOCUS: #287 HUMMOCK POND ROAD
   MAP 83 PARCEL 39

   OWNER: HUMMOCK POND HOLDINGS LLC
   591 WEST PUTNAM AVENUE
   GREENWICH, CT 06830

   DEED REF: CERT #27523

   PLAN REF: L.C.C. 15586-D (LOT 3)
   L.C.C. 39297-A (LOT 1)

2. LOCUS: #289 HUMMOCK POND ROAD
   MAP 83 PARCEL 4

   OWNER: BSS HUMMOCK POND LLC
   591 WEST PUTNAM AVENUE
   GREENWICH, CT 06830

   DEED REF: CERT #26027

   PLAN REF: L.C.C. 15586-B (LOT 1)
   L.C.C. 19571-C (LOT 2)

3. LOCUS FALLS WITHIN SPECIAL FLOOD HAZARD ZONES AE (el. 9) & VE (el. 9) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. 25019C-0068-G dated 06/09/14.

4. LOCUS FALLS WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF ESTIMATED HABITATS OF RARE WILDLIFE and PRIORITY HABITATS OF RARE SPECIES.

SUMMARY OF AREAS

	EXISTING	PROPOSED
STRUCTURE AREA WITHIN 25' BUFFER :	317± s.f.	0 s.f.
STRUCTURE AREA WITHIN 25' to 50' BUFFER :	2,119± s.f.	520± s.f.
TOTAL STRUCTURE AREA :	4,912± s.f.	4,013± s.f.
TOTAL RESTORATION AREA :		5,472± s.f.
RESTORATION AREA WITHIN 25' BUFFER :		2,912± s.f.

PLAN SCALE

0 6 12 18 24 30 45 60 90

1 inch = 30 feet

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

6-30-20

COMMONWEALTH OF MASSACHUSETTS
ALAN M GRADY
No. 37732
PROFESSIONAL LAND SURVEYOR

6/30/20

Prepared By:

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

PROPOSED SITE PLAN IN NANTUCKET, MASSACHUSETTS

Prepared For:

BSS HUMMOCK POND, LLC &
HUMMOCK POND HOLDINGS, LLC

#287 & #289 HUMMOCK POND ROAD
MAP 83 PARCELS 4 & 39

No.	Date	Revision Description	By
–	–	–	–

Date:	Drawn:	Checked:	Sheet:
JUNE 30, 2020	RMM/ERC/BEI	DFB/AMG	1 of 1

S:\Autocad Drawings\Nantucket\Hummock Pond Road\289 Hummock Pond Rd\287 & 289 Hummock Pond- Site Plan (rev3).dwg

Nantucket SURVEYORS LLC
One of The TILTON Companies

P.O. Box 3627, Nantucket, Massachusetts 02584-3627
Tel. (508) 228-0240 Fax (508) 228-9856
www.nantucketsurveyors.com
nsllcinfo@nantucketsurveyors.com

N-11180

July 2, 2020

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, Massachusetts 02554

Re: Request for Determination of Applicability
Applicant: Steven L. Cohen, Esq.
Owner: Nantucket Westmoor Farms, LLC
8 Old Westmoor Farm Road, Map: 41 Parcel: 822
Nantucket, MA 02554

Dear Commission Members,

Enclosed please find the following:

- Two (2) copies of a Request for Determination of Applicability for the above-referenced project;
- One (1) Filing Fee to the Town of Nantucket - $25.00(bylaw);
- One (1) Filing Fee to the Town of Nantucket - $200.00 (consultant review fee);
- One (1) Check to the Inquirer & Mirror - $335.10 (publishing of the Public Notice).

This application is to determine whether a man-made Koi Pond as depicted, is an area subject to jurisdiction of the Wetland Protection Act and whether the boundaries of a Bordering Vegetated Wetland and Vernal Pool as depicted, are accurately delineated. These areas are depicted on the included plan, "Site Plan to Accompany a Request for Determination of Applicability #8 Old Westmoor Farm Road" by Nantucket Surveyors, LLC dated July 2, 2020.

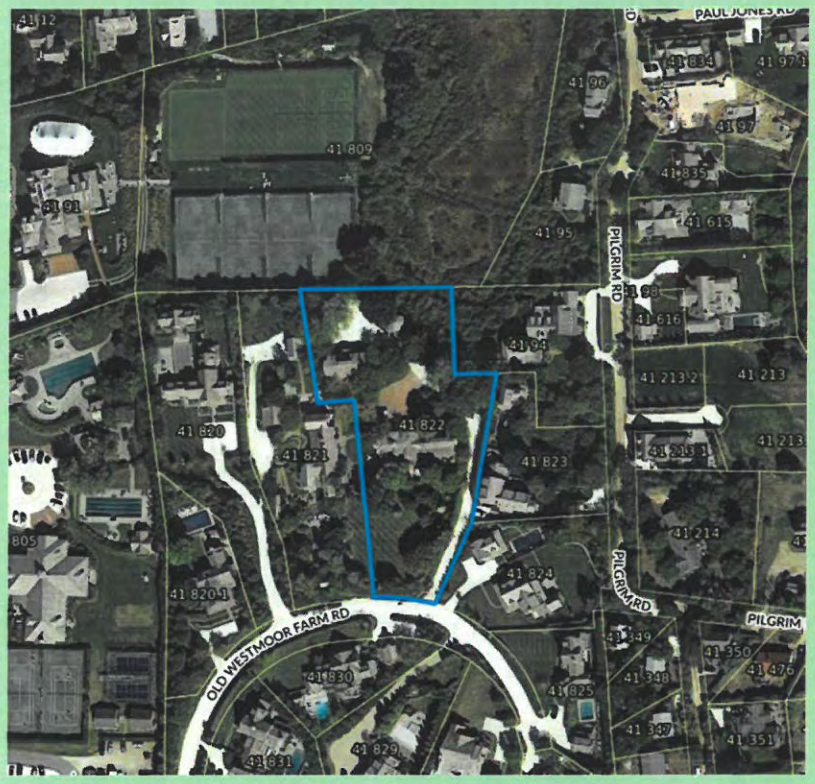
Thank you for your attention to this matter. If you have any questions, please do not hesitate to call our office.

Respectfully,
Nantucket Surveyors, LLC

Paul J. Santos, PLS

Enclosures

cc: DEP Southeast Regional Office
Steven L. Cohen, Esq.
Kevin F. Dale, Esq.



Request for Determination of Applicability

Map 41 Parcel 822
8 Old Westmoor Farm Road
Nantucket, Massachusetts

Prepared for: **Steven L. Cohen, Esq.**
Cohen & Cohen Law PC
34 Main Street, 2nd Floor
P.O. Box 786
Nantucket, MA 02554

Prepared by: **Nantucket Surveyors, LLC**
5 Windy Way, P.O. Box 3627
Nantucket, MA 02554

July 2, 2020

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Nantucket
City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. Applicant:

Steven L. Cohen, Esq. — Name
steven@cohenlegal.net — E-Mail Address
34 Main Street, 2nd Floor, P.O. Box 786 — Mailing Address
Nantucket — City/Town
MA — State
02554 — Zip Code
508-228-0337 — Phone Number
508-228-0970 — Fax Number (if applicable)

2. Representative (if any):

Nantucket Surveyors, LLC — Firm
Paul J. Santos — Contact Name
psantos@nantucketsurveyors.com — E-Mail Address
5 Windy Way — Mailing Address
Nantucket — City/Town
MA — State
02554 — Zip Code
508-228-0240 — Phone Number
508-228-9856 — Fax Number (if applicable)

B. Determinations

1. I request the Nantucket (Conservation Commission) make the following determination(s). Check any that apply:

☒ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.

☒ b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.

☐ c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.

☒ d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Nantucket
Name of Municipality

☐ e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

8 Old Westmoor Farm Road	Nantucket
Street Address	City/Town
41	822
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

The project locus is currently a developed residential lot with two existing dwellings on the north side of Old Westmoor Farm Road. The surrounding land use is residential and commercial (The Westmoor Club).

c. Plan and/or Map Reference(s):

"Site Plan to Accompany a Request for Determination of Applicability #8 Old Westmoor Farm Road"	7/2/20
	Date
Title	Date
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- ☐ Single family house on a lot recorded on or before 8/1/96
- ☐ Single family house on a lot recorded after 8/1/96
- ☐ Expansion of an existing structure on a lot recorded after 8/1/96
- ☐ Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- ☐ New agriculture or aquaculture project
- ☐ Public project where funds were appropriated prior to 8/7/96
- ☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- ☐ Residential subdivision; institutional, industrial, or commercial project
- ☐ Municipal project
- ☐ District, county, state, or federal government project
- ☐ Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

D. Signatures and Submittal Requirements

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

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Nantucket Westmoor Farms, LLC
Name

2812 Chesterfield Place NW
Mailing Address

Washington
City/Town

DC
State

20008
Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signature of Applicant — **Date**

Authorized Attorney for Owner of Record — June 30, 2020

Signature of Representative (if any) — **Date**

LEC WETLANDS WILDLIFE WATERWAYS

July 1, 2020

EMAIL (psantos@nantucketsurveyors.com)

Paul Santos
Nantucket Surveyors, LLC
P.O. Box 3627
Nantucket, MA 02584

Re: Wetland Resource Area Analysis
8 Old Westmoor Farm Road
Map 41, Parcel 822
Nantucket, Massachusetts

[LEC File #NSLLC\20-187.01]

Dear Paul:

As requested, LEC Environmental Consultants, Inc., (LEC) conducted a site evaluation on June 15, 2020, at the above-referenced subject parcel to identify and demarcate Wetland Resource Area boundaries protected under the *Massachusetts Wetlands Protection Act* (WPA, M.G.L., c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and/or the *Town of Nantucket Bylaw* (Chapter 136) and *Wetlands Protection Regulations* (*Bylaw*). The following report provides a description of the Wetland Resource Areas.

Wetland Resource Areas

An Isolated Vegetated Wetland (IVW)/Freshwater Wetland is located within the northeastern portion of the subject parcel. The interior of the IVW/Freshwater Wetland also qualifies as Vernal Pool and has been Certified (CVP #5200).

IVW/Freshwater Wetland

The IVW/ Freshwater Wetland extends across multiple properties and is located within a confined depression bounded by the Westmoor Club property and single-family dwellings located off Cliff Road and Pilgrim Road. The IVW/Freshwater Wetlands is occupied by a dense perimeter of woody vegetation and fox grape (*Vitis labrusca*) entanglements, while the interior contains shrub clusters and emergent marsh vegetation amongst contiguous standing water. Dominant vegetation includes willow (*Salix* spp.), winterberry (*Ilex verticillata*), bayberry (*Myrica pensylvanica*), buttonbush (*Cephalanthus occidentalis*), cattails (*Typha* sp.), reed canary grass (*Phalaris arundinacea*), swamp loosestrife (*Decodon verticillatus*), iris (*Iris* sp.), sensitive fern (*Onoclea sensibilis*), and miscellaneous sedges (*Carex* sp.) and rushes (*Juncus* sp.).

LEC

Vernal Pool

LEC (Brian Madden) has previously documented Fairy Shrimp (*Eubranchipus vernalis*) within the interior of the IVW/Freshwater Wetland on an off-site property. Fairy Shrimp are an Obligate Vernal Pool Species. LEC has also documented Facultative Spring Peeper (*Hyla crucifer*) chorusing within the wetland interior. Considering that standing water is contiguous amongst the woody and herbaceous vegetation, the entire wetland containing ephemeral waters would appear to be considered as part of the same Vernal Pool (CVP #5200). The hydrology of the Vernal Pool appears to be semi-permanent standing water.

LEC demarcated the Mean High Water (MHW) to the Vernal Pool in accordance with NHESP's *The Guidelines for Certification of Vernal Pool Habitat* (March 2009). The MHW/Vernal Pool boundary is nearly coincident with the IVW/Freshwater Wetland within the confined depression on-site.

Koi Pond / Water Feature

LEC also investigated the existing koi pond/water feature on the property. Based on a review of Conservation Commission file materials and historic aerial images, the koi pond/water feature was clearly man-made and built within an upland setting. The koi pond/water feature is lined by an artificial rubber liner, stone, and/or concrete as evident in locations and confirmed by LEC via probing with an auger. As such, the koi pond/water feature are not Wetland Resource Areas protected under the WPA or *Bylaw*.

Summary

Wetland Resource Areas located on-site include IVW/Freshwater Wetland and a Vernal Pool (CVP #5200) located within the northeasterly portion of the subject parcel. The koi pond/water feature shall not considered protectable under the WPA or *Bylaw*.

Should you have any questions or require additional information, please do not hesitate to contact me at 508-746-9491 or at bmadden@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

MassDEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: LEC Environmental Project location: 8 Old Westmoor Farm Rd, Nantucket DEP File #: _____

Check all that apply:

- ❑ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ❑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ❑ Method other than dominance test used (attach additional information)

Section I.

Vegetation	Observation Plot Number: **1**		Transect Number: **1**	Date of Delineation: **6/15/20**
A. Sample Layer & Plant Species (by common/scientific name)	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Reed Canary Grass (*Phalaris arundinacea*)	38.0	55.1	Yes	FACW+ *
Hop Sedge (*Carex lupulina*)	20.5	29.7	Yes	OBL *
Beggarstick (*Bidens* sp.)	10.5	15.2	No	
Shrub				
Buttonbush (*Cephalanthus occidentalis*)	10.5	100	Yes	OBL *
Vine				
Fox grape (*Vitis labrusca*)	20.5	100	Yes	FACU

* *Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.*

Vegetation conclusion:

Number of dominant wetland indicator plants: **3** Number of dominant non-wetland indicator plants: **1**

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? **YES** no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

MassDEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____ Prepared by: LEC Environmental Project location: 8 Old Westmoor Farm Rd, Nantucket DEP File #: _____

Check all that apply:

- ❑ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ❑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ❑ Method other than dominance test used (attach additional information)

Section I.

Vegetation	Observation Plot Number: **2**		Transect Number: **1**	Date of Delineation: **6/15/20**
A. Sample Layer & Plant Species (by common/scientific name)	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Ground				
Bush honeysuckle (*Lonicera* sp.)	10.5	100%	Yes	NI
Shrub				
Bush honeysuckle	63.0	100	Yes	NI
Vine				
Fox grape (*Vitis labrusca*)	98.0	100	Yes	FACU

* *Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.*

Vegetation conclusion:

Number of dominant wetland indicator plants: **0**

Number of dominant non-wetland indicator plants: **3**

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes **NO**

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? **YES**
title/date: **NRCS Web Soil Survey**
map number:
soil type mapped: **Evesboro sand**
hydric soil inclusions:**Berryland Variant loamy sand & Freetown & Swansea mucks**

Are field observations consistent with soil survey? **Generally**
Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
O	**0.5-0"**		
A	**0-14"**	**10 YR 2/1**	
B	**14-24"**	**10 YR 5/6**	

Remarks:
Plot taken with hand-held auger upgradient of wetland flag #2.

3. Other:

Conclusion: Is soil hydric? **NO**

8 Old Westmoor Farm Road, Nantucket (T1/P1-upland)

Other Indicators of Hydrology: (check all that apply & describe)

- ❑ Site Inundated: _____
- ❑ Depth to free water in observation hole: _____
- ❑ Depth to soil saturation in observation hole: _____
- ❑ Water marks: _____
- ❑ Drift lines: _____
- ❑ Sediment Deposits: _____
- ❑ Drainage patterns in BVW: _____
- ❑ Oxidized rhizospheres: _____
- ❑ Water-stained leaves: _____
- ❑ Recorded Data (streams, lake, or tidal gauge; aerial photo; other): _____ _____ _____
- ❑ Other: _____

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	____	**X**
Wetland hydrology present:		
Hydric soil present	____	**X**
Other indicators of hydrology present	____	**X**
Sample location is in a IVW	____	**X**

Submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? **YES**
title/date: **NRCS Web Soil Survey**
map number:
soil type mapped: **Evesboro sand**
hydric soil inclusions:**Berryland Variant loamy sand & Freetown & Swansea mucks**

Are field observations consistent with soil survey? **Generally**
Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
O	**3-0"**		
A	**0-16"**	**10 YR 3/2**	**2.5 YR 3/6, 10 YR 5/2**
B	**16-24"**	**10 YR 5/6**	**2.5 YR 3/6**

Remarks:
Plot taken with hand-held auger downgradient of wetland flag #2.

3. Other:

Conclusion: Is soil hydric? **YES**

8 Old Westmoor Farm Road, Nantucket (T1/P1-wetland)

Other Indicators of Hydrology: (check all that apply & describe)

- ❑ Site Inundated: **Wetland Interior**
- ❑ Depth to free water in observation hole: **12"**
- ❑ Depth to soil saturation in observation hole: **@ surface**
- ❑ Water marks:**YES**
- ❑ Drift lines: _____
- ❑ Sediment Deposits: _____
- ❑ Drainage patterns in BVW: _____
- ❑ Oxidized rhizospheres: _____
- ❑ Water-stained leaves: **Wetland Interior**
- ❑ Recorded Data (streams, lake, or tidal gauge; aerial photo; other):
  _____
  _____
  _____
- ❑ Other: _____

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	**X**	____
Wetland hydrology present:		
Hydric soil present	**X**	____
Other indicators of hydrology present	**X**	____
Sample location is in a IVW	**X**	____

Submit this form with the Request for Determination of Applicability or Notice of Intent.

Figure 1: ASSESSOR'S MAP

8 OLD WESTMOOR FARM ROAD
NANTUCKET, MASSACHUSETTS
SCALE: N.T.S. DATE: JULY 2, 2020

ASSESSOR'S REFERENCE:
MAP: 41 PARCEL: 822

PREPARED FOR:
STEVEN L. COHEN

PREPARED BY:
NANTUCKET SURVEYORS LLC
5 WINDY WAY NANTUCKET, MA 02554

SOURCE: 2020 NANTUCKET GIS

N–11180

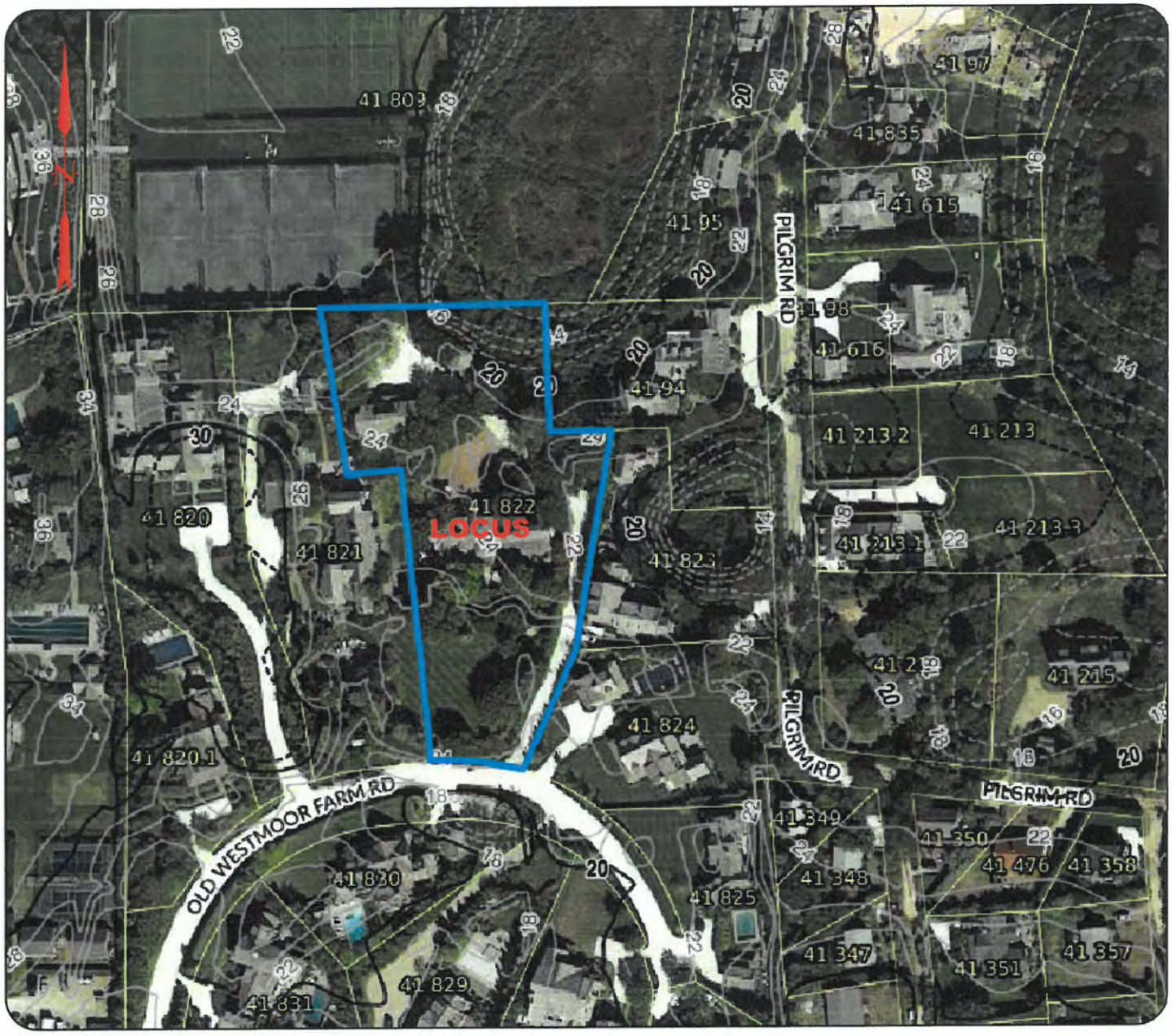


Figure 2: TOPOGRAPHIC MAP

8 OLD WESTMOOR FARM ROAD
NANTUCKET, MASSACHUSETTS
SCALE: N.T.S. DATE: JULY 2, 2020

ASSESSOR'S REFERENCE:
MAP: 41 PARCEL: 822

PREPARED FOR:
STEVEN L. COHEN

PREPARED BY:
NANTUCKET SURVEYORS LLC
5 WINDY WAY NANTUCKET, MA 02554

SOURCE: 2020 NANTUCKET GIS

N–11180

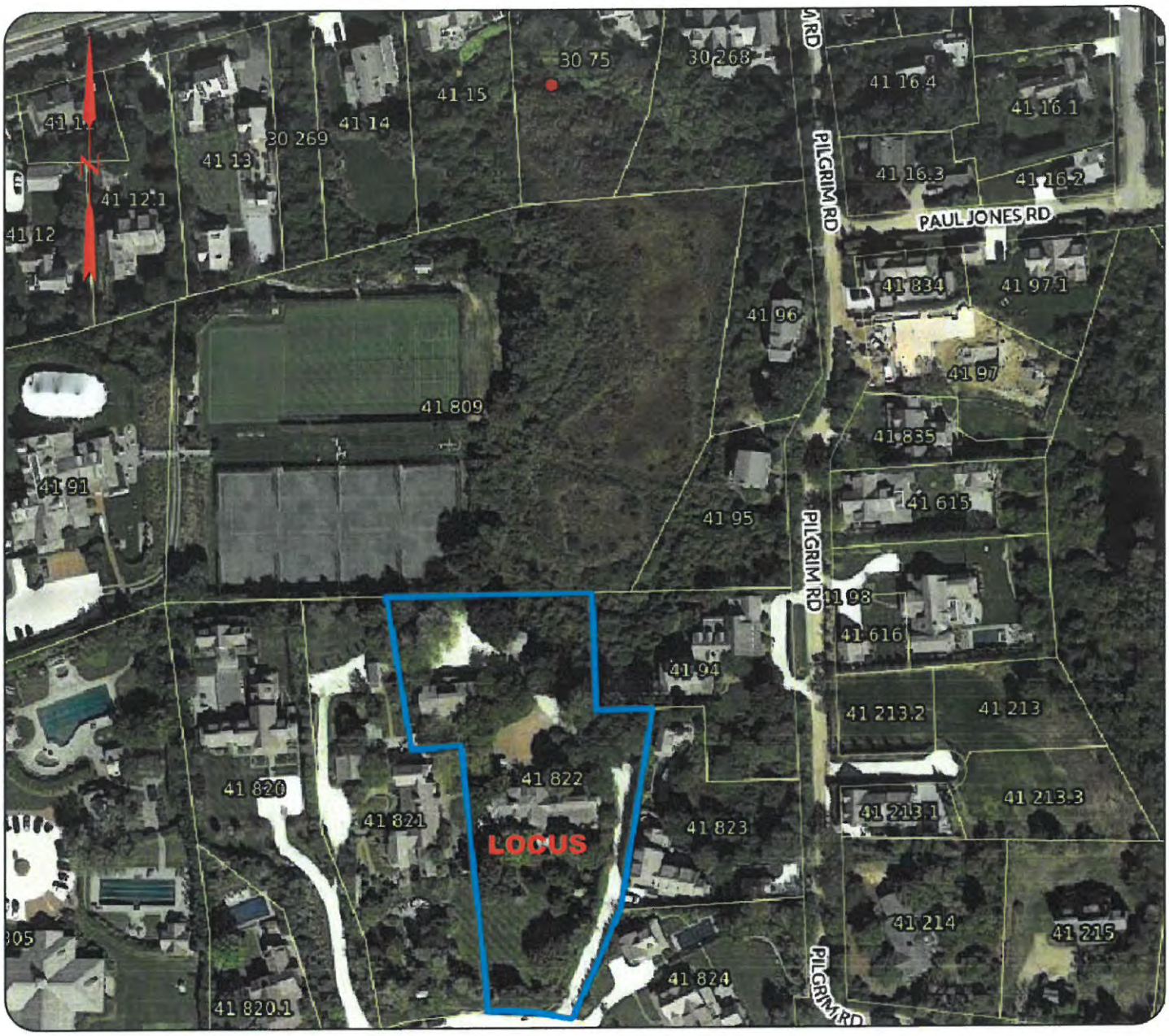


Figure 3: NHESP MAP

8 OLD WESTMOOR FARM ROAD
NANTUCKET, MASSACHUSETTS
SCALE: N.T.S. DATE: JULY 2, 2020

ASSESSOR'S REFERENCE:
MAP: 41 PARCEL: 822

PREPARED FOR:
STEVEN L. COHEN

PREPARED BY:
NANTUCKET SURVEYORS LLC
5 WINDY WAY NANTUCKET, MA 02554

NHESP PRIORITY HABITATS OF RARE SPECIES

NHESP ESTIMATED HABITATS OF RARE WILDLIFE

SOURCE: 2017 NHESP PRIORITY HABITAT AND ESTIMATED HABITAT

N-11180

PANEL: 25019C0086G
EFFECTIVE DATE: JUNE 9, 2014

Figure 4: FIRM MAP

8 OLD WESTMOOR FARM ROAD
NANTUCKET, MASSACHUSETTS
SCALE: N.T.S. DATE: JULY 2, 2020

ASSESSOR'S REFERENCE:
MAP: 41 PARCEL: 822

PREPARED FOR:
STEVEN L. COHEN

PREPARED BY:
NANTUCKET SURVEYORS LLC
5 WINDY WAY NANTUCKET, MA 02554

SOURCE: FEMA MAP SERVICE CENTER

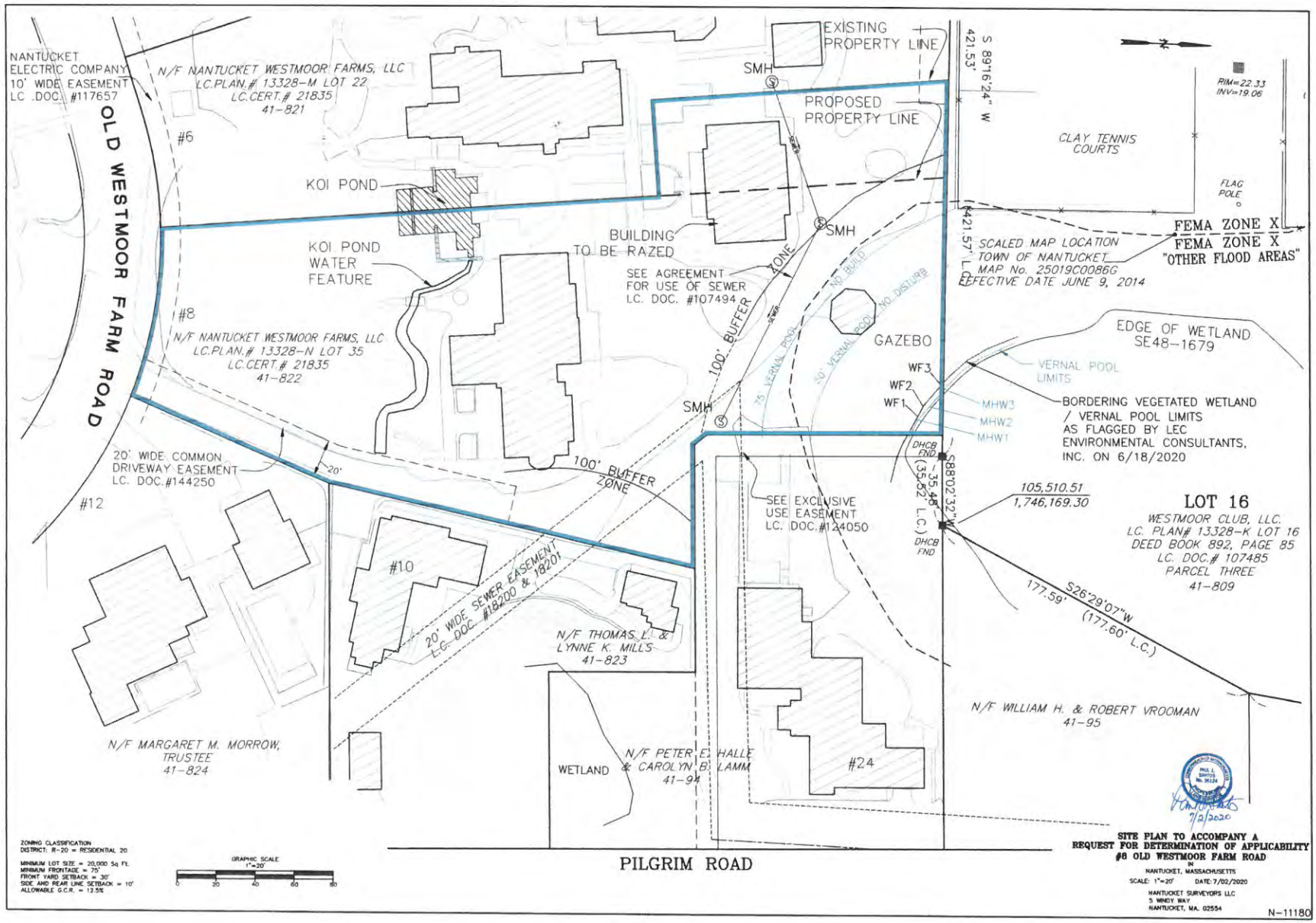
N-11180

8 Old Westmoor Farm Road, Nantucket, MA
Applicant: Steven L. Cohen

Koi Pond looking west

Koi Pond water feature looking east

View of Vernal Pool and Bordering Vegetated Wetland looking northeast


NANTUCKET ELECTRIC COMPANY 10' WIDE EASEMENT LC .DOC. #117657
OLD WESTMOOR FARM ROAD
N/F NANTUCKET WESTMOOR FARMS, LLC LC.PLAN.# 13328-M LOT 22 LC.CERT.# 21835 41-821
#6
KOI POND
KOI POND WATER FEATURE
#8
N/F NANTUCKET WESTMOOR FARMS, LLC LC.PLAN.# 13328-N LOT 35 LC.CERT.# 21835 41-822
20' WIDE COMMON DRIVEWAY EASEMENT LC. DOC.#144250
#12
#10
20' WIDE SEWER EASEMENT L.C. DOC. #18200 & 18201
N/F MARGARET M. MORROW, TRUSTEE 41-824
N/F THOMAS L. & LYNNE K. MILLS 41-823
WETLAND
N/F PETER E. HALLE & CAROLYN B. LAMM 41-94
#24
PILGRIM ROAD
EXISTING PROPERTY LINE
PROPOSED PROPERTY LINE
SMH
BUILDING TO BE RAZED
SEE AGREEMENT FOR USE OF SEWER LC. DOC. #107494
100' BUFFER ZONE
GAZEBO
75' VERNAL POOL
50' VERNAL POOL
NO BUILD
NO DISTURB
WF3
WF2
WF1
MHW3
MHW2
MHW1
EDGE OF WETLAND SE48-1679
VERNAL POOL LIMITS
BORDERING VEGETATED WETLAND / VERNAL POOL LIMITS AS FLAGGED BY LEC ENVIRONMENTAL CONSULTANTS, INC. ON 6/18/2020
SEE EXCLUSIVE USE EASEMENT LC. DOC.#124050
DHCB FND
S88°02'32"W 35.48' (35.52' L.C.)
105,510.51
1,746,169.30
LOT 16
WESTMOOR CLUB, LLC.
LC. PLAN# 13328-K LOT 16
DEED BOOK 892, PAGE 85
LC. DOC.# 107485
PARCEL THREE
41-809
S26°29'07"W 177.59' (177.60' L.C.)
N/F WILLIAM H. & ROBERT VROOMAN 41-95
S 89°16'24" W 421.53'
(421.57' L.C.)
CLAY TENNIS COURTS
RIM=22.33 INV=19.06
FLAG POLE
FEMA ZONE X
FEMA ZONE X "OTHER FLOOD AREAS"
SCALED MAP LOCATION TOWN OF NANTUCKET MAP No. 25019C0086G EFFECTIVE DATE JUNE 9, 2014
ZONING CLASSIFICATION DISTRICT: R-20 = RESIDENTIAL 20
MINIMUM LOT SIZE = 20,000 Sq. Ft.
MINIMUM FRONTAGE = 75'
FRONT YARD SETBACK = 30'
SIDE AND REAR LINE SETBACK = 10'
ALLOWABLE G.C.R. = 12.5%
GRAPHIC SCALE 1"=20'
0 20 40 60 80
7/2/2020
SITE PLAN TO ACCOMPANY A REQUEST FOR DETERMINATION OF APPLICABILITY #6 OLD WESTMOOR FARM ROAD IN NANTUCKET, MASSACHUSETTS
SCALE: 1"=20' DATE: 7/02/2020
NANTUCKET SURVEYORS LLC 5 WINDY WAY NANTUCKET, MA. 02554
N-11180

REQUEST FOR DETERMINATION OF APPLICABILITY

For Wetland Resource Determination

At

29 Baxter Road
Nantucket, MA

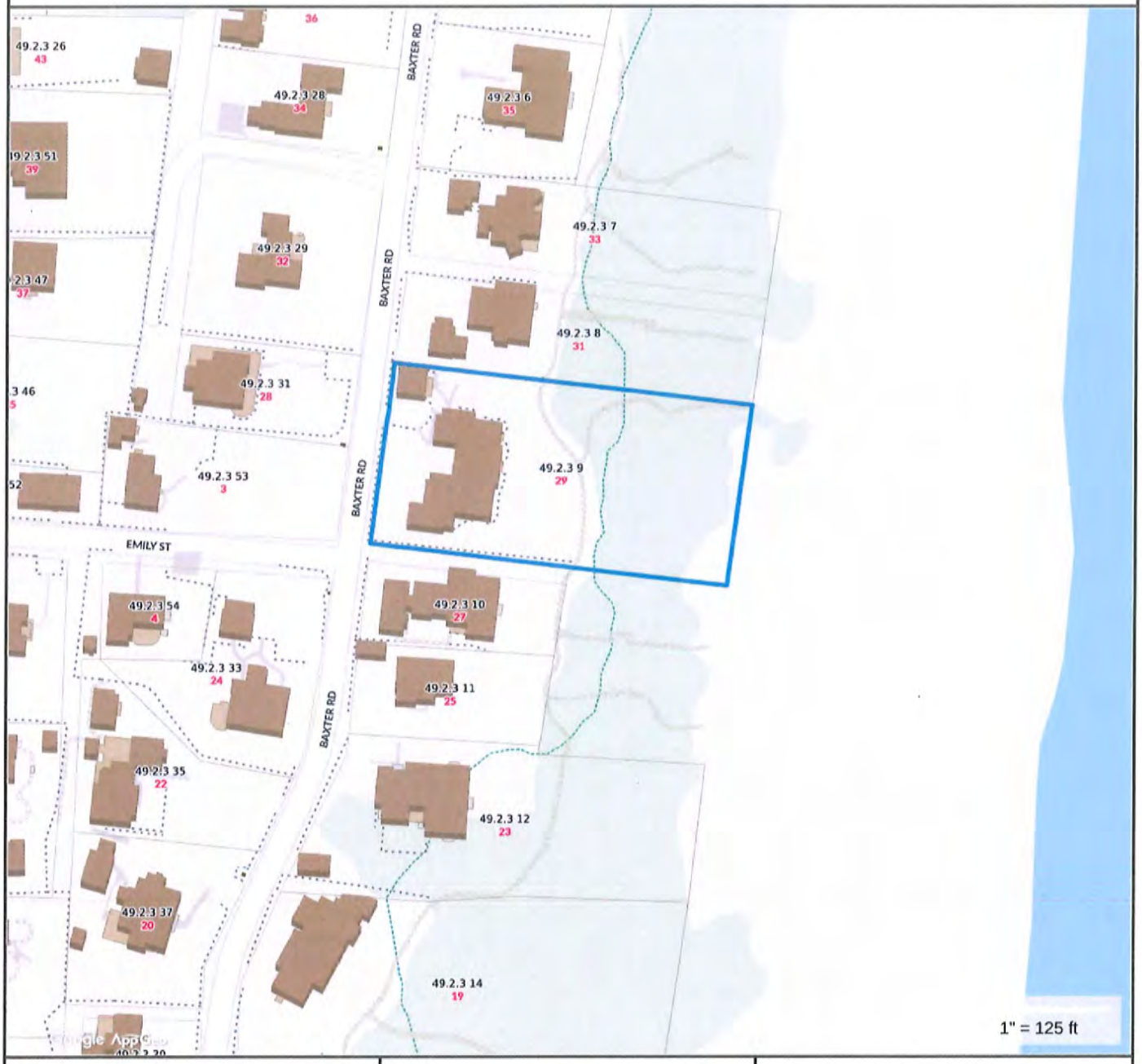
June 29, 2020

Prepared for

Conan Laughlin & Brooke Henning Laughlin

By

BLACKWELL & ASSOCIATES, Inc.
Professional Civil Engineers & Land Surveyors
20 Teasdale Circle
Nantucket, MA 02554
508-228-9026



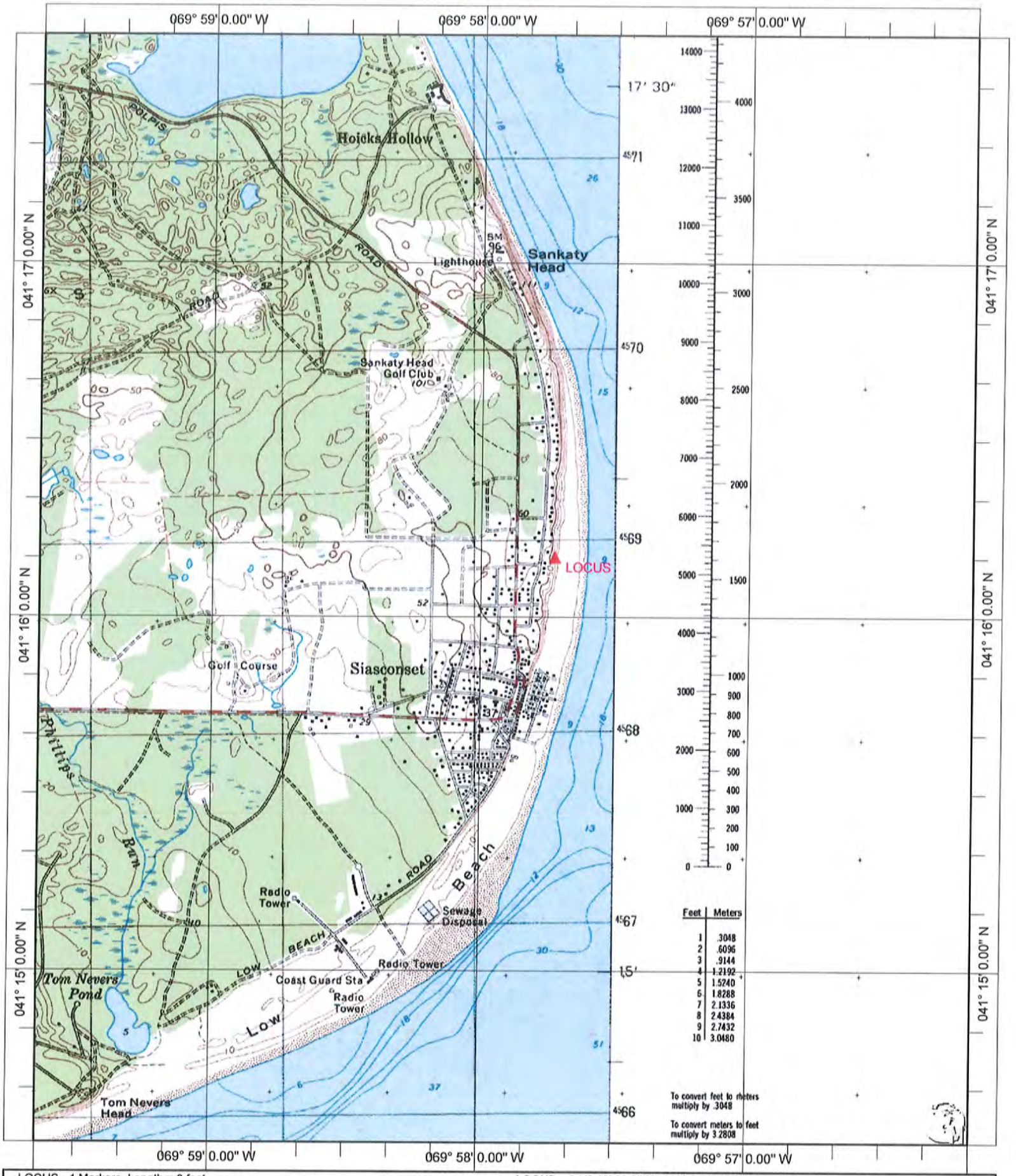
Property Information

Property ID	49.2.3 9
Location	29 BAXTER RD
Owner	LAUGHLIN CONAN J & BROOKE H

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town and County of Nantucket, MA makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 11/13/2018
Data updated 11/19/2018



LOCUS - 1 Markers, Length = 0 feet

LOCUS - 041° 16' 09.9" N, 069° 57' 43.3" W

Name: SIASCONSET
Date: 6/29/120
Scale: 1 inch equals 2000 feet

Location: 041° 16' 04.8" N 069° 57' 54.2" W

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

City/Town

A. General Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. Applicant:

Conan Laughlin & Brooke Hemming Laughlin
Name

E-Mail Address

29 Baxter Road
Mailing Address

Nantucket
City/Town

MA
State

02554
Zip Code

Phone Number

Fax Number (if applicable)

2. Representative (if any):

Blackwell & Associates, Inc.
Firm

Jeffrey Blackwell
Contact Name

jeff@blackwellsurvey.com
E-Mail Address

20 Teasdale Circle
Mailing Address

Nantucket
City/Town

MA
State

02554
Zip Code

508-228-9026
Phone Number

Fax Number (if applicable)

B. Determinations

1. I request the Nantucket (Conservation Commission) make the following determination(s). Check any that apply:

☒ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.

☒ b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.

☐ c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.

☒ d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Nantucket
Name of Municipality

☐ e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

29 Baxter Road	Nantucket
Street Address	City/Town
49.2.3	09
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

29 Baxter Road is located on the east side of Baxter road north of the village of Siasconset.

c. Plan and/or Map Reference(s):

Land Court Plan 16614-A	September 1937
Title	Date
Title	Date
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

No work is proposed.

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- ☐ Single family house on a lot recorded on or before 8/1/96
- ☐ Single family house on a lot recorded after 8/1/96
- ☐ Expansion of an existing structure on a lot recorded after 8/1/96
- ☐ Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- ☐ New agriculture or aquaculture project
- ☐ Public project where funds were appropriated prior to 8/7/96
- ☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- ☐ Residential subdivision; institutional, industrial, or commercial project
- ☐ Municipal project
- ☐ District, county, state, or federal government project
- ☐ Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

D. Signatures and Submittal Requirements

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

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Name

Mailing Address

City/Town

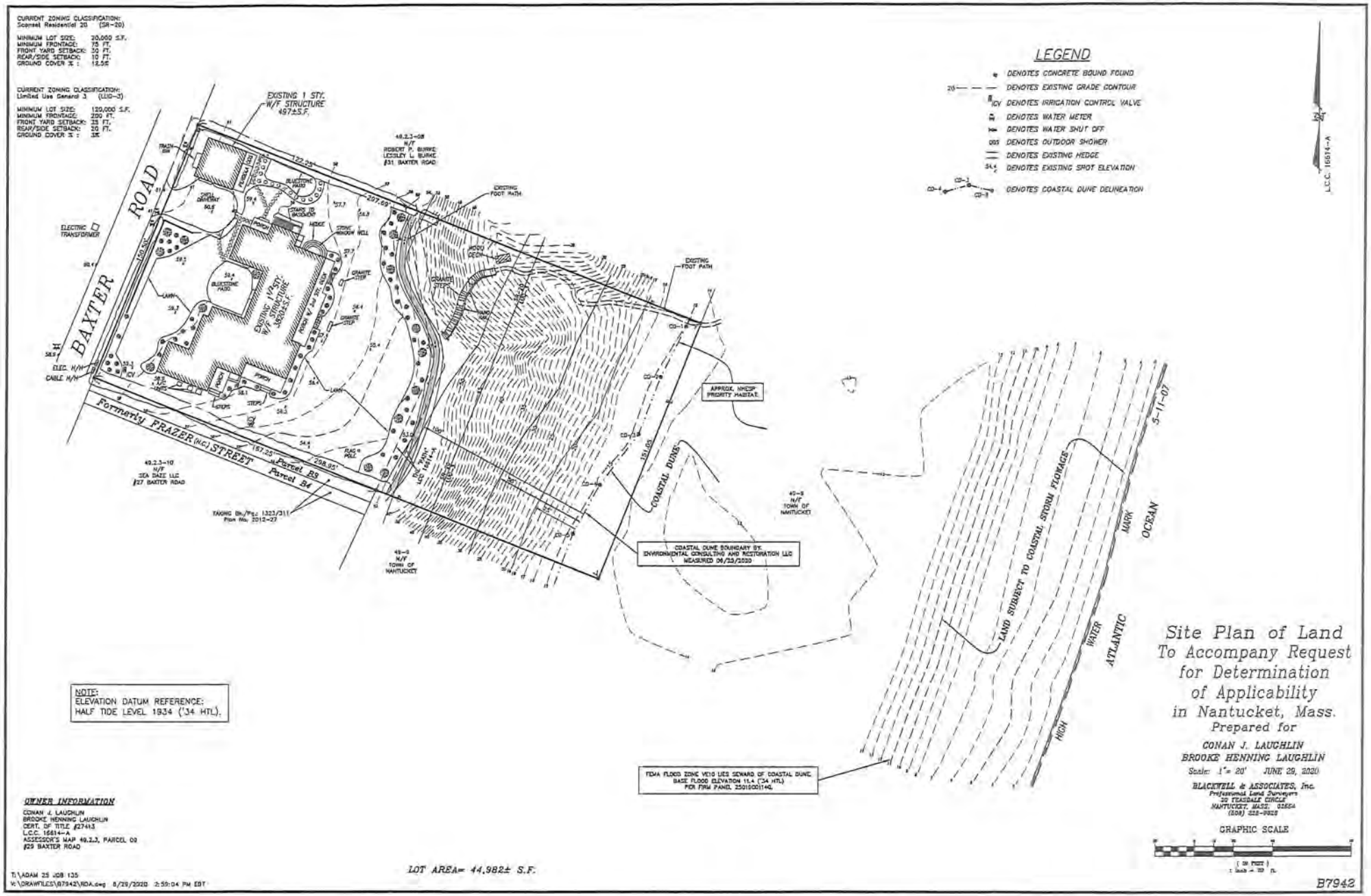
State | Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Jeff Reed, Agent — Signature of Applicant | 7-2-20 — Date

Jeff Reed — Signature of Representative (if any) | 7-2-20 — Date


CURRENT ZONING CLASSIFICATION:
Sconset Residential 20 (SR-20)
MINIMUM LOT SIZE: 20,000 S.F.
MINIMUM FRONTAGE: 75 FT.
FRONT YARD SETBACK: 30 FT.
REAR/SIDE SETBACK: 10 FT.
GROUND COVER % : 12.5%
CURRENT ZONING CLASSIFICATION:
Limited Use General 3 (LUG-3)
MINIMUM LOT SIZE: 120,000 S.F.
MINIMUM FRONTAGE: 200 FT.
FRONT YARD SETBACK: 25 FT.
REAR/SIDE SETBACK: 20 FT.
GROUND COVER % : 35%
LEGEND
DENOTES CONCRETE BOUND FOUND
DENOTES EXISTING GRADE CONTOUR
DENOTES IRRIGATION CONTROL VALVE
DENOTES WATER METER
DENOTES WATER SHUT OFF
DENOTES OUTDOOR SHOWER
DENOTES EXISTING HEDGE
DENOTES EXISTING SPOT ELEVATION
DENOTES COASTAL DUNE DELINEATION
L.C.C. 16614-A
BAXTER ROAD
Formerly FRAZER (N.C.) STREET
EXISTING 1 STY. W/F STRUCTURE 457± S.F.
EXISTING 1 VAST. W/F STRUCTURE 3,802± S.F.
49.2.3-08 N/F ROBERT P. BURKE LESSLEY L. BURKE #31 BAXTER ROAD
49.2.3-10 N/F SEA DAZE LLC #27 BAXTER ROAD
49-8 N/F TOWN OF NANTUCKET
Parcel B9
Parcel B4
TAKING Bk./Pg.: 1323/311 Plan No. 2012-27
EXISTING FOOT PATH
APPROX. NHESP PRIORITY HABITAT
COASTAL DUNE
COASTAL DUNE BOUNDARY BY: ENVIRONMENTAL CONSULTING AND RESTORATION LLC MEASURED 06/23/2020
FEMA FLOOD ZONE VE10 LIES SEWARD OF COASTAL DUNE. BASE FLOOD ELEVATION 11.4 ('34 HTL) PER FIRM PANEL 25019C0114G
LAND SUBJECT TO COASTAL STORM FLOWAGE
MEAN HIGH WATER MARK
ATLANTIC OCEAN
5-11-07
NOTE:
ELEVATION DATUM REFERENCE:
HALF TIDE LEVEL 1934 ('34 HTL).
OWNER INFORMATION
CONAN J. LAUGHLIN
BROOKE HENNING LAUGHLIN
CERT. OF TITLE #27413
L.C.C. 16614-A
ASSESSOR'S MAP 49.2.3, PARCEL 09
#29 BAXTER ROAD
LOT AREA= 44,982± S.F.
T:\ADAM 25 JOB 135
W:\DRAWFILES\B7942\NDA.dwg 8/29/2020 2:59:04 PM EDT
Site Plan of Land
To Accompany Request
for Determination
of Applicability
in Nantucket, Mass.
Prepared for
CONAN J. LAUGHLIN
BROOKE HENNING LAUGHLIN
Scale: 1" = 20' JUNE 29, 2020
BLACKWELL & ASSOCIATES, Inc.
Professional Land Surveyors
20 TRADDLE CIRCLE
NANTUCKET, MASS. 02554
(508) 228-9829
GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.
B7942

LEC WETLANDS WILDLIFE WATERWAYS

July 16, 2020

Email (jdodd@nantucket-ma.gov)

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Minor Modification Request [LEC File #: MCA\18-352.01]
DEP File #SE 48-3240
262 Polpis Road (25-1)
Nantucket, Massachusetts

Dear Members of the Commission:

On behalf of the Applicant, 262 Polpis Road Nominee Trust, LEC Environmental Consultants, Inc., (LEC) is submitting a Request for Minor Modification to the Order of Conditions (DEP File #SE48-3240) issued on September 25, 2019. The Minor Modification involves slight reconfiguration of the approved pool, spa, cabana, patios, fire pit, shed, and landscaping as depicted on the *Proposed Site Plan Modifications*, prepared by Bracken Engineering, Inc., dated July 16, 2020. An 8-foot bump-out to the cabana is also proposed. No structural work is proposed within the 50-foot Buffer Zone and there are no changes to the Limit of Work.

Should you have any questions or require additional information in advance of the July 23, 2020 Public Hearing, please do not hesitate to contact me at 508-746-9491 or at bmadden@lecenvironmental.com.

Sincerely,
LEC Environmental Consultants, Inc.

Brian T. Madden
Wildlife Scientist

Attachment

MASS COORDINATE SYSTEM
ISLAND ZONE MERIDIAN
DETERMINED USING A TOPCON
HIPER SR GPS RTK UNIT
COLLECTION DATE 11/12/2018

MA. COORD. SYSTEM ISLAND ZONE

BORDERING VEGETATED WETLAND DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS, INC.

D112 D113 D114 D115 D116 D117 D118 D108 D107

PROPOSED SILT FENCE

PREVIOUSLY APPROVED POOL/PATIO

PROPOSED PATIO

PROPOSED PATIO

SPA

POOL

FIRE PIT

LANDSCAPE AREA

LANDSCAPE AREA

PROPOSED PATIO

LANDSCAPE AREA

PROPOSED CABANA
1,006 s.f.
F.F.E. = 12.1

PREVIOUSLY APPROVED CABANA

PREVIOUSLY APPROVED SHED

SHED
80 s.f.

PATIO

DECK

DECK

PORCH

PORCH EXPANSION

PROPOSED ADDITION (293 s.f.)

EXISTING BULKHEAD and A/C UNIT (TO BE REMOVED)

EXISTING A/C UNITS (TO BE REMOVED)

PROPOSED ADDITION (336 s.f.)

RELOCATE SEPTIC TANKS AND ADJUST PIPING

PROPOSED SUBSURFACE INFILTRATION FOR ROOF RUNOFF

EXISTING STRUCTURE (TO BE RAZED)

EXISTING SEPTIC TANK (TO BE REMOVED)

25' WETLAND BUFFER

50' WETLAND BUFFER

100' WETLAND BUFFER

12x0 11x5 11x0 12x0

57' 52'

PLAN SCALE

0 4 8 12 16 20 30 40 60

1 inch = 20 feet

COMMONWEALTH OF MASSACHUSETTS
DONALD F. BRACKEN, JR.
CIVIL
No. 37071
REGISTERED PROFESSIONAL ENGINEER

NOTES:

1. OWNER: 262 POLPIS NOMINEE TRUST
   c/o DAVID J. MURPHY, trustee
2. DEED REF: CERTIFICATE #27117
3. PLAN REF: LAND COURT PLAN 11931C
   (LOTS 3 & 5)
4. A PORTION OF LOCUS FALLS WITHIN SPECIAL FLOOD HAZARD ZONES VE(EL 10) AND ZONE AE(EL8) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25019C-0092-G dated 06/09/2014.
5. THIS PLAN IS FOR A MODIFICATION TO A PREVIOUSLY APPROVED ORDER OF CONDITIONS (PREVIOUSLY APPROVED IN RED), SEE DEP FILE SE48-3240 FOR MORE DETAIL.

BRACKEN ENGINEERING, INC.

49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

PROPOSED SITE PLAN MODIFICATIONS
IN NANTUCKET, MASSASHUSETTS

Prepared for:

262 POLPIS NOMINEE TRUST
#262 POLPIS ROAD
MAP 25 PARCELS 1 & 31.1

Date:	Drawn:	Checked:	
JULY 16, 2020	RMM/BEI/DLH	DFB	

S:\Autocad Drawings\Nantucket\Polpis Road\260 & 262 Polpis Road\260 & 262 Polpis Road - Site Plan (Rev 4).dwg

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 8A – Request for Certificate of Compliance

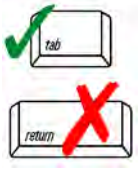
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

SE48-2319
Provided by DEP

A. Project Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. This request is being made by:(current Title holder):

Nantucket Conservation Foundation, Inc.
Name

P.O. Box 13
Mailing Address

Nantucket | MA | 02554-0013
City/Town | State | Zip Code

508-228-2884
Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Nantucket Conservation Foundation, Inc.
Applicant

August 9, 2010 | SE48-2319
Dated | DEP File Number

Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

3. The project site is located at:

183, 185 & 187 Eel Point Road | Nantucket, MA
Street Address | City/Town

33-1; 33-2; 33-3; 34-1 | 32-999 (right of way)
Assessors Map/Plat Number | Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for : (name on Order)

same
Property Owner (if different)

County | Book | Page

Certificate (if registered land)

5. This request is for certification that (check one):

☐ the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

☒ the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).
Annual herbicide treatments have been conducted to control *Phragmites australis* (Common Reed), *Salix atrocinerea* (Gray/Rusty Willow) and *Pinus thunbergii* (Japanese Black Pine) populations at this site between 2010-2019. We request permission to conduct ongoing maintenance with follow-up monitoring and treatment as stipulated in the Order of Conditions for this project in future years.

☐ the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

☐ Yes — If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

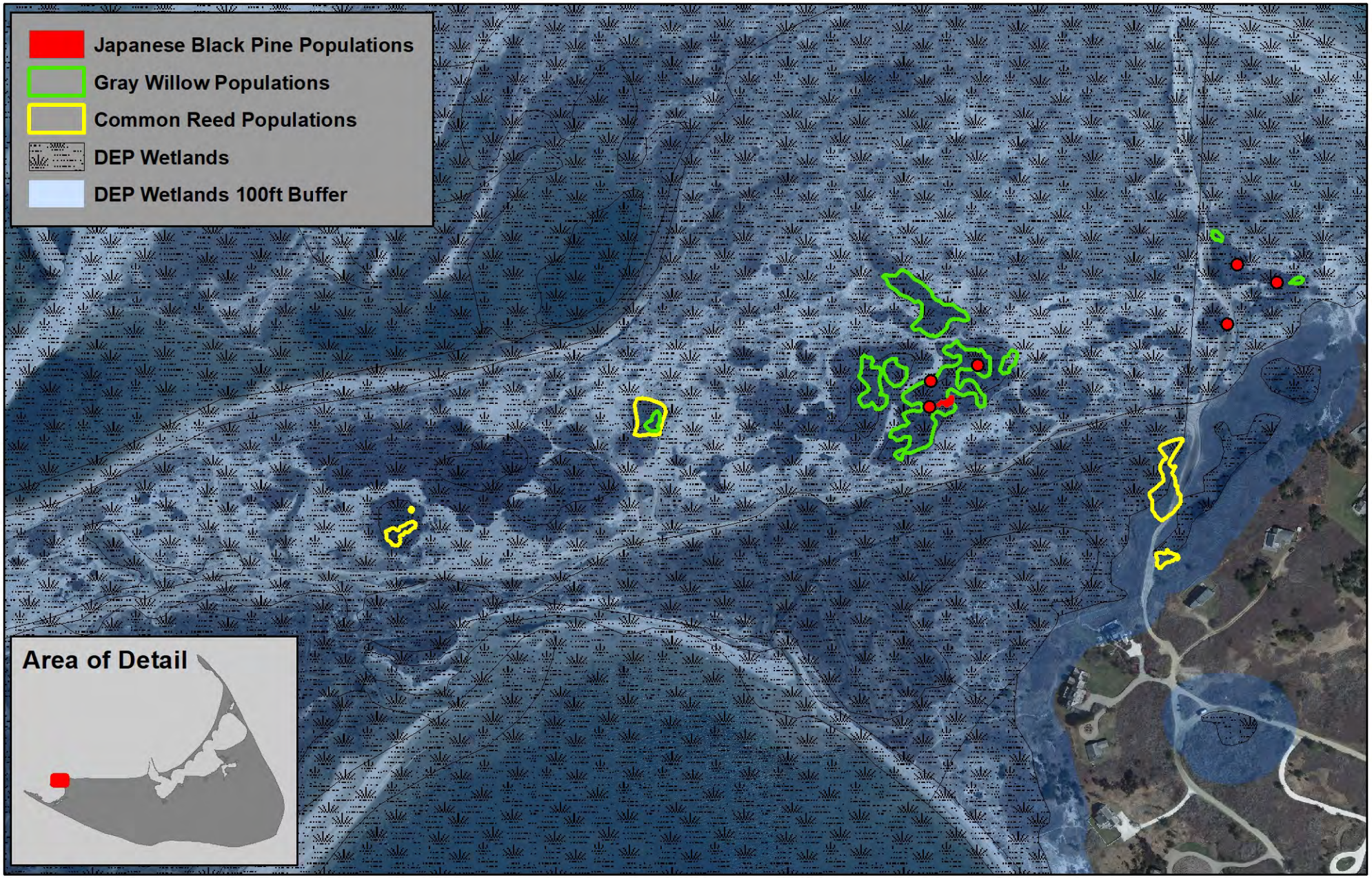
☒ No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html).

Eel Point Invasive Plant Species Management Project (SE48-2319)
Location of Populations Managed (please see included reports for details on management progress), Wetlands and Wetland 100 ft Buffers
Nantucket Conservation Foundation, Eel Point, Nantucket, MA

N



NANTUCKET CONSERVATION FOUNDATION, INC.
Invasive Species Management Reporting

E.C. Buck
December 2019

Project Location/NCF Property Name (Figure1: Overview Map): Eel Point
MA DEP Order of Conditions File # SE48-2319 **File Status**: Active, expires 8/9/2020
Year Project Initiated: 2010 (first herbicide treatment in 2011)

Target Species: Common reed *(Phragmites australis)*

Treatment Method: ☒Herbicide ☐Manual ☐Mechanical

Treatment Details (Figure 2):

- Individual stems were treated using the clip-and-drip method, with Rodeo® wetland formulated glyphosate-based herbicide mixed 2:1 with water and applied using a lab wash bottle.
- This year was very similar to 2018 with very few live *P. australis* stems were found in the Salt Marsh Patch and the West Patch, and no live stems were found in the Shrub Patch. All live stems encountered received treatment.
- The Middle Swale Patch responded well to the 2018 treatment. Less than 30 stems needed to be treated around the eastern and southern edges of the patch.

Area Treated this season (Fig 2-5): <50 m^2
Amount of Herbicide Used: 130 mL Rodeo (70 mL of the active ingredient, glyphosate)
Staff Time this Season: 2 staff hours on 9/16/19
Herbicide Applicator Licensed Staff Member(s): Kelly Omand, Elizabeth Buck
Associated Monitoring: ☒Invasive Plot/Transect Monitoring ☒Photo-monitoring ☒GPS Documentation ☒Veg Community ☐Other

Monitoring Details (Figures 2-8):

- Plot monitoring of the Salt Marsh *P. australis* stand indicates that this patch continued to decline in density and stem height, the two measures of stand vigor we tracked over time. Overall mean stem count per m^2 declined dramatically from pre-treatment levels of 22.95 ± 4.5 stems per m^2 in 2010 to 0.11 ± 0.05 stems per m^2 in 2019. Mean height of the 5 tallest stems per plot also declined substantially following treatment, from an original mean height of 1.64 ± 0.06 m in 2010, to 0.01 ± 0.01 m in 2019. In 2019, only one monitoring plots contained live *P. australis* stems.
- Plot monitoring in the Salt Marsh stand also showed an increase in plant species richness. Mean number of associated species within monitoring plots rose from 3.16 species per plot in 2011, to a high of 4.26 species per plot in 2018 but declined in 2019 3.53 species per plot.
- GPS documentation indicates that the Salt Marsh Patch declined from an original extent of 0.66 acres (2655 m^2) in 2010 to 10 scattered point locations in 2019. Middle Swale patch area declined from an original area of 0.45 acres (1829 m^2) in 2011, to 24 m^2 in 2019. The Shrub Patch declined from an original extent of 40 m^2 to zero in 2019. West Patch area declined from 0.15 acres (630 m^2) to only four point locations in 2019.

- Photo-monitoring documents that treated areas have re-vegetated well with native plant species without seeding or planting. Woody vegetation appears to have decreased in the Salt Marsh Patch but has increased in West and Middle Patches.

Future Management Recommendations & Observations:

- We recommend continuing to document *P. australis* treatment areas with GPS and photo-monitoring over the next several years to target and evaluate treatments and record shifts in vegetation.
- Salt Marsh Plot vegetation monitoring should continue for one more field season and/or until the Certificate of Compliance is issued.
- Sea level rise and storm events, combined with increased nutrient inputs from several large houses recently built nearby may alter hydrology and vegetation dynamics in the project site.
- Future treatments are likely to require less staff time for active treatment as this site is less likely to be re-colonized by large rafts, unlike West Hummock; there are no directly adjacent established reed beds. Surveying to ensure that any re-sprouting stems are treated will require about the same amount of time each year.

Additional Species included in this project? ☒Yes ☐No
Please see Eel Point Willow Management Report for information on rusty willow *(Salix atrocinerea, = S. cinerea* ssp. *oleifolia)* management at this site.

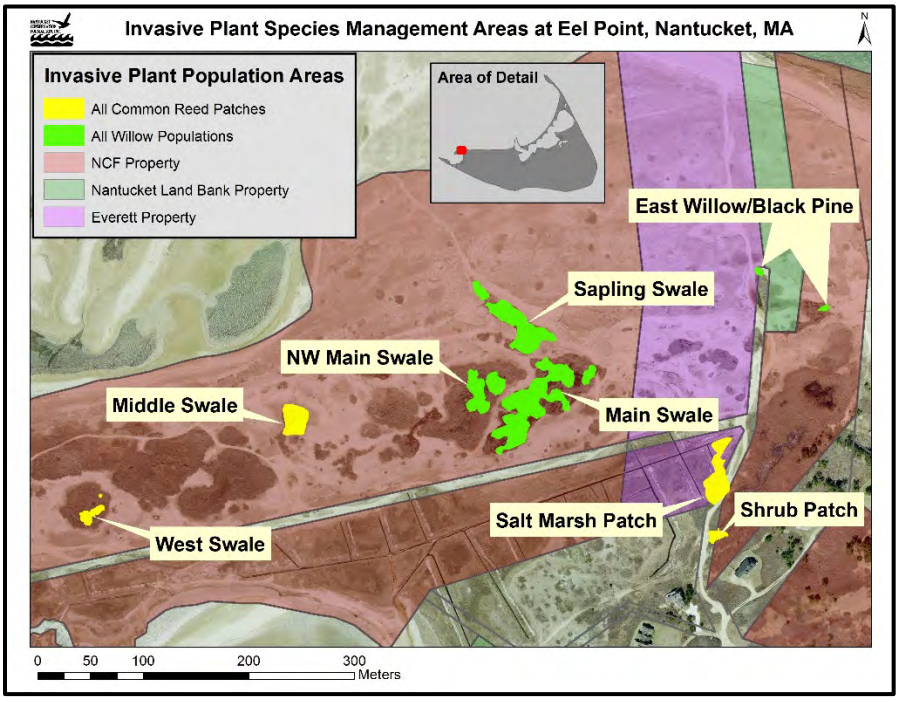


Figure 1: Map showing overview of Eel Point Invasive Species Management Project Area (2010-2019).

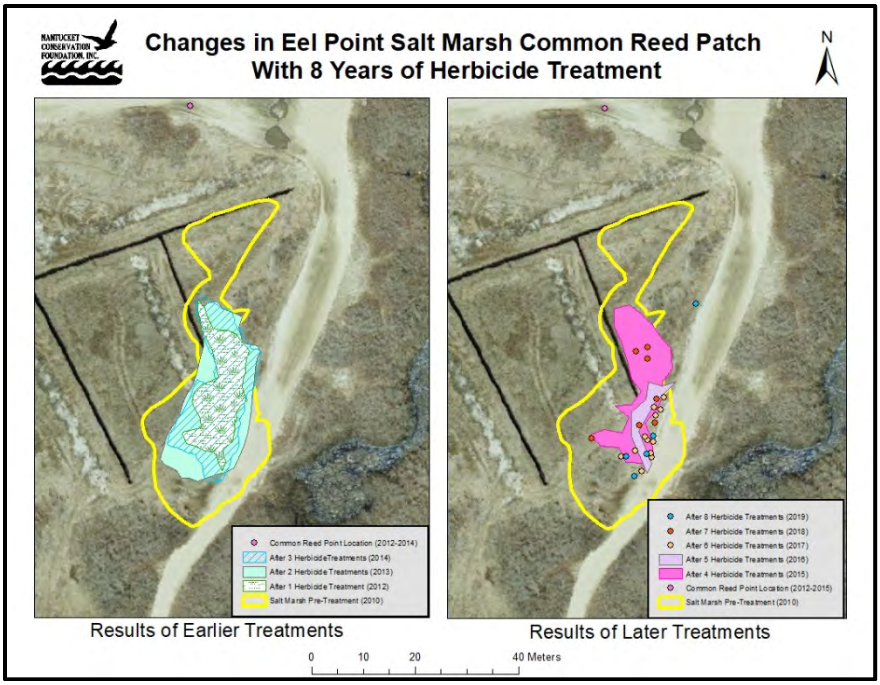


Figure 2: Map of Salt Marsh Patch showing changes in *P. australis* extent over time with successive treatments (2010-2019).

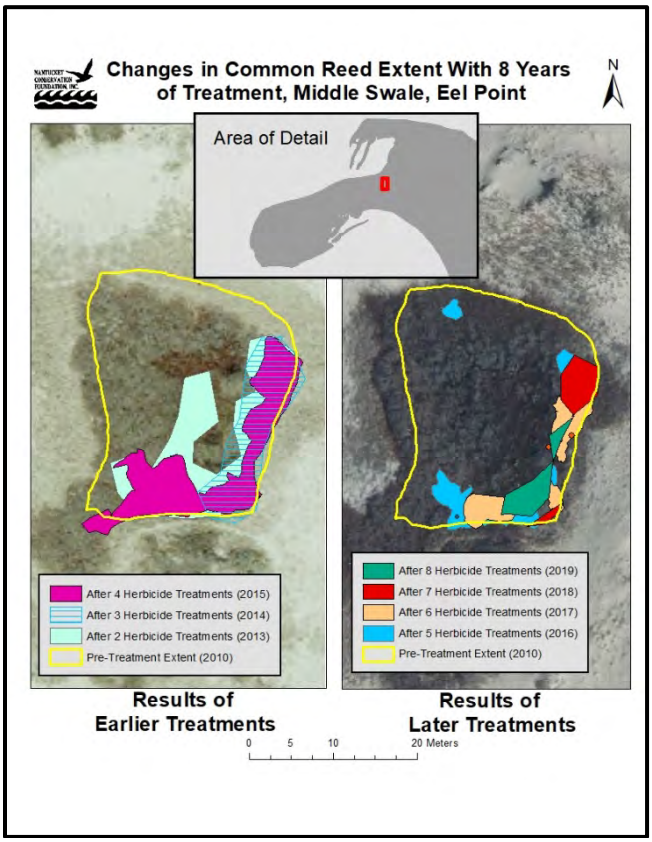


Figure 3: Map of Middle Swale showing changes in *P. australis* extent over time with successive treatments (2010-2019).

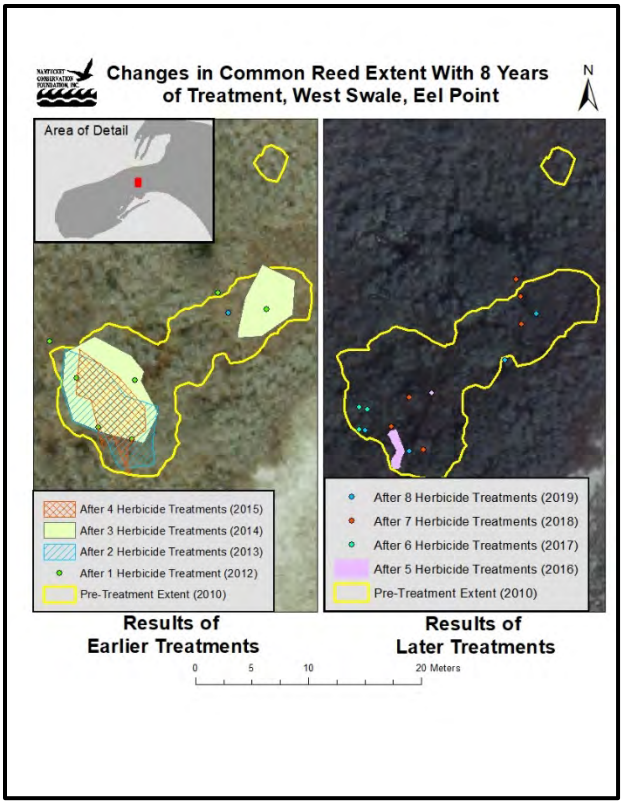


Figure 4: Map of West Swale showing changes in *P. australis* extent over time with successive treatments (2010-2019).

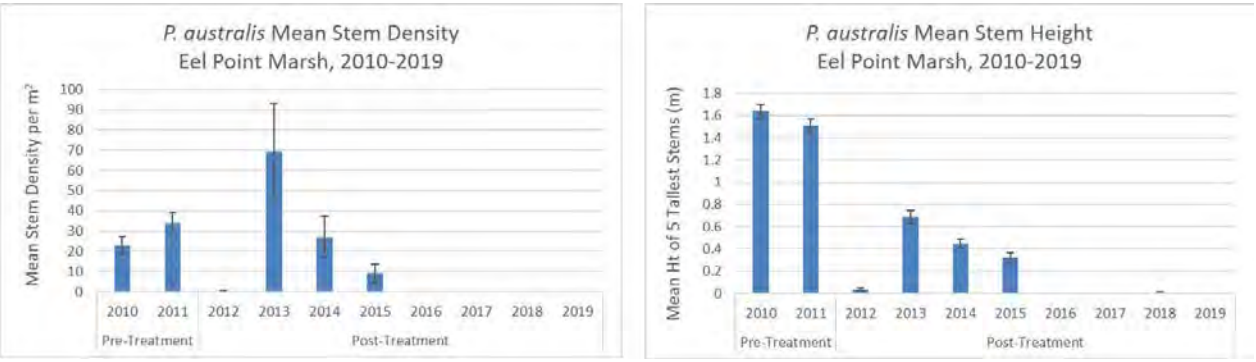


Figure 5: Graphs of *P. australis* stem density and height with successive treatments; error bars are SE (2010-2019).

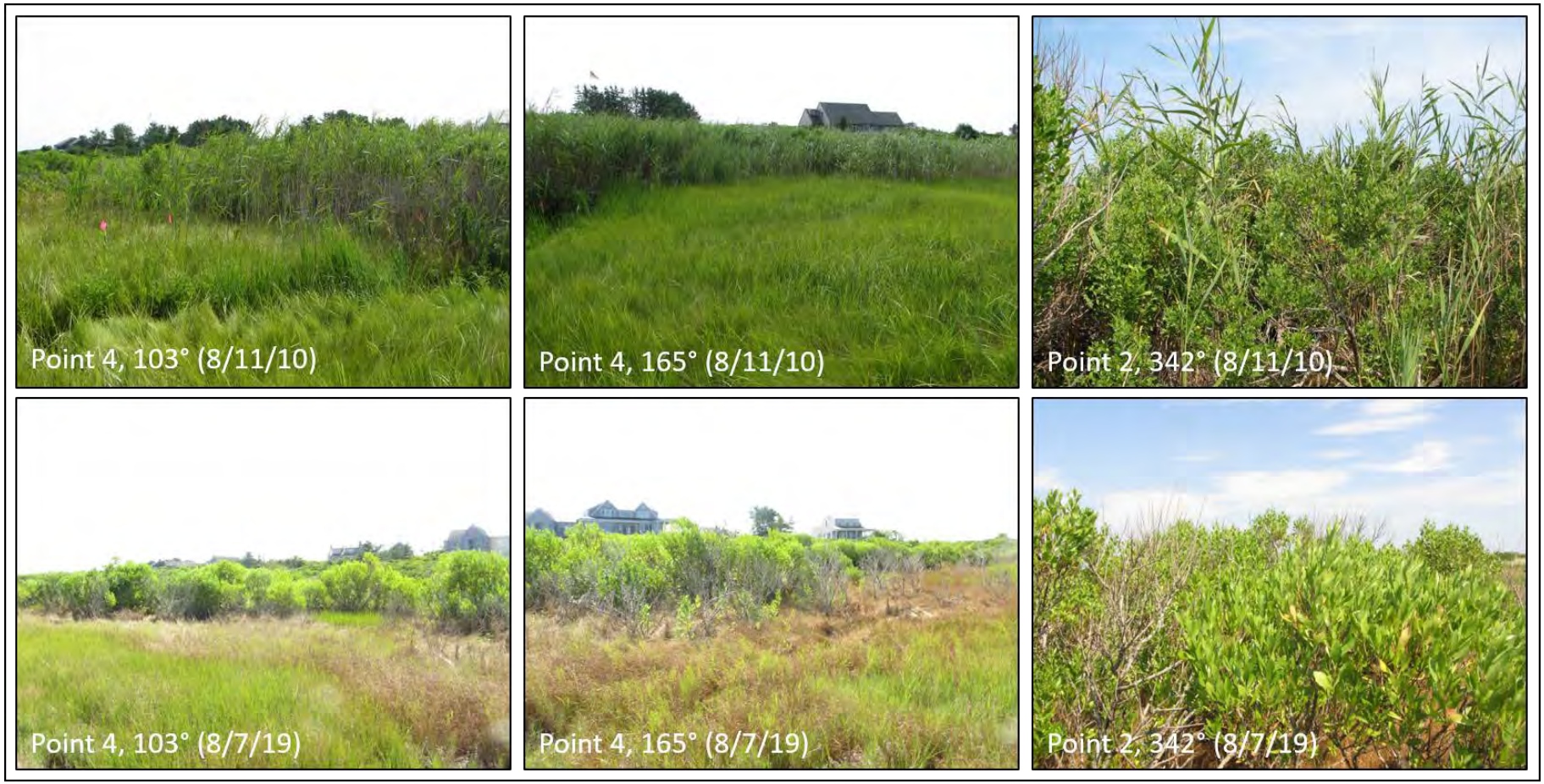


Figure 6: Salt Marsh *P. australis* stand in 2010 (pre-treatment) and in 2019, after 8 years of treatment.

Figure 7: Middle Swale *P. australis* stand in 2010 (pre-treatment) and in 2019, after 8 years of treatment. Note that invasive rusty willow was also treated in this swale in 2011-2012 and eradicated.

Figure 8: West Swale *P. australis* stand in 2011 (pre-treatment) and in 2019, after 8 years of treatment.

NANTUCKET CONSERVATION FOUNDATION, INC.
Invasive Species Management Reporting

Willow and Japanese Black Pine Management

E.C. Buck
November 2019

Project Location/NCF Property Name (Figure1: Overview Map): Eel Point
MA DEP Order of Conditions File # SE48-2319 **File Status**: Active, expires 8/9/2020
Year Project Initiated: 2010 (first herbicide treatment in 2011)

Target Species: Rusty/gray willow *(Salix atrocinerea, = S. cinerea* ssp. *oleifolia)* and Japanese black pine *(Pinus thunbergii)*
Treatment Method in 2019: ☐Herbicide ☐Manual ☐Mechanical

Treatment Details (Fig. 2):

- Due to time restraints and staff limitations, no treatment was performed for 2019.
- On August 21, 2019 two staff members completed the annual monitoring of the vegetation hydro plots and assessed the current state of the willow.
- The Middle Swale (treated in 2011 and 2012) continued to have no re-growth of willow for the seventh season and required no follow-up treatment.
- Treatments of the Sapling Swale and the mature trees in the NW Swale did not take place in 2019 due to previously time restraints and staff limitations.

Area Treated this season (Figures 2-5): No willow treatment for 2019
Amount of Herbicide Used: N/A
Staff Time this Season: 5.5 staff hours (monitoring)
Herbicide Applicator Licensed Staff Member(s): Kelly Omand, Elizabeth Buck
Associated Monitoring: ☒Invasive Plot/Transect Monitoring ☒Photo-monitoring ☒GPS Documentation ☒Veg Community ☒Hydrological Monitoring with Dataloggers

Monitoring Details (Figures 6-11):

- **Vegetation plot monitoring results**: Initial willow percent cover was 49.6 ± 12.4%, declining to 0.0% in 2016-2018. Mean pre-treatment species richness was 4.6 ± 0.4 species/m^2, increasing to 5.75 ± 0.4 species/ m^2 in 2018. Woody percent cover remained high throughout the monitoring time frame, but canopy cover (woody species cover >2 m tall) was eliminated after the first two years of treatment. Woody species that dominated prior to treatment have all remained dominant in 2018, with the exception of willow, which has been eliminated from monitoring plots. Prior to treatment, cranberry *(Vaccinium macrocarpon)* occurred in 91.7% of the monitoring plots with mean cover of 33.5 ± 9.9%; in 2018 cranberry occurred in 83.0% of monitoring plots, with mean percent cover increasing to 53.7 ± 11.4%. Plots where cranberry no longer occurs are mainly overgrown with tall shrubs and poison ivy. Forb and graminoid cover increased over the monitoring time frame. The frequency of the dominant forb species flat-topped goldenrod *(Euthamia* spp.) and marsh St. John's wort (*Triadenum virginianum)* increased over time, as did the frequency of cotton woolgrass (*Scirpus cyperinus),* indicating that these species were becoming more common within the swale with treatment. Rushes *(Juncus spp.*) peaked in

2015 and subsequently declined, but remain above pre-treatment levels. Rushes and flat-topped goldenrods were analyzed at the generic level due to difficulties in identification at different growth stages and among years.

- **Sapling Swale monitoring plots** contained vigorous re-growth of *S. atrocinerea* stems due to lack of treatment in 2016 and poor results of follow-up treatment of re-sprouts in previous years. These plots were not sampled in 2019 due to inconsistency of treatments.
- **GPS documentation of Main Swale willow:** coverage declined from an original extent of 2,345 m^2 in 2010 to just 589 m^2 at the center of the Main Swale, along with 31 scattered point locations (Figure 5). This central area also includes a small stand of Japanese Black Pine *(Pinus thunbergii)* and scattered sapling sized pines throughout the Main Swale.
- **GPS documentation of Sapling Swale willow:** in 2018 we documented a previously un-mapped willow area of approximately 133 m^2 at the northern end of the Sapling Swale, resulting in a total area of 397 m^2 requiring initial treatment, and 910 m^2 requiring follow-up treatment in this swale.
- **Visual assessment of the NW Willow Swale in 2019** indicates that this area is populated with several very large trees (~25-40 cm basal diameter, and with large, expansive crowns).
- **Photo-monitoring** (Figures 8-10) documents a shift from taller willow cover to lower-growing shrubs and poison ivy. Areas of cranberry groundcover, mainly in the center of the Main Swale, are not very visible in photo-monitoring images due to taller shrubs around the perimeter, but standing within the swale large open areas of cranberry are now visible (Figure 11).

Future Management Recommendations & Observations:

- We recommend continuing plot monitoring and GPS documentation of willow extent and treated areas, along with photo-monitoring. These data will assist in evaluating treatments and targeting problem areas while recording shifts in vegetation within the *S. atrocinerea/P. thunbergii* infested cranberry dune swales.
- In the Middle Swale where willow has been eradicated, we will continue to make spot-checks when *P. australis* follow-up treatments occur to ensure that this area is not re-colonized.
- Future treatments are likely to continue to demand significant staff time. Follow-up treatments in the Sapling Swale will require assistance of field assistants to cut and remove sapling sized material during treatment, while re-treatment in the Main Swale and treatment of other larger willows will only require licensed applicators as we do not intend to remove all treated trees for chipping in the future.
- Vegetation data suggests that our treatments have enhanced native species richness with reductions in willow cover over time, meanwhile maintaining desirable cranberry groundcover.
- Sea level rise and storm events, combined with increased nutrient inputs from several large houses recently built nearby, may alter hydrology and vegetation dynamics in the project site. Fluctuations in the ground water level were noted to occur with tidal cycles, and higher high tides may cause higher water tables in the cranberry dune swales, with unpredictable results. Massive storm events have the ability to alter the shape and size of the surrounding dunes rapidly.
- Hydrologic data will be analyzed following completion of treatment in the Main Swale to assess changes in ground and surface water levels if possible.

Additional Species included in this project? ☒Yes ☐No

Please see Eel Point *Phragmites* Management Report for information on common reed *(Phragmites australis)* management at this site.

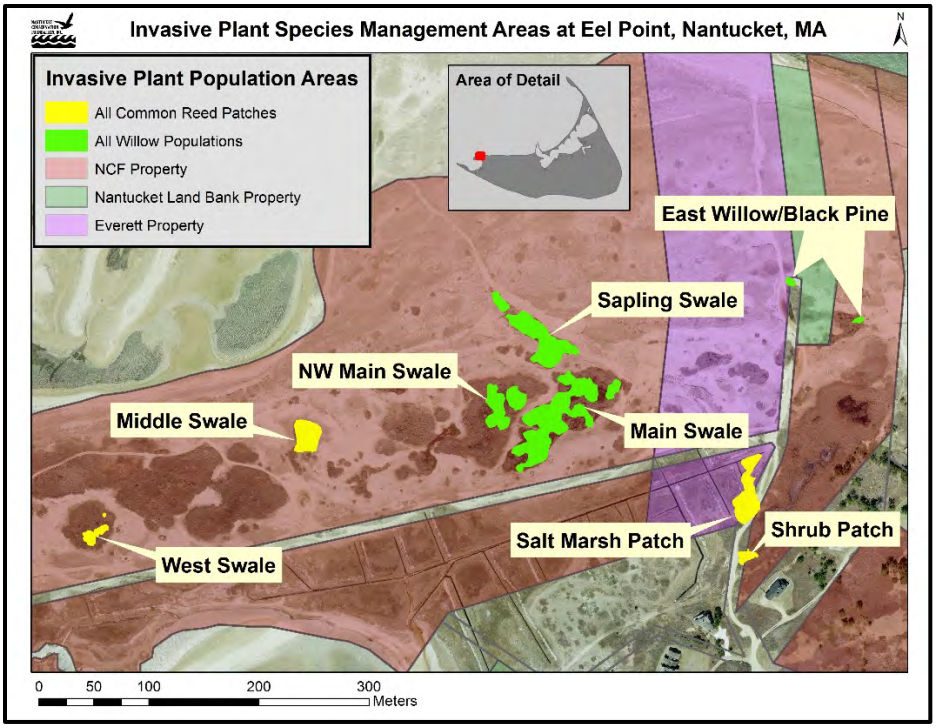


Figure 1: Map showing overview of Eel Point Invasive Species Management Project Area (2010-2019).

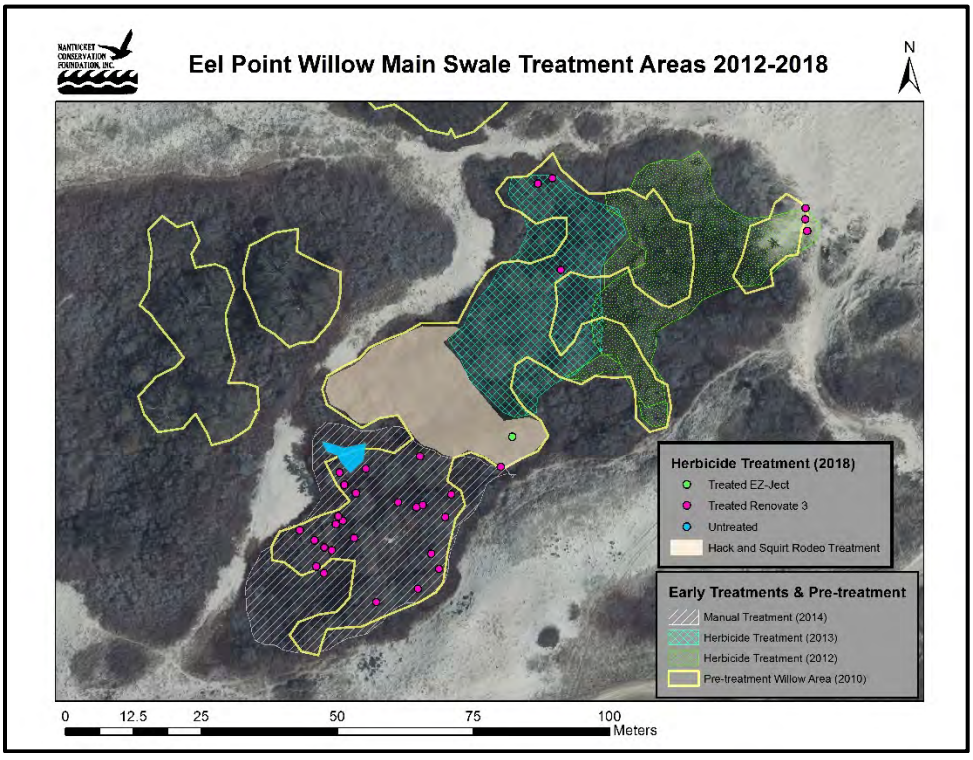


Figure 2: Map of Main Swale showing *S. atrocinerea* treatment areas over time with successive treatments (2012-2018) No treatment occurred in 2019.

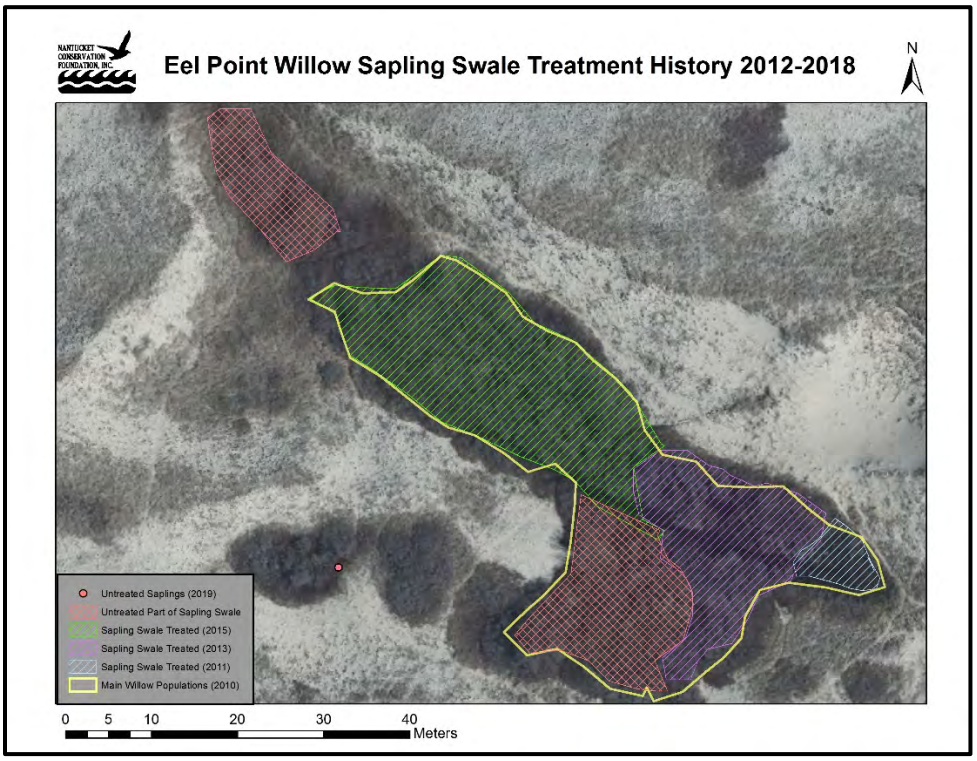


Figure 3: Map of Sapling Swale showing *S. atrocinerea* treatment history (blue, purple, and green) over time (2011-2018) and remaining untreated areas in pink crosshatch. No treatment occurred in 2019.

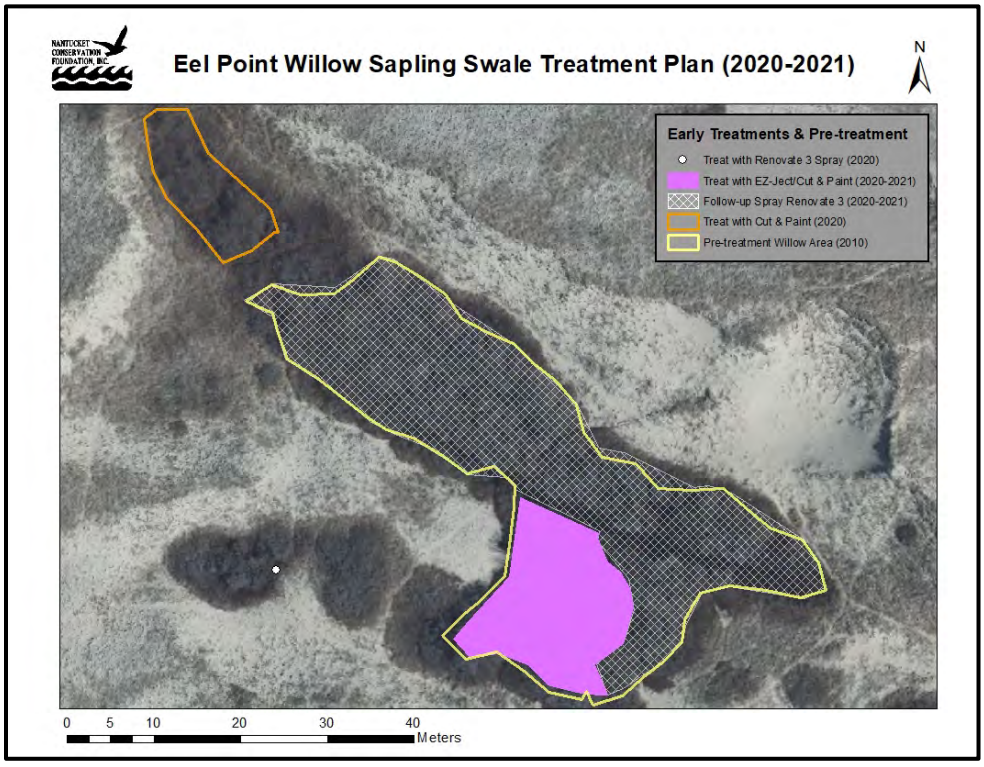


Figure 4: Map of Proposed Sapling Willow Treatment areas by treatment type (2020-2021).

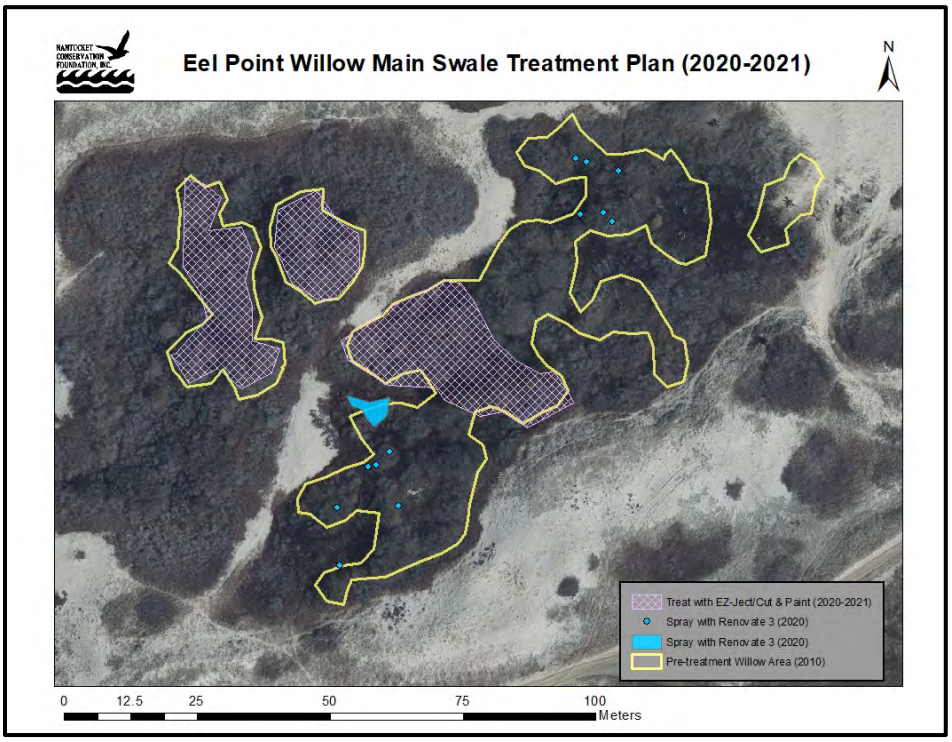


Figure 5: Map of Proposed Main Swale Willow Treatment areas by treatment type (2020-2021).

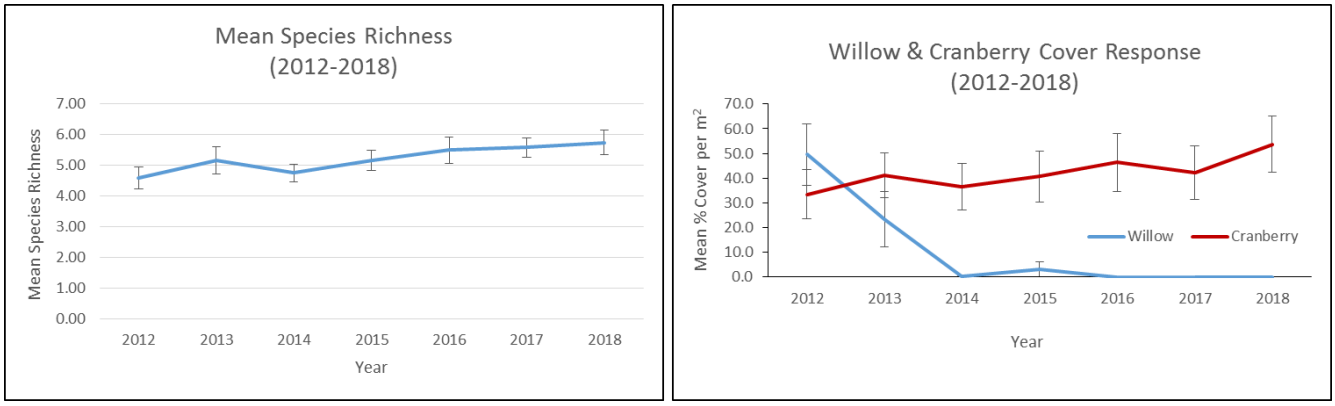


Figure 6: Graphs of Main Swale vegetation species richness and mean cranberry percent cover over time (2010-2018).

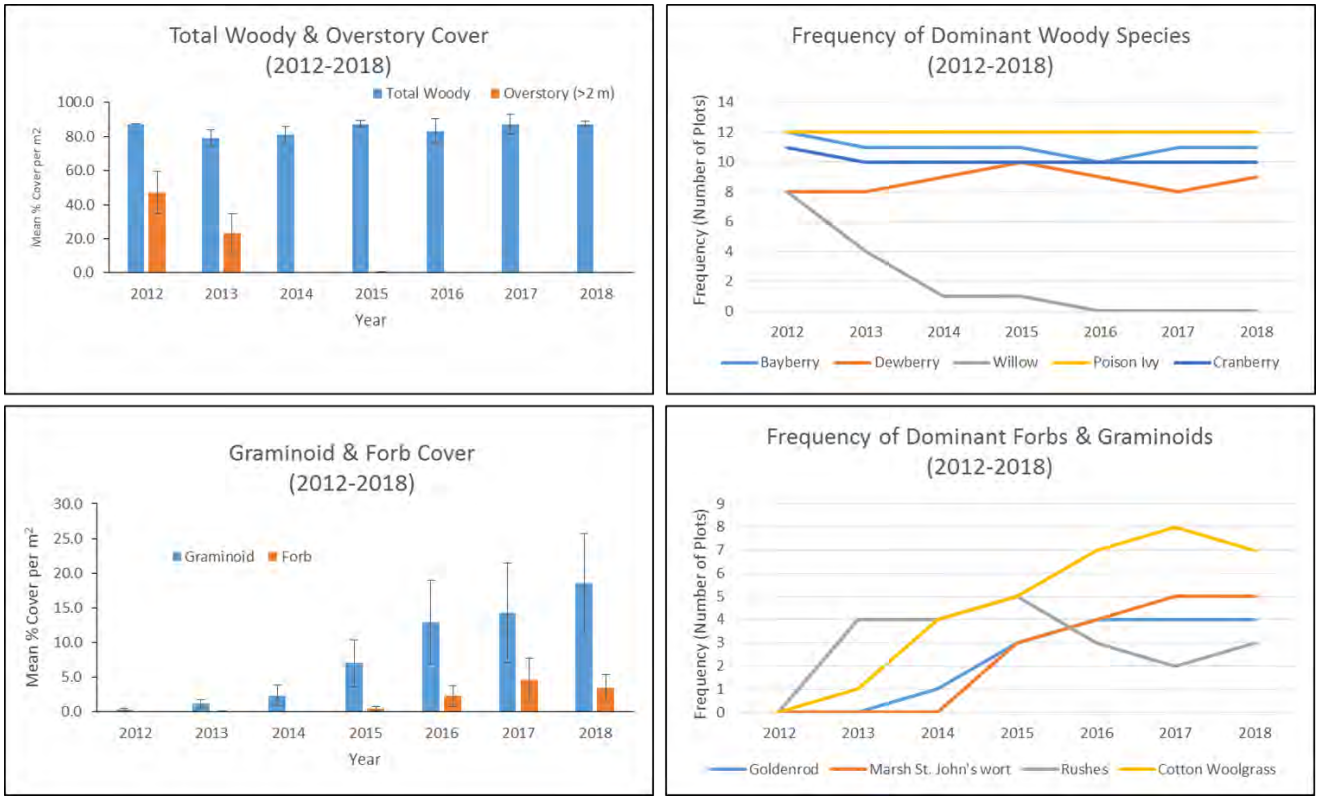


Figure 7: Graphs of Main Swale vegetation changes with treatment. Total woody and overstory cover (top left); frequency of dominant woody species (top right); graminoid and forb cover (lower left) and frequency of dominant forbs and graminoids over time (bottom right) (2012-2018).

Figure 8: Main Swale in 2013 (top photos) and in 2019, after 7 years of treatment (bottom photos). Treatments have occurred in stages in the Main Willow Swale, with follow-up spot treatments (2012-2019).

Figure 9: Middle Swale *S. atrocinerea* and *P. australis* stand in 2011 (top photos) and in 2019, after 7 years of treatment (bottom photos). Note that invasive common reed treatment has also been occurring in this swale (2011-2019).

Figure 10: Sapling Swale *S. atrocinerea* stand in 2011 (pre-treatment) and in 2019 (not treated) showing vigorous re-growth in the southern portion of the sapling swale.

Figure 11: Cranberry color in foreground with bayberry, blueberry, and other native species. Top photo shows the west end of the Main Swale; bottom photo shows the center of the Main Swale looking southeast, where the first willow treatments took place.

Nantucket SURVEYORS LLC
One of The TILTON Companies

P.O. Box 3627, Nantucket, Massachusetts 02584-3627
Tel. (508) 228-0240 Fax (508) 228-9856
www.nantucketsurveyors.com
nsllcinfo@nantucketsurveyors.com

NS10070

July 17, 2020

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Certificate of Compliance Request SE48-1986
Applicant: Nantucket Hotel Holdings, LLC
77 Easton Street: 42.4.1 Parcel: 35
Nantucket, MA 02554

Dear Commissioners:

I am writing on behalf of Nantucket Hotel Holdings, LLC to request a Certificate of Compliance for the above referenced project. The lot is subject to an Order of Conditions recorded in Deed Book 1067 Page 190, DEP File No. SE48-1986, issued to NHM Realty, LLC on January 17, 2007. The Order of Conditions permitted the construction of a swimming pool, construction of retaining walls, drainage infiltrators and perimeter drains and associated landscaping within the buffer zone to a Bordering Vegetated Wetland and within Land Subject to Coastal Storm Flowage.

Pursuant to the Order of Conditions, the swimming pool is equipped with a salt-based chlorination system so no hazardous chlorine tablets or liquid chlorine is stored on site.

The work outlined in the Order of Conditions has been completed within substantial compliance of the order.

Thank you for your attention to this matter.

Sincerely,

Paul J. Santos, PLS
Nantucket Surveyors, LLC

Enclosures

- The Nantucket Hotel Existing Conditions Plan #77 Easton Street in Nantucket, MA, Dated October 28, 2019
- One (1) filing fee check to Town of Nantucket for $25.00

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 8A – Request for Certificate of Compliance

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

SE48-1986
Provided by DEP

A. Project Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. This request is being made by:

Nantucket Hotel Holdings, LLC
Name

321 Commonwealth Road Suite 201
Mailing Address

Wayland | MA | 01778
City/Town | State | Zip Code

508-310-7827
Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

NHM Realty, LLC
Applicant

1/17/07 | SE48-1986
Dated | DEP File Number

Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

3. The project site is located at:

77 Easton Street | Nantucket
Street Address | City/Town

42.4.1 | 35
Assessors Map/Plat Number | Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

NHM Realty, LLC
Property Owner (if different)

Nantucket | 1067 | 190
County | Book | Page

Certificate (if registered land)

5. This request is for certification that (check one):

☒ the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

☐ the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

☐ the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

   ☒ Yes — If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

   ☐ No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html).

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Bylaw Chapter 136

NHM Realty Trust

DEP File Number:

SE48-1986

2007 00000584

Bk: 1067 Pg: 190 Page: 1 of 12
Doc: OOC 02/16/2007 11:59 AM

A. General Information

From: Nantucket
1. Conservation Commission

2. This issuance is for (check one): ☒ Order of Conditions ☐ Amended Order of Conditions

3. To: Applicant:

a. First Name	b. Last Name	c. Company
		NHM Realty, LLC

59 Elm Street
d. Mailing Address

e. City/Town	f. State	g. Zip Code
New Haven	CT	06510

4. Property Owner (if different from applicant):

a. First Name	b. Last Name	c. Company
Same		

d. Mailing Address

e. City/Town	f. State	g. Zip Code

5. Project Location:

a. Street Address	b. City/Town
77 Easton Street	Nantucket

c. Assessors Map/Plat Number	d. Parcel/Lot Number
42.4.1	35

Latitude and Longitude, if known (**note:** electronic filers will click for GIS locator):

e. Latitude	f. Longitude

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

a. County	b. Certificate (if registered land)
Nantucket	

c. Book	d. Page
340	950

7. Dates:

a. Date Notice of Intent Filed	b. Date Public Hearing Closed	c. Date of Issuance
December 15, 2006	January 10, 2007	January 17, 2007

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Plan to accompany a notice of intent
a. Plan Title

b. Prepared By	c. Signed and Stamped by
Nantucket Surveyors LLC	Michael Russell

d. Final Revision Date	e. Scale
December 15, 2006	

f. Additional Plan or Document Title	g. Date
Landscaping Plan	

9. Total WPA Fee Paid:

a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid
$1050.00	$512.50	$537.50

FINDINGS and ADDITIONAL CONDITIONS
NHM Realty, LLC
DEP FILE NUMBER SE48-1986
ASSESSOR'S MAP 42.4.1 PARCEL 35
77 Easton Street
UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT
(Chapter 131s40) and
THE TOWN OF NANTUCKET WETLANDS PROTECTION BYLAW

This Order of Conditions permits the construction of a swimming pool, construction of retaining walls, drainage infiltrators and perimeter drains and associated landscaping within the buffer zone to a bordering vegetated wetland and within land subject to coastal storm flowage. A waiver is required for the work permitted by this Order of Conditions.

FINDINGS

1. Applicant Name NHM Realty, LLC DEP File Number SE48-1986.
2. This Order of Conditions is being issued based upon strict accordance with the information submitted in the Notice of Intent dated 12/14/2006, the Plan of Record dated 12/15/06 stamped by Michael Russell and the Landscaping Plan dated 12/27/06 stamped by Mathew Mrva.
3. Areas subject to protection/regulation is bordering vegetated wetland, its buffer zone and land subject to coastal storm flowage.
4. This Order is in accordance with a vote by the Nantucket Conservation Commission to close the public hearing on 1/10/2007, and a vote to issue Orders taken by the Commission on 1/10/2007.
5. This Order permits the construction of a swimming pool, construction of retaining walls, drainage infiltrators and perimeter drains and associated landscaping within the buffer zone to a bordering vegetated wetland and within land subject to coastal storm flowage.
6. A waiver for placement of a structure within two feet of high groundwater is required for the work permitted by this Order in the buffer zone to a vegetated wetland.

In addition to the above referenced GENERAL CONDITIONS the Commission has found it necessary to include the following Additional Conditions pursuant to MGLCh131s40 and the Town of Nantucket Wetlands Protection Bylaw, Chapter 136. The above listed General Conditions and Findings are automatically part of this Order of Conditions.

ADDITIONAL CONDITIONS

18. Prior to the expiration of the appeal period, the applicant shall provide the Commission with revised plans showing all new structures including retaining walls

to be in excess of 50 feet from the vegetated wetlands and all landscaping activities to be in excess of 25 feet from the vegetated wetland.

19. All other disturbed areas shall be covered with a minimum of 6" of organic topsoil and seeded as soon as weather permits.
20. Temporary construction dewatering activities are permitted by this Order of Conditions provided written authorization from the Nantucket Director of Public Works is provided to the Conservation prior to the start of work. This written authorization may be an update of the authorization provided under SE48-1859.
21. The swimming pool shall not be equipped with a chlorine filtration system.
22. Any draining of pool water for maintenance or repair shall not be discharged within the buffer zone to the vegetated wetland, within the vegetated wetland or to the municipal stormwater facilities.

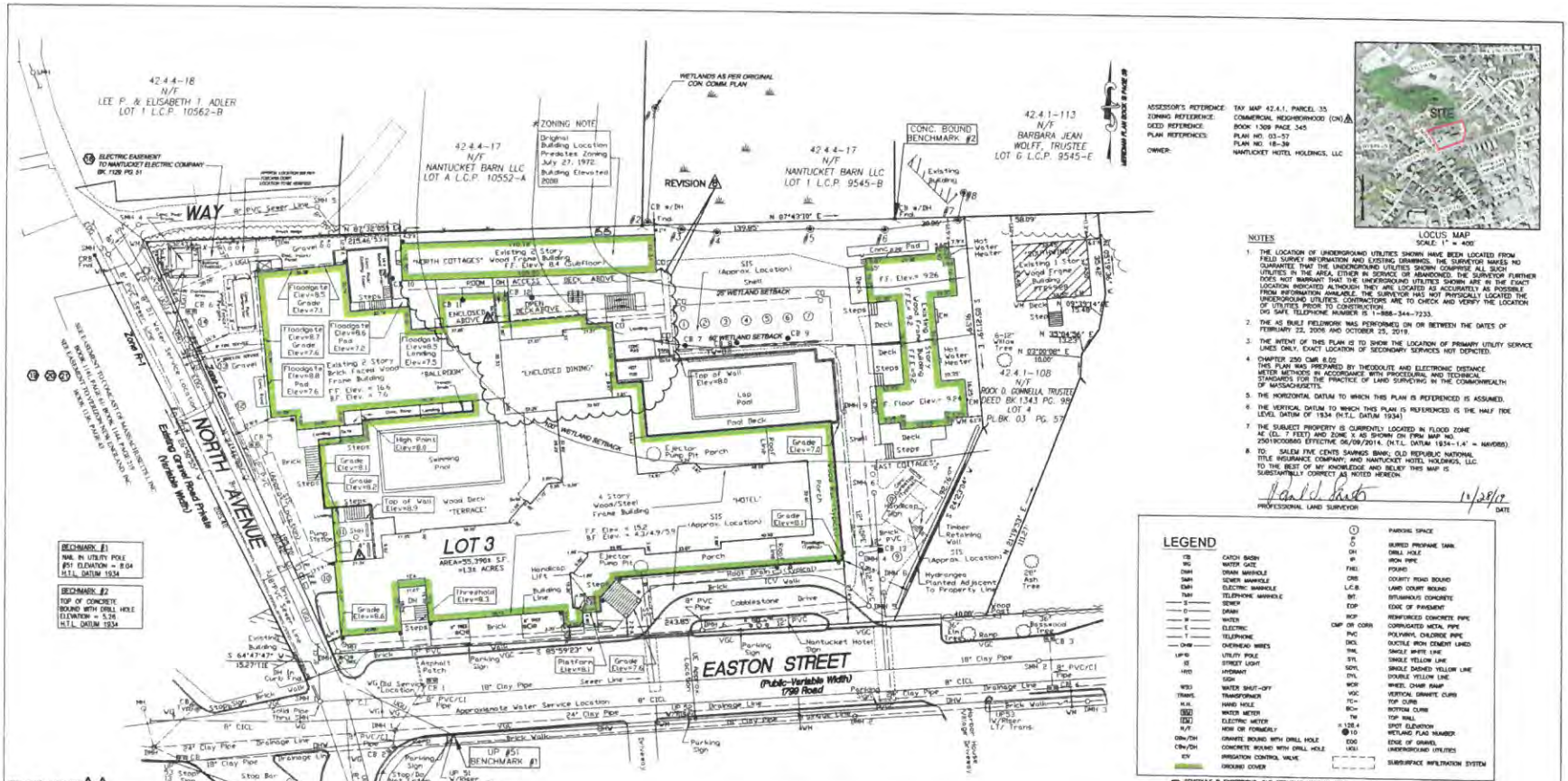
WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

The Commission hereby grants a waiver to Section 3.02(B)(1) of the Wetlands Protection Regulations of the Town of Nantucket Wetlands Protection Bylaw (Chapter 136) which states that all structures shall maintain an undisturbed two-foot separation to high groundwater. The Commission finds that there are no reasonable alternatives to and no adverse impacts to the interests of the Bylaw from the work as permitted by this Order of Conditions. Therefore a waiver is granted under the authority of Sections 1.03(F)(2) and Section 1.03(F)(3)(a) of the Wetlands Protection Regulations for the Town of Nantucket.

77 Easton Street, Nantucket, MA
Applicant: Nantucket Hotel Holdings, LLC

View of pool fencing from shell parking lot looking south.

Aerial image of the Nantucket Hotel showing location of pool.


42.4.4-18
N/F
LEE F. & ELISABETH T. ADLER
LOT 1 L.C.P. 10562-B
42.4.4-17
N/F
NANTUCKET BARN LLC
LOT A L.C.P. 10552-A
42.4.4-17
N/F
NANTUCKET BARN LLC
LOT 1 L.C.P. 9545-B
42.4.1-113
N/F
BARBARA JEAN WOLFE, TRUSTEE
LOT 6 L.C.P. 9545-E
42.4.1-108
N/F
ROCK O. GONNELLA, TRUSTEE
DEED BK 1343 PG. 98
PLBK 03 PG. 57
LOT 4
ZONING NOTE
Original Building Location Predates Zoning July 27, 1972.
Building Elevated 2006
REVISION
WETLANDS AS PER ORIGINAL CON. COMM. PLAN
CONC. BOUND BENCHMARK #2
ELECTRIC EASEMENT TO NANTUCKET ELECTRIC COMPANY BK. 1129 PG. 51
NORTH AVENUE
Private Way
Zone R-1
NORTH WATER STREET
EASTON STREET
(Public-Variable Width)
1798 Road
LOT 3
AREA=55,3901 S.F.
±1.35 ACRES
"NORTH COTTAGES" Existing 3 Story Wood Frame Building F.F. Elev.= 8.4 (Subfloor)
"ENCLOSED DINING"
"BALLROOM"
"TERRACE"
"HOTEL"
"COTTAGES"
4 Story Wood/Steel Frame Building
Existing 2 Story Brick Faced Wood Frame Building
Existing 1 Story Wood Frame Building
Proposed
Swimming Pool
Lap Pool
Pool Deck
Cobblestone Drive
Brick Walk
Asphalt Patch
Parking
Parking Sign
Stop Sign
Stop Bar
Do Not Enter
Sewer Line
Drainage Line
Building Line
Wetland Setback
Ejector Pump Pit
Pump Station
Hydrangea Planted Adjacent To Property Line
Timber Retaining Wall
Hot Water Heater
Shed
Deck
Steps
Porch
Ramp
Handicap Lift
Threshold
Top of Wall
Grade
Floodgate
Pad
Gravel
Brick
Concrete Pad
Existing Building
Bay Curb Cut
Bassweed Tree
Ash Tree
Willow Tree
Hydrant
Utility Pole
Light
Sign
Water Shut-Off
Transformer
Hand Hole
Water Meter
Electric Meter
Irrigation Control Valve
Ground Cover
UP #51 BENCHMARK #1
UP #51 W/Iron Pipe & Pipe Box
UP #52 W/Iron Pipe
UP #53 W/Iron Pipe
LT/ Trans.
Nantucket Hotel
Parking
Vehicle Service Line
Water Service Location
Approximate Water Service Location
Old Service Location
Gas Line
Gas Service Line
Gas Meter
Gas Valve
Gas Box
Gas Vent
Gas Riser
Gas Pipe
Gas Marker
Gas Service Location
Gas Service Line

Nantucket SURVEYORS LLC
One of The TILTON Companies

P.O. Box 3627, Nantucket, Massachusetts 02584-3627
Tel. (508) 228-0240 Fax (508) 228-9856
www.nantucketsurveyors.com
nsllcinfo@nantucketsurveyors.com

NS10070

July 17, 2020

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Certificate of Compliance Request SE48-2072
Applicant: Nantucket Hotel Holdings, LLC
77 Easton Street: 42.4.1 Parcel: 35
Nantucket, MA 02554

Dear Commissioners:

I am writing on behalf of Nantucket Hotel Holdings, LLC to request a Certificate of Compliance for the above referenced project. The lot is subject to an Order of Conditions recorded in Deed Book 1112 Page 128, DEP File No. SE48-2072, issued to NHM Realty Trust on October 15, 2007. The Order of Conditions permitted the constructions of a concrete pier foundation and renovations to an existing structure within the 50' buffer to a Vegetated Wetland and within Land Subject to Coastal Storm Flowage.

A Minor Modification was approved on January 4, 2012. The modification included the connection of the previously permitted second floor decking with new sections of second floor deck and to allow for a raised walkway to connect this structure to another existing structure.

A second Minor Modification was approved on April 16, 2014. The modification included the reconfiguration of the second floor decks and walkways.

The work outlined in the Order of Conditions has been completed within substantial compliance of the order.

Thank you for your attention to this matter.

Sincerely,

Paul J. Santos, PLS
Nantucket Surveyors, LLC

Enclosures

- The Nantucket Hotel Existing Conditions Plan #77 Easton Street in Nantucket, MA, Dated October 28, 2019
- One (1) filing fee check to Town of Nantucket for $25.00

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 8A – Request for Certificate of Compliance

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:
SE48-2072
Provided by DEP

A. Project Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. This request is being made by:

Nantucket Hotel Holdings, LLC
Name

321 Commonwealth Road Suite 201
Mailing Address

Wayland | MA | 01778
City/Town | State | Zip Code

508-310-7827
Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

NHM Realty Trust
Applicant

10/15/07 | SE48-2072
Dated | DEP File Number

Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

3. The project site is located at:

77 Easton Street | Nantucket
Street Address | City/Town

42.4.1 | 35
Assessors Map/Plat Number | Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

NHM Realty Trust
Property Owner (if different)

Nantucket | 1112 | 128
County | Book | Page

Certificate (if registered land)

5. This request is for certification that (check one):

☒ the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

☐ the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

☐ the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

   ☒ Yes — If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

   ☐ No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html).

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Bylaw Chapter 136

NHM Realty
DEP File Number:
SE48-2072

2007 00003942
Bk: 1112 Pg: 128 Page: 1 of 12
Doc: OOC 11/14/2007 01:50 PM

A. General Information

From: Nantucket
1. Conservation Commission

2. This issuance is for (check one): ☒ Order of Conditions ☐ Amended Order of Conditions

3. To: Applicant:

a. First Name	b. Last Name	c. Company
		NHM Realty Trust

77 Easton Street
d. Mailing Address

e. City/Town	f. State	g. Zip Code
Nantucket	MA	02554

4. Property Owner (if different from applicant):

a. First Name	b. Last Name	c. Company
Same		

d. Mailing Address

e. City/Town	f. State	g. Zip Code

5. Project Location:

a. Street Address	b. City/Town
77 Easton Street	Nantucket

c. Assessors Map/Plat Number	d. Parcel/Lot Number
42.4.1	35

Latitude and Longitude, if known (**note:** electronic filers will click for GIS locator):

e. Latitude	f. Longitude

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

a. County	b. Certificate (if registered land)
Nantucket	

c. Book	d. Page
950	340

7. Dates:

a. Date Notice of Intent Filed	b. Date Public Hearing Closed	c. Date of Issuance
September 21, 2007	October 3, 2007	October 15, 2007

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Plan to accompany a notice of Intent
a. Plan Title

b. Prepared By	c. Signed and Stamped by
Nantucket Surveyors LLC	Paul Santos

d. Final Revision Date	e. Scale
September 21, 2007	

View Findings and additional conditions.
f. Additional Plan or Document Title — g. Date

9. Total WPA Fee Paid:

a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid
$1050.00	$512.50	$537.50

FINDINGS and ADDITIONAL CONDITIONS
NHM Realty, LLC
DEP FILE NUMBER SE48-2072
ASSESSOR'S MAP 42.4.1 PARCEL 35
77 Easton Street
UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT
(Chapter 131s40) and
THE TOWN OF NANTUCKET WETLANDS PROTECTION BYLAW

This Order of Conditions permits the construction of a concrete pier foundation and renovations to an existing structure within the 50' buffer to a vegetated wetland and within land subject to coastal storm flowage. Waivers are required for the work permitted by this Order of Conditions.

FINDINGS

1. Applicant Name NHM Realty, LLC DEP File Number SE48-2072
2. This Order of Conditions is being issued based upon strict accordance with the information submitted in the Notice of Intent dated 9/19/2007, the Plan of Record dated 9/21/07 stamped by Paul Santos, the Architectural Plans designed by the Matthews Hotels Design Group (Sheets A001, A002, A100-102, A200, A600, S100 and EX-1) dated as received 9/27/07 and the Construction Protocol submitted by Nantucket Surveyors LLC dated 9/21/07.
3. Areas subject to protection/regulation is bordering vegetated wetland, its buffer zone and land subject to coastal storm flowage.
4. This Order is in accordance with a vote by the Nantucket Conservation Commission to close the public hearing on 10/1/2007, and a vote to issue Orders taken by the Commission on 10/1/2007.
5. This Order permits the construction of a concrete pier foundation and renovations to an existing structure within the 50 foot buffer zone to a bordering vegetated wetland and within land subject to coastal storm flowage.
6. A waiver for placement of a structure within two feet of high groundwater and construction of the concrete pier foundation within the 50' buffer zone is required for the work permitted by this Order in the buffer zone to a vegetated wetland.

In addition to the above referenced GENERAL CONDITIONS the Commission has found it necessary to include the following Additional Conditions pursuant to MGLCh131s40 and the Town of Nantucket Wetlands Protection Bylaw, Chapter 136. The above listed General Conditions and Findings are automatically part of this Order of Conditions.

ADDITIONAL CONDITIONS

18. Work permitted by this Order shall not result in any increase to the footprint of the existing structure, except for stairway access and landing/balcony areas shown on the Architectural Plans.
19. No landscaping activities have been requested or permitted by this Order of Conditions.
20. All demolition debris shall be contained and transported off site to a properly licensed solid waste disposal facilities.
21. By this issuance of this Order, the Commission is only verifying wetland flags # 2, 3, and 4 as shown on the Plan of Record and that the site falls within land subject to coastal storm flowage.
22. All materials, machinery and solid waste debris shall be stored in designated areas in excess of 25 feet from the vegetated wetland.
23. All other disturbed areas shall be covered with a minimum of 6" of organic topsoil and seeded as soon as weather permits.
24. Temporary construction dewatering activities are permitted by this Order of Conditions as previously permitted by SE48-1985.
25. Prior to the start of work on this project a pre-construction onsite shall be held with the applicant, construction supervisor and Commission staff to review work protocols. Within 48 hours of the pre-construction onsite the applicant shall provide written work protocols for final review and approval by the Commission staff.
26. All materials excavated for the footings shall be used/returned as backfill over the constructed footings.

WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

The Commission hereby grants a waiver to Section 3.02(B)(1) of the Wetlands Protection Regulations of the Town of Nantucket Wetlands Protection Bylaw (Chapter 136) which states that all structures shall maintain an undisturbed two-foot separation to high groundwater and construction of the pier foundation within 50 feet of the vegetated wetland. The Commission finds that there are no reasonable alternatives to and no adverse impacts to the interests of the Bylaw from the work as permitted by this Order of Conditions. Therefore a waiver is granted under the authority of Sections 1.03(F)(2) and Section 1.03(F)(3)(a) of the Wetlands Protection Regulations for the Town of Nantucket.

Town of Nantucket Conservation Commission
Minor Modification Request Approval

Town of Nantucket Bylaw Chapter 136
And Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number
SE48-2072
Provided by DEP

A. General Information

From:

Nantucket Conservation Commission

To:

Applicant:

Nantucket Hotel Holdings, LLC
Name

c/o Winnetu Oceanside Resort, 321 Commonwealth Road, Suite 201
Mailing Address

Wayland | MA | 01778
City/Town | State | Zip Code

Property Owner (if different from applicant):

77 Easton Street, LLC
Name

c/o TD Bank, N.A., 333 State Street
Mailing Address

Portsmouth | NH | 03801
City/Town | State | Zip Code

Project Location:

77 Easton Street
Street Address

Nantucket
City/Town

42.4.1
Assessors Map/Plat Number

35
Parcel /Lot Number

2. Title and Date (or Revised Date if applicable) of Final Plans and Other Documents:

North Cottage Deck Changes — 12/30/2011
Title — Date

Title — Date

Title — Date

4. Description of Minor Modification:

The modification is to include the connecting of previously permitted 2nd floor decking with new sections of 2nd floor deck and to allow for a raised walkway to connect this structure to another existing structure.

3. Dates:

12/30/2011	1/4/2012	10/5/2007
Date Minor Modification Filed	Date of Approval	Order of Conditions Date of Issuance*

Note: The date of issuance for the Order of Conditions is 10/5/2007 and is not extended further by this minor modification.

Town of Nantucket Conservation Commission
Minor Modification Request Approval

Town of Nantucket Bylaw Chapter 136
And Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number
SE48-2072
Provided by DEP

A. General Information

From:

Nantucket Conservation Commission

To:

Applicant:

NHM Realty Trust
Name

77 Easton Street
Mailing Address

Nantucket | MA | 02554
City/Town | State | Zip Code

Property Owner (if different from applicant):

Same as applicant
Name

Mailing Address

City/Town | State | Zip Code

Project Location:

77 Easton Street
Street Address

Nantucket
City/Town

42.4.1
Assessors Map/Plat Number

35
Parcel /Lot Number

2. Title and Date (or Revised Date if applicable) of Final Plans and Other Documents:

The Nantucket Hotel & Resort — 4/11/2014
Title — Date

Title — Date

Title — Date

4. Description of Minor Modification:

Reconfiguration of second floor decks and walkways

3. Dates:

4/11/2014
Date Minor Modification Filed

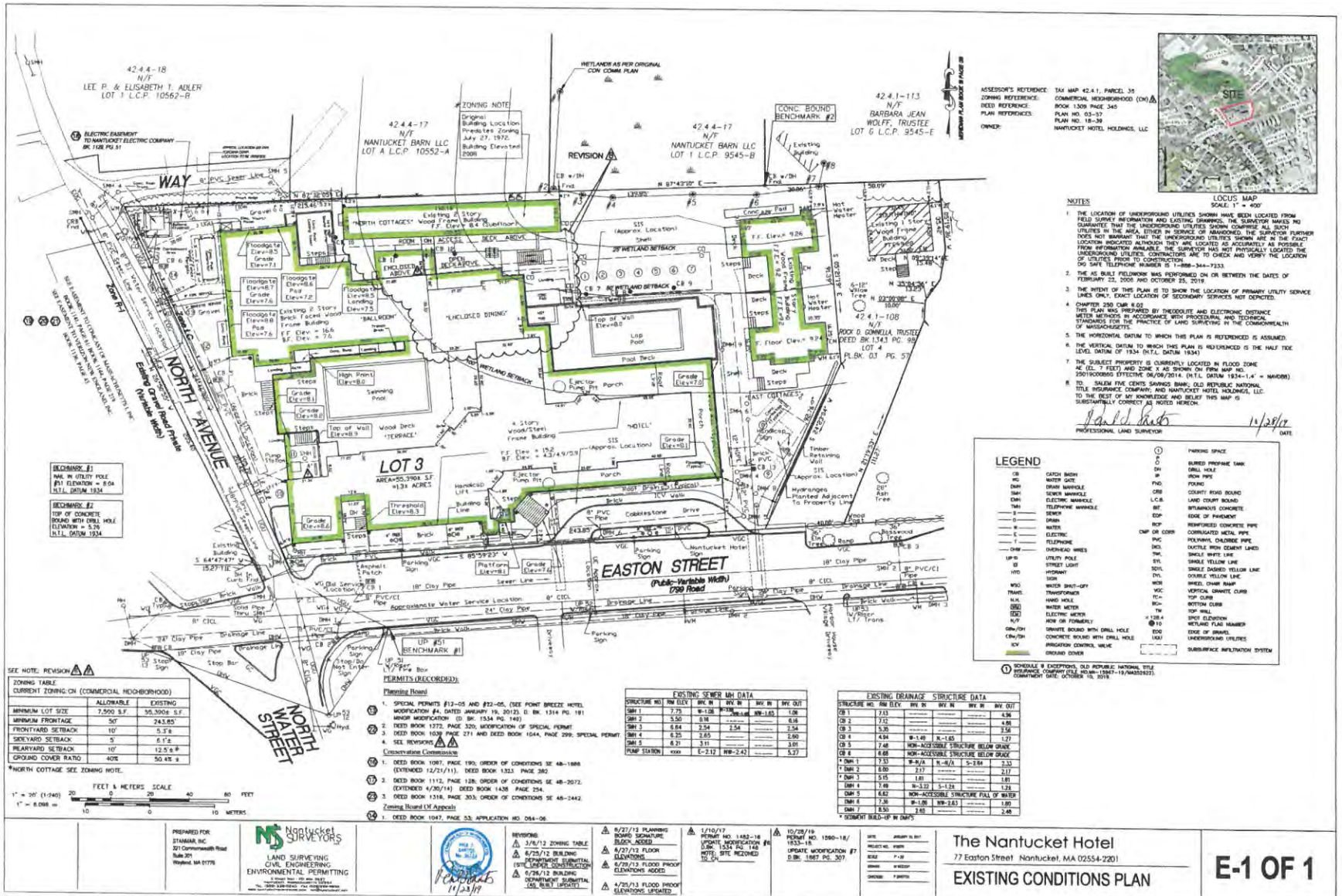
4/16/2014
Date of Approval

10/15/2007
Order of Conditions Date of Issuance*

Note: The date of issuance for the Order of Conditions is 10/15/2007 and is not extended further by this minor modification.

77 Easton Street, Nantucket, MA
Applicant: Nantucket Hotel Holdings, LLC

View of existing structure from shell parking lot looking west.



LOCUS MAP
SCALE: 1" = 400'

ASSESSOR'S REFERENCE: TAX MAP 42.4.1, PARCEL 35
ZONING REFERENCE: COMMERCIAL NEIGHBORHOOD (CN)
DEED REFERENCE: BOOK 1309 PAGE 345
PLAN REFERENCES: PLAN NO. 03-37
PLAN NO. 18-39
OWNER: NANTUCKET HOTEL HOLDINGS, LLC

NOTES

1. THE LOCATION OF UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CONTRACTORS ARE TO CHECK AND VERIFY THE LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.
DIG SAFE TELEPHONE NUMBER IS 1-888-344-7233.
2. THE AS BUILT FIELDWORK WAS PERFORMED ON OR BETWEEN THE DATES OF FEBRUARY 23, 2008 AND OCTOBER 25, 2019.
3. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF PRIMARY UTILITY SERVICE LINES ONLY. EXACT LOCATION OF SECONDARY SERVICES NOT DEPICTED.
4. CHAPTER 250 CMR 6.03
THIS PLAN WAS PREPARED BY THEODOLITE AND ELECTRONIC DISTANCE METER METHODS IN ACCORDANCE WITH PROCEDURAL AND TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS.
5. THE HORIZONTAL DATUM TO WHICH THIS PLAN IS REFERENCED IS ASSUMED.
6. THE VERTICAL DATUM TO WHICH THIS PLAN IS REFERENCED IS THE HALF TIDE LEVEL DATUM OF 1934 (N.T.L. DATUM 1934)
7. THE SUBJECT PROPERTY IS CURRENTLY LOCATED IN FLOOD ZONE AE (EL. 7 FEET) AND ZONE X AS SHOWN ON FIRM MAP NO. 25019C0089G EFFECTIVE 06/08/2014. (N.T.L. DATUM 1934=1.4' = NAVD88)
8. TO: SALEM FIVE CENTS SAVINGS BANK; OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY; AND NANTUCKET HOTEL HOLDINGS, LLC
TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

Paul J. Sheets 10/28/19
PROFESSIONAL LAND SURVEYOR DATE

LEGEND

CB	CATCH BASIN	①	PARKING SPACE
WG	WATER GATE	○	BURIED PROPANE TANK
DMH	DRAIN MANHOLE	DH	DRILL HOLE
SMH	SEWER MANHOLE	IP	IRON PIPE
EMH	ELECTRIC MANHOLE	FND	FOUND
TMH	TELEPHONE MANHOLE	CRB	COUNTY ROAD BOUND
S	SEWER	L.C.B.	LAND COURT BOUND
D	DRAIN	BIT.	BITUMINOUS CONCRETE
W	WATER	EOP	EDGE OF PAVEMENT
E	ELECTRIC	RCP	REINFORCED CONCRETE PIPE
T	TELEPHONE	CMP OR CORR	CORRUGATED METAL PIPE
OHW	OVERHEAD WIRES	PVC	POLYVINYL CHLORIDE PIPE
UP S	UTILITY POLE	DICL	DUCTILE IRON CEMENT LINED
SL	STREET LIGHT	SWL	SINGLE WHITE LINE
HYD	HYDRANT	SYL	SINGLE YELLOW LINE
	SIGN	SDYL	SINGLE DASHED YELLOW LINE
WSO	WATER SHUT-OFF	DYL	DOUBLE YELLOW LINE
TRANS.	TRANSFORMER	WCR	WHEEL CHAIR RAMP
H.H.	HAND HOLE	VGC	VERTICAL GRANITE CURB
WM	WATER METER	TC=	TOP CURB
EM	ELECTRIC METER	BC=	BOTTOM CURB
N/F	NOW OR FORMERLY	TW	TOP WALL
GBM/DH	GRANITE BOUND WITH DRILL HOLE	×128.4	SPOT ELEVATION
CBM/DH	CONCRETE BOUND WITH DRILL HOLE	●10	WETLAND FLAG NUMBER
ICV	IRRIGATION CONTROL VALVE	EOB	EDGE OF BROOKS
	GROUND COVER	UGU	UNDERGROUND UTILITIES
			SUBSURFACE INFILTRATION SYSTEM

① SCHEDULE B EXCEPTIONS, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY (ITL# MUMH-15947-19/MA5329221) COMMITMENT DATE: OCTOBER 10, 2019.

ZONING TABLE
CURRENT ZONING: CN (COMMERCIAL NEIGHBORHOOD)

	ALLOWABLE	EXISTING
MINIMUM LOT SIZE	7,500 S.F.	55,390± S.F.
MINIMUM FRONTAGE	50'	243.85'
FRONTYARD SETBACK	10'	5.3'±
SIDEYARD SETBACK	5'	6.1'±
REARYARD SETBACK	10'	12.5'±*
GROUND COVER RATIO	40%	50.4%±

*NORTH COTTAGE SEE ZONING NOTE.

PERMITS (RECORDED):

Planning Board
① 1. SPECIAL PERMITS #12-05 AND #22-05, (SEE POINT BREEZE HOTEL MODIFICATION #4, DATED JANUARY 19, 2012). D. BK. 1314 PG. 191 MINOR MODIFICATION (D. BK. 1534 PG. 148)
② 2. DEED BOOK 1272, PAGE 320; MODIFICATION OF SPECIAL PERMIT
③ 3. DEED BOOK 1039 PAGE 271 AND DEED BOOK 1044, PAGE 299; SPECIAL PERMIT
4. SEE REVISIONS

Conservation Commission
⑮ 1. DEED BOOK 1087, PAGE 190; ORDER OF CONDITIONS SE 48-1888 (EXTENDED 12/21/11). DEED BOOK 1323 PAGE 382
⑰ 2. DEED BOOK 1112, PAGE 128; ORDER OF CONDITIONS SE 48-2072. (EXTENDED 4/30/14) DEED BOOK 1438 PAGE 254.
㉓ 3. DEED BOOK 1318, PAGE 303; ORDER OF CONDITIONS SE 48-2442.

Zoning Board Of Appeals
⑭ 1. DEED BOOK 1047, PAGE 53; APPLICATION NO. 084-06

EXISTING SEWER MH DATA

STRUCTURE NO.	RIM ELEV.	INV. IN	INV. IN	INV. IN	INV. OUT
SMH 1	7.75	W-1.06	———	NW-1.65	1.06
SMH 2	5.50	0.98	———	———	0.68
SMH 3	6.84	2.54	2.54	———	2.54
SMH 4	6.25	2.65	———	———	2.60
SMH 5	6.21	3.11	———	———	3.01
PUMP STATION	xxxx	E-2.12	NW-2.42	———	5.27

EXISTING DRAINAGE STRUCTURE DATA

STRUCTURE NO.	RIM ELEV.	INV. IN	INV. IN	INV. IN	INV. OUT
CB 1	7.13	———	———	———	4.96
CB 2	7.12	———	———	———	4.86
CB 3	5.35	———	———	———	3.56
CB 4	4.94	W-1.49	N.-1.65	———	1.27
CB 5	7.48	NON-ACCESSIBLE STRUCTURE BELOW GRADE			
CB 6	6.68	NON-ACCESSIBLE STRUCTURE BELOW GRADE			
* DMH 1	7.53	W-N/A	N.-N/A	S-2.86	2.33
* DMH 2	6.00	2.17	———	———	2.17
* DMH 3	5.15	1.81	———	———	1.81
DMH 4	7.49	W-3.32	S-1.26	———	1.26
DMH 5	6.62	NON-ACCESSIBLE STRUCTURE FULL OF WATER			
DMH 6	7.36	W-1.06	NW-2.63	———	1.80
DMH 7	8.50	2.65	———	———	2.48

* SEDIMENT BUILD-UP IN DMH'S

PREPARED FOR:
STANMAR, INC.
321 Commonwealth Road
Suite 201
Wayland, MA 01778

Nantucket SURVEYORS
LAND SURVEYING
CIVIL ENGINEERING
ENVIRONMENTAL PERMITTING
2 Straight Path - PO Box 2143
Nantucket, MA 02584
Tel. (508) 228-0543 Fax (508) 228-9856
www.nantucketsurveyors.com info@nantucketsurveyors.com

COMMONWEALTH OF MASSACHUSETTS
PAUL J. SHEETS
No. 36124
REGISTERED PROFESSIONAL LAND SURVEYOR
10/28/19

REVISIONS:
3/6/13 ZONING TABLE
6/25/12 BUILDING DEPARTMENT SUBMITTAL (SITE UNDER CONSTRUCTION)
6/26/12 BUILDING DEPARTMENT SUBMITTAL (AS BUILT UPDATE)
6/27/12 PLANNING BOARD SIGNATURE BLOCK ADDED
6/27/12 FLOOR ELEVATIONS
6/28/13 FLOOD PROOF ELEVATIONS ADDED
4/25/13 FLOOD PROOF ELEVATIONS UPDATED
1/10/17 PERMIT NO. 1482-16 UPDATE MODIFICATION #6 D.BK. 1534 PG. 148 NOTE: SITE REZONED TO CN
10/28/19 PERMIT NO. 1590-18/1833-18 UPDATE MODIFICATION #7 D.BK. 1987 PG. 307

The Nantucket Hotel
77 Easton Street Nantucket, MA 02554-2201

EXISTING CONDITIONS PLAN

E-1 OF 1

Nantucket SURVEYORS LLC
One of The TILTON Companies

P.O. Box 3627, Nantucket, Massachusetts 02584-3627
Tel. (508) 228-0240 Fax (508) 228-9856
www.nantucketsurveyors.com
nsllcinfo@nantucketsurveyors.com

July 17, 2020

Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Re: Certificate of Compliance Request SE48-2442
Applicant: Nantucket Hotel Holdings, LLC
77 Easton Street: 42.4.1 Parcel: 35
Nantucket, MA 02554

Dear Commissioners:

I am writing on behalf of Nantucket Hotel Holdings, LLC to request a Certificate of Compliance for the above referenced project. The lot is subject to an Order of Conditions recorded in Deed Book 1316 Page 303, DEP File No. SE48-2442, issued on February 17, 2012. The Order of Conditions permitted the construction of a pervious parking area with an access aisle, removal of an existing deck and the removal of invasive species within the buffer zone to a Vegetated Wetland and within Land Subject to Coastal Storm Flowage. This Order also permitted the construction of a secondary pervious parking area, the construction of an addition on an existing building, installation of an underground fuel tank and the construction of an ADA compliant access ramp within Land Subject to Coastal Storm Flowage.

Pursuant to the Order of Conditions, the invasive species were successfully removed from within the 25' buffer zone and the area was replanted. No plant survey reports were found in the Conservation Commission files documenting the restoration of the 25' buffer zone, however the area is still currently clear of invasive species.

The underground fuel tank was not installed, and the ADA compliant access ramp was installed as a lift.

The work outlined in the Order of Conditions has been completed within substantial compliance of the order.

Thank you for your attention to this matter.

Sincerely,

Paul J. Santos, PLS
Nantucket Surveyors, LLC

Enclosures

- The Nantucket Hotel Existing Conditions Plan #77 Easton Street in Nantucket, MA, Dated October 28, 2019
- One (1) filing fee check to Town of Nantucket for $25.00

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 8A – Request for Certificate of Compliance

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

SE48-2442
Provided by DEP

A. Project Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. This request is being made by:

Nantucket Hotel Holdings, LLC
Name

321 Commonwealth Road Suite 201
Mailing Address

Wayland	MA	01778
City/Town	State	Zip Code

508-310-7827
Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Nantucket Hotel Holding, LLC
Applicant

2/17/12	SE48-2442
Dated	DEP File Number

Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

3. The project site is located at:

77 Easton Street	Nantucket
Street Address	City/Town
42.4.1	35
Assessors Map/Plat Number	Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

Nantucket Hotel Holding, LLC
Property Owner (if different)

Nantucket	1316	303
County	Book	Page

Certificate (if registered land)

5. This request is for certification that (check one):

☒ the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

☐ the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

☐ the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

   ☒ Yes — If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

   ☐ No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html).

2012 00000619
Bk: 1316 Pg: 303 Page: 1 of 16
Doc: OOC 03/09/2012 08:56 AM

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
And the Town of Nantucket Wetlands Bylaw Chapter 136

Provided by MassDEP: SE48-2442
MassDEP File #

eDEP Transaction #

Nantucket
City/Town

A. General Information

1. From: Nantucket
Conservation Commission

2. This issuance is for (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

a. First Name | b. Last Name

Nantucket Hotel Holding, LLC, c/o Winnetu Oceanside Resort
c. Organization

321 Commonwealth Road Suite 201
d. Mailing Address

Wayland | MA | 01778
e. City/Town | f. State | g. Zip Code

4. Property Owner (if different from applicant):

a. First Name | b. Last Name

77 Easton Street, LLC, c/o T.D. Bank, N.A.
c. Organization

333 State Street
d. Mailing Address

Portsmouth | NH | 03801
e. City/Town | f. State | g. Zip Code

5. Project Location:

77 Easton Street | Nantucket
a. Street Address | b. City/Town

42.4.1 | 35
c. Assessors Map/Plat Number | d. Parcel/Lot Number

Latitude and Longitude, if known: d m s (d. Latitude) | d m s (e. Longitude)

FINDINGS and ADDITIONAL CONDITIONS

Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40)
Town of Nantucket Wetlands Bylaw (Chapter 136)

Address:	77 Easton Street
Assessor's Map and Parcel:	42.4.1-35
Property Owner:	Nantucket Hotel Holding, LLC
Applicant:	Nantucket Hotel Holding, LLC
DEP File Number:	SE48-2442
Filing Date:	December 30, 2011
Date Hearing Closed:	February 15, 2012
Date Orders Issued:	February 17, 2012
Plan of Record Information:	Point Breeze Hotel – Site Plan Dated 1/13/2012, stamped by Daniel C. Mulloy, P.E.

Permit Overview:
This Order permits the construction of a pervious parking area with an access aisle, removal of an existing deck and the removal of invasive species within the buffer zone to a vegetated wetland and within land subject to coastal storm flowage. This Order also permits the construction of a secondary pervious parking area, the construction of an addition on an existing building, installation of an underground fuel tank and the construction of an ADA compliant access ramp within land subject to coastal storm flowage. Waivers are required for the project as proposed.

Additional Findings:

1. The area falls outside mapped habitat areas and does not require NHESP review.
2. The Commission finds that the removal of invasive species from the buffer zone provides a long-term net benefit to the resource area.

In addition to the General Conditions contained elsewhere in this document, the Commission includes the following Special Conditions pursuant to MGLCh131s40 and the Town of Nantucket Wetlands Protection Bylaw, Chapter 136:

18. All work shall be performed in accordance with the Site and Work Description contained within the Notice of Intent and plan notes set out on the plan of record, provided project narratives, waiver requests and protocols.
19. All invasive plant species are to be removed from the site and disposed off through the digester at the Nantucket Landfill. All disturbed soil from the invasive species removal is to be properly disposed of off site.
20. Monitoring of the area of invasive species is to be done by plant surveys at the beginning and end of each growing season with that report being provided to the Commission for review. This monitoring shall be for three years or until the issuance of a Certificate of Compliance whichever is the longer time period.
21. If herbicide is needed to control any persistent invasive species the applicant shall file a species specific protocol as part of an Amended Order of Conditions request.

22. The applicant shall demonstrate a greater than 90% survivorship of the plants replanted in the invasive species area prior to the issuance of a Certificate of Compliance.
23. All disturbed areas are to be restored and stabilized prior to the issuance of a Certificate of Compliance.
24. No fertilizer or irrigation is permitted by this Order.

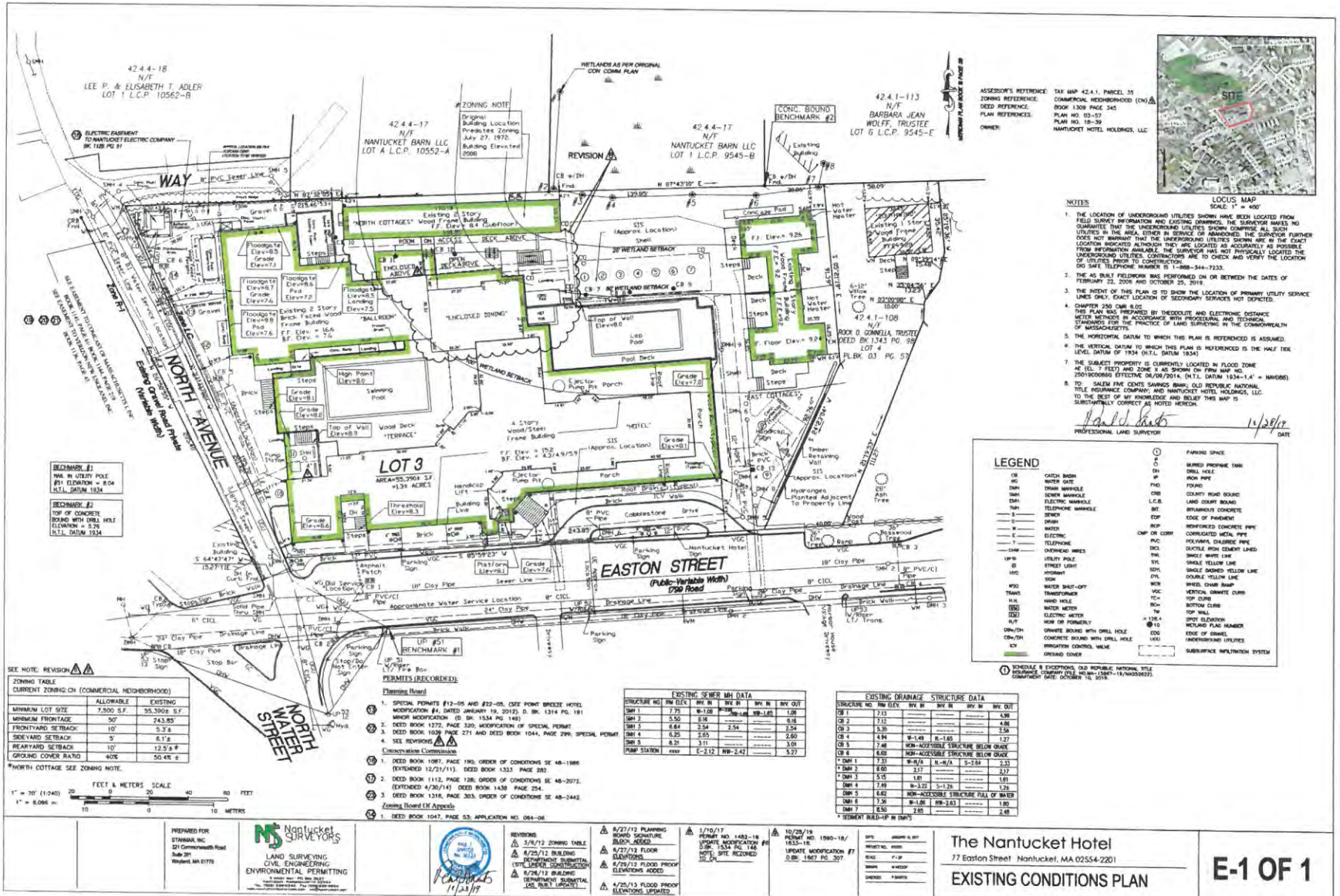
WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

Waivers are required for Section 3.02(B)(1) of the Town of Nantucket Wetlands Protection Regulations that proposed projects which are not water dependent shall maintain at least a 25-foot natural undisturbed area adjacent to vegetated wetlands and that 50% of the area between the 25-foot buffer and the 50-foot buffer shall not be altered. The Commission finds that the work as proposed will not have an adverse impact on the interests protected by the bylaw and that there are no reasonable alternatives. In addition the Commission finds that the removal of invasive species from within the buffer zone will provide a long-term net benefit to the resource. Therefore the Commission grants a waiver under Section 1.03(F)(a & c) of the Town of Nantucket Wetlands Protection Regulations.

77 Easton Street, Nantucket, MA
Applicant: Nantucket Hotel Holding, LLC

View of shell access aisle looking north

View of existing shell parking area and Bordering Vegetated Wetland looking northeast


LOT 3
AREA=55,390± S.F.
±1.3± ACRES
NORTH AVENUE
EASTON STREET
(Public-Variable Width)
1750 Road
NORTH WATER STREET
"NORTH COTTAGES"
"EAST COTTAGES"
"HOTEL"
"TERRACE"
"BALLROOM"
"UNENCLOSED DINING"
Swimming Pool
Lap Pool
Pool Deck
Cobblestone Drive
Brick Walk
Parking Sign
Existing Gravel Road Private
Existing Gravel Road (Variable Width)
WETLANDS AS PER ORIGINAL CON COMM PLAN
REVISION
ZONING NOTE
Original Building Location Predates Zoning July 27, 1972. Building Elevated 2006
42.4.4-18 N/F LEE P. & ELISABETH T. ADLER LOT 1 L.C.P. 10562-B
42.4.4-17 N/F NANTUCKET BARN LLC LOT A L.C.P. 10552-A
42.4.4-17 N/F NANTUCKET BARN LLC LOT 1 L.C.P. 9545-B
42.4.1-113 N/F BARBARA JEAN WOLFF, TRUSTEE LOT 6 L.C.P. 9545-E
42.4.1-108 N/F ROCK D. GONNELLA, TRUSTEE DEED BK 1343 PG. 98 LOT 4 PLBK 03 PG. 57
CONC. BOUND BENCHMARK #2
BENCHMARK #1
BENCHMARK #2
UP #51 BENCHMARK #1
ELECTRIC EASEMENT TO NANTUCKET ELECTRIC COMPANY BK 1128 PG 91
SEE EASEMENT TO NANTUCKET ELECTRIC COMPANY BK 1128 PG 91 AND BK 1134 PG 41
SEE EASEMENT TO NANTUCKET TELEPHONE CO. BK 1134 PG 41
20' WETLAND SETBACK
8' WETLAND SETBACK
WETLAND SETBACK
Existing 2 Story Brick Faced Wood Frame Building FF. Elev. = 16.6 BF. Elev. = 7.6
Existing 2 Story Brick Faced Wood Frame Building FF. Elev. = 14.9/15.9 BF. Elev. = 4.3/4.9/5.9
Existing 1 Story Wood Frame Building FF. Elev.= 9.2±
Existing 2 Story Wood/Steel Frame Building
Existing Building
Hydrangea Planted Adjacent To Property Line
Ejector Pump Pit
Ejector Pump Pit Porch
Handicap Lift
Handicap Sign
Hot Water Heater
Timber Retaining Wall
Brick Walk
Asphalt Patch
Platform Elev=8.1
Threshold Elev=8.3
Top of Wall Elev=8.9
Top of Wall Elev=8.0
High Point Elev=8.0
Grade Elev=8.1
Grade Elev=8.6
Grade Elev=7.6
Grade Elev=7.8
Grade Elev=8.1
Floodgate Elev=8.5 Grade Elev=7.1
Floodgate Elev=8.7 Grade Elev=7.6
Floodgate Elev=8.6 Pad Elev=7.2
Floodgate Elev=8.5 Landing Elev=7.5
Floodgate Elev=8.9 Pad Elev=7.6
Steps
Deck
Porch
Shed
Gravel
Graves
Sign
Stop Sign
Stop Bar
Curb Cut
Utility Pole
Hydrant
Sewer Line
Drainage Line
Water Service Location
Old Service Location
Existing Building
S 64°43'47" W 152.97'TIE
S 85°59'23" W 243.85'
N 07°43'10" E 139.85'
N 87°30'05" E 215.46'±
S 31°48'28" E 112.51'
N 25°34'36" E 132.91'
N 82°09'09" E 18.00'
S 31°48'28" E 112.51'
N 82°09'09" E 15.48'
N 07°43'10" E 58.09'
N 87°43'10" E 30.00'
S 87°43'10" W 30.00'
S 07°43'10" W 58.09'
CB 1 thru CB 12
DMH 1 thru DMH 9
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SITE
LOCUS MAP
SCALE: 1" = 400'
LEGEND
CB CATCH BASIN
WG WATER GATE
DMH DRAIN MANHOLE
SMH SEWER MANHOLE
EMH ELECTRIC MANHOLE
TMH TELEPHONE MANHOLE
S SEWER
D DRAIN
W WATER
E ELECTRIC
T TELEPHONE
OHW OVERHEAD WIRES
UP/P UTILITY POLE
SL STREET LIGHT
HYD HYDRANT
SIGN
WSO WATER SHUT-OFF
TRANS. TRANSFORMER
HH HAND HOLE
WM WATER METER
EM ELECTRIC METER
M/F MONUMENT FOUND OR FORMERLY
CBM/DH CONCRETE BOUND WITH DRILL HOLE
CBM/IH CONCRETE BOUND WITH IRON PIPE
ICV IRRIGATION CONTROL VALVE
GC GROUND COVER
PARKING SPACE
BURIED PROPANE TANK
DRILL HOLE
IP IRON PIPE
FND. FOUND
CRB COUNTY ROAD BOUND
L.C.B. LAND COURT BOUND
BIT. BITUMINOUS CONCRETE
EOP EDGE OF PAVEMENT
RCP REINFORCED CONCRETE PIPE
CMP OR CORR CORRUGATED METAL PIPE
PVC POLYVINYL CHLORIDE PIPE
DICL DUCTILE IRON CEMENT LINED
THW SINGLE WHITE LINE
SYL SINGLE YELLOW LINE
SDYL SINGLE DASHED YELLOW LINE
DYL DOUBLE YELLOW LINE
WCR WHEEL CHAIR RAMP
VGC VERTICAL GRANITE CURB
TC= TOP CURB
BC= BOTTOM CURB
TW TOP WALL
x 126.4 SPOT ELEVATION
10 WETLAND FLAG NUMBER
EOG EDGE OF GRAVEL
UGU UNDERGROUND UTILITIES
SUBSURFACE INFILTRATION SYSTEM
ASSESSOR'S REFERENCE: TAX MAP 42.4.1, PARCEL 35
ZONING REFERENCE: COMMERCIAL NEIGHBORHOOD (CN)
DEED REFERENCE: BOOK 1309 PAGE 345
PLAN REFERENCES: PLAN NO. 03-57, PLAN NO. 18-39
OWNER: NANTUCKET HOTEL HOLDINGS, LLC
NOTES
1. THE LOCATION OF UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CONTRACTORS ARE TO CHECK AND VERIFY THE LOCATION OF UTILITIES PRIOR TO CONSTRUCTION. DIG SAFE TELEPHONE NUMBER IS 1-888-344-7233.
2. THE AS BUILT FIELDWORK WAS PERFORMED ON OR BETWEEN THE DATES OF FEBRUARY 22, 2006 AND OCTOBER 25, 2019.
3. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF PRIMARY UTILITY SERVICE LINES ONLY. EXACT LOCATION OF SECONDARY SERVICES NOT DEPICTED.
4. CHAPTER 250 CMR 8.05: THIS PLAN WAS PREPARED BY THEODOLITE AND ELECTRONIC DISTANCE METER METHODS IN ACCORDANCE WITH PROCEDURAL AND TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS.
5. THE HORIZONTAL DATUM TO WHICH THIS PLAN IS REFERENCED IS ASSUMED.
6. THE VERTICAL DATUM TO WHICH THIS PLAN IS REFERENCED IS THE HALF TIDE LEVEL DATUM OF 1934 (H.T.L. DATUM 1834)
7. THE SUBJECT PROPERTY IS CURRENTLY LOCATED IN FLOOD ZONE AE (EL. 7 FEET) AND ZONE X AS SHOWN ON FIRM MAP NO. 25019C0086G EFFECTIVE 06/08/2014. (H.T.L. DATUM 1934-1.4' = NAVD88)
8. TO: SALEM FIVE CENTS SAVINGS BANK; OLD REPUBLIC NATIONAL TITLE IN

CONSERVATION COMMISSION
PUBLIC MEETING

2 Bathing Beach Road
Nantucket, Massachusetts 02554
www.nantucket-ma.gov
Thursday, July 9, 2020 – 5:00 p.m.

This meeting was held via remote participation using ZOOM and YouTube,
Pursuant to Governor Baker's March 12, 2020 Order Regarding Open Meeting Law

Commissioners: Ashley Erisman (Chair), Ian Golding (Vice Chair), David LaFleur, Joe Topham, Seth Engelbourg, Maureen Phillips, and Mark Beale

Called to order at 5:00 p.m. by Ms. Erisman

Staff in attendance:	Jeff Carlson, Natural Resources Director; Joanne Dodd, Natural Resources Coordinator
Attending Members:	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Absent Members:	LaFleur

*Matter has not been heard

I. PUBLIC MEETING

A. Announcements

B. Appointment of officers:

Motion to Keep Officers as are. (made by: Topham) (seconded)
Carried unanimously//Beale, Engelbourg, Gold, Phillips, and Topham-aye

C. Public Comment: None

II. PUBLIC HEARING

A. Notice of Intent

1. Kim Glowacki – 46 Easton Street (42.4.1-22) SE48-3285

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation	Site and topographical plans, photos, requisite departmental reports, and correspondence.
Representative	Dan Wells, Goddard Consulting, LLC Dan Bailey, Pierce Attwood LLP Kim Glowacki, owner Ryan Maxwell, Bracken Engineering
Public	Arthur Reade, Reade, Gullicksen, Hanley, & Gifford LLP for the Frisbee family

Discussion (5:08)

Bailey – There will be no boat storage in the space under the structure. We've made no changes to the plans; but we are prepared to build these entirely on helical piers with break-away panels and no foundation. There could be 8 to 9 feet between the top of the pier and the 1st floor. There is a wood bulkhead on site that is seriously deteriorated and probably very old; it continues across the entirety of the site tying into existing bulkheads on both sides. Would like to increase the height of that bulkhead; this is the only property which does not have an effective bulkhead. There will continue to be a build-up of sand and dune in front of the bulkhead. The original structure dates to the 1880s; it will be moved closer to Easton Street out of the 25-foot buffer. There is a lot of Japanese Knot weed along the west side to be removed and replaced with appropriate vegetation.

Phillips – You said you believe the increase of the footprint in the 25- to 50-foot buffer is modest; she believes it will be 57%, which is not modest in her opinion. She has significant concern about adding that much structure in the buffer zone.

Golding – It's all new construction in an area ConCom doesn't normally allow new construction. The fact is the remains of the existing building is well outside the 50-foot buffer. The new construction has no statutory right to be protected by a bulkhead or anything else.

Erisman – She's concerned about the significant increase of structure between the 0- to 50-foot setback. It's all new construction and can't see how ConCom can allow that. She recalls it was presented that there was no bulkhead under the dune.

Topham – The current foundation increases the water flow. Being on piers is an improvement and it will be set back as far as possible. There is a lot of massing. Appreciates that there will be no storage underneath. Need info on the bulkhead.

Engelbourg – He had asked the representative to locate the terminus of the bulkhead; ConCom never received a survey plot plan showing that terminus. ConCom never had a filing for the bulkhead extension or replacement; this is the first we've heard of it. It's likely that bulkhead is unlicensed; this is a perfect place to talk about a living shoreline or any other eco-friendly solution. Appreciates the knotweed removal; but it's not a large enough stand to be a sufficient net benefit for the increase of structure within the buffer.

Beale – ConCom's concern was the new dwelling construction within the buffer; there is the opportunity to move everything outside the 50-foot buffer.
Topham – That property is the area where the storm surge comes through; asked if a dune-like effect could be raised to align with the bulkheads along that shore.
Reade – His client agrees with the position set forth by commissioners with regard to the increase of residential footprint within the no-build zone.
Carlson – Public Comments. Bill McGowan: bulkhead from 1938. Emily Molden, Nantucket Land Council (NLC): asked if the knotweed extends to other property, if so, that makes removal unlikely; any increase in footprint contradicts the regulations. Howard Lincoln: the bulkhead predates 1938.
Asked that any documentation the public has be sent to his office.
Engelbourg – ConCom conducted a site visit and he noticed that the knotweed extends over the property line; concurs with Ms. Molden.
Phillip – Previously there had been attempts to cast this as water dependent use; we made a formal ruling that it was not. This is not an appropriate place for a lot of new construction; though it might not be financially feasibility, our charge is the environment. These proposed structural changes don't rise to the level that they must be done.
Golding – Our regulations state that all non-water dependent should be 50 feet from a coastal bank; this is new construction. The relative surface area of the original structure to the new structures is irrelevant.
Bailey – We have the right to protect the existing structure. He disagrees that if the commission takes the position that improvements within the 50-feet must be reconstructed outside the 50 feet, no one will attempt to make improvements. We are trying to improve the situation and admit there will be new construction within the 50-foot buffer.
Erisman – The commissioners understand that there must be some construction within the 50, but we need to see some reduction; all we see is an increase.
Beale – In trying to max out this property, the applicant is increasing the square footage within the 50-foot zone. She feels the proposal is overly ambitious.
Bailey – Asked to continue for one months.

Staff — He will have to look into the bulkhead but thinks any work to it would be detrimental to the coastal dune that now covers it. If a bulkhead falls into disrepair, it could become abandoned and there is the chance it was never licensed.
Motion — Continued to August 6.
Roll-call Vote — N/A

2. 46 Shimmo Pond Road N.T – 46 Shimmo Pond Road (43-77) SE48-3264 **Withdrawn**

Motion — **Motion to Accept the Withdrawal. (made by: Topham)**
Roll-call Vote — Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

3. 62 Cliff Road Realty Trust – 62 Cliff Road (41-20) SE48-3306 **(Cont. 07/23/2020)**
4. *ETG Nominee Trust – 6 Old Harbor Road (40-95) SE48-____

Sitting — Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation — Site and topographical plans, photos, requisite departmental reports, and correspondence.
Representative — Jeff Blackwell, Blackwell & Assoc.
Public — None
Discussion (5:40') — **Blackwell** – This is a vacant lot; work within the buffer is a pool, pool wall, section of driveway, portion of the smaller structure, and landscaping with a walking path. The lot is served by Town water but there will be on-site septic.
Erisman – Asked if there is a chance for runoff to go down the path to Washing Pond.
Blackwell – The grade pitches west toward the pond; however, there would be lawn around the pool to dissipate the energy of and absorb runoff. He doesn't anticipate sediment running down the path, but he discussed with the owner the chance of a raised boardwalk.
Engelbourg – It's okay as long as there is no fertilizer use within the lawn.
Erisman – All lawns that abut wetlands should submit fertilizer and watering reports.
Blackwell – We have no objection to that condition.
Erisman – Nantucket Land Council asked how the runoff would be maintained and fertilizer used on the path.
Staff — In protecting the interest of the bylaw, commissioners can condition the use of any chemicals on lawns.
Have everything needed to close.
Motion — **Motion to Close.** (made by: Golding) (seconded)
Roll-call Vote — Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

5. *Arthur Schwabe – 8 Caroline Way (82-27) SE48-3307

Sitting — Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation — Site and topographical plans, photos, requisite departmental reports, and correspondence.
Representative — Jeff Blackwell, Blackwell & Assoc.
Public — None

Discussion (5:47) **Blackwell** – A previously existing structure located close to the top of the coastal bank was removed; a new home was constructed more than 100 feet from the top of bank in 2018. The builder assumed the boardwalk could be continued and made the wood stairs aluminum to facilitate seasonal removal. Seeking permission for the extension and replacement of the beach stairs.

Staff Have everything needed to close.

Motion **Motion to Close.** (made by: Topham) (seconded)

Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

6. *Nantucketshire, LLC – 30 Dukes Road (56-189) SE48-3312

Sitting Erisman, Golding, LaFleur, Topham, Engelbourg, Phillips, Beale

Documentation Site and topographical plans, photos, requisite departmental reports, and correspondence.

Representative Jeff Blackwell, Blackwell & Assoc.

Public None

Discussion (5:50) **Blackwell** – This is for a sewer connection to run a forcemain to connect to the Dukes Road forcemain. A substantial portion of the front of the property is taken up by a wetland system; the pressure line would be installed in the driveway thus avoiding the wetland; there will be work within the 25-foot buffer. The failed septic will be removed.

Staff Have everything needed to close.

Motion **Motion to Close.** (made by: Beale) (seconded)

Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

7. Phyllis J. & Donald T. Visco – 67 Easton Street (42.4.1-115.1) SE48-3308

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale

Documentation Site and topographical plans, photos, requisite departmental reports and correspondence.

Representative Mark Rits, Site Design Engineering

Public Brigitte Petrocelli, 2 North Beach Street
Arthur Reade, Reade, Gullicksen, Hanley, & Gifford LLP for Brigitte and Nicholas Petrocelli

Discussion (5:54) **Rits** – There have been a number of discussion about the wetland delineation; last year's discussion shows a small wetland surrounded by hydric soil. The area has been maintained as a lawn as far back as 1955. Work is to construct a small cottage in the upland portion of the property; all the upland is within the 25-foot buffer. The property is also, within land subject to coastal storm flowage. The cottage will be on piers. To offer a benefit, the entire site will continue to be maintained as lawn. We will restore the entire wetland with a mix of shrubs and native wetland seed to create a vegetative wetland. There is a drainage trench around two sides of the property; it was installed before drainage trenches were excluded from being wetlands; because of the trench, much of the soil has become hydric. The structure will be connected to Town water and sewer. The restored wetlands will be indicated by a permanent barrier. We will need waivers.

Engelbourg – He's concerned about the history of the drainage trench; satellite imagery indicates it wasn't there in 2010 but appeared in 2014. Mowing and maintenance of the lawn predate the Wetlands Protection Act; however there has been further activity since then.

Erisman – She's concerned the photos indicate certain vegetation has disappeared from the site in the last decade. Regarding the robust planting, the commission would like to see the planting plan and the wetland reestablishment plan; wetland reestablishment will probably take 3 years before any construction can start.

Rits – We will work with Brian Madden, LEC Environmental, on that plan; we could try to get that to the commission by the next meeting.

Topham – Would like to have a condition that a certain percentage of plants must survive.

Golding – The trouble with conditioning the wetlands, is if it fails, we aren't going to ask Mr. Visco to remove the cottage. The site does clearly retain a lot of water; he often sees ducks enjoying that water.

Topham – The entire neighborhood has the same soil condition for about 500 feet.

Engelbourg – He hesitant right now so would like to see the restoration plan. Suggested conditioning that no construction take place until the wetlands is established.

Phillips – If this can be brought back to a proper wetland, that would be good. This has a large opportunity for mitigation and if we condition it properly and the wetland takes effect, that's a good way to go.

Reade – This is proposing building a structure, which would abut the wetland boundary and is within the 25-foot buffer. This wetland is without benefit at this time; having a wetland where ducks can swim around is great. No structure justifies where the entire structure would be within the 25-foot buffer and touching the wetland boundary; allowing this flies in the face of ConCom regulations. This is not a buildable lot based upon the wetland.

Beale – Asked if denying the applicant any construction constitutes a taking.

Reade – There's plenty of case law that any denial of construction on a non-buildable lot does not constitute a taking.

Engelbourg – Echoes Mr. Reade's comments. Wetlands, even in a potentially denuded state, still provide numerous resources; our purview includes wildlife habitat, which this wetland currently provides. Vegetation, even when cut, has a root system more efficient at absorbing water than any man-made structure. Regardless of what they do, there will be loss of water absorption. There has to be a long-term net benefit and burden of proof of that is upon the applicant.

Erisman – She worries about this site because there is a history of non-permitted work; approving this might set a precedent for allowing houses through restoration where wetlands have been left to degrade to lawn. Would like to see the planting plans. In addition to the planting plans, she would also like an ecologist on the team to speak to the improved habitat and things of that nature. We would need to justify manty performance standards as an improvement.

Topham – Looking at other properties with wetlands where houses have been permitted, those seem to work. He thinks there's some benefit to this but would also like to see the planting plan; there are success stories to look at.

Engelbourg – The waiver says Long-term net benefit; that burden of proof is on the applicant.

Erisman – Read written comments. NLC provided a letter; asked staff to provide history on this lot regarding unpermitted work; this property has always been an isolated vegetated wetland and within land subject to coastal storm flowage; contend the entire site has great flood-source value. Ms. Molden comments, this is not a buildable lot and is not presently a buildable lot. "David L." (asked he clarify his last name) is an abutter and wants to have pumping and drainage plan; he says, "first and foremost, we are mindful of the impact to wildlife and vegetation."

Carlson – This site has a sordid history regarding unpermitted work since 2011; gave a brief narrative. He'll put together a more detailed narrative and check with Town Counsel about ConCom's definition of the isolated vegetated wetland, which the owner challenged in court.

Golding – Absolutely wants to hear from Town Counsel about the definition of an isolated vegetated wetland.

Carlson – Thinking about waiver provisions; commissioners need to keep in mind separate waivers are issued for different criteria. For things that aren't a direct net benefit, granting a waiver for this based upon that is a slippery slope; suggested they have to look at No Reasonable Alternative/No Adverse Impact.

Golding – A question for Town Counsel is does the location and previous use have any precedent going forward; this has been a lawn downtown.

Carlson – This is an area of development.

Topham – Suggested adding to the list of questions for Town Counsel - the ability to declare a Taking.

Carlson – To demonstrate a Taking, you have to prove there is no functional use for the property. Based upon that logic, there is still some value and use to this property.

Erisman – With the No Reasonable Alternative/No Adverse Impact, asked if both of those hold equal wait. Based upon characteristics of the site, there is evidence of No Reasonable Alternative.

Carlson – In this case the issue is the lack of setback to the wetland. The question will be whether or not putting a structure within the 50-foot setback is an adverse impact.

Phillips – In looking at this as an empty lot that floods, if we can recreate the wetland vegetation, which has diminished over the years, and compare that to the fact lots of people believe it is a good wetland as is, she's struggling with the idea of making it into a better wetland; asked if there are gradations to the success of a wetland to balance the negative impact of the structure.

Erisman – That is where the burden of proof falls upon the applicant. Traditionally, creating a functional wetland is very difficult; you're looking at 7 to 10 years for the plants to get established.

Engelbourg – First is the issue of ConCom performance standards; second is the question of improving the habitat sufficiently to make it functional.

Rits – We will provide a planting plan and get an ecologist involved. We understand the challenge, time, and high failure rate of establishing a wetland. One thing in our favor is the well-established hydric soils. There has been much discussion about flood storage and hydrology; we aren't planning much grading so expect those to remain much as it is now. We are proposing a pier foundation that won't impact flow or infiltration.

Petrocelli – Cited that their recent application for renovations, they were told respect the wetlands on this property; they did that.

Golding – We are pretty much bound by our regulation not to approve this; the fact is this is a defined wetland with the house built right there.

Rits – Asked for a 2-week continuance.

Staff	None
Motion	Continued to July 23rd.
Roll-call Vote	N/A

8. *Madaket Wheelhouse, LLC – 13 Massachusetts Avenue (60-75) SE48-3309

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation	Site and topographical plans, photos, requisite departmental reports, and correspondence.
Representative	Gasbarro
Public	None
Discussion (6:38)	**Gasbarro** – The raised walkway is heaving; this is to replace the 4X4 posts with helical anchors. The thought is the plates on the anchors will prevent the up-heaving.

Golding – On the details, it indicates it's a concept drawing only; asked what bearing this has on the application, how deep the anchors will be, and what material the anchors will be.

Gasbarro – It's a 3-foot-wide walkway with supports spaced every 10 feet. Anchors are galvanized steel and will go about 4-feet deep. We need to continue for Massachusetts Natural Heritage.

Staff	None
Motion	Continued to July 23rd.

Roll-call Vote N/A

9. *Eleven Crooked Lane, LLC – 10 Hickory Meadow Lane (41-904) SE48-3311

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation Site and topographical plans, photos, requisite departmental reports, and correspondence.
Representative Ryan Maxwell, Bracken Engineering
Public None
Discussion (6:42) **Maxwell** – We are submitting a new NOI since the existing is due to expire. What's on the plan have been approved, under the expiring Orders of Conditions, and already under construction.
Staff Our recommendation; if this gains approval, ConCom allow the existing Order of Conditions to end. When work is done, they would file for a Certificate of Compliance on both. We have no concerns at this time. Have everything needed to close.
Motion **Motion to Close.** (made by: Topham) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

10. *Liberty Realty Trust – 36 North Liberty Street (41-265) NAN-131

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation Site and topographical plans, photos, requisite departmental reports, and correspondence.
Representative Ryan Maxwell, Bracken Engineering
Public None
Discussion (6:47) **Maxwell** – The previous permit was issued in 2013 with no work done; that was closed out. We are seeking a new permit for the same work.
Staff The site is as it was when initially permitted. This filing is only under the local bylaw. Have everything needed to close.
Motion **Motion to Close.** (made by: Phillips) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

11. *Stafford Meyer – 41 Dukes Road (56-327) SE48-3310

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation Site and topographical plans, photos, requisite departmental reports and correspondence.
Representative Ryan Maxwell, Bracken Engineering
Public None
Discussion (6:49) **Maxwell** – This is for a new porch replacing steps and stoop all outside the 50-foot buffer; no grade change.
Staff Have everything needed to close.
Motion **Motion to Close.** (made by: Topham) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

III. PUBLIC MEETING

C. Certificates of Compliance

1. Silver Fox Partners Real Estate, LLC – 235 Madaket Road (59.4-364) SE48-3121

Sitting Erisman, Golding, LaFleur, Topham, Engelbourg, Phillips, Beale
Staff In our review we found issues; asking this be carried forward for two weeks to resolve those issues.
Discussion (6:51) **Carlson** – Asked this be continued to work out issues.
Motion Continued to July 23rd.
Roll-call Vote N/A

2. Escapehatch, LLC – 20 Western Avenue (87-74) SE48-576

Sitting Erisman, Golding, LaFleur, Topham, Engelbourg, Phillips, Beale
Staff In our review we found issues; asking this be carried forward for two weeks to resolve those issues.
Discussion (6:52) **Carlson** – This is for a septic system; the original was permitted and installed in the late 1990s; they are asking to close that out. We are confident it is appropriate to issue the Certificate of Compliance.
Motion **Motion to Issue.** (made by: Golding) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, LaFleur, Phillips, and Topham-aye

D. Orders of Condition

1. ETG Nominee Trust – 6 Old Harbor Road (40-95) SE48-3314

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation Draft Order of Conditions
Staff From the discussion, he changed Condition 19 requiring a soil test; Condition 20 added herbicide, pesticide, and fertilizer are not to be used.
Discussion (6:41) None
Motion **Motion to Approve as drafted.** (made by: Golding) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

2. Arthur Schwabe – 8 Caroline Way (82-27) SE48-3307

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation Draft Order of Conditions
Staff Had no unusual conditions.
Discussion (6:56) None
Motion **Motion to Approve as drafted.** (made by: Phillip) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

3. Nantucketshire, LLC – 30 Dukes Road (56-189) SE48-3312

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation	Draft Order of Conditions
Staff	Added the condition required Sewer Department approval.
Discussion (6:57)	None
Motion	**Motion to Approve as drafted.** (made by: Golding) (seconded)
Roll-call Vote	Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

4. Eleven Crooked Lane, LLC – 10 Hickory Meadow Lane (41-904) SE48-3311

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation	Draft Order of Conditions
Staff	He took the conditions from the last one and updated with conditions now being applied.
Discussion (6:59)	None
Motion	**Motion to Approve as drafted.** (made by: Engelbourg) (seconded)
Roll-call Vote	Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

5. Liberty Realty Trust – 36 N. Liberty Street (41-265) NAN-131

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation	Draft Order of Conditions
Staff	Conditioned to keep construction material outside the setback.
Discussion (7:00)	None
Motion	**Motion to Approve as drafted.** (made by: Beale) (seconded)
Roll-call Vote	Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

6. Stafford Meyer – 41 Dukes Road (56-327) SE48-3310

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Documentation	Draft Order of Conditions
Staff	Same provision all construction material be kept outside the 50.
Discussion (7:02)	None
Motion	**Motion to Approve as drafted.** (made by: Golding) (seconded)
Roll-call Vote	Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

E. Other Business

1. Approval of Minutes 6/25/2020:

Motion	**Motion to Approve.** (made by: Phillips) (seconded)
Roll-call Vote	Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

2. Town of Nantucket – Sesachacha Road (21-20) SE48-2967

Sitting	Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Representatives	None
Mr. Shuch's representatives	Sarah Alger, Sarah F. Alger P.C., Alan Shuch of 45 Quidnet Road Seth Wilkinson, Wilkinson Environmental
Discussion (7:03)	**Erisman** – Commissioners got a lot of information today as well as Mr. Carlson's report.

Carlson – Summarized his report: focused on the town-owned piece and evaluated it against the approved plan then counted plants to ensure they matched the original list; the invasive species have been removed from both sites.

Golding – Mr. Such noted an 11-inch diameter cedar.

Erisman – It was suggested commissioners visit the site; she's having issues differentiating between the violation and the permitted project. That would be helpful.

Beale and Phillips – Would also like a site visit.

Carlson – A site visit can be arranged as long as everyone observes social distancing and wears a mask; he'll help facilitate that. He didn't lay a ruler against the cedar but by estimation it is 10- to 12-inches diameter at the base.

Golding – The report sounds fairly egregious; it sounds like there's nothing to discuss except remediation going forward.

Engelbourg – There is the issue of what additional enforcement actions should be taken against Mr. Johnson. The second issue is how to get the site into compliance. He's not concerned about the number of each plant as long as they reflect the intended ecosystem.

Erisman – Asked if the landscapers call Mr. Wilkinson when they encounter deer pressure.

Wilkinson – There has been good communication between himself, Mr. Such, and Mr. Shuch's landscapers.

Erisman – Asked why the Virginia Rose was being eaten by deer and why it wasn't swapped out.

Wilkinson – There were other roses planted in the uplands; but we tried to avoid supplementing other plants on the list.

Erisman – Mr. Carlson's report laid out the things that need to be completed to close out the permit. Mr. Johnson's violation needs to be looked at thoroughly to get the square footage and get that moving in the correct direction.

Carlson – There is an open permit on the Town piece. Part of that is whether or not the Board is okay with replacing the cedar that was removed and authorize a species switch. It's fine if the commissioners want to view and discuss the enforcement order.

Wilkinson – Mr. Shuch purchased materials for this project, which he will provide to the Department of Public Works (DPW); the plants should get into the ground ASAP; if the DPW can't do that in a timely manner, Mr. Shuch's landscaper will; he asks that a Natural Resources staff member be present when the plants go in.

Erisman – When talking about the plants Mr. Shuch purchased, asked if those are specific to the area of violation – yes.

Golding – Asked how old the 11-inch diameter tree was and how could it be replaced in kind.

Carlson – Without aging the tree, it's hard to say. Aerial photos indicate they weren't over 40 years old. You can't replace a mature tree in kind; survivability is low. At the time this project started, a number of trees were infected by the Asiatic beetle and in ill health. Feels the eco system can be returned fairly quickly.

Golding – Asked how we penalize vista pruning so people won't do it.

Erisman – That requires Town Counsel advice; believes charging by square footage can be a deterrent.

Beale – The cedar family does not like being transplanted; suggested getting several healthy young ones in there.

Engelbourg – One way we might creatively get at vista pruning is by measuring the biomass in addition to the square feet pruned.

Wilkinson – He seconds what Mr. Engelbourg said about measuring the biomass; using the Basal Inch allows you to extrapolate the biomass.

Carlson – He will meet the parties involved out in the field to facilitate this moving forward; he can make that happen quickly, so they can get the plants into the ground. The permit is open; the commission authorizes work under the permit but could make a motion to allow field substitutions and the cedars.

Motion **Motion to Authorize site substitutions and cedar plantings.** (made by: Engelbourg) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, Topham-aye

Carlson – Fertilizer is regulated through the Town; Herbicides and pesticides are regulated through the State.

Erisman – NLC asked material of path to the pond and maintenance and asking a condition against using fertilizer on the path.

Carlson – Have everything needed to close. He'll reach out to Mr. Wilkinson to schedule the site visit with the commissioners.

Motion **Motion to Close**. (made by: Golding) (seconded)
Roll-call Vote Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, Topham-aye

3. Discussion of SBPF – 77-122 Baxter Road SE 48-1659; SBPF – 65-67 Baxter Road SE48-1602

Sitting Erisman, Golding, Topham, Engelbourg, Phillips, Beale
Representatives Steven Cohen, Cohen & Cohen Law P.C.
Dwight Dunk, Epsilon Consulting, LLC
Other speakers None
Discussion (7:30) **Carlson** – Still getting the report
Motion Continued to July 23rd
Roll-call Vote N/A

4. Reports:
   a. CRAC, Golding
   b. NP&EDC, Phillips
5. Committee Appointments:
   a. CPC – Mr. Topham appointed without objection
   b. CRAC – Mr. Golding appointed without objection
   c. NP&EDC – Ms. Phillips appointed without objection
   d. Polpis Harbor Public Access Workgroup – Beale volunteered. Mr. Beale appointed without objection
6. Commissioners Comment
   a. **Golding** – Looking to Ms. Erisman to provide impetus to update the local regulations. Sarah Oktay was on the commission when it was last done.

      Erisman – She's entering into her 7th year on the Commission and there has been no change/update to the regulations.

      Carlson – Changes require a public hearing. Having those on a regular agenda is a terrible idea; suggested starting special meetings in middle to end of August.

      Phillips – What she'd like to do is look at what other commissions did to beef up their regulations, also the Massachusetts Association of Conservation Commissions also has resources, so we don't re-invent the wheel.
   b. **Topham** – The Historic District Commission (HDC) had a meeting in which they discussed sea-level rise and it was mentioned ConCom and HDC sometimes are at odds. He reached out to the HDC chair, Ray Pohl, about getting the two groups together to come to an agreement. He can talk to Mr. Pohl first then talk to Holly Backus, Preservation Planner.

      Carlson – He will reach out to the HDC; he believes there should be a work group with one member of each regulatory board to hash out conflicts. He talks with Ms. Backus frequently and is willing to reach out to her. he feels there should be a process in which people submit their applications to a compilation group to work out whether or not it will work.

c. **Erisman** – Happy to still be on the Commission.
d. **Beale** – When the Commission feels there's no change and the applicant won't get what he wants, feels we should tell them that.
Topham – At the head of Hummock Pond there was a house that wanted corals in front of their house, and we said no. In the case of properties tonight, we have to go through the process first.
Carlson – If you say no and they withdraw, that's great. If they want to go through the process to get a denial for the appeal process, you have to work hard to try to make the project comply.
Topham – It is a matter of checking all the boxes so that Town Counsel, George Pucci, has a good case.
Carlson – So far ConCom has not lost an appeal.
Engelbourg – The regulations are written so the burden of proof is on the applicant. It is our job to allow them to have a thorough hearing with our knowledge of the regulations and laws. Feels telling them preemptively is not beneficial.
Golding – It's a good idea to reach out to Mr. Pohl; we should liaise more often.
Carlson – Rick Atherton suggested starting this by having each Board chairman meet.
e. **Phillips** – Would like to see some standardization in applicants marking up the plans.

7. Administrator/Staff Reports
a. He will get sometimes for the commission to meet with the folks at Sesachacha Pond
b. Regarding regulation changes, we should look at the bylaws to see if those need changes. Bylaw changes require a Warrant Article. He'll send links to everybody

F. Adjournment

Motion	**Motion to Adjourn at 8:01 p.m.** (made by: Golding) (seconded)
Roll-call Vote	Carried unanimously//Beale, Engelbourg, Erisman, Golding, Phillips, and Topham-aye

Submitted by:
Terry L. Norton