

**COMMONWEALTH OF MASSACHUSETTS
SUPERIOR COURT
DEPARTMENT OF THE TRIAL COURT**

Nantucket, ss.

Civil Action No. 2675CV00004

OCEAN HEATH LLC,

Plaintiff,

v.

SETH ENGELBOURG, LINDA
WILLIAMS, TIM BRAINE, MIKE
MISURELLI, JOE PLANDOWSKI,
JOHN SCHAFER, and RJ TURCOTTE, as
they are the members of the NANTUCKET
CONSERVATION COMMISSION; and
THE NANTUCKET ISLANDS
LAND BANK

Defendants.

Filed 02/23/2026

COMPLAINT

This is Ocean Heath LLC’s complaint in the nature of certiorari under G.L. c. 249, § 4, appealing from a January 14, 2026, Order of Conditions (“Order of Conditions”) issued by the Nantucket Conservation Commission to the Nantucket Islands Land Bank, insofar as the Order of Conditions was issued under the Nantucket Wetlands Bylaw, Chapter 136 of the Code of Nantucket (the “Wetlands Bylaw”). The Wetlands Bylaw imposes mandatory prerequisites to the Commission’s exercise of authority over a Notice of Intent, including a requirement that the applicant send notice to all certified abutters by certified mail, return receipt requested, confirmation of which must be provided to the Conservation Commission during the public hearing. The Land Bank failed to comply with the Wetlands Bylaw’s notice requirements, and the Commission failed to follow its own procedures which require evidence of proper notice to abutters. Absent compliance, and evidence of compliance, with the Wetlands Bylaw’s notice

prerequisites, the Conservation Commission's issuance of the Order of Conditions where the Land Bank failed to provide any notice to Ocean Heath LLC, a direct abutter, was unlawful. Ocean Heath LLC respectfully requests that this Court determine that the Conservation Commission's proceedings and subsequent issuance of the Order of Conditions violated the Wetlands Bylaw in numerous respects and must be annulled.

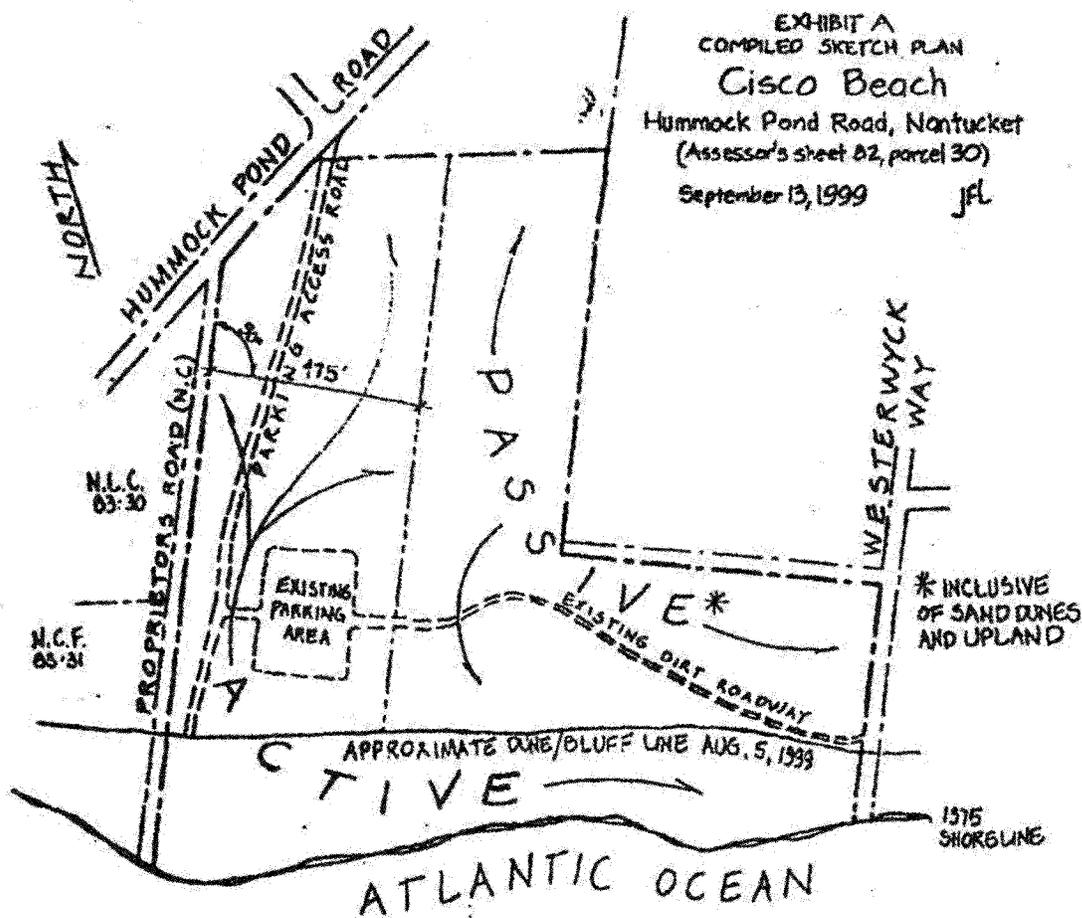
Parties

1. Plaintiff Ocean Heath LLC is a Massachusetts corporation and the record owner of the land known as 9 Falmouth Avenue, Nantucket, Massachusetts.
2. Defendants Seth Engelbourg, Linda Williams, Tim Braine, Mike Misurelli, Joe Plandowski, John Schafer, and RJ Turcotte are the members of the Nantucket Conservation Commission, which has an address of 131 Pleasant Street, 2nd Floor, Nantucket, Massachusetts 02554, and are named solely in their capacity therein.
3. Defendant Nantucket Islands Land Bank is a body politic established by a special act of the Massachusetts Legislature with a principal place of business at 22 Broad Street, Nantucket, Massachusetts 02554.

Facts

4. Plaintiff is the owner of 9 Falmouth Avenue by virtue of a deed dated September 9, 2021, recorded with Nantucket County Registry of Deeds at Book 1850, Page 164.
5. Plaintiff's title includes the fee in the entire width of Falmouth Avenue where it abuts Plaintiff's property.
6. The Nantucket Islands Land Bank ("Land Bank") was created by the Legislature in 1983 via the "Land Bank Act", St. 1983, c.669 (the "Act").
7. The Land Bank is the owner of land known as Smooth Hummocks (Map 82/Parcel 30) in Nantucket, Massachusetts ("Locus").

8. The Locus is a 45.30 acre waterfront parcel which includes Cisco Beach.
9. Locus has its frontage on Hummock Pond Road, and Cisco Beach is primarily accessed by a private drive from Hummock Pond Road.
10. There is a parking lot associated with Cisco Beach.
11. The southern portion of the southern Cisco Beach parking lot has eroded, forcing the closure of this area to parking.
12. The Land Bank at one time had access to the eastern side of Cisco Beach via a 10 foot wide dirt road off of Westerwyck Way, as shown on a sketch attached to the Land Bank's deed, an extract of which is below.



13. Over time, as the Locus eroded, the Land Bank moved the “existing dirt roadway” north such that it connects to the end of Falmouth Avenue.
14. The Land Bank has no rights of record in Falmouth Avenue.
15. On or about December 8, 2025, the Land Bank filed a Notice of Intent (“NOI”) with the Nantucket Conservation Commission seeking an Order of Conditions to conduct further work on its dirt roadway.
16. The NOI was filed pursuant to G.L. c. 131, § 40 and the Town’s local bylaw, § 136 of the Nantucket Code. A true and accurate copy of the NOI is attached hereto as **Exhibit A**.
17. The Town’s Wetlands Bylaw states: “The Commission shall hold a public hearing on the application within 21 days of its receipt. Notice of the time and place of the hearing shall be given by the Commission at the expense of the applicant, not less than five days prior to the hearing, by publication in a newspaper of general circulation in Nantucket and by mailing a notice to the applicant, the Board of Health, the Select Board, the Planning Board, all abutters, the property owner if different from the applicant and to such other persons as the Commission may by regulation determine. At least five days prior to the public hearing, by certified mail, return receipt requested, the applicant shall send a copy of the notice of the public hearing, supplied by the Commission, to all abutters, as certified by the Assessor from the Town's most recent Assessor's list. Postmarked mailing receipts and the certified abutter's list shall be presented to the Commission at the opening of the public hearing. Return receipt cards shall be presented to the Commission before the hearing can be closed. The Commission, its agents, officers and employees, may enter upon privately owned land for the purpose of performing their duties under this chapter.” Nantucket Code § 136-4(A).

18. The NOI did not include a certified list of abutters from the Nantucket Assessors office; though an abutters list was included, it did not include the required certification from the Assessor.
19. The NOI did not include postmarked mailing receipts.
20. The Conservation Commission opened a hearing on the NOI on January 8, 2026.
21. The Conservation Commission conducted a short, approximately 12-minute, public hearing (“Hearing”) on the NOI, and then closed the Hearing.
22. The Land Bank did not present return receipt cards to the Conservation Commission before the Hearing closed.
23. Plaintiff Ocean Heath LLC, despite being a direct abutter, did not receive notice of the Hearing.
24. The Land Bank did not comply, nor did the Commission require compliance, with the Bylaw’s requirement that “postmarked mailing receipts and the certified abutter’s list shall be presented to the Commission at the opening of the public hearing.”
25. The Land Bank did not comply, nor did the Commission require compliance, with the Bylaw’s requirement that “Return receipt cards shall be presented to the Commission before the hearing can be closed.”
26. Ocean Heath LLC was deprived of an opportunity to be heard by the Conservation Commission by the failure to provide notice.
27. Had Ocean Heath LLC received notice, it would have participated in the Hearing.
28. Ocean Heath LLC was prejudiced by the Land Bank’s failure to provide notice of the Hearing.
29. The Land Bank was well aware that Ocean Heath LLC objected to their proposed project.

30. The NOI itself references Ocean Heath LLC's opposition to a prior Notice of Intent filed by the Land Bank. Exhibit A at pg. 2.
31. In January 2025 the Land Bank filed a Notice of Intent with the Conservation Commission for the same property and the same work project ("First NOI"). A true and accurate copy of said document is attached hereto as **Exhibit B**.
32. The First NOI did include evidence that notice had been given to the abutters; certified mail receipts were included in the First NOI. Exhibit B at pgs. 34-39.
33. Ocean Heath LLC (along with other neighbors) opposed the First NOI, which was later withdrawn.
34. No abutters or other residents appeared or spoke at the January 8, 2026 Conservation Commission Hearing on the NOI.
35. The Conservation Commission issued an Order of Conditions on January 14, 2026, approving the Land Bank's request. A true and accurate copy of the Order of Conditions is attached hereto as **Exhibit C**.
36. Ocean Heath LLC is aggrieved by the issuance of the Order of Conditions.

Count I
Certiorari (G.L. c. 249, § 4)

37. Plaintiff repeats and realleges the statements in paragraph 1 through 36 above.
38. The Order of Conditions is the result of proceedings which are not according to the course of the common law and are not otherwise reviewable, by motion or appeal.
39. This action in the nature of certiorari is brought to correct errors in the Commission's proceedings.
40. The Order of Conditions and the Conservation Commission's proceeding leading to the same violates the Wetlands Bylaw in the following respects, among others:

- a. Failure to require compliance with the requirement that an applicant submit a certified abutters list;
- b. Failure to require compliance with the requirement that notice be properly given to all abutters; and
- c. Failure to comply with the requirement that the public hearing be held open until proof of receipt of notice is submitted to the Commission.

41. The issuance of the Order of Conditions without adequate notice and an opportunity to be heard has harmed Plaintiff and Plaintiff's property and Plaintiff's protected legal interests in a manner that is different in nature and magnitude from that of the general public.

WHEREFORE, Ocean Heath LLC respectfully prays that the Court enter judgment:

- (a) annulling the Order of Conditions;
- (b) awarding Ocean Heath LLC its costs and reasonable attorneys' fees, including interest;
and
- (c) granting such further relief as the Court deems necessary or appropriate, in the interests of justice.

Respectfully submitted,

Ocean Heath LLC,
By their attorneys,

/s/ Kathleen M. Heyer
Daniel J. Bailey III, BBO No. 552612
dbailey@pierceatwood.com
Kathleen M. Heyer, BBO No. 685380
khey@pierceatwood.com
Pierce Atwood LLP
100 Summer Street
Boston, MA 02110
(617) 488-8100

Dated: February 23, 2026

EXHIBIT A



**Notice of Intent Application
Falmouth Ave Relocation
Smooth Hummocks (Map 82, Parcel 30), Nantucket, MA**

**Prepared for:
The Nantucket Conservation Commission
131 Pleasant Street
2nd Floor
Nantucket, MA 02554**

**Prepared by:
The Nantucket Islands Land Bank**

December 8, 2025



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 #:1960681
City/Town:NANTUCKET

A.General Information

1. Project Location:

a. Street Address	SMOOTH HUMMOCKS	c. Zip Code	02554
b. City/Town	NANTUCKET	e. Longitude	70.15349W
d. Latitude	41.25287N	g.Parcel/Lot #	30
f. Map/Plat #	82		

2. Applicant:

Individual Organization

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	508-228-9369
j. Email	ephelps@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	508-228-9369
j. Email	ephelps@nantucketlandbank.org		

4. Representative:

a. First Name	ELIZABETH	b. Last Name	PHELPS
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	ephelps@nantucketlandbank.org		

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
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6. General Project Description:

THE APPLICANT PROPOSES TO RELOCATE A PORTION OF THE EXISTING DIRT ROADWAY ON THE PROPERTY FURTHER FROM THE BEACH/DUNE, AND TO RESTORE THE ABANDONED ROADWAY WITH NATIVE PLANTINGS.

7a. Project Type:

- | | |
|---|--|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Limited Project Driveway Crossing | 4. <input type="checkbox"/> Commercial/Industrial |
| 5. <input type="checkbox"/> Dock/Pier | 6. <input type="checkbox"/> Utilities |
| 7. <input type="checkbox"/> Coastal Engineering Structure | 8. <input type="checkbox"/> Agriculture (eg., cranberries, forestry) |
| 9. <input type="checkbox"/> Transportation | 10. <input type="checkbox"/> Other |



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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:	c. Book:	d. Page:
NANTUCKET		646	258

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

1. Buffer Zone & Resource Area Impacts (temporary & permanent):

This is a Buffer Zone only project - 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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input type="checkbox"/> Land under Waterbodies and Waterways	1. Square feet	2. square feet
	3. cubic yards dredged	
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input type="checkbox"/> Riverfront Area	1. Name of Waterway (if any)	
	2. Width of Riverfront Area (check one)	
	<input type="checkbox"/> 25 ft. - Designated Densely Developed Areas only	
	<input type="checkbox"/> 100 ft. - New agricultural projects only	
	<input type="checkbox"/> 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.



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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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Designated Port Areas	Indicate size under	Land under the ocean below,
b. <input type="checkbox"/> Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes, below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	1. square feet	2. cubic yards dune nourishment
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab, crea.
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet	
k. <input type="checkbox"/> 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. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet	

4.Restoration/Enhancement

Restoration/Replacement

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 entered the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5.Projects Involves Stream Crossings

Project Involves Streams Crossings



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If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

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 of Endangered Species program (NHESP)?

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

b. Date of map:2021

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18)...

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

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

3. Project plans for entire project site, including wetland resource areas and areas outside of wetland 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

c. MESA filing fee (fee information available at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html>)

Make check payable to "Natural Heritage & Endangered Species Fund" 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

d. 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/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14>; 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 Number

b. Date submitted to NHESP



Massachusetts Department of Environmental Protection

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

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3. Separate MESA review completed.

Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

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

a. Not applicable - project is in inland resource area only

b. Yes No

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

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

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 S. Rodney French Blvd
New Bedford, MA 02744

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it 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.

3. 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 DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. 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

5. 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

6. 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, Explain why the project is exempt:

1. Single Family Home

2. Emergency Road Repair



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

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

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

D. Additional Information

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 by regular mail delivery.

- 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.
- 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.

a. Plan Title: b. Plan Prepared By: c. Plan Signed/Stamped By: c. Revised Final Date: e. Scale:

- 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.



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 #:1960681
City/Town:NANTUCKET

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:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payer name on check: First Name

7. Payer name on check: Last Name

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.

1. Signature of Applicant

2. Date

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 Section C, Items 1-3, 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.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Wetland Fee Transmittal
Form

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

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1960681
City/Town:NANTUCKET

A. Applicant Information

1. Applicant:

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 5082287240 i. Fax 5082289369 j. Email ephelps@nantucketlandbank.org

2. Property Owner:(if different)

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 5082287240 i. Fax 5082289369 j. Email ephelps@nantucketlandbank.org

3. Project Location:

a. Street Address SMOOTH HUMMOCKS b. City/Town NANTUCKET

Are you exempted from Fee? (YOU HAVE SELECTED 'YES')

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than \$100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total
	City/Town share of filing fee	State share of filing fee	Total Project Fee	
	\$0.00	\$0.00	\$0.00	



List of Plans and Supporting Documents

Falmouth Ave Relocation

Smooth Hummocks (Map 82/Parcel 30), Nantucket, Massachusetts

Notice of Intent

1. Project Narrative, Resource Area Descriptions, and Waiver Request
2. Figures
 - 1: Site Locus
 - 2: Existing Conditions
 - 3: Resource Areas
 - 4: NHESP Habitat and Land Subject to Flooding
 - 5: Proposed Restoration Plan
3. Photographs
4. Project Plan
5. Roadway Blend Material Permeability and Structural Classification (Bracken Engineering, Inc.)
6. NPD and NFD Letters of Support
7. Performance Standards Analysis and Waiver Request (Verill Law)
8. Abutters Information

**PROJECT NARRATIVE, RESOURCE AREA DESCRIPTIONS,
AND WAIVER REQUESTS**



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

Site Description and Background

The Nantucket Islands Land Bank (“Land Bank”) is submitting this Notice of Intent (NOI) application to relocate a portion of a dirt road, known as Falmouth Ave, at the Cisco Beach property identified as Smooth Hummocks (Map 82/Parcel 30) in Nantucket, Massachusetts (the site). Falmouth Ave provides access to the Cisco Beach parking lot from the residential neighborhoods to the east.

The site is bound to the north by a vacant parcel beyond which is Hummock Pond Road, to the east by residences, to the south by the Atlantic Ocean, and to the west by an access driveway to the Cisco Beach parking lot off of Hummock Pond Road. Much of the site is sandplain-heathland. Falmouth Ave and the Cisco Beach parking lot are located within the southern portion of the site, beyond which is Cisco Beach. Figures 1 and 2 (Attachment 2) depict the site location and existing conditions, and photographs are included in Attachment 3.

Bank erosion has compromised the southern parking lot, forcing the closure of the front (southern) section, and the Land Bank recently permitted a secondary parking area on the opposite side of the access driveway to the north. At the time, the new parking area required coordination with the Massachusetts Natural Heritage Endangered Species Program (NHESP) but is not within the 100-foot buffer to any wetland resource areas. NHESP issued a Conservation Management Permit (CMP-86043) for the parking lot expansion. Work on this lot is not yet complete.

The rear (northern) section of the original parking lot is still being used to provide public access to Cisco Beach; however, erosion is threatening the southwestern portion of Falmouth Ave, which provides access to the lot from the east. The purpose of this Notice of Intent is to request permission to relocate the southwestern section of Falmouth Ave to the north, connect it to the existing northern portion, and restore the abandoned roadbed with native plantings.

A NOI for the same project was previously submitted on January 30, 2025 and issued MassDEP file number SE48-3893. The NOI was withdrawn in September 2025. This is a new submittal; however, the proposed work is the same. When the NOI was first submitted, Daniel J. Bailey, III, Esq., of Pierce Atwood LLP submitted several letters to the Conservation Commission on behalf of Ocean Health, LLC, owner of 9 Falmouth Avenue, opposing the project. The letter submitted on August 25, 2025 challenges the Land Bank’s right to use Falmouth Ave. Peter Vetere, the Land Bank’s counsel at Verill Law, has responded to this letter, and the response is being submitted separately to the Conservation Commission for reference.

Wetland Resource Areas

Resource areas on the site subject to protection under the Massachusetts Wetlands Protection Act (M.G.L., c. 131, s.40) and the Nantucket Wetland Bylaw Regulations (Chapter 136) include Land Under the Ocean (310 CMR 10.25/ § 390-6.), Coastal Beach (310 CMR 10.27/ § 390-7), Coastal Dune (310 CMR 10.28/ § 390-8), Coastal Bank (310 CMR 10.30/ § 390-10), and Land Subject to Coastal Storm Flowage (310 CMR 10.04/ § 390-15). Please refer to Figures 3 and 4 (Attachment 2) for a depiction of the resource areas on the site. The proposed work plan prepared by Bracken Engineering, Inc. (Attachment 4) also depicts the resource areas.



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

As shown on the Bracken plan (Attachment 4), portions of the proposed new section of Falmouth Ave are within the 75 and 100-foot buffer zones to the Coastal Dune. As shown on the plan, we are also proposing a swale to the south of the roadway for drainage purposes. The swale is outside the 50-foot buffer to the Coastal Dune. The existing southwestern portion of Falmouth Ave for proposed restoration (native plantings) is located partially within the dune and its 25-foot buffer zone, as well as partially within the buffer to the Coastal Bank and the Coastal Beach. None of the proposed work areas are within Land Subject to Flooding or Land Subject to Coastal Storm Flowage.

NHESP Rare Species Habitat

According to the 15th Edition of the Massachusetts Natural Heritage Atlas (August 2021) published by the NHESP, the site is within an Estimated Habitat of Rare Wildlife and a Priority Habitat of Rare Species. A copy of this NOI has been submitted to NHESP for review, and the Land Bank is coordinating with the agency to obtain a CMP Amendment prior to starting work.

Project Details

The southern portion of the southern Cisco Beach parking lot has eroded, forcing the closure of this area to parking. Erosion is also threatening the southwestern portion of Falmouth Ave. To preserve this parking lot access, we are proposing to relocate the southernmost section of the road northward, connecting it to the existing northern portion of Falmouth Ave. The new section of the road would match the existing road and parking lot, and would require vegetation/topsoil removal, grading, and the application of a roadway material blend. We are also proposing to grade a swale on the south side of the new section of road for drainage purposes. Post and rail fence will be installed on either side of the roadway. The proposed work plan is included in Attachment 4.

The Land Bank requested that our consulting engineer, Bracken Engineering, Inc., conduct permeability testing on three potential roadway blends to ensure the selected material would not create an "impervious surface" which is defined in § 390-2 as "[a] manmade surface that does not allow infiltration of water into the underlying soil". The results indicated that all three materials were permeable to varying degrees (Attachment 5). Bracken recommends using the "Toscana Ack Pack" material blend, which rated as rapid permeability (18.4 inches per hour) based on USDA Natural Resources Conservation Service soil classification guidelines—comparable to natural sand and low-end gravel, and significantly more permeable than loamy sand, a commonly encountered permeable soil. The Land Bank is amendable to using this roadway material blend if the Commission were to condition approval of the notice of intent on its use.

As discussed with NHESP, individual rare plant species have been surveyed and flagged and will be translocated out of the project area to a previously approved translocation area. Once relocated, the abandoned portion of Falmouth Ave will be restored as depicted on Figure 5 (Attachment 2). Removed plants from the new section of the road (other than those flagged for translocation) will be moved to the old roadbed as large sods. Beach grass will be planted in the areas of the existing road where dune has started to take over. The old roadbed will be closed to traffic.



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

Alternatives Analysis

Alternatives to relocating the southwestern portion of Falmouth Ave were evaluated as follows:

- 1) **No Action:** The dune erosion will ultimately destroy the southwestern section of Falmouth Ave, making access to the Cisco Beach parking lot from the east unsafe in the short term and eventually not possible. Therefore, the only feasible alternatives are to close the road or to relocate the portion that is compromised.
- 2) **Road Closure:** Falmouth Ave provides access to some of the residences off of Westerwyck Way to the east. The Land Bank could therefore only close the western portion of the road that provides access to the Cisco Beach parking lot. Doing so would eliminate this beach access from the residential neighborhoods to the east and may encourage people to park at the roadway terminus to access the beach, potentially causing adverse impacts to rare species. Although traffic could go around via Hummock Pond Road, this would funnel all beach traffic into one area.

Both Nantucket Fire Chief Michael Cranston and Nantucket Police Chief Jodi Kasper have submitted letters to the Conservation Commission (Attachment 6) in support of the project, stating that Falmouth Ave is advantageous for public safety and overall emergency preparedness. Maintaining this access point is therefore considered to be a better alternative than closing it.

- 3) **Relocate Outside the 100-foot Buffer:** During the planning of this proposed project, consideration was given to alternative routes that would be completely outside of the 100-foot buffer to the Coastal Dune. Any alternatives were determined to result in an increased number of rare species that would be impacted as well as greater habitat disturbance due to the increased length of roadway required. Additionally, the only portion of the proposed work that is within the resource area and the 25-foot buffer is restoration of the old roadbed. Based on these factors, we believe the current configuration is the option that would cause the least impact to the habitat and resource areas while continuing to provide this public accessway to Cisco Beach.

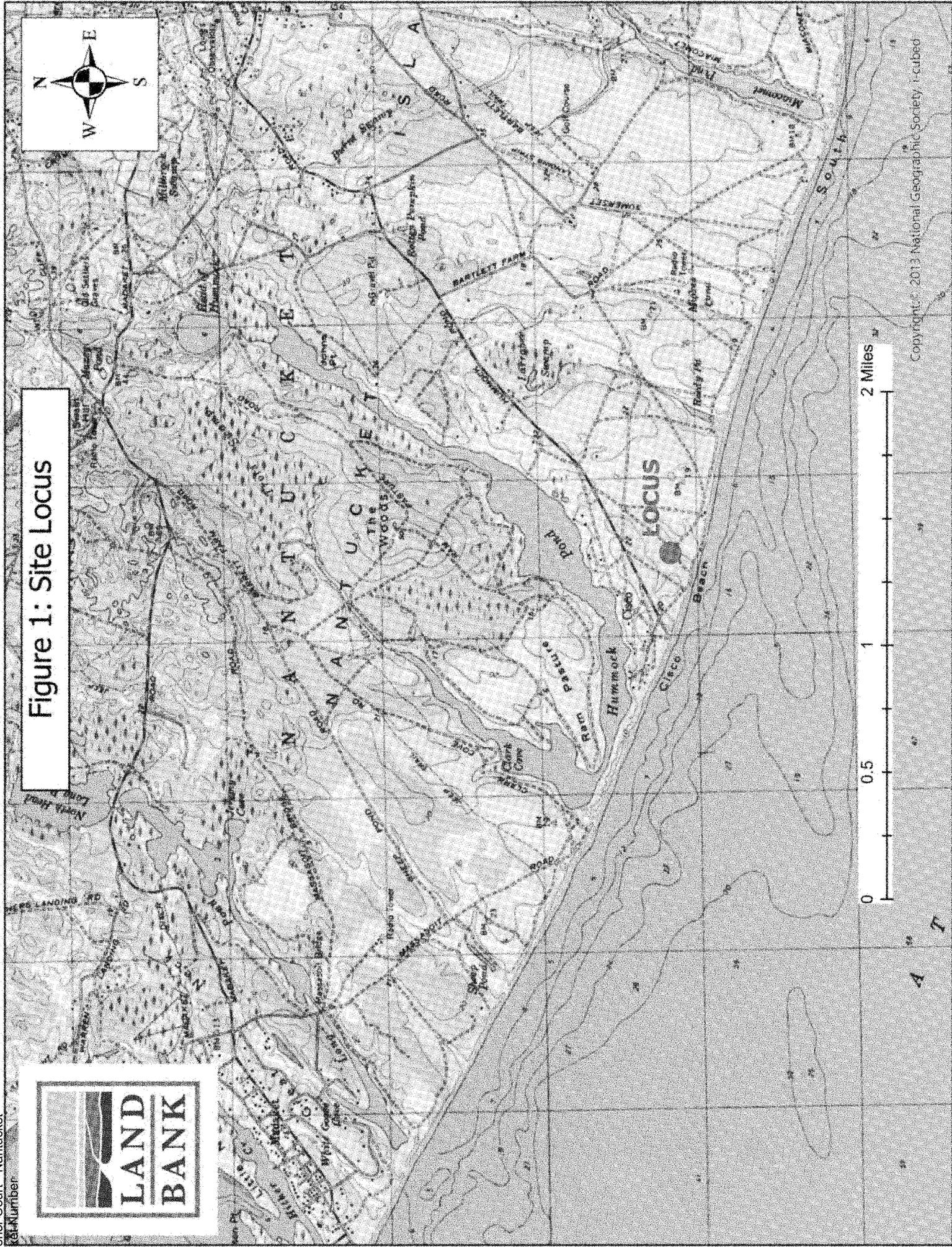
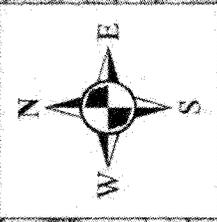
Performance Standards and Waivers

It is our opinion that the project would cause limited impacts to the resource areas at the site, which would be mitigated by the CMP Amendment that will be approved by NHESP prior to the start of work. The project involves moving the roadway further from the wetland resource areas and restoring the portion that is currently within the dune and 25-foot buffer.

It is our understanding that waivers from the Nantucket Wetland Regulations are required for altering existing vegetation within rare/significant species habitat. A separate performance standard analysis and waiver request was prepared by our counsel, Mr. Peter Vetere of Verill Law (Attachment 7).

FIGURES

Figure 1: Site Locus



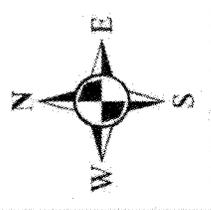
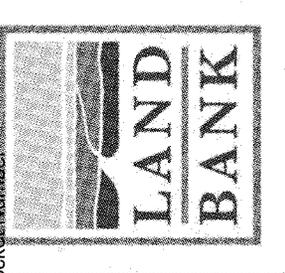


Figure 2: Existing Conditions



Smooth Hummocks
Map 82/Parcel 30

Approximate Proposed
Relocation Area (Dashed)

Existing Falmouth Ave

Cisco Beach
Parking Lot

Closed Portion of
parking Lot

Approximate Location of
Permitted Northern Parking Area

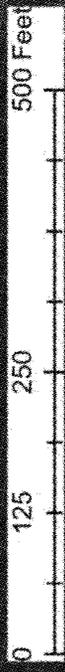
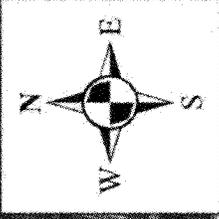




Figure 3: Resource Areas



Approximate Proposed Relocation Area (Dashed)

Existing Falmouth Ave For Proposed Restoration

Cisco Beach Parking Lot

Closed Section of Parking Lot

Coastal Bank

Coastal Dune

Coastal Beach

Legend

- LEC Dune Flags
- Coastal Beach Line

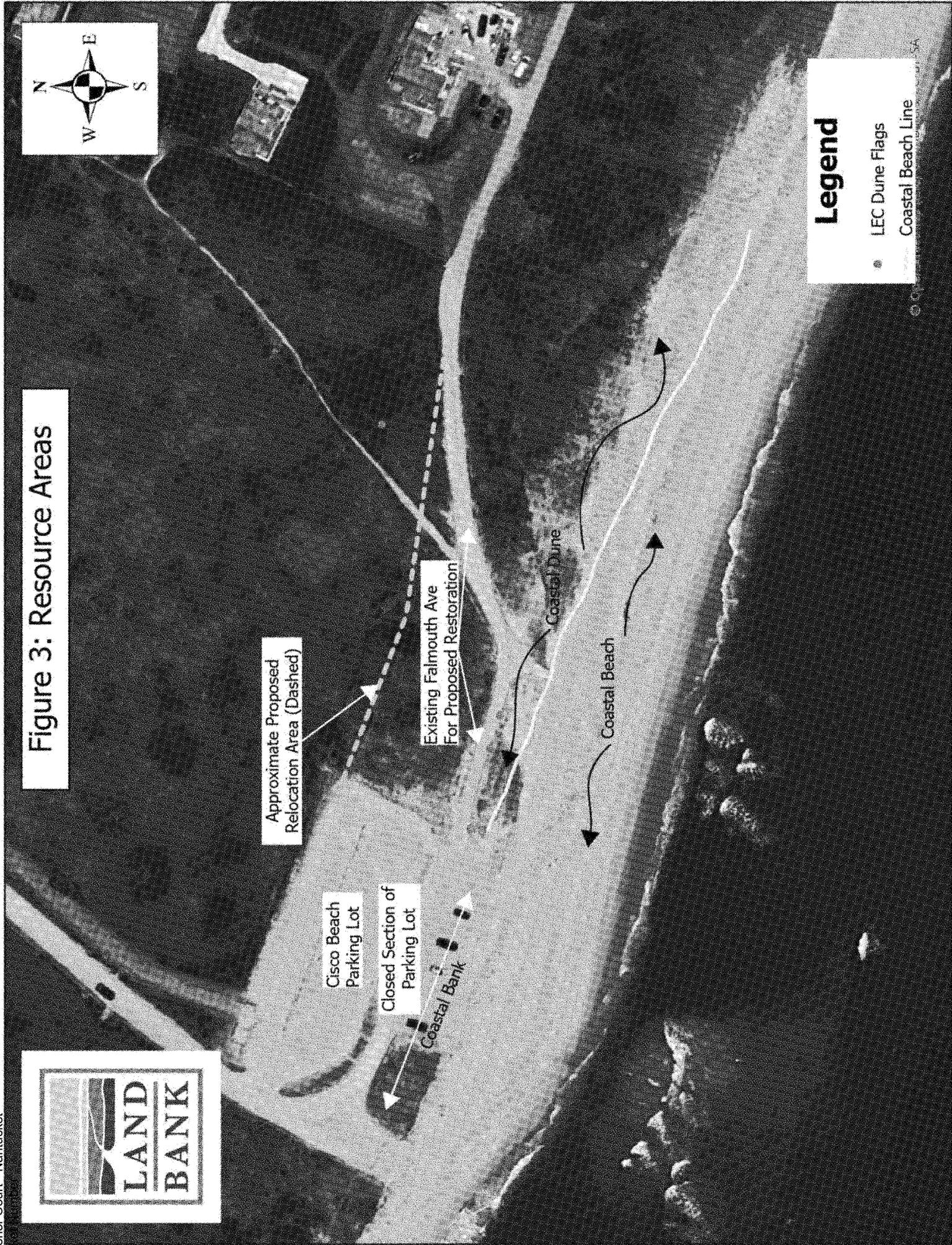
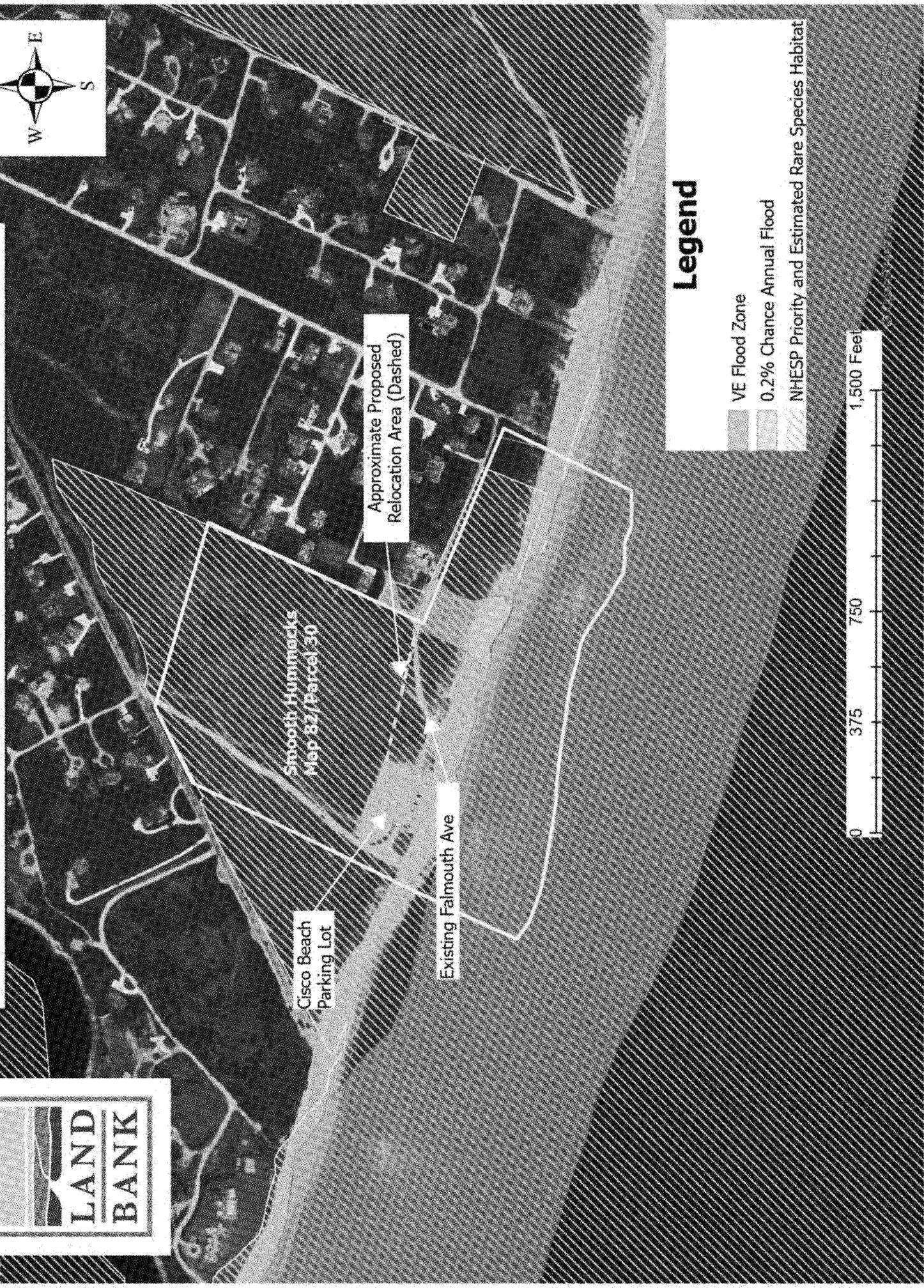
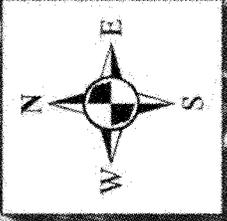


Figure 4: NHESP Habitat and Land Subject to Flooding



Legend

- VE Flood Zone
- 0.2% Chance Annual Flood
- NHESP Priority and Estimated Rare Species Habitat

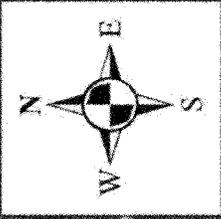




Cisco Beach Parking Lot

Coastal Bank

Figure 5: Proposed Restoration Plan



Beach Grass

Sods from Road Relocation Area

Legend

- LEC Dune Flags
- Coastal Beach Line



Map by SWECO/PAI/REGISTRATION, LLC - 07-24

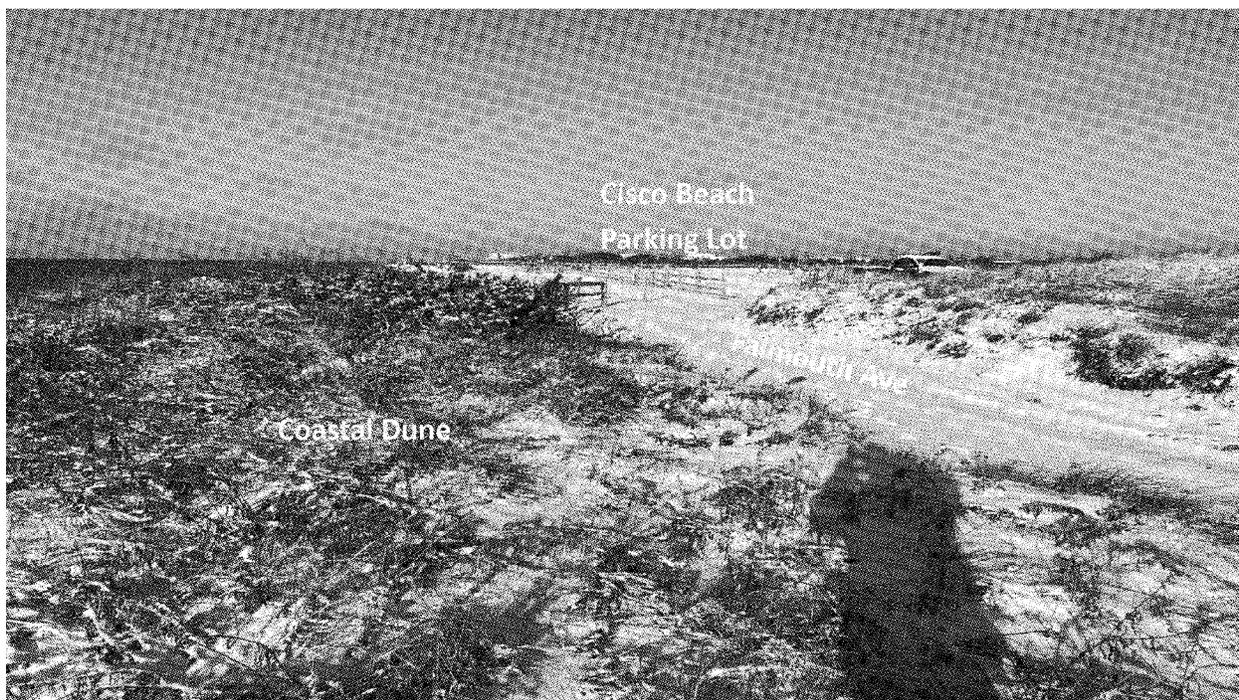
PHOTOGRAPHS

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
December 2025

Photographs



Existing Falmouth Ave access to Cisco Beach parking lot, coastal dune to right (south).



Existing Falmouth Ave access to Cisco Beach parking lot.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
December 2025



Closed section of Cisco Beach parking lot at west terminus of dune.



Flagged dune, south of existing Falmouth Ave.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
December 2025

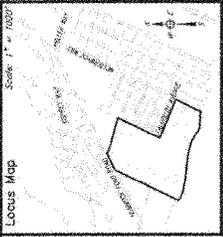


Falmouth Ave, facing east.



North side of Falmouth Ave facing northeast.

PROJECT PLAN



- Notes**
1. LOCUS: SMOOTH HUMMOCKS MAP 82
 2. OWNER: NANTUCKET ISLANDS LAND BANK NANTUCKET, MA 02584
 3. DEED REF: 36, 645 Pgs. 298
 4. PLAN REF: Smooth Hummocks, Map No. 2014-044 Non Eng. 25-0
 5. LOCUS GOES PARTIALLY FALL WITHIN A 75' WIDE BUFFER ZONE (SEASIDE) WITHIN THE NANTUCKET ISLANDS LAND BANK INSURANCE RISK MAP NO. 2018B-0089-C DATED 06/09/2018.
 6. LOCUS GOES PARTIALLY WITHIN THE NATURAL PROGRAM (NPRES) AREAS OF ESTIMATED HAZARDOUS MATERIALS AND RESIDUALS FROM PREVIOUS USES OF THESE SITES.

AREA SUMMARY

TOTAL AREA OF DISTURBANCE: 10,400 SF
 TOTAL AREA OF DISTURBANCE: 10,400 SF
 TOTAL DISTURBANCE AREA PERCENT OF SITE: 100%

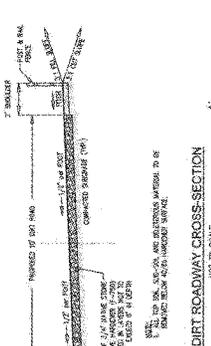
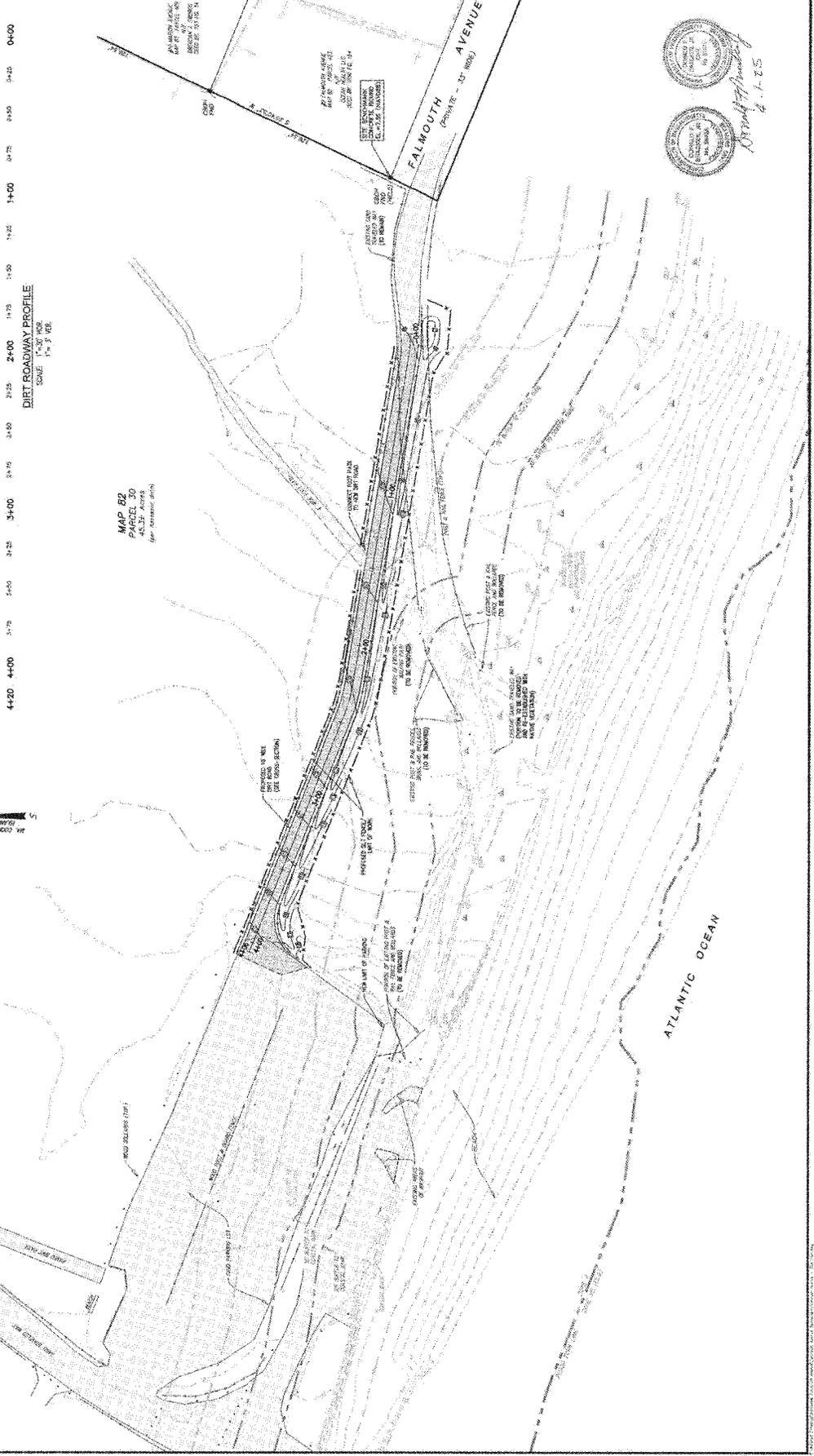
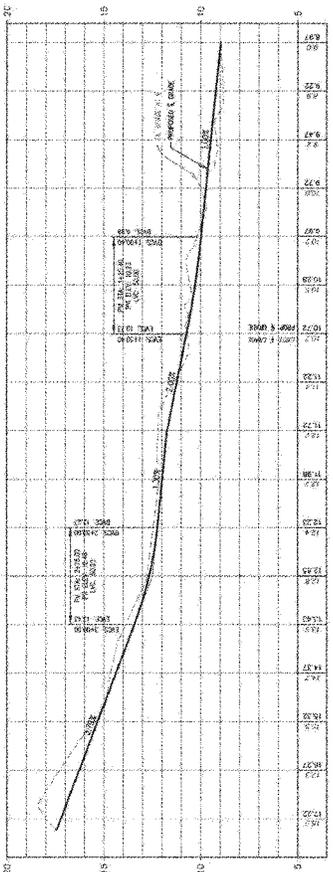


BRACKEN ENGINEERING
 15 OLD SOUTH ROAD
 NANTUCKET, MA 02584
 TEL: 508-339-0300
 FAX: 508-339-0304
 WWW.BRACKEN-ENG.COM

Prepared For:
**CONSERVATION SITE PLAN
 IN NANTUCKET, MASSACHUSETTS**
 Prepared For:
NANTUCKET ISLANDS LAND BANK
 MAP 82 PARCEL 30

DATE: FEBRUARY 10, 2025 (AM/CLAY/ANNA) (DATE/CLAY)

NO.	DATE	REVISION DESCRIPTION
1.1	10/20/2024	ISSUE FOR PERMITS AND SET OF WORK
1.2	10/20/2024	ISSUE FOR PERMITS AND SET OF WORK
1.3	10/20/2024	ISSUE FOR PERMITS AND SET OF WORK



SEE TOP OF SHEET FOR DISTURBANCE MATERIAL TO BE REMOVED FROM EXISTING DRIVEWAY.

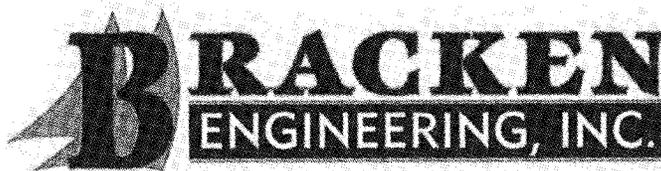


52-1-1-25
 Anna Clay

**ROADWAY BLEND MATERIAL PERMEABILITY AND
STRUCTURAL CLASSIFICATION
(BRACKEN ENGINEERING, INC.)**

MAIN OFFICE:

49 Herring Pond Road
Buzzards Bay, MA 02532
TEL: (508) 833-0070
FAX: (508) 833-2282



NANTUCKET OFFICE:

19 Old South Road
Nantucket, MA 02554
TEL: (508) 325-0044
www.brackeneng.com

June 6, 2025

Nantucket Island Land Bank
Liz Phelps, Environmental Permitting Coordinator
22 Broad Street
Nantucket, MA 02554

RE: Falmouth Avenue Road Relocation – Material Permeability and Structural Classification

Dear Liz,

Per your request, we retained Thielsch Engineering of Cranston, Rhode Island, to perform laboratory testing on three roadway material blends. The material samples were locally sourced and include the "Toscana Ack Pack", the "Holdgate Hardener", and the "Toscana Road Blend". The goal was to obtain objective data regarding its physical characteristics and hydraulic behavior. The tests included a **sieve analysis and permeability (hydraulic conductivity) testing**, with results summarized below:

Laboratory Findings:

• **Sieve Analysis:**

The sample material blends were found to be approximately composed as follows:

- Toscana Ack Pack: 56% gravel, 43% sand, and 1% fines;
- Holdgate Hardener: 8% gravel, 88% sand, and 4% fines;
- Toscana Road Blend: 30% gravel, 68% sand, and 2% fines.

• **Permeability (Hydraulic Conductivity):**

The permeability rate of the sample material blends are as follows:

- Toscana Ack Pack: 1.3×10^{-2} cm/sec or approximately 18.4 in/hr;
- Holdgate Hardener: 6.6×10^{-4} cm/sec or approximately 0.94 in/hr;
- Toscana Road Blend: 3.1×10^{-3} cm/sec or approximately 4.4 in/hr.

Soil Type Comparison:

To provide context, according to the USDA Natural Resources Conservation Service (NRCS) soil classification guidelines:

Permeability Class	Code	Criteria: Estimated in/hr ¹
impermeable	IM	< 0.0015
very slow	VS	0.0015 to < 0.06
slow	SL	0.06 to < 0.2
moderately slow	MS	0.2 to < 0.6
moderate	MO	0.6 to < 2.0
moderately rapid	MR	2.0 to < 6.0
rapid	RA	6.0 to < 20
very rapid	VR	≥ 20

- Clean sand typically exhibits a permeability rate of 6–20 in/hr
- Gravel can range from 10–1000 in/hr depending on composition
- Loamy sand, a commonly encountered permeable soil, ranges between 2–6 in/hr

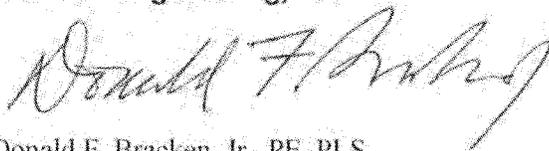
Conclusion:

Based on these laboratory findings, we would recommend using the “Toscana Ack Pack” material blend for the road construction. The tested material’s rate of **18.4 in/hr** clearly places it in the “**rapid**” permeability category, under USDA soil taxonomy, comparable to natural sand and low-end gravel. It significantly exceeds the permeability of loamy or silty soils and is well within the range expected of an intentionally permeable surface.

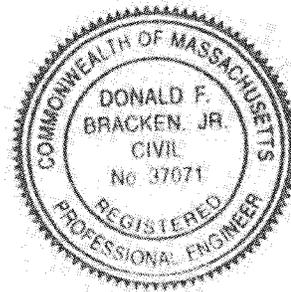
If you have any further questions, please do not hesitate to contact us at 508-325-0044 or the undersigned at don@brackeneng.com.

Sincerely,

Bracken Engineering, Inc.



Donald F. Bracken, Jr., PE, PLS
President





195 Frances Avenue
 Cranston RI, 02910
 Phone: (401)-467-6454
 Fax: (401)-467-2398
 cts@thielsch.com
 Let's Build a Solid Foundation

Client Information:
 Bracken Engineering, Inc.
 Buzzards Bay, MA
 (508) 833-0070
 Project Contact: Ryan Maxwell
 Collected By: CO

Project Information:
 Falmouth Ave - Roadway Relocation
 Nantucket, MA
 Project Number: 7425-0002.100
 Summary Page: 1 of 1
 Report Date: 6/5/2025

LABORATORY TESTING DATA SHEET, Report No.: 7425-E-156

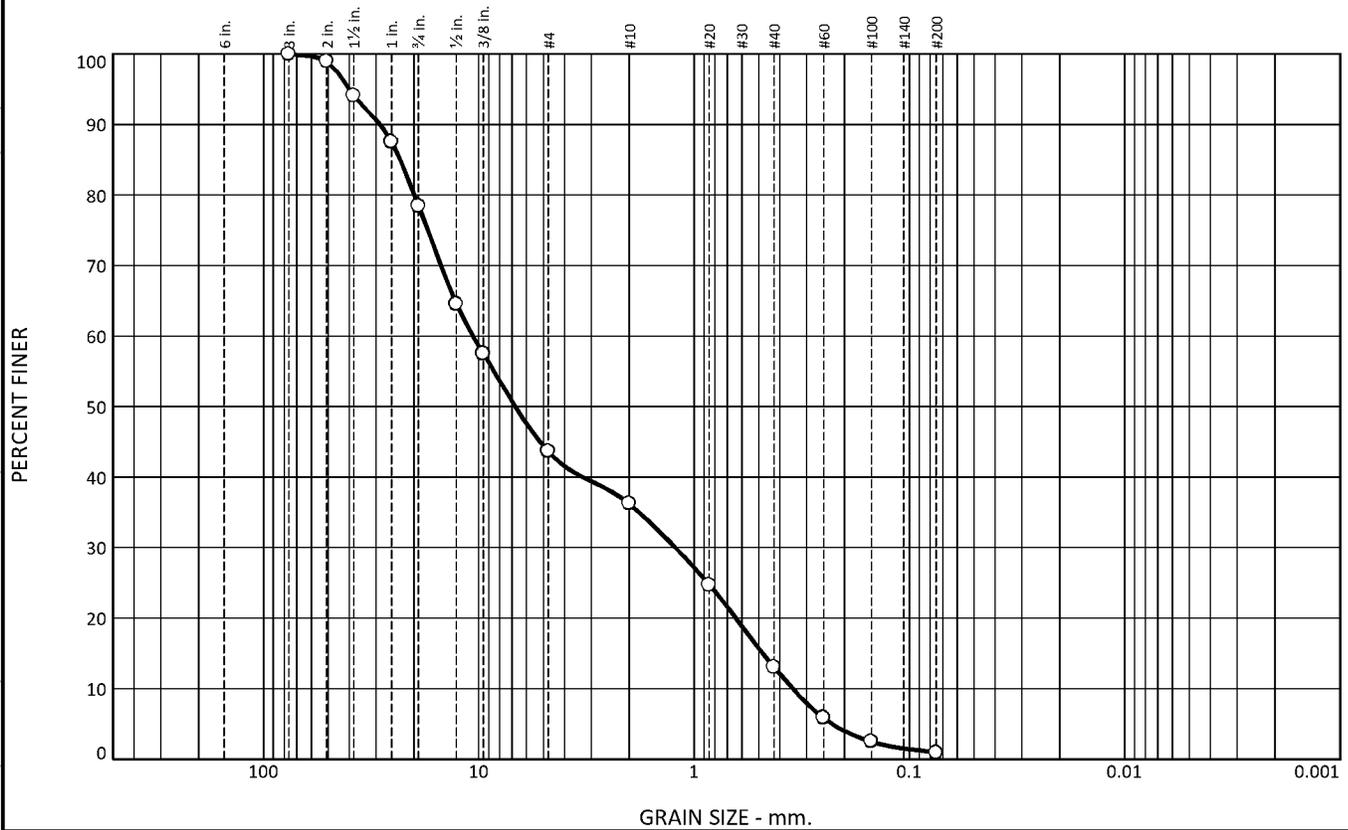
Material Source	Sample ID	Depth (ft)	Laboratory No.	Identification Tests							Proctor / CBR / Permeability Tests					Laboratory Log and Soil Description				
				As Rec'd Moisture Content % D2216	LL % D4318	PL % D4318	OD LL %	Gravel % D6913	Sand % D6913	Fines % D6913	Org. % D2974	pH D4792	g _s MAX (pcf) W _{opt} (%) D1557	g _s MAX (pcf) W _{opt} (%) (Corr.) D1557	Dry unit wt. (pcf)		Test Moisture Content %	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec
BEI #1	Toscana Ack Pack	Stockpile	25-S-1751					56.3	42.8	0.9	*	125.2 6.5	126.6 6.2	116.5	1.9	85			1.3x10 ⁻⁰²	Brown poorly graded gravel with sand
BEI #2	Holdgate Hardener	Stockpile	25-S-1752					7.8	88.6	3.6				113.3	0.0	85			6.6x10 ⁻⁰⁴	Brown poorly graded sand
BEI #3	Toscana Road Blend	Stockpile	25-S-1753					30.1	68.1	1.8	*			117.8	1.2	85			3.1x10 ⁻⁰³	Brown poorly graded sand with gravel

* Due to low sample volume, proctor testing was unable to be conducted, with the Client's permission, the permeability sample was compacted using an average pcf based on material's USCS classification from geotechnicalinfo.com.

Date Received: 5/19/2025 Reviewed By: [Signature] Date Reviewed: 6/5/2025

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspected and/or tested. No warranty, expressed or implied, is made.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	21.6	34.7	7.4	23.3	12.1	0.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	99.0		
1 1/2"	94.1		
1"	87.6		
3/4"	78.4		
1/2"	64.5		
3/8"	57.5		
#4	43.7		
#10	36.3		
#20	24.7		
#40	13.0		
#60	5.9		
#100	2.5		
#200	0.9		

Soil Description

Brown poorly graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 28.7287 D₈₅= 23.1658 D₆₀= 10.6554
 D₅₀= 6.7630 D₃₀= 1.2198 D₁₅= 0.4804
 D₁₀= 0.3467 C_u= 30.74 C_c= 0.40

Classification

USCS= GP AASHTO= A-1-a

Remarks

* (no specification provided)

Source of Sample: BEI 1 thru 3 Depth: Stockpile Date: 5.30.25
 Sample Number: Toscana Ack Pack

Thielsch Engineering Inc. Cranston, RI	Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Project No: 7425-0002.100
Fig. 25-S-1751	

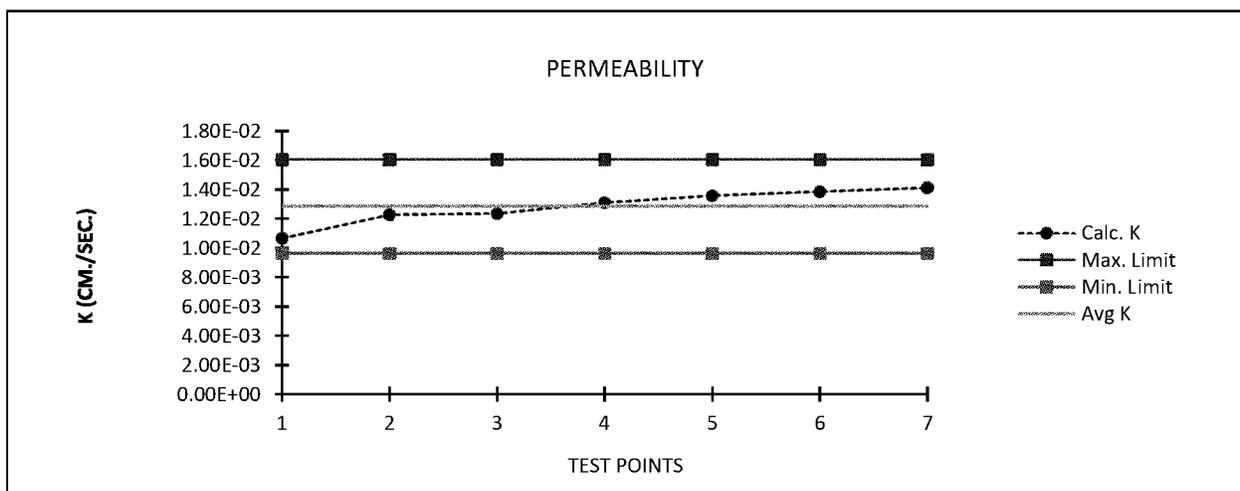
Tested By: MS/TG Checked By: Kris Roland

 DIVISION OF THE RISE GROUP	195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 cts.thielsch.com	Client Information: Bracken Engineering, Inc. 49 Herring Pond Road Buzzards Bay, MA Ryan@Brackeneng.com	
	ASTM D2434: Permeability Test on Granular Soil		
Project Name:	Falmouth Ave - Roadway Relocation	Lab Number:	KR-1751
Project Number:	7425-0002.100	Location:	Nantucket, MA
Source:	BEI #1	Material:	Toscana Ack Pack
Oversized Material:	21.6%	% Passing #200 Sieve:	0.9%
Soil Description:	Brown poorly graded gravel with sand		
Materials Used:			

Unit Weight Determination					
Diameter, D (cm):	15.23	Net Weight (g):	6824.03	Volume, V (cm ³):	2728.99
Area, A (cm ²):	182.18	Net Height (cm):	19.71	Material Volume:	3590.52
Length, L (cm):	14.98	Relative Density, RD:	NA*		

Moisture Content:	1.9%
Air Dry Unit Weight, W (lb/ft ³):	116.5

Void Ratio, e	0.42
Percent of Proctor:	

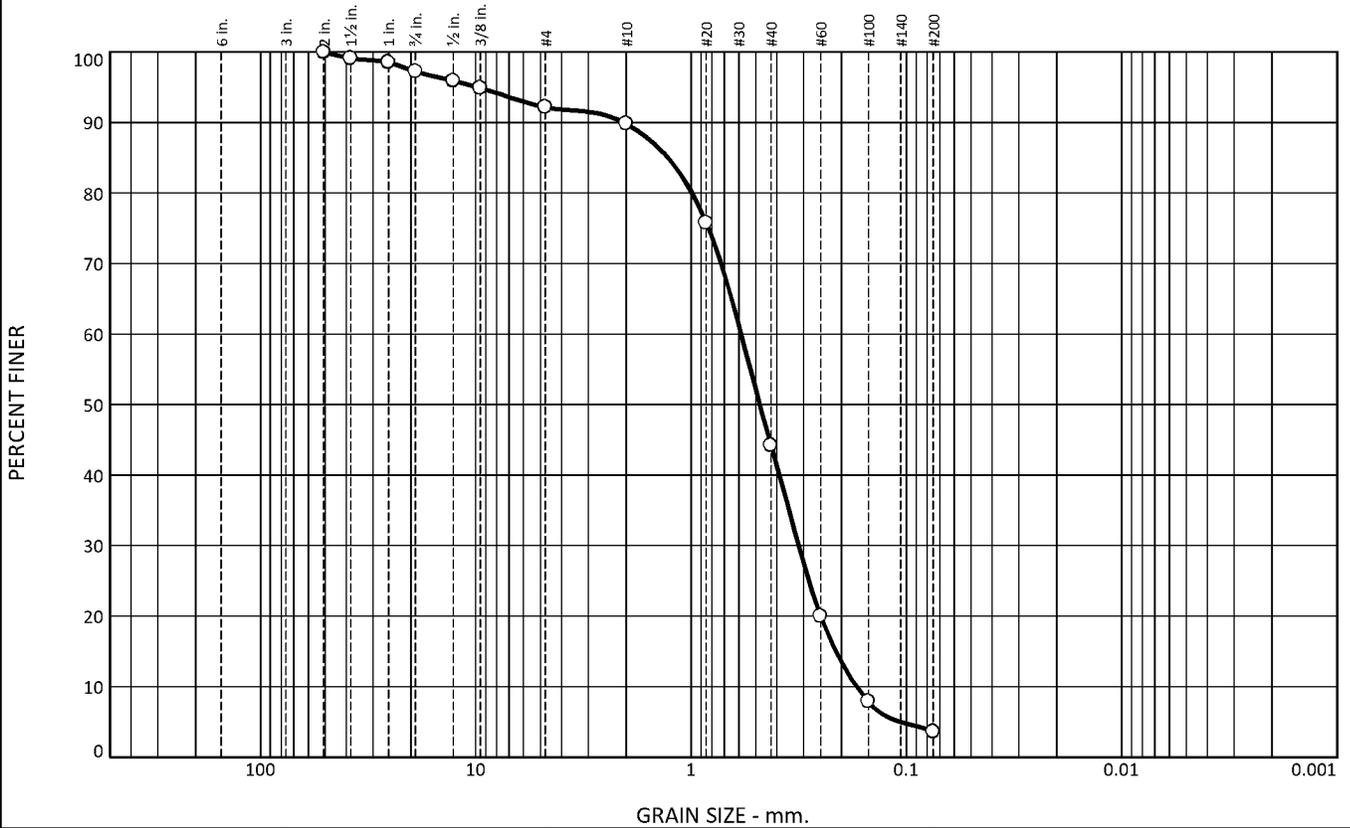


Average K cm/s	1.3E-02
----------------	---------

Comments			
Tap water was used to saturate sample.			
Specific Gravity is assumed as 2.65.			
*Maximum and Minimum Density tests were not part of the testing scope.			
Sample was split over a 3/4" sieve			
			
Technician:	Sophia Brooks-Randall	Reviewed By:	Kris Roland
Report Date:	06.02.25	Review Date:	06.05.25

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspected and/or tested. No warranty, expressed or implied, is made.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.7	5.1	2.3	45.7	40.6	3.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1 1/2"	99.1		
1"	98.5		
3/4"	97.3		
1/2"	95.9		
3/8"	94.9		
#4	92.2		
#10	89.9		
#20	75.8		
#40	44.2		
#60	20.0		
#100	7.9		
#200	3.6		

Soil Description

Brown poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 2.0342 D₈₅= 1.2766 D₆₀= 0.5859
 D₅₀= 0.4798 D₃₀= 0.3167 D₁₅= 0.2124
 D₁₀= 0.1703 C_u= 3.44 C_c= 1.01

Classification

USCS= SP AASHTO= A-1-b

Remarks

* (no specification provided)

Source of Sample: BEI 1 thru 3 Depth: Stockpile
 Sample Number: Hldgate Hrdener

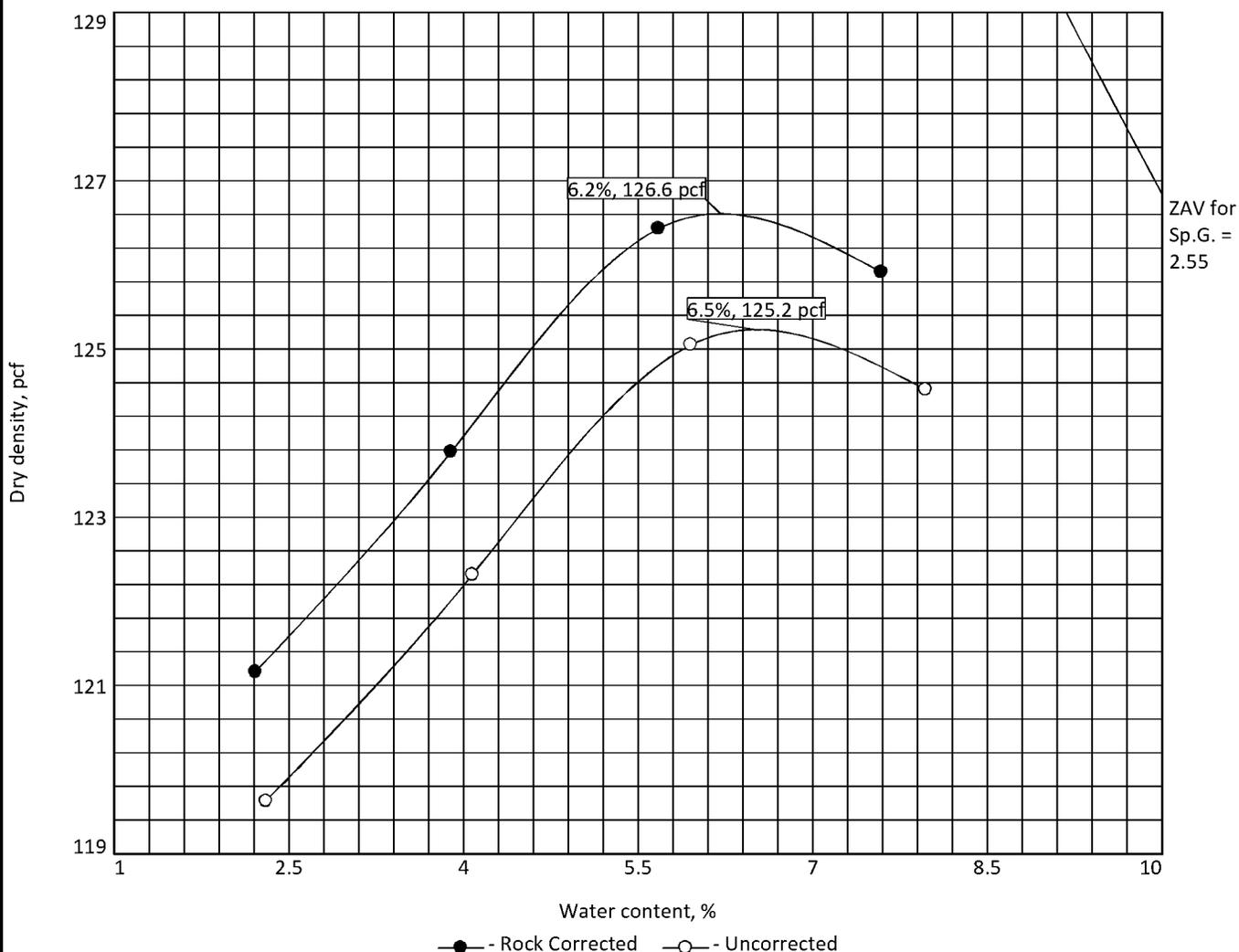
Date: 5.30.25

Thielsch Engineering Inc. Cranston, RI	Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Project No: 7425-0002.100
Fig. 25-S-1752	

Tested By: RKO/TG Checked By: Kris Roland

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspect and/or tested. No warranty, expressed or implied, is made.

COMPACTION TEST REPORT for Curve No. 25-MC-1752



Test specification: ASTM D 1557-12 Method B Modified
 ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
Stockpile	SP	A-1-b		2.55	NV	NP	5.1	3.6

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 126.6 pcf	125.2 pcf	Brown poorly graded sand
Optimum moisture = 6.2 %	6.5 %	

Project No. 7425-0002.100 Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Date: 05.30.25 Source of Sample: BEI 1 thru 3 Sample Number: IIoldgate IIardener	Remarks:
Thielsch Engineering Inc. Cranston, RI	

Fig. 25-MC-1752

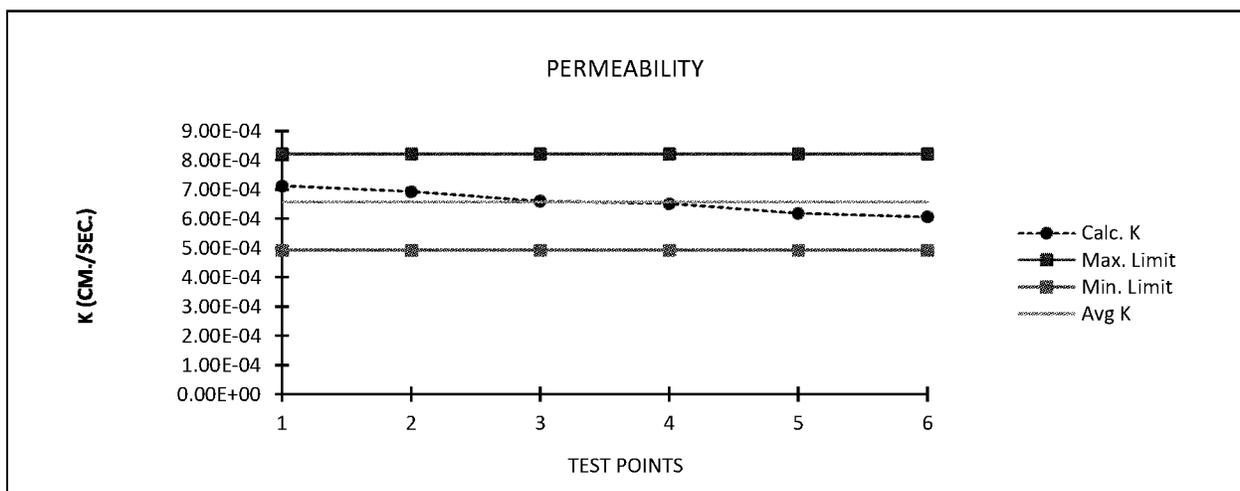
Tested By: RKO Checked By: Kris Roland

 DIVISION OF THE RISE GROUP	195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 cts.thielsch.com	Client Information: Bracken Engineering, Inc. 49 Herring Pond Road Buzzards Bay, MA Ryan@Brackeneng.com	
	ASTM D2434: Permeability Test on Granular Soil		
Project Name:	Falmouth Ave - Roadway Relocation	Lab Number:	KR-1752
Project Number:	7425-0002.100	Location:	Nantucket, MA
Source:	BEI #2	Material:	Holdgate Hardener
Oversized Material:	3.6%	% Passing #200 Sieve:	2.7%
Soil Description:	Brown poorly graded gravel with sand		
Materials Used:			

Unit Weight Determination			
Diameter, D (cm):	15.23	Net Weight (g):	6947.39
Area, A (cm ²):	182.18	Net Height (cm):	21.01
Length, L (cm):	14.98	Volume, V (cm ³):	2728.99
		Material Volume:	3827.26
		Relative Density, RD:	NA*

Moisture Content:	0.0%
Air Dry Unit Weight, W (lb/ft ³):	113.3

Void Ratio, e	0.46
Percent of Proctor:	89.5%

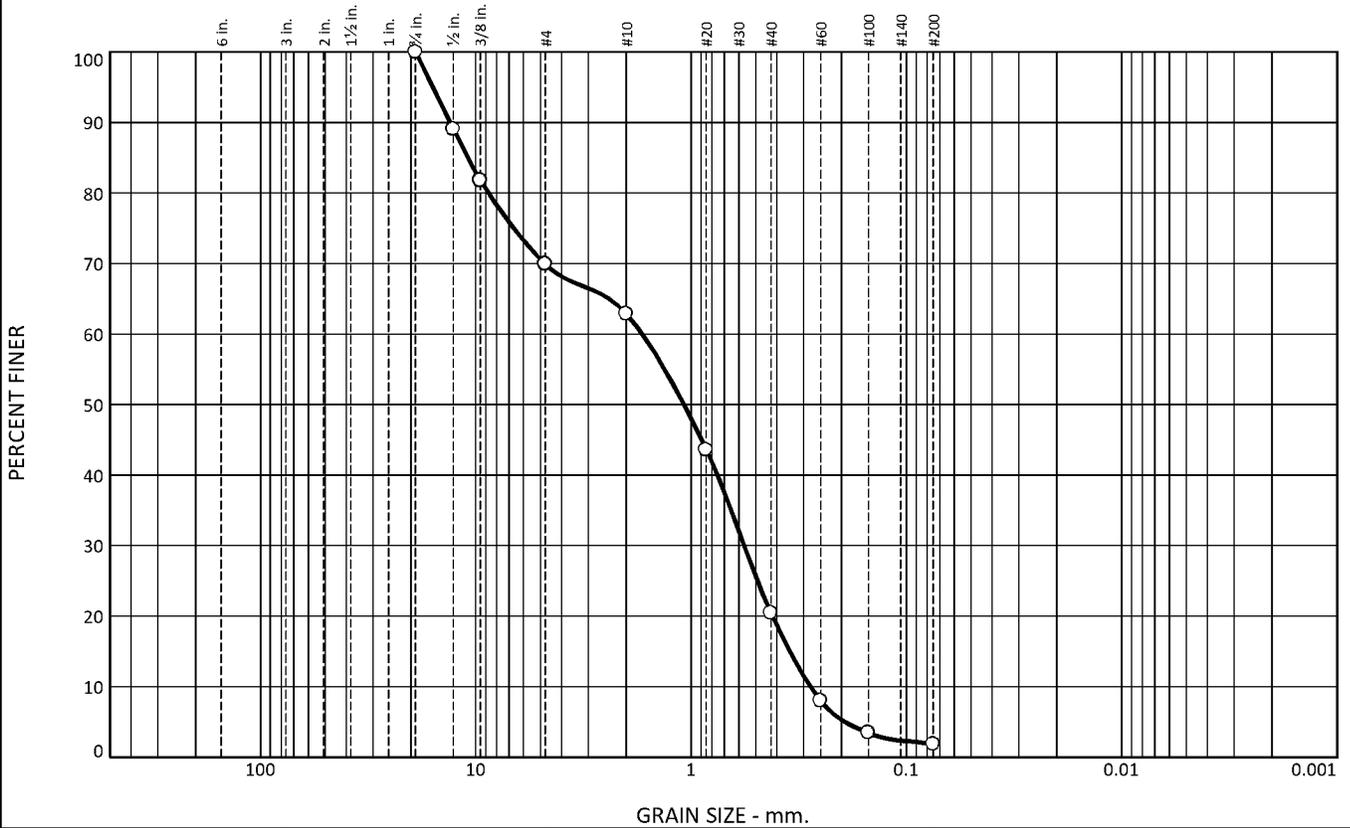


Average K cm/s 6.6E-04

Comments	
Tap water was used to saturate sample. Specific Gravity is assumed as 2.65. *Maximum and Minimum Density tests were not part of the testing scope. Sample was split over a 3/4" sieve	
	
Technician: Sophia Brooks-Randall Report Date: 6/5/2025	Reviewed By: Kris Roland Review Date: 6/5/2025

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspected and/or tested. No warranty, expressed or implied, is made.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	30.1	7.0	42.5	18.6	1.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4"	100.0		
1/2"	89.1		
3/8"	81.8		
#4	69.9		
#10	62.9		
#20	43.6		
#40	20.4		
#60	8.0		
#100	3.5		
#200	1.8		

Soil Description

Brown poorly graded sand with gravel

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 13.1601 D₈₅= 10.8927 D₆₀= 1.6907
 D₅₀= 1.0806 D₃₀= 0.5678 D₁₅= 0.3476
 D₁₀= 0.2793 C_u= 6.05 C_c= 0.68

Classification

USCS= SP AASHTO= A-1-b

Remarks

* (no specification provided)

Source of Sample: BEI 1 thru 3 Depth: Stockpile
 Sample Number: Toscana Road Blend

Date: 05.30.25

Thielsch Engineering Inc. Cranston, RI	Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Project No: 7425-0002.100
Fig. 25-S-1753	

Tested By: MCS/TG

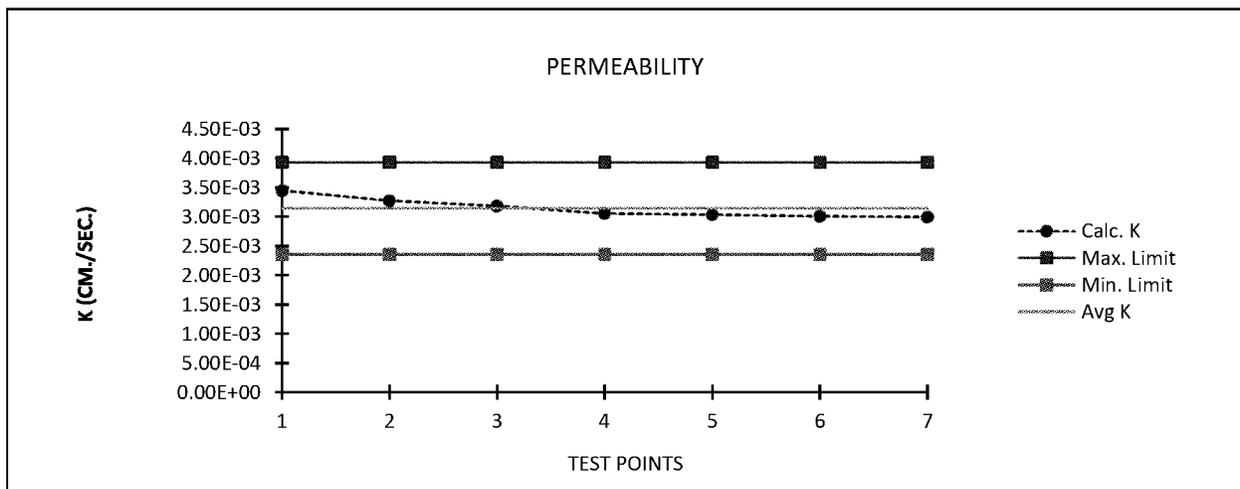
Checked By: Kris Roland

	195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 cts.thielsch.com	Client Information: Bracken Engineering, Inc. 49 Herring Pond Road Buzzards Bay, MA Ryan@Brackeneng.com	
	ASTM D2434: Permeability Test on Granular Soil		
Project Name:	Falmouth Ave - Roadway Relocation	Lab Number:	KR-1753
Project Number:	7425-0002.100	Location:	Nantucket, MA
Source:	BEI #3	Material:	Toscana Road Blend
Oversized Material:	0.0%	% Passing #200 Sieve:	1.8%
Soil Description:	Brown poorly graded sand with gravel		
Materials Used:			

Unit Weight Determination					
Diameter, D (cm):	15.23	Net Weight (g):	7218.07	Volume, V (cm ³):	2728.99
Area, A (cm ²):	182.18	Net Height (cm):	20.75	Material Volume:	3780.47
Length, L (cm):	14.98	Relative Density, RD:	NA*		

Moisture Content:	1.2%
Air Dry Unit Weight, W (lb/ft ³):	117.8

Void Ratio, e	0.40
Percent of Proctor:	



Average K cm/s	3.1E-03
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Comments			
Tap water was used to saturate sample.			
Specific Gravity is assumed as 2.65.			
*Maximum and Minimum Density tests were not part of the testing scope.			
Sample was split over a 3/4" sieve			
			
Technician:	Sophia Brooks-Randall	Reviewed By:	Kris Roland
Report Date:	6/3/2025	Review Date:	6/5/2025

Chapter 2

Soils

Contents:	FL652.0204a	General	FL2-1
	FL652.0204b	Physical Soil Characteristics	FL2-1
		(a) Available Water Capacity	FL2-1
		(b) Permeability	FL2-3
		(c) Intake Rate	FL2-3
		(d) Slope	FL2-4
		(e) Wetness	FL2-4
		(f) Surface Texture	FL2-4
	(g) Restrictive Features	FL2-4	
Tables	FL2-1	Relative Permeability of Soils	FL2-3
	FL2-2	Drainage Classes of Soils	FL2-4
	FL2-3	Soil Texture Abbreviations	FL2-4
	FL2-4	Irrigation Restrictive Features	FL2-5
Figures	FL2-1	Soil Moisture Content – Types of Water in the Soil	FL2-2
	FL2-2	Moisture Release Curves for Three Soils	FL2-2
Exhibits	FL2-1	Navigating and Using the Web Soil Survey	FL2-6
	FL2-2	Navigating and Using the Soil Data Mart	FL2-15

FL652.0204a General

Knowledge of soils is essential for the efficient use of water for crop production. Soil survey maps for the areas mapped in the state are now available online through the NRCS Web Soil Survey (WSS), <http://websoilsurvey.nrcs.usda.gov/app/>. See Exhibit FL2-1 for instructions on how to use and access the NRCS WSS. The WSS is replacing the familiar, traditional paper copies of soil survey reports. As new and updated soil surveys are completed, NRCS is distributing the results of these surveys by means of the WSS instead of published reports. The WSS allows NRCS to update the information more rapidly and ensures a single source for official data. Those without computer access can still acquire soil survey information from an NRCS field office or local library.

Important physical and chemical characteristics of each kind of soil are recorded in soils handbooks or soil survey publications. This information is also available online through the NRCS Soil Data Mart, <http://soildatamart.nrcs.usda.gov/>. See Exhibit FL2-2 for instructions on how to access and use the NRCS Soil Data Mart. Some characteristics of these soils that are important to understanding soil-moisture plant relationships are discussed in this guide. They include available water capacity, permeability, intake rate, slope, wetness (drainage and depth to water table), and surface texture.

FL652.0204b Physical soil characteristics

Available Water Capacity

The available water capacity (AWC) of a soil is a measure of its capacity to make water available for plant growth. The AWC is the amount of water held between field capacity (FC) and the permanent wilting point (WP) as shown in Figure FL2-1. AWC is expressed as the water retained between 0.33 bar and 15 bar

tension for fine to medium textured soils and between 0.10 bar and 15 bar for moderately coarse to very coarse textured soils. AWC of a soil is primarily related to the soil texture, organic matter content, and bulk density. A formula for the computation of available water capacity is

$$AWC = (d_b \times T \times P_w) / (d_w \times 100)$$

Where:

AWC = Available water capacity in inches

d_b = Bulk density

$$= \frac{\text{Weight of oven-dry soil sample in grams}}{\text{Field volume of sample in cm}^3}$$

T = Thickness of soil horizon under consideration in inches

P_w = Moisture content between field capacity and wilting point in percentage by weight

d_w = Density of water taken as 1

There are two methods concerning when to irrigate. One method is based on the percentage of AWC within the root zone and the other is based on soil moisture tension. This difference in concept is shown in Figure FL2-2 which shows moisture release curves for three soils. In this figure moisture content is expressed as a percentage of AWC rather than a percentage by weight. FC is 100 percent of AWC and the WP is 0 percent of AWC (15 bars). Tension at any moisture level is different for the three soils. At the 50 percent level, for example, moisture tension for the clay is 4.3 bars; for the loam, 2 bars; and for the sand, 0.60 bars.

Moisture is more readily available to plants at low soil moisture tension (near field capacity). Since tension values are so different in the three soils shown in Figure FL2-2, it is possible that crop response would be different if the soils were irrigated when available moisture depletes to the 50 percent level. However, for most soils, irrigation should be started when the soil moisture content is no lower than the 50 percent level.

The NRCS Soil Data Mart can be used to generate reports on physical soil properties for Florida soils, including AWC. For example, the water holding capacity for 36 inches of rooting depth on an Alpin soil is:

$$0'-1', 0.056 \text{ in./in.} \times 12 \text{ in.} = 0.67 \text{ in.}$$

$$1'-2', 0.050 \text{ in./in.} \times 12 \text{ in.} = 0.60 \text{ in.}$$

$$2'-3', 0.050 \text{ in./in.} \times 12 \text{ in.} = \underline{0.60 \text{ in.}}$$

Total AWC for 36 in. depth = 1.87 in.

The weighted AWC for the rooting depth is obtained by dividing the total AWC by the rooting depth. For the above example, the weighted AWC is:

$$1.87 \text{ in.}/36 \text{ in.} = 0.052 \text{ in./in.}$$

Permeability

Permeability is the quality of soil that enables it to transmit air and water. It is independent of the viscosity of water. The permeability of a soil is based on the most restrictive layer in the soil. The relative permeability of soils is described by the terms listed in Table FL2-1.

Table FL2-1. Relative Permeability of Soils

Term	Permeability Rate (in/hr)
Very slow	<0.06
Slow	0.06 - 0.2
Moderately slow	0.2 - 0.6
Moderate	0.6 - 2.0
Moderately rapid	2.0 - 6.0
Rapid	6.0 - 20.0
Very rapid	>20

Permeability rates for Florida soils are shown as saturated hydraulic conductivity, K_{sat} ($\mu\text{m}/\text{sec}$) in the Physical Soil Properties report in the NRCS Soil Data Mart. These values can be converted to in./hr. for design purposes.

Intake Rate

Intake rate is a measure of soil's capacity to absorb irrigation water from the surface, and move it into and through the soil profile. It is an expression of several factors, including infiltration and percolation. The term, "basic intake rate" is the rate at which water percolates into soil after infiltration has decreased to a low and nearly constant value.

Infiltration is the downward flow of water from the surface through the soil. Water enters the soil through pores, cracks, worm and decayed root holes, and cavities introduced by tillage. Surface sealing or crusting will restrict infiltration.

Percolation is the movement of water through the soil profile. In order for irrigation water to be effective in replenishing the soils water supply, it must be able to move through the profile, or percolate, to a predetermined irrigation depth. The percolation rate is governed by the permeability of the soil or its hydraulic conductivity. Both terms are used to describe the ease with which soil transmits water and air.

The amount of moisture already in the soil greatly influences the rate at which water enters the soil. The soil takes in and absorbs irrigation water rapidly when water is first applied to the field surface. As the irrigation application continues, the surface soil gradually becomes saturated and the intake rate decreases until it reaches a nearly constant value.

The intake of any soil is limited by any restriction to the flow of water into or through the soil profile. The soil layer with the lowest transmission rate, either at the surface or directly below it, usually determines intake rate. The most important general factors that influence intake rate are the physical properties of the soil and, in sprinkler irrigation, the plant cover. But for any given soil, other factors may affect the intake rate.

Since so many factors affect the water intake, it is not surprising that it varies so much among soils. Furthermore, the intake characteristics of a given field vary from place to place, from irrigation to irrigation, and from season to season. The intake characteristics that must be considered in sprinkler irrigation design differ from those for surface methods.

Actual measured intake rates are unavailable for Florida soils. Intake rates are estimates based on the characteristics of the top two feet of the soil. If the soil has a water table within two feet of the surface, the intake rate is assigned as if the soil is drained. Typically, for a well-drained soil, the intake rate is estimated at 3.0 in./hr. For other

soil types, consult with a soil scientist to determine an intake rate value.

Slope

Slope refers to the incline of the surface of the soil area. A simple, or single, slope is defined by its gradient, shape, and length. Slopes may also be defined as single or complex depending on the nature of the area. Soil slope is expressed in terms of percentage. It is the difference in elevation in feet for each 100-foot horizontal. A soil with a slope of 45 degrees is a slope of 100 percent since the difference in elevation of two points 100 feet apart horizontally is 100 feet.

Soil slope and intake rate are important factors in determining runoff.

Wetness

Wetness is expressed as a function of soil drainage and depth to water table. Internal soil drainage is a natural condition of the soil that refers to the frequency and duration of periods when the soil is free of saturation. For example, in well drained soils the water is removed readily but not rapidly; in poorly drained soils the root zone is waterlogged for long periods unless artificially drained. In excessively drained soils water is removed so completely that most plants suffer from lack of water.

Except for very young soils, the natural soil drainage conditions are reflected in soil morphology. The drainage class shown for the various soils is the drainage that existed during the development of the soil as opposed to altered drainage as the result of artificial drainage. Table FL2-2 lists classes (with their abbreviations) to define natural soil drainage in broad terms.

Table FL2-2. Drainage Classes of Soils

Drainage Class	Abbreviation
Very poorly drained	VP
Poorly drained	P
Somewhat poorly drained	SP
Moderately well drained	MW
Well drained	W
Somewhat excessively drained	SE
Excessively drained	E

High water table is defined as the top of the zone of saturation at the highest average depth elevation during the wettest season. It persists in the soil for more than a few days. The depth to water table is given for each soil in the Water Features report in the NRCS Soil Data Mart.

The presence of a saturated zone (water table) is a prime factor in determining soils adaptability for irrigation. If a saturated zone is at a shallow depth, a hazard always exists that heavy rains can raise the saturated zone to depths shallow enough to slow or inhibit plant growth. Thus, soils with wetness limitations are given different considerations than other similar soils that do not have a wetness limitation.

Surface Texture

Surface texture is displayed in the Engineering Properties report in the NRCS Soil Data Mart, for all soil series. The abbreviations in Table FL2-3 are used to describe soil texture.

Table FL2-3. Soil Texture Abbreviations

Soil Texture	Abbreviation
Sand	S
Coarse sand	COS
Fine sand	FS
Loamy coarse sand	LCOS
Loamy sand	LS
Loamy fine sand	LFS
Coarse sandy loam	COSL
Sandy loam	SL
Fine sandy loam	FSL
Very fine sandy loam	VFSL
Loam	L
Silt loam	SIL
Clay loam	CL
Sandy clay loam	SCL
Silty clay loam	SICL
Silty clay	SIC
Sandy clay	SC
Clay	C
Muck or peat	MK or PT
Additional Textural Modifiers	
Channery	CN
Gravelly	GR
Shaley	SII

Restrictive Features

Certain soil features affect design, layout, construction, management or performance of an irrigation system. Those features important in design and management of most irrigation systems are wetness or ponding and the need for drainage, flooding, available water capacity, intake rate, permeability, susceptibility to wind or water erosion, and slope. Soil features that

influence construction are large stones and depth to bedrock or cemented pan. The features that affect performance of the system are rooting depth, amount of salts or sodium, and soil acidity. These properties, limits, and restrictive features are shown in Table FL2-4. Particular soils with restrictive features are displayed in the Engineering Properties report in the NRCS Soil Data Mart.

Table FL2-4. Irrigation Restrictive Features

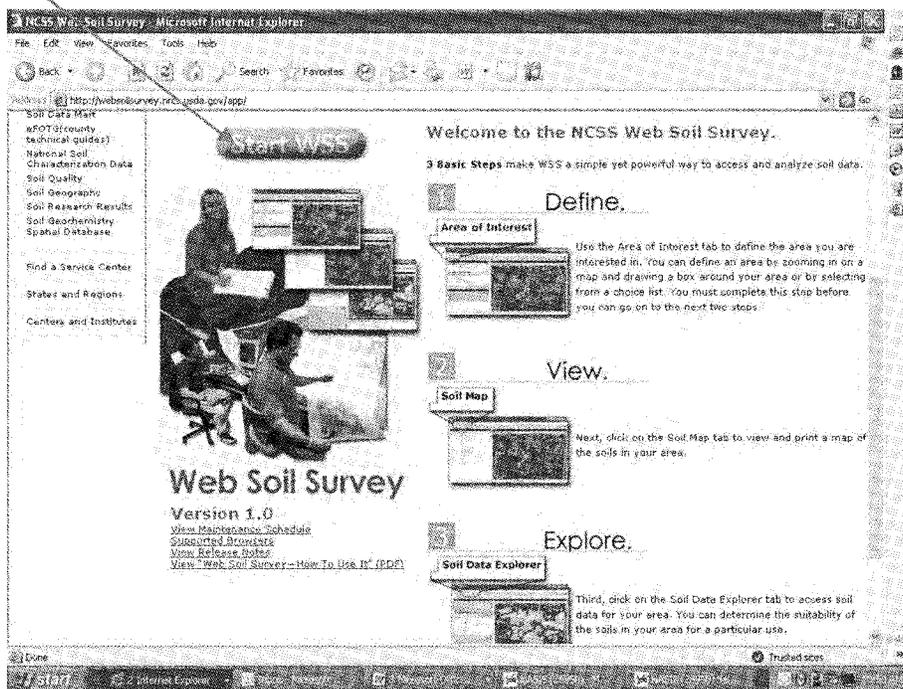
Property	Limits	Restrictive Factors
Fraction >3 in. (wt. %) ^{1/}	>25	Large Stones
Depth to High Water Table(ft)	<3	Wetness Ponding
Available Water Capacity (in./in.) ^{1/}	<0.10	Droughty
USDA Texture (Surface Layer)	S, FS, VFS, LS, LFS, VFSL	Fast Intake
USDA Texture (Surface Layer)	SIC, C, SC	Slow Intake
Wind Erodibility Group	1, 2, 3	Soil Blowing
Permeability (in./hr.) (0-60")	<0.2	Peres Slowly
Depth to Bedrock (in.)	<40	Depth to Rock
Depth to Cemented Pan (in.)	<40	Cemented Pan
Fragipan (Great Group)	All Fragi	Rooting Depth
Bulk Density (g/cc) (0-40")	>1.7	Rooting Depth
Slope (%)	>3	Slope
Erosion Factor (K) (Surface Layer)	>0.35	Erodes Easily
Flooding	Common	Floods
Sodium Absorption Ratio (Great Group)	>12 (Natric, Hialic)	Excess Sodium
Salinity (mmho/cm)	>8	Excess Salt
Soil Reaction (pH)	<3.6	Too Acidic
-----	None of Above	Favorable
^{1/} Weighted average to 40 inches.		

Exhibit FL2-1. Navigating and Using the Web Soil Survey

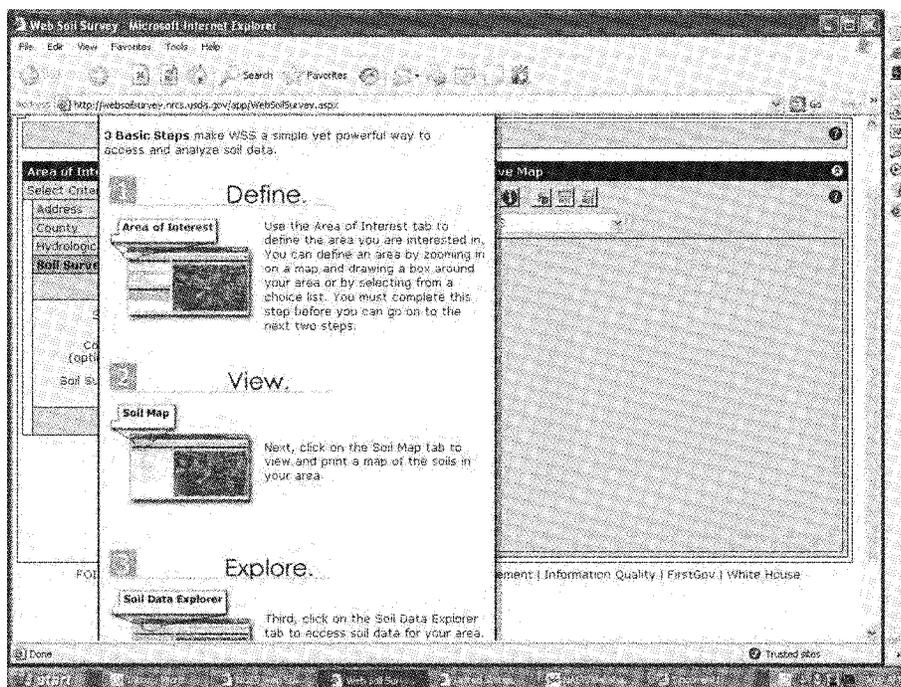
Accessing web soil survey: (ctrl + click link below)

<http://websoilsurvey.nrcs.usda.gov/app/>

Click on "Start WSS" button.



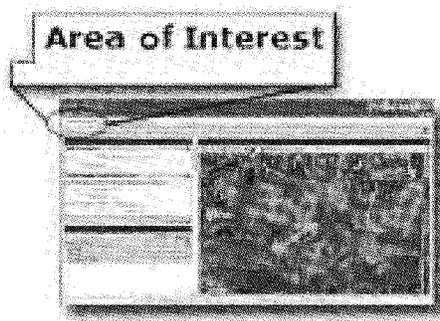
There are 3 basic steps in using Web Soil Survey (WSS): Define, View, Explore.



1) DEFINE: The first step in using Web Soil Survey is to define your area of interest.

You can select an area in the continental United States, Alaska, Hawaii, the Pacific Basin, Puerto Rico, or the U.S. Virgin Islands. You select an area by zooming in on a locator map or by specifying street address, county, or survey area.

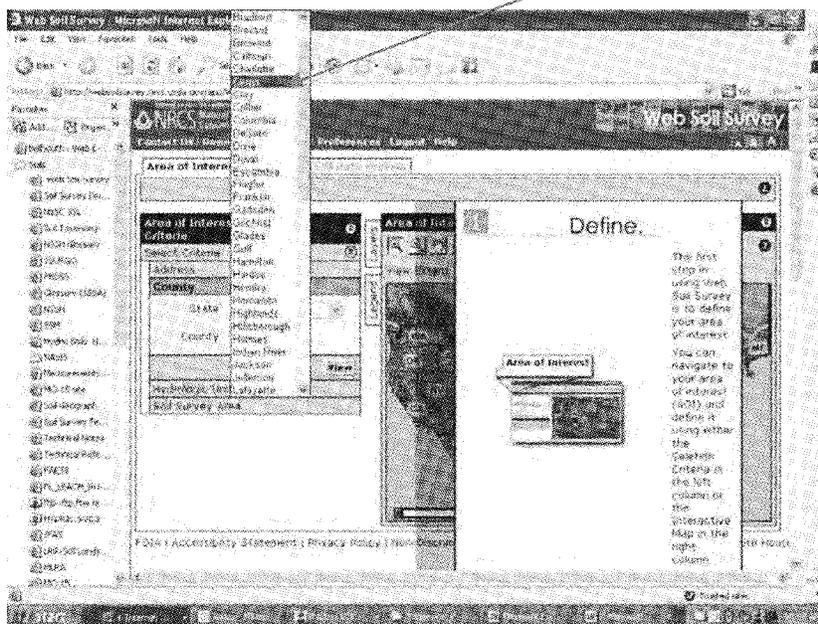
You can navigate to your area of interest (AOI) and define it using either the Selection Criteria in the left column or the Interactive Map in the right column.



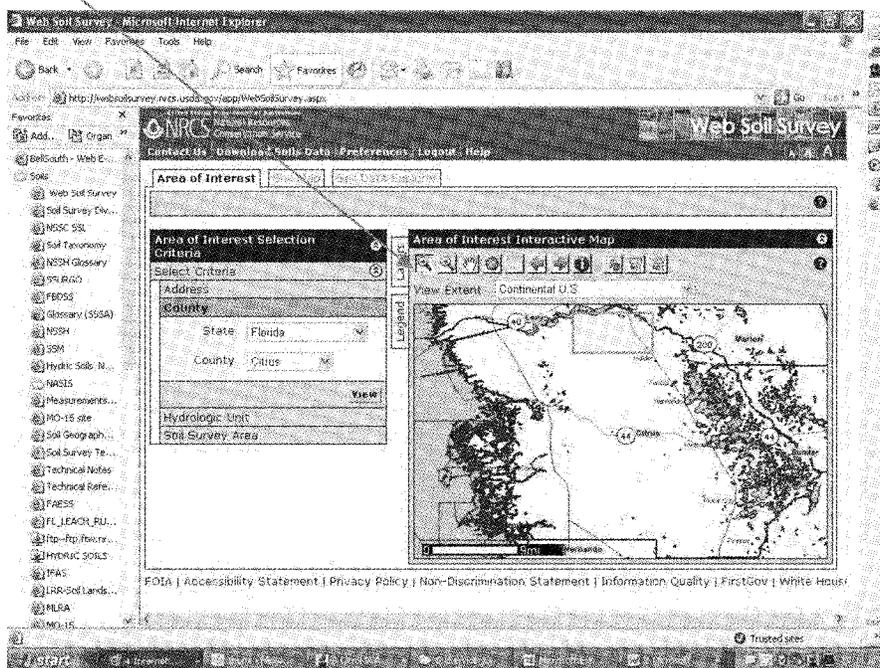
Note: The specified AOI must be smaller than 10,000 acres.

Click the upside-down help button  on the above button bar to close a help window.

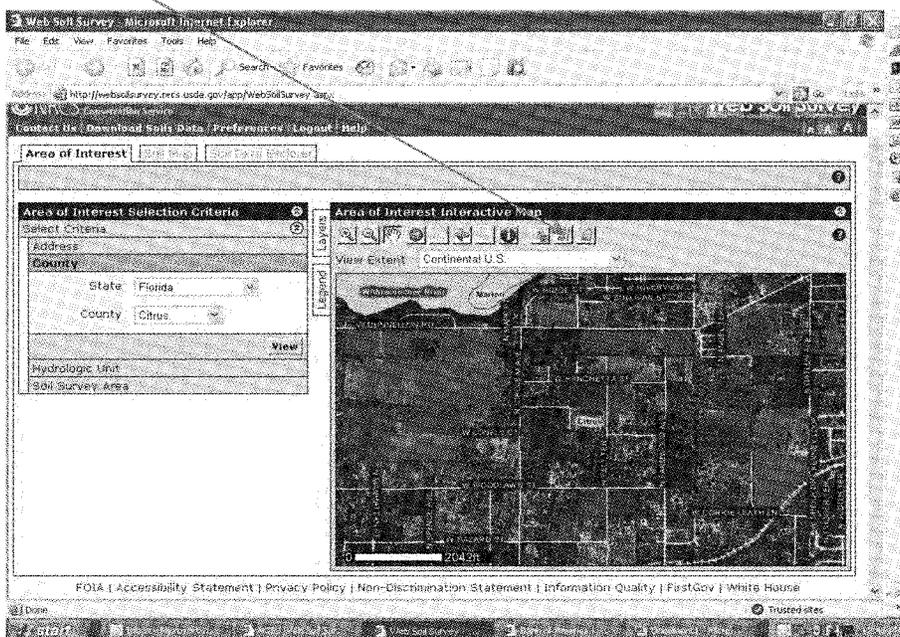
For this example, using Selection Criteria on the left side of the screen, select Citrus County, Florida.



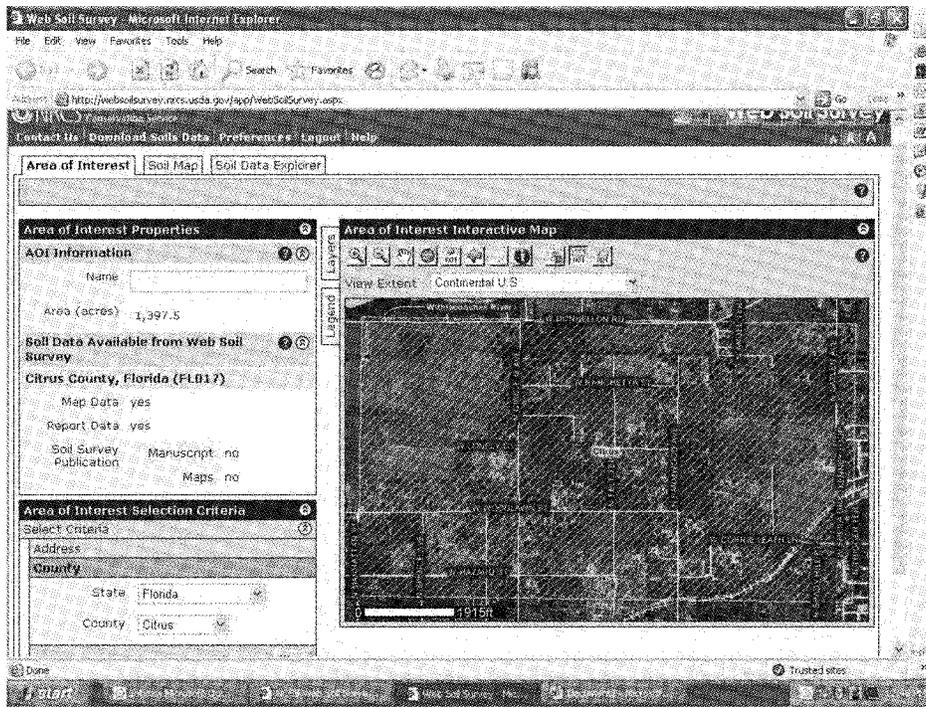
Using the Magnify tool (left side of tool bar); choose the exact area for viewing. In this case, the gray shaded area in northern Citrus County, near the Withalacoochee River is selected.



To define the AOI, use the Interactive Map, and select the button at the top of the page with the red rectangular AOI label. This selection will show a crosshair that will allow you to select the preferred area in rectangular shape.



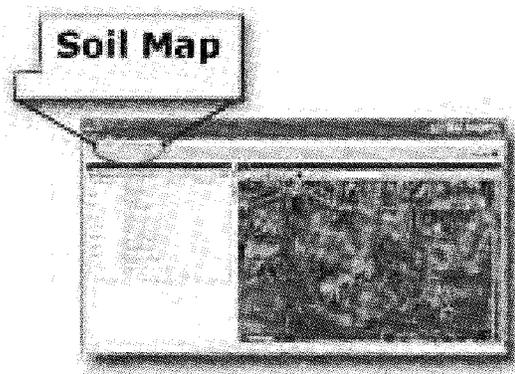
The defined AOI will show up in a crosshatched pattern and the soil data within your AOI is ready for viewing.



2) VIEW: The second step in using Web Soil Survey is to look at the Soil Map for your area of interest. The soil map shows the map unit symbols in your AOI.

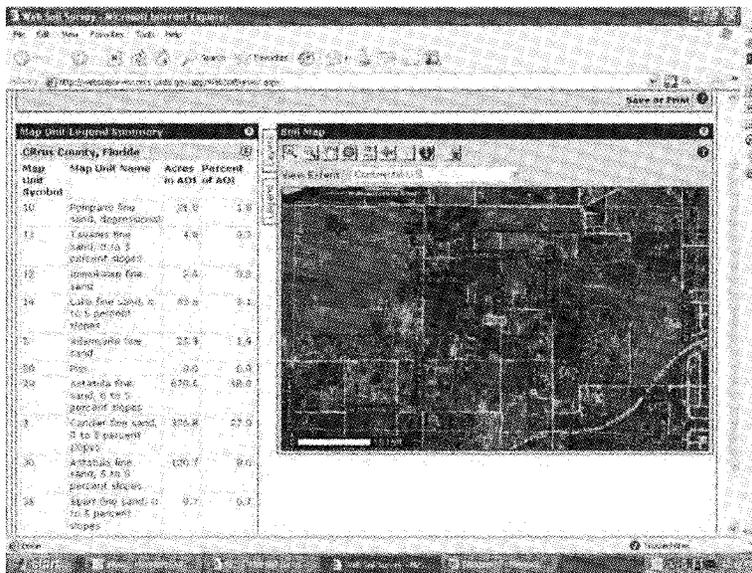
Soil maps are not yet available for all areas. The maps that are available consist of aerial photography overlain by lines that indicate the boundaries of the various types of soil.

The Map Unit Legend Summary table in the left column shows you the name and map symbol of each map unit, the percent of each map unit in the AOI, and the total acreage of each map unit in the AOI.



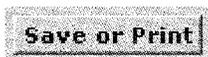
Once the AOI is selected, the map can be viewed by clicking on the "Soil Map" tab on the top left of the screen.

In addition, Map Unit Symbol, Map Unit Name, the Acres in AOI and Percent of AOI are viewable in the Map Unit Legend Summary in the far left column.



Viewing and printing the soil map

While using Web Soil Survey, you may want to refer back to your soil map. You can do so on the screen by clicking the Soil Map tab, or you can print the soil map by clicking the **Save or Print** button:

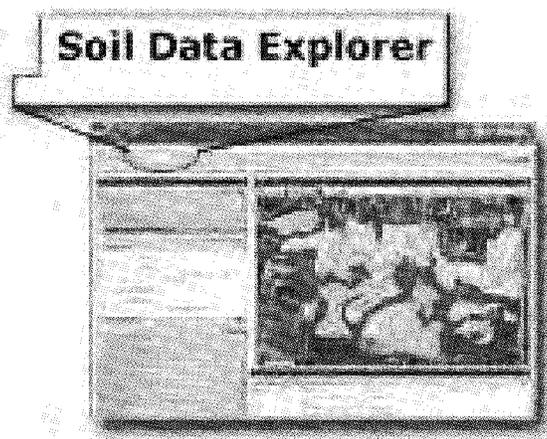


Closing the help window

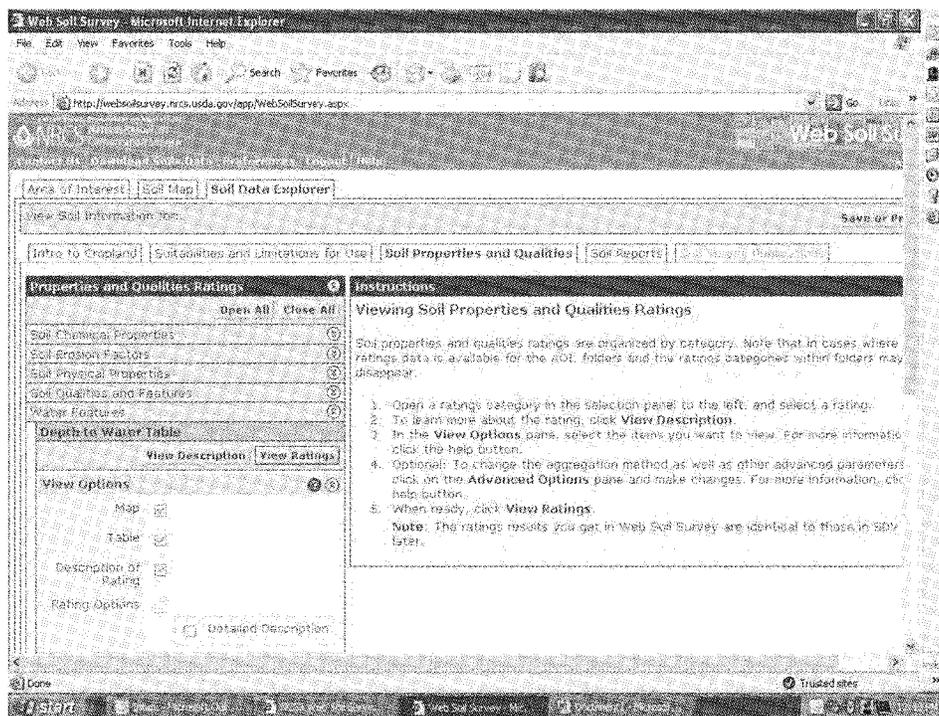
Click the upside-down help button  on the above button bar to close a help window.

3) Explore: The third and final step in using Web Soil Survey is to explore all of the available information associated with the soils in your area of interest. The Soil Data Explorer allows individuals to generate thematic maps based on land use rating and limitations, or by specific physical or chemical data attributes.

The Web Soil Survey can display the properties and qualities of the soils. It can also show interpretations about the suitabilities and limitations of the soils for many uses. Examples of properties and qualities include available water capacity and pII. Examples of suitabilities and limitations include interpretations about how productive the soils are for various crops and about how well the soils would function as a site for buildings. The information can be displayed in tables and, in many cases, on maps.

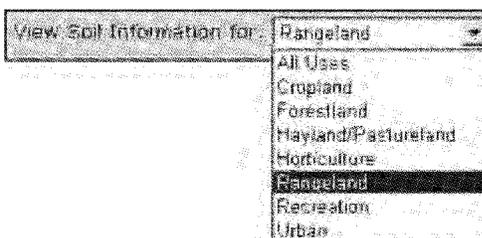


Click on the Soil Data Explorer tab to bring up the Explorer window.

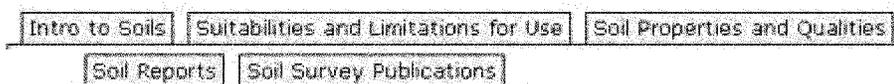


Finding relevant information

You can view soil information about a specific use, such as cropland, forestland, rangeland, urban development, and so forth, by selecting the use from the drop-down list on the button bar.

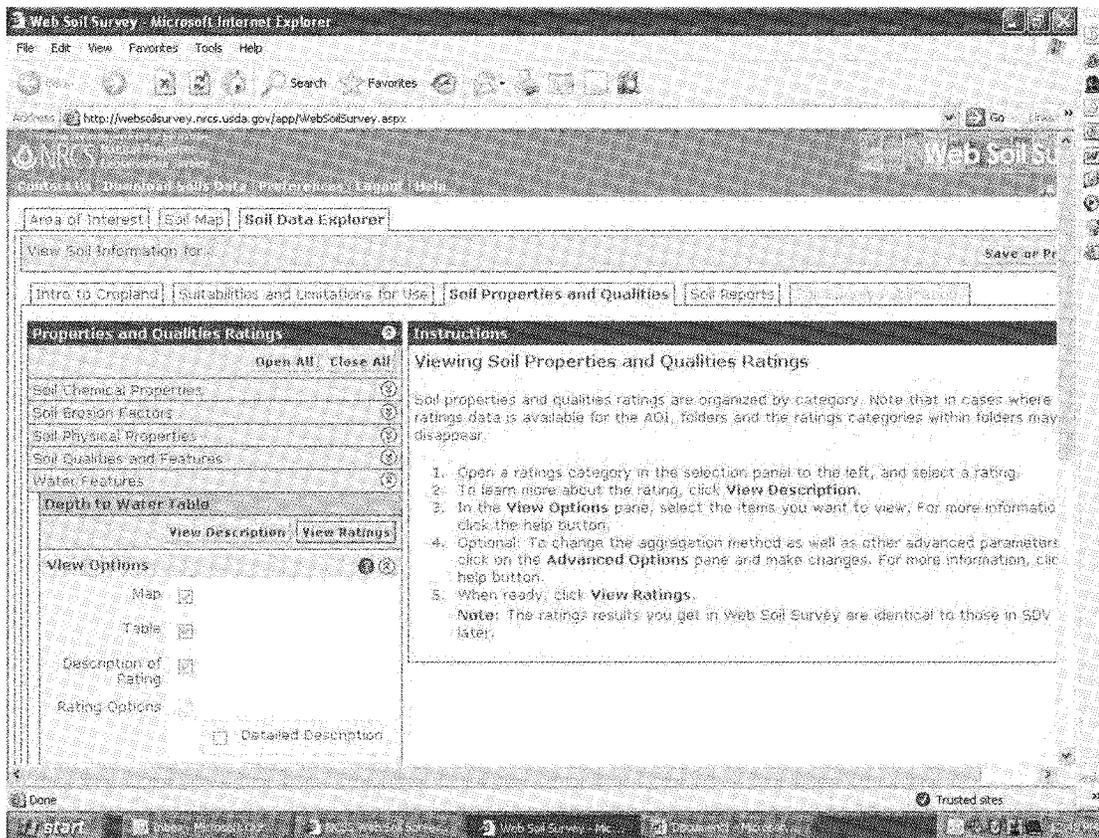


To get a particular type of soil information, use the Soil Data Explorer's inner tabs:

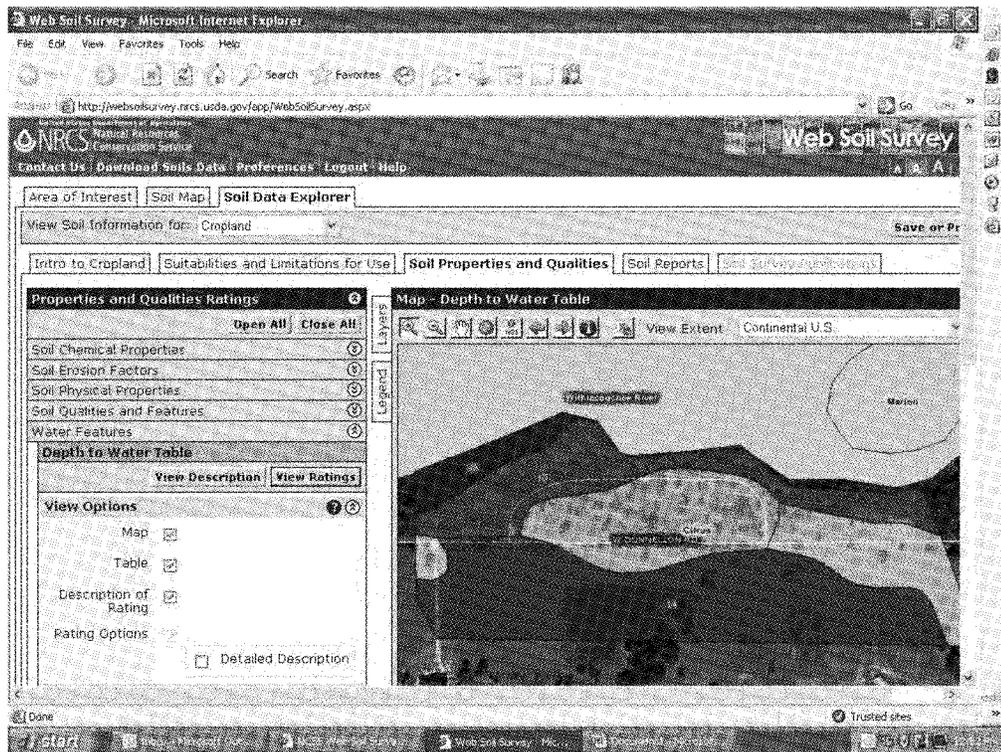


Depending on the use that you select in the drop-down list, the tabs and the contents of the tabs will change.

For example, click on the Soil Properties and Qualities tab.

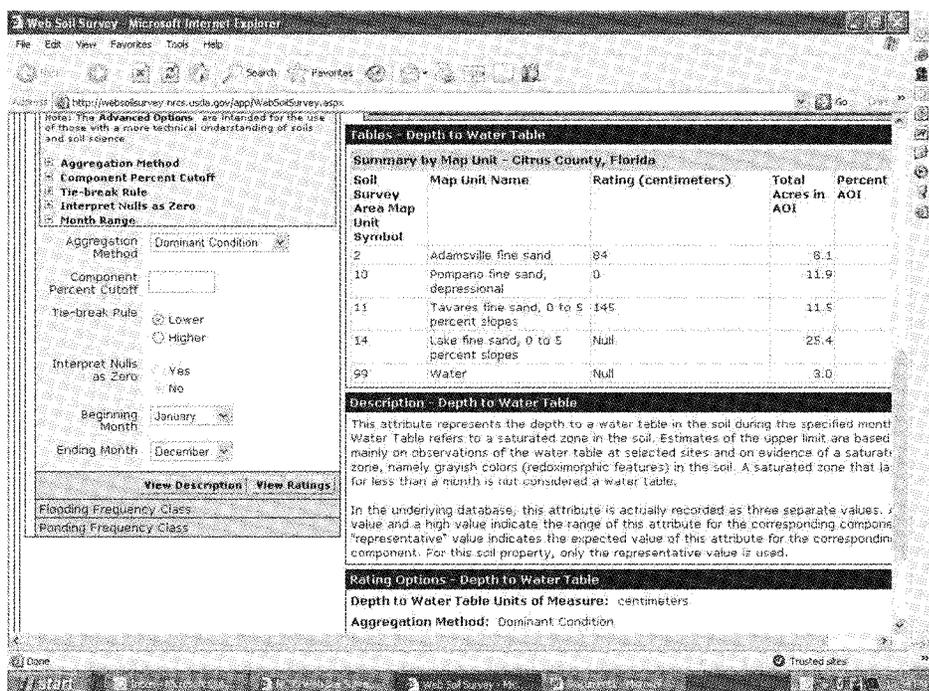


By clicking on **Water Features**, then **Depth to Water Table** and **View Ratings**, you can view the depth to the top of the seasonal high water table based on actual tabular data. An example from northern Citrus County, FL illustrates the water table depths near the Withalacoochee River, the actual depth to the top of the water table, total acres within your AOI, and the percent of the AOI with that rating.



The Legend tab on the left side of the map provides the Map Legend, including the soil ratings (in centimeters) and other map features.

As you scroll down the screen, you'll see the attribute table that illustrates the actual depth to the top of the water table for each map unit in your AOI, the total acres within your AOI, and the percent of the AOI with that rating.

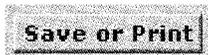


Other choices for thematic maps for Suitabilities and Limitations include Building Site Development for Shallow Excavations or Commercial Buildings, Cropland Productivity, Forestland Management, Hydric Soils Rating, Land Capability Classification, among others. For Soil Properties and Qualities, Chemical attributes such as, Cation Exchange Capacity, pH, Calcium Carbonate Equivalent, OR Physical Properties, such as Available Water Capacity, Organic Matter, Saturated Hydraulic Conductivity, Percent Sand, Silt, and Clay among others can be displayed thematically.

All maps can be printed locally for use.

Printing or saving the information you want

In Web Soil Survey, you select information in the left column and view it in the right column. When you want to print or save the information in the right column, click the **Save or Print** button:



Closing the help window

Click the upside-down help button  on the above button bar to close a help window.

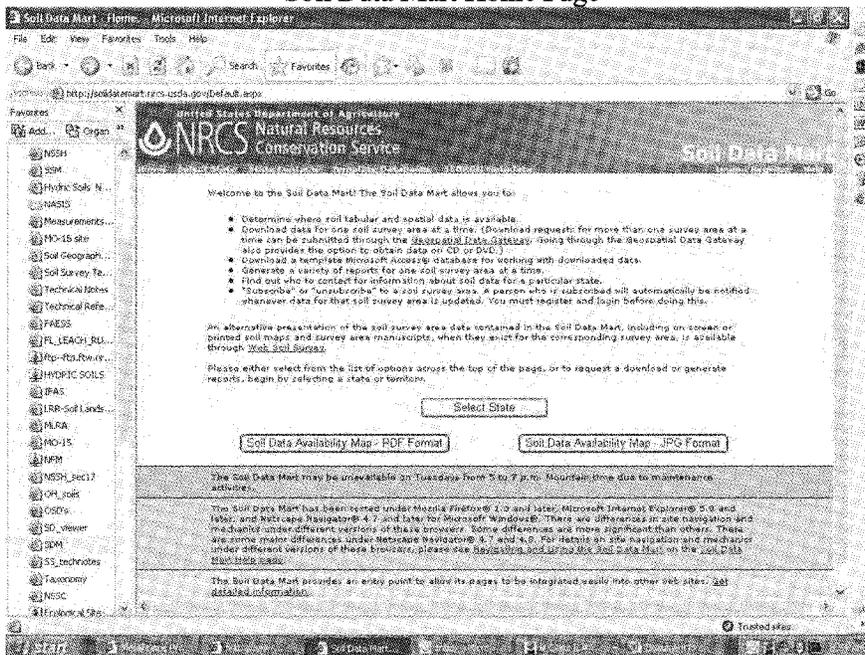
Exhibit FL2-2. Navigating and Using the Soil Data Mart

The Soil Data Mart allows one to generate and print reports or download data (spatial and/or tabular).

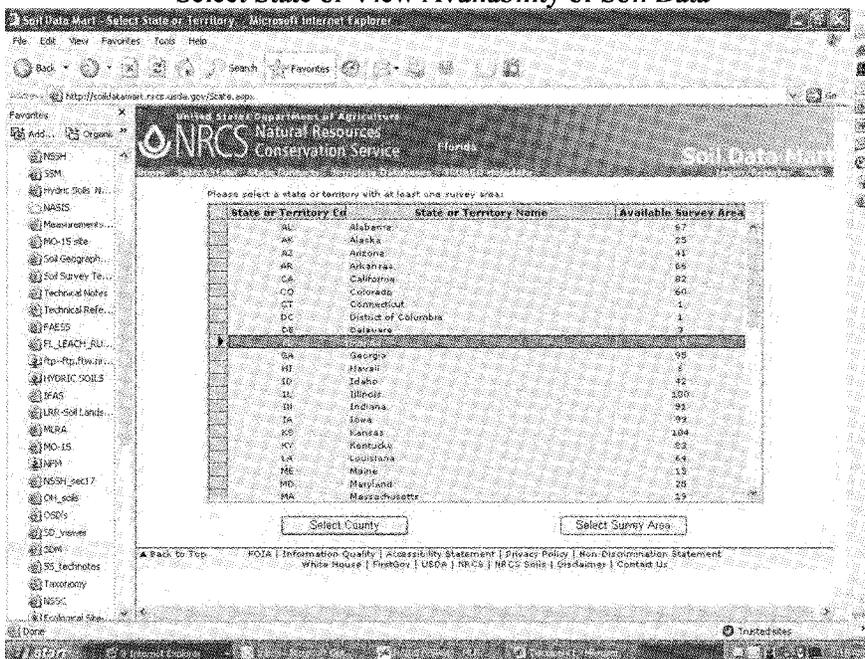
Accessing soil data mart: (ctrl + click link below)

<http://soildatamart.nrcs.usda.gov>

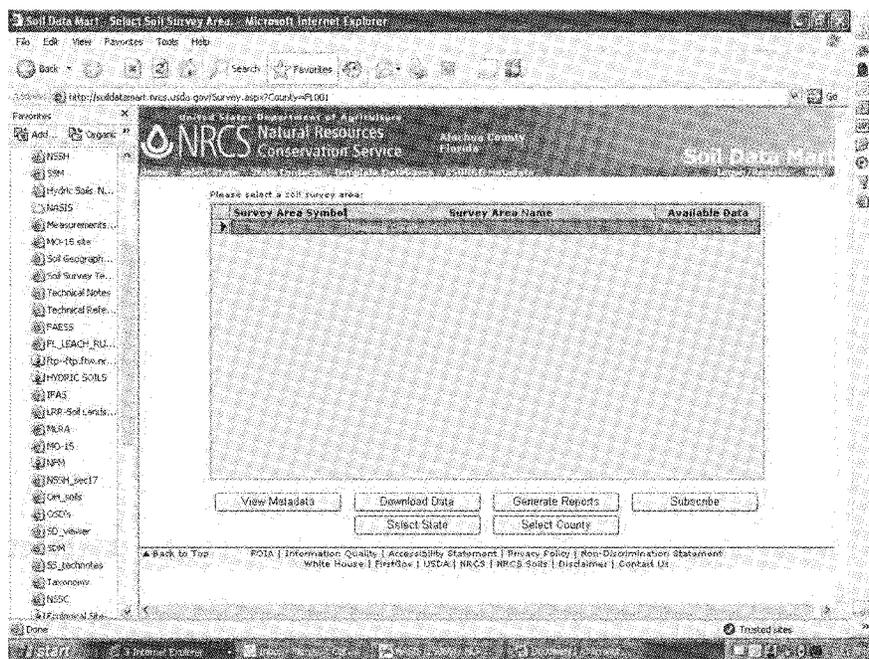
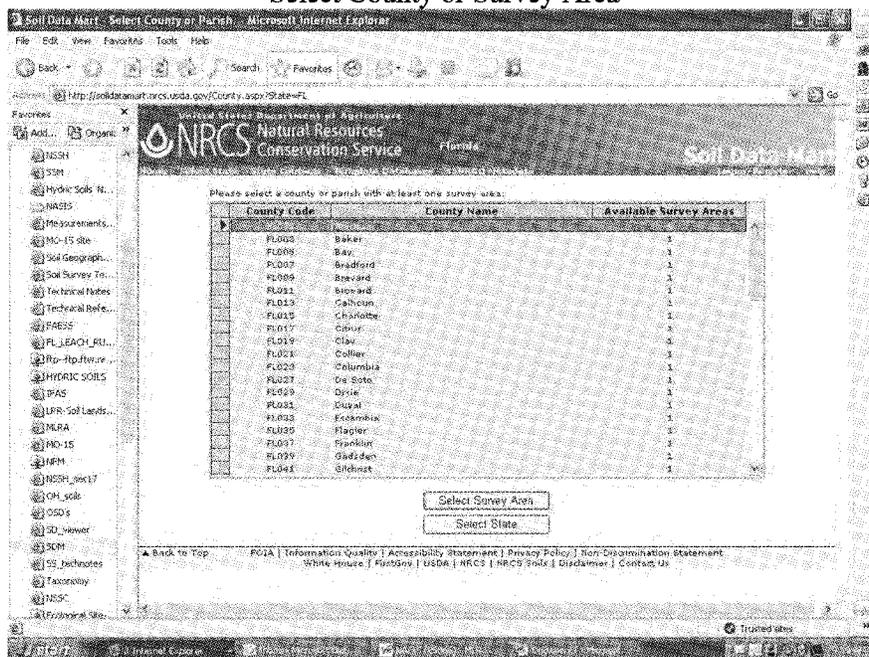
Soil Data Mart Home Page



Select State or View Availability of Soil Data



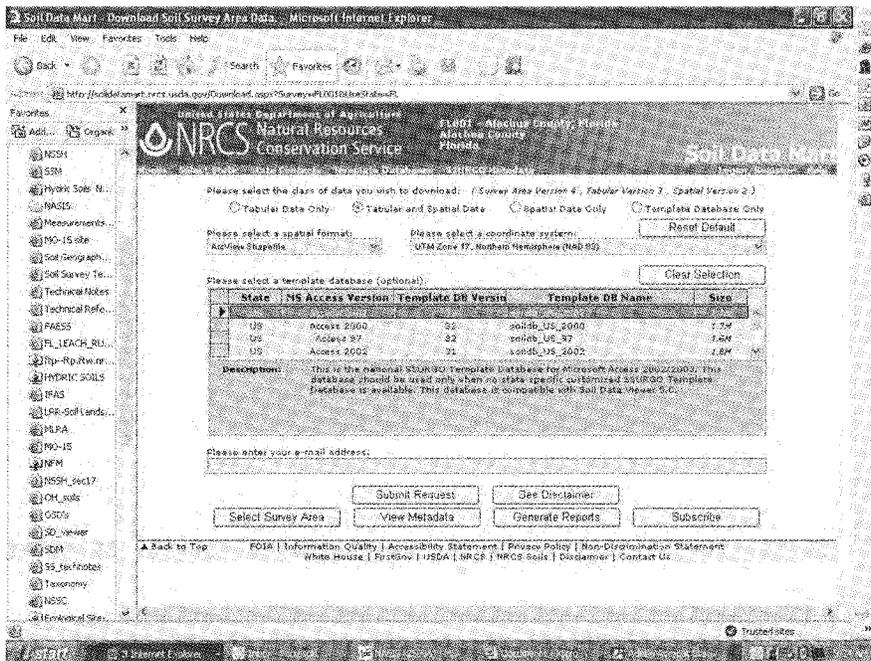
Select County or Survey Area



At this point, a decision is made as to download data directly or to generate and review specific soil reports. Other functions include viewing metadata or to add an email address to the County's subscription list to be notified when the data is updated.

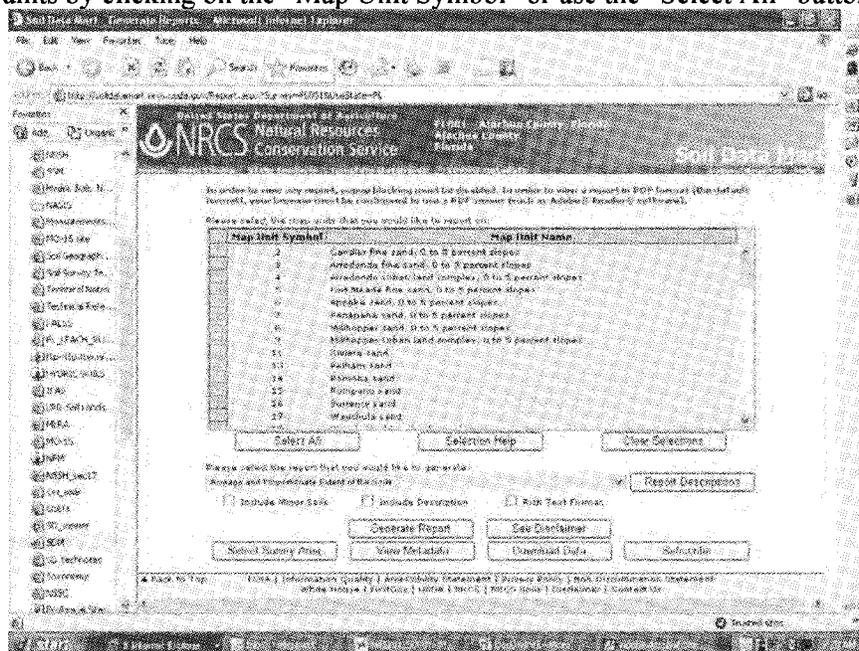
Downloading data

Either spatial or tabular data can be downloaded by selecting the specific data type. Spatial data can be downloaded by format type and coordinate system. Tabular data is downloaded and then viewed using Microsoft Access. Individuals may select the most applicable version for their computer. Enter an email address and submit a request. Notification will be received depending on one's location within the queue nationwide.

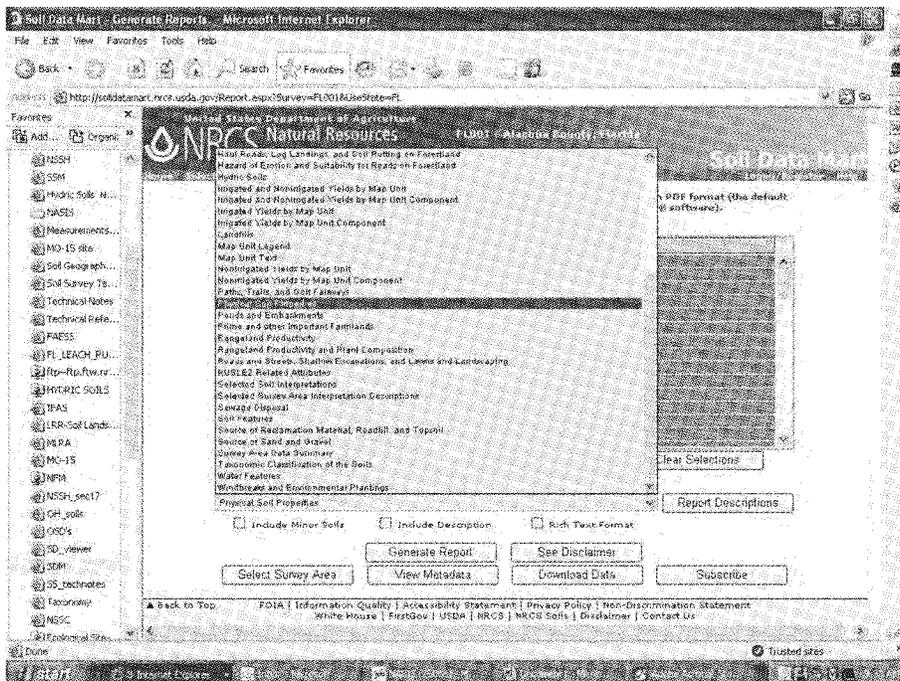


Generating Reports

To generate reports, determine which map units or all map units that you want a report for. Either select individual map units by clicking on the "Map Unit Symbol" or use the "Select All" button.



Then, using the drop down list, choose the report to view. For example, view the Saturated Hydraulic Conductivity (kSat) data for all map units in Alachua County. Select “Alachua County, Florida”, then select “All Map Units”, navigate to “Generate Reports”, and finally choose “Physical Properties Report”.



Click Generate Report and Physical Properties Report opens in a new window.

Map symbol and soil name	Depth	Sand			Silt			Clay			Moisture capacity	Saturated hydraulic conductivity	Available water capacity	Linear shrinkage	Organic matter	Swollen factors			Wind erosion	Wind erosion
		0-10	10-20	20-30	0-10	10-20	20-30	0-10	10-20	20-30						SW	SH	SL		
Gardner																				
	0-10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Arredondo																				
	0-10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Urbanland																				
	0-10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NPD AND NFD LETTERS OF SUPPORT

Town of Nantucket Police Department

Jody D. Kasper
Chief of Police

Charles Gibson
Deputy Chief of Police



4 Fairgrounds Road
Nantucket, Massachusetts
02554-2804

Telephone (508) 228-1212
Facsimile (508) 228-7246
www.nantucket-ma.gov

April 9, 2025

Seth Englebourg, Chair
Nantucket Conservation Commission
131 Pleasant Street
Nantucket, MA 02554

Dear Chair Englebourg,

I am writing to express my support for the proposed relocation of a portion of Falmouth Avenue, which is under consideration due to ongoing beach erosion in the area. As I understand it, the plan involves adjusting the alignment of a segment of the roadway in order to keep Falmouth Avenue connected.

From a public safety standpoint, I believe this proposed configuration is beneficial. Maintaining multiple access routes to any area of the island is a key priority for emergency services. Ensuring that responders can reach residents and visitors efficiently—even if one route becomes blocked, impassable, or heavily congested—is essential. These alternate routes are particularly critical during peak seasonal traffic and in emergency situations when every second counts.

I appreciate the thoughtful planning and collaboration that have gone into this proposal and offer my full support for the new roadway configuration as presented.

Thank you for your continued efforts to preserve and enhance our community's infrastructure.

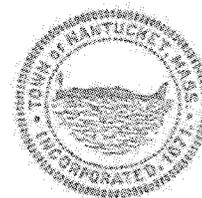
Sincerely,

Jody D. Kasper
Chief of Police
Nantucket Police Department



NANTUCKET FIRE DEPARTMENT

4 Fairgrounds Road
Nantucket, MA 02554
508-228-2323 or 508-228-2324
Michael Cranson, Chief
Tim Vamosi, Deputy Chief
Nicholas Esposito, Deputy Chief



April 15, 2025

Seth Englebourg, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Dear Chair Englebourg,

I am writing to express my support for maintaining two access points to the Cisco Beach parking area, including the existing access via Falmouth Avenue. From a public safety perspective, having multiple points of access to this popular area is a clear benefit.

I want to emphasize that maintaining Falmouth Avenue as an access route—though not strictly required for emergency response—is advantageous for public safety and overall emergency preparedness. Redundancy in access routes can prove critical during high-traffic periods, severe weather events, or emergency situations, when a single point of access may be compromised or delayed.

Thank you for your consideration, and for your continued commitment to thoughtful stewardship of Nantucket's natural resources. Please feel free to reach out if further clarification or input would be helpful.

Sincerely,

Michael Cranson
Nantucket Fire Chief

**PERFORMANCE STANDARDS ANALYSIS AND WAIVER
REQUEST**

PETER M. VETERE
COUNSEL
pvetere@verrill-law.com
Direct: (617) 357-3770

Verrill Dana, LLP
One Federal Street, 20th Floor
Boston, MA 02110
Main 617-309-2600

SUBMITTED WITH NOTICE OF INTENT

December 8, 2025

Nantucket Conservation Commission
131 Pleasant Street, 2nd Floor
Nantucket, MA 02554

**Re: Notice of Intent – Falmouth Ave Relocation
Smooth Hummocks (Map 82, Parcel 30)
Applicant: Nantucket Islands Land Bank**

Dear Commission Members:

The Nantucket Islands Land Bank has re-submitted a notice of intent for the relocation of a portion of Falmouth Avenue near Cisco Beach (the “Project”). As detailed below, the Project meets applicable performance standards under the Massachusetts Wetlands Protection Act, G.L. c. 131, § 40 (“WPA”), and the Nantucket Wetlands Protection Regulations, or is otherwise eligible for a waiver under the Nantucket Wetlands Protection Regulations.

The only Project impact to a resource area will be to 1,500 square feet of Coastal Dune, but this work will consist solely of the restoration of the abandoned section of the current Falmouth Avenue to functioning dune. These impacts will therefore be entirely beneficial to wetland functions. The remaining Project impacts are limited to the buffer zones to Coastal Dune, Coastal Bank, and Coastal Beach. The Project will maintain the status quo of providing a second access route to the Cisco Beach parking lot while improving the existing condition of the coastal dune and buffer zone. The Nantucket police and fire departments agree that maintaining the second access route to the Cisco Beach parking lot is beneficial to public safety; letters in support are submitted with the notice of intent.

Moreover, the Land Bank’s project engineer, Donald F. Bracken, Jr., P.E., P.L.S., has recommended use of the “Toscana Ack Pack” material blend which has a permeability rating comparable to natural sand and low-end gravel, and which is significantly more permeable than loamy sand, a commonly encountered permeable soil. The Land Bank has included Mr. Bracken’s permeability analysis with the notice of intent and is amendable to utilizing this roadway material blend in the Project if the Commission were to condition approval of the notice of intent on its use. Consequently, because the new portion of Falmouth Avenue can be constructed with materials that would allow infiltration of water into the underlying soil, the Project does not contain any impervious surfaces or structures as defined in § 390-2 of the Nantucket Wetlands Protection Regulations.

The Project meets the applicable performance standards except for three performance standards related to work in rare or significant habitat under the Nantucket Wetlands Protection Regulations. The

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December 8, 2025
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Commission can adequately condition the Project to minimize any adverse effects of the Project on state-listed plant species, however. Accordingly, the Land Bank requests a waiver from the operation of §§ 390-16(1), (3), and (4), and for the Commission to issue an order of conditions approving the Project.

WPA Performance Standards

1. Coastal Dune. The performance standards at 310 CMR 10.28(3) through (6) apply to coastal dunes.¹

Performance Standard	Application to Project
310 CMR 10.28(3)	Meets performance standard. The alterations proposed in the coastal dune consist only of dune restoration work that will have a beneficial effect on the coastal dune and the dune attributes set forth in 310 CMR 10.28(3)(a) through (f). The alterations proposed within 100 feet of the coastal dune are far enough from the dune (outside the 50-foot buffer) that they will not have an adverse effect on the coastal dune itself.
310 CMR 10.28(4)	Not applicable. No building exists in the coastal dune.
310 CMR 10.28(5)	Meets performance standard in 310 CMR 10.28(5)(c). Project includes plantings compatible with the natural vegetative cover and it adheres to the provisions of 310 CMR 10.28(3). The proposed work within the coastal dune consists solely of dune restoration work that includes replanting of large sods of plants removed from the new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over.
310 CMR 10.28(6)	Meets performance standard. Project will not have any adverse effect on rare species habitat, as confirmed by the Division of Fisheries & Wildlife in the review letter dated March

¹ Copies of the applicable pages of the WPA Wetlands Regulations and the Nantucket Wetlands Protection Regulations are enclosed with this letter for the Commission's reference.

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December 8, 2025
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Performance Standard	Application to Project
	5, 2025 (a copy of which was sent to the Commission).

2. Coastal Bank. The performance standards at 310 CMR 10.30(3) through (5) apply to coastal banks that supply sediment to coastal beaches.

Performance Standard	Application to Project
310 CMR 10.30(3)	Not applicable. Project does not propose a new coastal engineering structure.
310 CMR 10.30(4)	Meets performance standard. Project's location within 100 feet of a coastal bank will not have any effect on the movement of sediment from the coastal bank to the coastal beach or land subject to tidal action. There is only a tiny portion of the new road that is located near the 100-foot buffer to the coastal bank. It is so remote and distant from the coastal bank's interface with the coastal beach that it should have no effect whatsoever on the coastal bank.
310 CMR 10.30(5)	Not applicable. Project does not propose any new building within 100 feet landward of the top of the coastal bank.

3. Coastal Beach. The performance standards at 310 CMR 10.27(3) through (7) apply to coastal beaches and tidal flats.

Performance Standard	Application to Project
310 CMR 10.27(3)	Not applicable. Project does not propose any work on a coastal beach.
310 CMR 10.27(4)	Not applicable. Project does not propose any solid fill structure which will interfere with littoral drift.

Nantucket Conservation Commission

December 8, 2025

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Performance Standard	Application to Project
310 CMR 10.27(5)	Not applicable. Project does not propose any beach nourishment.
310 CMR 10.27(6)	Not applicable. Project does not propose any work on a tidal flat.
310 CMR 10.27(7)	Meets performance standard. Project will not have any adverse effect on rare species habitat, as confirmed by NHESP. ²

4. Estimated Habitats of Rare Wildlife. The Project meets the performance standard in 310 CMR 10.37 because it will not have any adverse effects on the habitat of a state-listed species, as previously confirmed by NHESP.

Nantucket Wetlands Protection Regulations Performance Standards

1. Coastal Dune. The performance standards in § 390-8(B) of the Nantucket Wetlands Protection Regulations apply to coastal dunes.

Performance Standard	Application to Project
§ 390-8(B)(1)	Not applicable. Project does not propose any coastal engineering structures
§ 390-8(B)(2)	Meets performance standard. Project maintains a 25-foot undisturbed buffer zone and undisturbed 50-foot buffer zone to the dune. The proposed work within the coastal dune consists solely of dune restoration work that includes replanting of large sods of plants removed from the new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over. The work will result in a restored and undisturbed 50-foot buffer zone to the dune.

² See Letter from Jesse Leddick, Assistant Director of the Natural Heritage & Endangered Species Program, dated March 5, 2025 (a copy of which was sent to the Commission).

Nantucket Conservation Commission

December 8, 2025

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Performance Standard	Application to Project
§ 390-8(B)(3)	Meets performance standard. The proposed work within the coastal dunes consists of dune restoration work.
§ 390-8(B)(4)	Meets performance standard. Project does not propose importing any fill to restore the dune, only the re-use of transplanted sods from the proposed new portion of Falmouth Avenue.
§ 390-8(B)(5)	Not applicable. Project does not propose any septic system.
§ 390-8(B)(6)	Meets performance standard. Similar to 310 CMR 10.28(3), the alterations proposed in the coastal dune consist only of dune restoration work that will have a beneficial effect on the coastal dune and the dune attributes set forth in § 390-8(B)(6). The alterations proposed within 100 feet of the coastal dune are far enough from the dune (outside the 50-foot buffer) that they will not have an adverse effect on the coastal dune itself.
§ 390-8(B)(7)	Not applicable. Project does not propose any construction of a building on the coastal dune or within 50 feet of it.
§ 390-8(B)(8)	Not applicable. Project does not propose any pedestrian or elevated walkway.
§ 390-8(B)(9)	Not applicable. Project does not propose any use of fertilizers.
§ 390-8(B)(10)	Meets performance standard. The proposed relocated portion of Falmouth Avenue will be unpaved and located more than 50 feet from the coastal dune.

2. Coastal Bank. The performance standards in § 390-10(B) of the Nantucket Wetlands Protection Regulations apply to coastal banks and land within 100 feet of a coastal bank.

Nantucket Conservation Commission

December 8, 2025

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Performance Standard	Application to Project
§ 390-10(B)(1)	Not applicable. Project does not propose any coastal engineering structures.
§ 390-10(B)(2)	Not applicable. Project does not propose any piers.
§ 390-10(B)(3)	Meets performance standard. Only a tiny portion of the new road is located near the 100-foot buffer to the coastal bank. It is so remote and distant from the coastal bank that it should have no effect whatsoever on the coastal bank attributes set forth in § 390-10(B)(3).
§ 390-10(B)(4)	Not applicable. Project does not propose any elevated walkway.
§ 390-10(B)(5)	Meets performance standard. No work is proposed within the 75-foot buffer and therefore existing conditions will be maintained.
§ 390-10(B)(6)	Not applicable. Project does not propose any septic system.
§ 390-10(B)(7)	Not applicable. Project does not propose any new structures.
§ 390-10(B)(8)	Not applicable. Project does not propose any substantial improvement of an existing building or new construction of a building

3. Coastal Beach. The performance standards in § 390-7(B) of the Nantucket Wetlands Protection Regulations apply to coastal beaches, tidal flats, and land within 100 feet of a coastal beach or tidal flat. The first performance standard, § 390-7(B)(1), requires compliance with the performance standards for land under the ocean set forth in § 390-6(B)(1) through (8).

Performance Standard	Application to Project
§ 390-6(B)(1)	Not applicable. Project does not propose any dredging.
§ 390-6(B)(2)	Not applicable.

Nantucket Conservation Commission

December 8, 2025

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Performance Standard	Application to Project
	Project does not propose any dredging.
§ 390-6(B)(3)	Not applicable. Project does not propose any residential piers.
§ 390-6(B)(4)	Not applicable. Project does not propose any commercial piers.
§ 390-6(B)(5)	Not applicable. Project does not propose any piers.
§ 390-6(B)(6)	Not applicable. Project does not propose any aquaculture.
§ 390-6(B)(7)	Not applicable. Project does not propose any coastal engineering structures.
§ 390-6(B)(8)	Not applicable. Project is not water-dependent.
§ 390-7(B)(1)	Meets performance standard. Project complies with the performance standards for land under the ocean.
§ 390-7(B)(2)	Not applicable. Project does not propose any coastal engineering structures.
§ 390-7(B)(3)	Not applicable. Project does not propose any dredging.
§ 390-7(B)(4)	Not applicable. Project does not propose any fill on a coastal beach or tidal flat. The only work is to the coastal dune.
§ 390-7(B)(5)	Not applicable. Project does not propose any septic system.
§ 390-7(B)(6)	Meets performance standard. Project maintains a 25-foot undisturbed buffer zone and undisturbed 50-foot buffer zone to the beach. The proposed work within the coastal dune consists solely of dune restoration work that includes replanting of large sods of plants removed from the

Nantucket Conservation Commission
 December 8, 2025
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Performance Standard	Application to Project
	new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over. The work will result in a restored and undisturbed greater than 50-foot buffer zone to the beach.
§ 390-7(B)(7)	Not applicable. Project does not propose any buildings.
§ 390-7(B)(8)	Meets performance standard. The proposed relocated portion of Falmouth Avenue will be unpaved and located more than 50 feet from the coastal dune and even further from the coastal beach.
§ 390-7(B)(9)	Not applicable. Project does not propose any use of fertilizers.

4. Estimated Habitat for Rare Wildlife, Flora, and Fauna. The performance standards in § 390-16(B) of the Nantucket Wetlands Protection Regulations apply to estimated habitat areas. NHESP determined that portions of the Project are located within the habitat for five state-listed invertebrate species, one state-listed avian species, and four state-listed plants. NHESP also determined that the Project will not adversely affect the resource area habitat of state-protected rare wildlife species for purposes of issuing an order of conditions under the WPA. However, the WPA performance standards apply only to rare wildlife habitat.

NHESP further determined that the Project will result in a take of state-listed plant species (Sandplain Blue-eyed Grass) under the Massachusetts Endangered Species Act (“MESA”). The Land Bank is pursuing an amendment to its MESA Conservation & Management Permit (CMP-86043) for the Cisco Beach Parking Lot, which NHESP determined would address the impacts to Sandplain Blue-eyed Grass and the cumulative habitat loss for state-listed species impacted by the Project. NHESP required the Land Bank to obtain the amendment prior to the start of work on the Project. The Land Bank is amenable to the Commission imposing a similar requirement as a special condition to any order of conditions for the Project.

Performance Standard	Application to Project
§ 390-16(B)(1)	Does not meet performance standard. Project will alter existing vegetation within rare/significant species habitat.
§ 390-16(B)(2)	Not applicable. Project does not propose any construction or

Performance Standard	Application to Project
	enlargement of a structure.
§ 390-16(B)(3)	Does not meet performance standard. Project will alter the topography and drainage characteristics of land within rare/significant species habitat.
§ 390-16(B)(4)	Does not meet performance standard. Project proposes new construction of portion of Falmouth Avenue with drainage swale within rare/significant species habitat.
§ 390-16(B)(5)	Not applicable. Project does not propose any septic system.

Waiver Standard

The Nantucket Wetlands Protection Regulations provide that “[t]he Commission may, in its discretion, for good cause shown, grant waivers from the operation of one or more of these regulations.” § 390-3(H)(2). The regulations further provide that a waiver shall be granted only for the specific reasons listed in § 390-3(H)(3)(a) through (e). The Project is eligible for a waiver for the following reasons:

Waiver Reason	Application to Project
§ 390-3(H)(3)(a)	Project will not adversely impact the interests identified in the Bylaw and there are no reasonable alternatives that would allow the Project to proceed in compliance with the regulations. <u>See</u> NOI Alternatives Analysis.
§ 390-3(H)(3)(c)	Project will provide a long-term net benefit or improvement to the resource area. Project work within the resource area consists solely of work to restore the abandoned section of the current Falmouth Avenue to functioning dune and will have a beneficial effect on the coastal dune. The proposed work includes replanting of large sods of plants removed from the new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over. The remaining Project impacts are limited to the buffer zones to Coastal Dune, Coastal Bank, and Coastal

Waiver Reason	Application to Project
	Beach. The work will result in a restored and undisturbed 50-foot buffer zone to the dune. NHESP determined that the Project will not adversely affect any rare wildlife species. The Project can be conditioned to minimize adverse effects on rare plant species by requiring the Land Bank obtain an amendment to its Conservation & Management Permit.
§ 390-3(H)(3)(e)	Project will provide a significant public benefit. The relocated portion of Falmouth Avenue will maintain the status quo of providing alternative vehicular access to the Cisco Beach parking lot while improving the existing conditions of the coastal dune and buffer zone. The Nantucket police and fire departments agree that maintaining this second access route will be beneficial to public safety. The Project can be conditioned to minimize adverse effects on rare plant species by requiring the Land Bank obtain an amendment to its Conservation & Management Permit.

Abutters Ocean Heath, LLC, in a letter dated March 19, 2025, submitted in connection with the prior notice of intent, “question[ed] the need for the requested waiver [and] for the Proposed Project itself,” and claimed the Land Bank’s alternatives analysis was inadequate. Even were that the case, the Project is eligible for a waiver for other reasons as discussed above. Regardless, the existing access from Hummock Pond Road does not provide “full and adequate access” to the beach parking lot, as the abutters suggest, since the Nantucket police and fire departments agree that maintaining the second access route over Falmouth Avenue would be advantageous to public safety.

The Project merely maintains the status quo of access over Falmouth Avenue while improving the existing conditions of the coastal dune and buffer zone. If the Project is denied, portions of Falmouth Avenue will eventually be lost to erosion and abandoned, and the abandoned portions will remain as impacts to the resource area. The Project moves the road out of the resource area and deep into the buffer zone and restores the dune functions. The abutters would simply prefer the road be abandoned so there will be no traffic in front of their house. This is not a legitimate concern of the Commission.

The abutters also noted that “waivers should not be granted where the proposed work will impact a rare wildlife species.” However, NHESP determined that the Project “will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species.” NHESP Letter, at 2. The abutters’ concern is therefore unfounded. To the extent the Project will adversely affect rare plant species habitat, the Commission can adequately condition the Project to minimize adverse effects by

Nantucket Conservation Commission
December 8, 2025
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requiring the Land Bank obtain an amendment to its Conservation & Management Permit (which the Land Bank is already pursuing) before starting any work, as NHESP has already required.

Accordingly, the Land Bank requests a waiver from the operation of §§ 390-16(1), (3), and (4), and for the Commission to issue an order of conditions approving the Project.

The Land Bank thanks the Commission for its time and effort on this matter and looks forward to discussing the Project at the meeting on January 8, 2026.

Regards,

A handwritten signature in black ink, appearing to read "Peter M. Vetere".

Peter M. Vetere

cc: Rachael Freeman, Executive Director, Nantucket Islands Land Bank
Elizabeth Phelps, Environmental Permitting Coordinator, Nantucket Islands Land Bank

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 10.00: WETLANDS PROTECTION

Section

Regulations for All Wetlands

- 10.01: Introduction and Purpose
- 10.02: Statement of Jurisdiction
- 10.03: General Provisions
- 10.04: Definitions
- 10.05: Procedures
- 10.06: Emergencies
- 10.07: Compliance with M.G.L. c. 30, §§ 61 through 62II
- 10.08: Enforcement Orders
- 10.09: Severability
- 10.10: Effective Date
- 10.11: Actions Required Before Submitting a Notice of Intent for an Ecological Restoration Project
- 10.12: Notice of Intent for an Ecological Restoration Project
- 10.13: Eligibility Criteria for Restoration Order of Conditions
- 10.14: Restoration Order of Conditions

Additional Regulations for Coastal Wetlands

- 10.21: Introduction
- 10.22: Purpose
- 10.23: Additional Definitions for 310 CMR 10.21 through 10.37
- 10.24: General Provisions
- 10.25: Land under the Ocean
- 10.26: Designated Port Areas
- 10.27: Coastal Beaches
- 10.28: Coastal Dunes
- 10.29: Barrier Beaches
- 10.30: Coastal Banks
- 10.31: Rocky Intertidal Shores
- 10.32: Salt Marshes
- 10.33: Land under Salt Ponds
- 10.34: Land Containing Shellfish
- 10.35: Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes or Creeks that Underlie Anadromous/Catadromous ("Fish Run")
- (10.36: Reserved: Variance Provision is found at 310 CMR 10.05(10))
- 10.37: Estimated Habitats of Rare Wildlife (for Coastal Wetlands)

Additional Regulations for Inland Wetlands

- 10.51: Introduction
- 10.52: Purpose
- 10.53: General Provisions
- 10.54: Bank (Naturally Occurring Banks and Beaches)
- 10.55: Bordering Vegetated Wetlands (Wet Meadows, Marshes, Swamps and Bogs)
- 10.56: Land under Water Bodies and Waterways (under any Creek, River, Stream, Pond or Lake)
- 10.57: Land Subject to Flooding (Bordering and Isolated Areas)
- 10.58: Riverfront Area
- 10.59: Estimated Habitats of Rare Wildlife (for Inland Wetlands)
- 10.60: Wildlife Habitat Evaluations

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

10.26: continued

Land under the ocean often provides support for such structures. Some proposed activities may alter wave and current patterns so as to affect the stability of such structures or the depths or configurations of navigation channels.

Where a proposed project involves dredging, filling, removing, or altering land under the ocean in designated port areas, the issuing authority shall presume that the area is significant to marine fisheries, storm damage prevention and flood control. These presumptions may be overcome only upon a clear showing that land under the ocean in designated port areas does not play a role in the protection of marine fisheries, storm damage prevention or flood control, or that a salt marsh, coastal dune, land under a salt pond, coastal beach, tidal flat, barrier beach, rocky intertidal shore or land containing shellfish, in designated port areas, does play a role in marine fisheries, storm damage prevention or flood control, and if the issuing authority makes a written determination to such effect.

When a proposed project in a designated port area is on land under the ocean which is determined to be significant to marine fisheries, the following factors are critical to the protection of such interests:

- (a) water circulation; and
- (b) water quality.

When a proposed project in a designated port area is on land under the ocean which is determined to be significant to storm damage prevention or flood control, the ability of such land to provide support for adjacent coastal or human-made structures is critical to the protection of such interests.

(2) Definition.

Designation of Port Areas means those areas designated in 301 CMR 25.00: *Designation of Port Areas*.

WHEN LAND UNDER THE OCEAN IN DESIGNATED PORT AREAS IS FOUND TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, STORM DAMAGE PREVENTION OR FLOOD CONTROL, 310 CMR 10.26(3) AND (4) SHALL APPLY:

(3) Projects shall be designed and constructed, using best practical measures, so as to minimize adverse effects on marine fisheries caused by changes in:

- (a) water circulation;
- (b) water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

(4) Projects shall be designed and constructed, using the best practical measures, so as to minimize, adverse effects on storm damage prevention or flood control caused by changes in such land's ability to provide support for adjacent coastal banks or adjacent coastal engineering structures.

10.27: Coastal Beaches

(1) Preamble. Coastal beaches, which are defined to include tidal flats, are significant to storm damage prevention, flood control and the protection of wildlife habitat. In addition, tidal flats are likely to be significant to the protection of marine fisheries and where there are shellfish, to

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land containing shellfish.²

Coastal beaches dissipate wave energy by their gentle slope, their permeability and their granular nature, which permit changes in beach form in response to changes in wave conditions.

Coastal beaches serve as a sediment source for dunes and subtidal areas. Steep storm waves cause beach sediment to move offshore, resulting in a gentler beach slope and greater energy dissipation. Less steep waves cause an onshore return of beach sediment, where it will be available to provide protection against future storm waves.

A coastal beach at any point serves as a sediment source for coastal areas downdrift from that point. The oblique approach of waves moves beach sediment alongshore in the general direction of wave action. Thus, the coastal beach is a body of sediment which is moving along the shore.

² For regulations concerning land containing shellfish see 310 CMR 10.34.

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10.27: continued

Coastal beaches serve the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean and other coastal beaches. Interruptions of these natural processes by human-made structures reduce the ability of the coastal beach to perform these functions.

A number of birds also nest in the coastal berm, between the toe of a dune and the high tide line. In addition, isolated coastal beaches on small islands are important as haul out areas for harbor seals.

Tidal flats are likely to be significant to the protection of marine fisheries and wildlife habitat because they provide habitats for marine organisms such as polychaete worms and mollusks, which in turn are food sources for fisheries and migratory and wintering birds. Coastal beaches are extremely important in recycling of nutrients derived from storm drift and tidal action. Vegetative debris along the drift line is vital for resident and migratory shorebirds, which feed largely on invertebrates which eat the vegetation. Below the drift line in the lower intertidal zone are infauna (invertebrates such as mollusks and crustacea) which are also eaten by shore birds.

Tidal flats are also sites where organic and inorganic materials may become entrapped and then returned to the photosynthetic zone of the water column to support algae and other primary producers of the marine food web.

When a proposed project involves the dredging, filling, removing, or altering of a coastal beach, the issuing authority shall presume that the coastal beach is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a coastal beach does not play a role in storm damage prevention, flood control, or protection of wildlife habitat, or that tidal flats do not play a role in the protection of marine fisheries or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When coastal beaches are determined to be significant to storm damage prevention or flood control, the following characteristics are critical to the protection of those interests:

- (a) volume (quantity of sediments) and form; and
- (b) the ability to respond to wave action.

When coastal beaches are significant to the protection of marine fisheries or wildlife habitat, the following characteristics are critical to the protection of those interests:

- (a) distribution of sediment grain size;
- (b) water circulation;
- (c) water quality; and
- (d) relief and elevation.

When tidal flats are in a designated port area, 310 CMR 10.26(1) through (4) shall apply. When tidal flats are significant to land containing shellfish, 310 CMR 10.34(1) through (8) shall apply.

(2) Definitions.

Coastal Beach means 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.

Tidal Flat means any nearly level part of a coastal beach which usually extends from the mean low water line landward to the more steeply sloping face of the coastal beach or which may be separated from the beach by land under the ocean.

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WHEN A COASTAL BEACH IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL, OR PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(3) THROUGH (7) SHALL APPLY:

(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 downdrift coastal beach.

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10.27: continued

- (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:
- (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 downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift 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.

WHEN A TIDAL FLAT IS DETERMINED TO BE SIGNIFICANT TO MARINE FISHERIES OR THE PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(6) SHALL 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.

10.28: Coastal Dunes

(1) Preamble. All coastal dunes are likely to be significant to storm damage prevention and flood control, and all coastal dunes on barrier beaches and the coastal dune closest to the coastal beach, also known as the Primary Frontal Dune as defined in 310 CMR 10.04, in any area are per se significant to storm damage prevention and flood control. The Coastal High Hazard Area or Velocity Zone extends at a minimum to the inland limit of the Primary Frontal Dune along the open coast. Coastal dunes are also often significant to the protection of wildlife habitat.

Coastal dunes aid in storm damage prevention and flood control by supplying sand to coastal beaches. Coastal dunes protect inland coastal areas from storm damage and flooding by storm waves and storm elevated sea levels because such dunes are higher than the coastal beaches which they border. In order to protect this function, coastal dune volume must be maintained while allowing the coastal dune shape to conform to natural wind and water flow patterns.

Vegetation cover contributes to the growth and stability of coastal dunes by providing conditions favorable to sand deposition.

On retreating shorelines, the ability of the coastal dunes bordering the coastal beach to move landward at the rate of shoreline retreat allows these dunes to maintain their form and volume, which in turn promotes their function of protecting against storm damage or flooding.

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10.28: continued

When a coastal dune is significant to storm damage prevention, flood control or the protection of wildlife habitat, the following characteristics are critical to the protection of those interest(s):

- (a) the ability of the dune to erode in response to coastal beach conditions;
- (b) dune volume;
- (c) dune form, which must be allowed to be changed by wind and natural water flow;
- (d) vegetative cover;
- (e) the ability of the dune to move landward or laterally; or
- (f) the ability of the dune to continue serving as bird nesting habitat.

(2) Definition.

Coastal Dune means 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.

WHEN A COASTAL DUNE IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL OR THE PROTECTION OF WILDLIFE HABITAT, 310 10.28(3) THROUGH (6) SHALL APPLY:

(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;
- (b) disturbing the vegetative cover so as to destabilize the dune;
- (c) causing any modification of the dune form that would increase the potential for storm or flood damage;
- (d) interfering with the landward or lateral movement of the dune;
- (e) causing removal of sand from the dune artificially; or
- (f) interfering with mapped or otherwise identified bird nesting 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.

(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;
- (b) fencing and other devices designed to increase dune development; and
- (c) plantings compatible with the natural vegetative cover.

(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.

10.29: Barrier Beaches

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10.28: continued

Barrier beaches protect landward areas because they provide a buffer to storm waves and to sea levels elevated by storms. Barrier beaches protect from wave action such highly productive wetlands as salt marshes, estuaries, lagoons, salt ponds and fresh water marshes and ponds, which are in turn important to marine fisheries and protection of wildlife habitat. Barrier beaches and the dunes thereon are also important to the protection of wildlife habitat in the ways described in 310 CMR 10.27(1) (Coastal Beaches) and 10.28(1) (Coastal Dunes).

Barrier beaches are maintained by the alongshore movement of beach sediment caused by wave action. The coastal dunes and tidal flats on a barrier beach consist of sediment supplied by wind action, storm wave overwash and tidal inlet deposition. Barrier beaches in Massachusetts undergo a landward migration caused by the landward movement of sediment by wind, storm wave overwash and tidal current processes. The continuation of these processes maintains the volume of the landform which is necessary to carry out the storm and flood buffer function.

When a proposed project involves removal, filling, dredging or altering of a barrier beach, the issuing authority shall presume that the barrier beach, including all of its coastal dunes, is significant to the interest(s) specified above. This presumption may be overcome only upon a clear showing that a barrier beach, including all of its coastal dunes, does not play a role in storm damage prevention, flood control, or the protection of marine fisheries, wildlife habitat, or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When a barrier beach is significant to storm damage prevention and flood control, the characteristics of coastal beaches, tidal flats and coastal dunes listed in 310 CMR 10.27(1) and 10.28(1) and their ability to respond to wave action, including storm overwash sediment transport, are critical to the protection of the interests specified in 310 CMR 10.29.

(2) Definition.

Barrier Beach means 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.

(3) When a Barrier Beach Is Determined to Be Significant to Storm Damage Prevention, Flood Control, Marine Fisheries or Protection of Wildlife Habitat. 310 CMR 10.27(3) through (6) (coastal beaches) and 10.28(3) through (5) (coastal dunes) shall apply to the coastal beaches and to all coastal dunes which make up a barrier beach.

(4) Notwithstanding the provisions of 310 CMR 10.29(3), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.30: Coastal Banks

(1) Preamble. Coastal banks are likely to be significant to storm damage prevention and flood control. Coastal banks that supply sediment to coastal beaches, coastal dunes and barrier beaches are per se significant to storm damage prevention and flood control. Coastal banks that, because of their height, provide a buffer to upland areas from storm waters are significant to storm damage prevention and flood control.

Coastal banks composed of unconsolidated sediment and exposed to vigorous wave action serve as a major continuous source of sediment for beaches, dunes, and barrier beaches (as well as other land forms caused by coastal processes). The supply of sediment is removed from banks

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by wave action, and this removal takes place in response to beach and sea conditions. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes and barrier beaches which, in turn, dissipate storm wave energy, thus protecting structures of coastal wetlands landward of them from storm damage and flooding.

Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage and flooding. While erosion caused by wave action is an integral part of shoreline processes and furnishes important sediment to downdrift landforms, erosion of a coastal bank by wind and rain runoff, which plays only a minor role in beach nourishment, should not be increased unnecessarily. Therefore, disturbances to a coastal bank which reduce its natural resistance to wind and rain erosion cause cuts and gullies in the bank, increase the risk of its collapse, increase the danger to structures at the top of the bank and decrease its value as a buffer.

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10.30: continued

Bank vegetation tends to stabilize the bank and reduce the rate of erosion due to wind and rain runoff. Pedestrian and vehicular traffic damages the protective vegetation and frequently leads to gully erosion or deep "blowouts" on unconsolidated banks. Therefore, any project permitted by 310 CMR 10.30 should incorporate, when appropriate, elevated walkways.

A particular coastal bank may serve both as a sediment source and as a buffer, or it may serve only one role.

When a proposed project involves dredging, removing, filling, or altering a coastal bank, the issuing authority shall presume that the area is significant to storm damage prevention and flood control. This presumption may be overcome only upon a clear showing that a coastal bank does not play a role in storm damage prevention or flood control, and if the issuing authority makes a written determination to that effect.

When issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches, the ability of the coastal bank to erode in response to wave action is critical to the protection of that interest(s).

When the issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it is a vertical buffer to storm waters, the stability of the bank, *i.e.*, the natural resistance of the bank to erosion caused by wind and rain runoff, is critical to the protection of that interest(s).

(2) Definition.

Coastal Bank means 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.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT SUPPLIES SEDIMENT TO COASTAL BEACHES, COASTAL DUNES OR BARRIER BEACHES, 310 CMR 10.30(3) THROUGH (5) SHALL APPLY:

(3) No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on such a coastal bank except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to the effective date of 310 CMR 10.21 through 10.37 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.21 through 10.37 (August 10, 1978), including reconstructions of such buildings subsequent to the effective date of 310 CMR 10.21 through 10.37, provided that the following requirements are met:

- (a) a coastal engineering structure or a modification thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due to changes in wave action, and
- (b) the applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible.
- (c) protective planting designed to reduce erosion may be permitted.

(4) Any project on a coastal bank or within 100 feet landward of the top of a coastal bank, other than a structure permitted by 310 CMR 10.30(3), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.

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(5) The Order of Conditions and the Certificate of Compliance for any new building within 100 feet landward of the top of a coastal bank permitted by the issuing authority under M.G.L. c. 131, § 40 shall contain the specific condition: 310 CMR 10.30(3), promulgated under M.G.L. c. 131, § 40, requires that no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT IS A VERTICAL BUFFER TO STORM WATERS, 310 CMR 10.30(6) THROUGH (8) SHALL APPLY:

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10.30: continued

(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

(7) Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

(8) Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.31: Rocky Intertidal Shores

(1) Preamble. Rocky intertidal shores are likely to be significant to storm damage prevention, flood control, protection of marine fisheries and wildlife habitat and where there are shellfish, protection of land containing shellfish.⁴

Rocky shore environments are habitats for macroalgae and marine invertebrates and provide protection to and food for, larger marine organisms such as crabs, lobsters, and such fish species as winter flounder, as well as a number of birds. Most marine plants and animals found in rocky shore environments are uniquely adapted to survive there and cannot survive elsewhere. Harbor seals also use rocky intertidal shores, such as rock outcroppings or isolated shores of small islands, as haul out areas.

When a proposed project involves the filling, removing or altering of a rocky intertidal shore, the issuing authority shall presume that such shore is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a rocky intertidal shore does not play a role in storm damage prevention, flood control, protection of marine fisheries or wildlife habitat, and where there are shellfish, protection of land containing shellfish and if the issuing authority makes a written determination to such effect.⁴

When a rocky intertidal shore is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat the form and volume of exposed intertidal bedrock and boulders are critical to the protection of those interests.

When a rocky intertidal shore is significant to the protection of marine fisheries or wildlife habitat, water circulation and water quality are critical to the protection of those interests.

(2) Definition.

Rocky Intertidal Shores means naturally occurring rocky areas, such as bedrock or boulder-strewn areas between the mean high water line and the mean low water line.

(3) When a Rocky Intertidal Shore Is Determined to Be Significant to Storm Damage Prevention, Flood Control, or Protection of Wildlife Habitat, any proposed project shall be designed and constructed, using the best practical measures, so as to minimize adverse effects on the form and volume of exposed intertidal bedrock and boulders.

⁴ For regulations concerning land containing shellfish, see 310 CMR 10.34.

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10.35: continued

This presumption that the impacts of the crossing have been avoided, minimized and that mitigation measures have been provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40 may be rebutted by credible evidence from a competent source.

(10.36: Reserved. Variance Provision is Found at 310 CMR 10.05(10))

10.37: Estimated Habitats of Rare Wildlife (for Coastal Wetlands)

If a project is within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife (if any) published by the Natural Heritage and Endangered Species Program (hereinafter referred to as the Program), a fully completed copy of the Notice of Intent (including all plans, reports, and other materials required under 310 CMR 10.05(4)(a) and (b)) for such project shall be sent to the Program via the U.S. Postal Service by express or priority mail (or otherwise sent in a manner that guarantees delivery within two days). Such copy shall be sent no later than the date of the filing of the Notice of Intent with the issuing authority. Proof of timely mailing or other delivery to the Program of the copy of such Notice of Intent shall be included in the Notice of Intent which is submitted to the issuing authority and sent to the Department's regional office.

Estimated Habitat Maps shall be based on the estimated geographical extent of the habitats of all state-listed vertebrate and invertebrate animal species for which a reported occurrence within the last 25 years has been accepted by the Program and incorporated into its official data base.

Within 30 days of the filing of such a Notice of Intent with the issuing authority, the Program shall determine whether any state-listed species identified on the aforementioned map are likely to continue to be located on or near the site of the original occurrence and, if so, whether the area to be altered by the proposed project is in fact part of such species' habitat. Such determination shall be presumed by the issuing authority to be correct. Any proposed project which would alter a resource area that is not located on the most recent Estimated Habitat Map (if any) provided to the conservation commission, shall be presumed not to be within a rare species' habitat. Both of these presumptions are rebuttable and may be overcome upon a clear showing to the contrary. If the issuing authority fails to receive a response from the Program within 30 days of the filing of such a Notice of Intent, a copy of which was received by the Program in a timely manner, it shall issue its Order of Conditions based on available information; however, the fact that a proposed project would alter a resource area that is located on an Estimated Habitat Map shall not be considered sufficient evidence in itself that such project is in fact within the habitat of a rare species.

If the Program determines that a resource area which would be altered by a proposed project is in fact within the habitat of a state-listed species, it shall provide in writing to the applicant and to the Conservation Commission and the Department, the identification of the species whose habitat would be altered by the proposed project, and all other relevant information which the Program has regarding the species' location and habitat requirements, insofar as such information may assist the applicant and the issuing authority to determine whether the project is or can be designed so as to meet the performance standard set in 310 CMR 10.37.

Notwithstanding 310 CMR 10.24(7) and 10.25 and 10.27 through 10.35, if a proposed project is found by the issuing authority to alter a resource area which is part of the habitat of a state-listed species, such project shall not be permitted to have any short or long term adverse effects on the habitat of the local population of that species. A determination of whether or not a proposed project will have such an adverse effect shall be made by the issuing authority. However, a written opinion of the Program on whether or not a proposed project will have such

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an adverse effect shall be presumed by the issuing authority to be correct. This presumption is rebuttable and may be overcome upon a clear showing to the contrary.

The conservation commission shall not issue an Order of Conditions under 310 CMR 10.05(6) regarding any such project for at least 30 days after the filing of the Notice of Intent, unless the Program before such time period has elapsed has either determined that the resource area(s) which would be altered by the project is not in fact within the habitat of a state-listed species or, if it has determined that such resource area(s) is in fact within rare species habitat, rendered a written opinion as to whether the project will have an adverse effect on that habitat.

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10.37: continued

Notwithstanding any other provision of 310 CMR 10.37, should an Environmental Impact Report be required for a proposed project under the M.G.L. c. 60, §§ 6 through 62II, as determined by 301 CMR 11.00: *MEPA Regulations* the performance standard established under 310 CMR 10.37 shall only apply to proposed projects which would alter the habitat of a rare species for which an occurrence has been entered into the official data base of the Massachusetts Natural Heritage and Endangered Species Program prior to the time that the Secretary of the Executive Office of Energy and Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4), that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, §§ 6 through 62II (unless, subsequent to that determination, the Secretary requires supplemental information concerning state-listed species, in accordance with the provisions of 301 CMR 11.17: *Transition Rules*).

10.51: Introduction

310 CMR 10.51 through 10.60 applies to all work which will remove, fill, dredge or alter any bank, bordering vegetated wetland, land under water bodies and waterways, land subject to flooding or riverfront area. 310 CMR 10.51 through 10.60 pertains to inland (as opposed to coastal) wetlands, and is promulgated in addition to 310 CMR 10.01 through 10.10 and 10.21 through 10.37. A project may be subject to regulation under both 310 CMR 10.01 through 10.10 and 10.21 through 10.37, in which case compliance with all applicable regulations is required.

310 CMR 10.51 through 10.60 is grouped into five resource areas. Each section begins with a Preamble which specifies the interests identified in M.G.L. c. 131, § 40 to which that resource area is or is likely to be significant. The next subsection defines the resource area and describes the characteristics of that area which are critical to the protection of the interests so identified. The next subsection sets forth the presumptions concerning the significance of the resource area. The last subsection contains the general performance standards to be applied to any work that will remove, fill, dredge or alter the resource area.

10.52: Purpose

310 CMR 10.51 through 10.60 is intended to establish criteria and standards for the uniform and coordinated administration of the provisions of M.G.L. c. 131, § 40. It is intended to ensure that development in and near inland wetlands is sited, designed, constructed and maintained in a manner that protects the public interests identified in M.G.L. c. 131, § 40 and served by these resource areas.

310 CMR 10.51 through 10.60 is intended to ensure coordination between the divisions of the Department and between the Department and other Executive Office of Energy and Environmental Affairs agencies; and to ensure consideration by the Department of relevant policies, laws or programs of other Executive Office of Energy and Environmental Affairs agencies. 310 CMR 10.51 through 10.60 is, in addition, intended to be consistent with and form a part of the Commonwealth's Coastal Zone Management Program as it has been promulgated and defined by 301 CMR 20:00: *Coastal Zone Management Program* issued pursuant to M.G.L. c. 21A. 310 CMR 10.51 through 10.60, however, is adopted independently under M.G.L. c. 131, § 40 and would remain in full force and effect in the absence of 301 CMR 20.00.

310 CMR 10.51 through 10.60 is intended to notify both persons proposing work in Areas Subject to Protection Under M.G.L. c. 131, § 40 and those regulating that work as to the performance standards that should be applied. These standards are intended to identify the level of protection that the issuing authority must impose in order to contribute to the protection of the interests identified in M.G.L. c. 131, § 40. It is the responsibility of the person proposing work

Chapter 390 WETLANDS PROTECTION

ARTICLE I

General Provisions, Definitions and Procedures

- § 390-1. Introduction and purpose.
- § 390-2. Definitions.
- § 390-3. Procedures.
- § 390-4. Severability.
- § 390-5. When effective; applicability.

ARTICLE II

Regulations for Coastal Wetlands

- § 390-6. Land under ocean.
- § 390-7. Coastal beaches (and tidal flats).
- § 390-8. Coastal dunes.
- § 390-9. Barrier beaches.
- § 390-10. Coastal banks.
- § 390-11. Salt marshes.
- § 390-12. Salt ponds.
- § 390-13. Land containing shellfish.
- § 390-14. Anadromous/Catadromous fish runs, banks along and lands under fish runs.
- § 390-15. Land subject to coastal storm flowage.
- § 390-16. Estimated habitat for rare/ significant wildlife and rare/ significant flora and fauna (for coastal wetlands).

ARTICLE III

Regulations for Inland Wetlands

- § 390-17. Inland banks and beaches.
- § 390-18. Vegetated wetlands (meadows, marshes, swamps, and bogs).
- § 390-19. Inland water bodies (lakes, creeks, streams, ponds, ditches and flats).
- § 390-20. Land subject to flooding (both bordering and isolated areas).
- § 390-21. Estimated habitat for rare/ significant wildlife and rare/ significant flora and fauna (for inland wetlands).
- § 390-22. Riverfront area.
- § 390-23. Great Pond Area

ARTICLE IV

Activities in Buffer Zone

- § 390-23. Findings; RDA or NOI required.
- § 390-24. Significance of buffer zones.
- § 390-25. Measuring cumulative impact.
- § 390-26. Filing requirements and buffer zone setbacks.

ARTICLE V

Activities to Enhance Wetland Resource Health and Function

§ 390-27. Invasive exotic plants.

§ 390-28. Control and mitigation of invasive plant species.

§ 390-29. Permitting requirements.

APPENDICIES

Appendix A, Best Management Practices for Fertilizer Use

Appendix B, Invasive Species Lists

Appendix C, Swimming Pool Guidelines

Appendix D, Viewshed Management Guidelines

Fee Schedule

for a period of 10 years and maybe amended by written request at any time it is valid using the same procedure as described above.

G. Minor Activities

Certain projects may involve minimal activity and/or alteration within Resource Area Buffer Zone or any work with the Great Pond Area. The Commission may consider such projects, as defined below, to be minor in nature and is of opinion that requiring review under an RDA or an NOI would be unnecessary. Considering the Conservation Commission designee shall have the authority to review applications for minor activities and further issue Minor Project Permits for projects that meet the standards defined herein.

Applicability: Minor projects are defined as those that occur outside of the 50' setback but inside the 100' buffer zone or within the Great Pond Area.

Minor Activities: Minor activities include but are not limited to:

- 1) Unpaved pedestrian walkways;
- 2) Split-rail fencing so long as it does not constitute a barrier to wildlife movement.
- 3) Viewshed management within the adopted viewshed management guidelines
- 4) Planting of native trees, shrubs, or groundcover, but does not include turf lawns.
- 5) Conversion of impervious surface to natural vegetation.
- 6) Removal of dead or dying trees or pruning of live trees that pose a hazard to structures or public safety as determined by a certified arborist.
- 7) Benches installed for public use.

H. Waivers of requirements.

- 1) All requests for waivers shall be in writing.
- 2) The Commission may, in its discretion, for good cause shown, grant waivers from the operation of one or more of these regulations pursuant to this subsection. Such waivers shall be granted only in accordance with the provisions of this subsection.
- 3) A waiver shall be granted only for the following reasons and upon the following conditions:
 - a) The Commission may grant a waiver from these regulations when the Commission finds that, given existing conditions, the proposed project will not adversely impact the interests identified in the Bylaw and there are no reasonable conditions or alternatives that would allow that project to proceed in compliance with the regulations. The burden of proof to show no adverse impact to the interests identified in the Bylaw, Chapter 136, Wetlands, § 136-2, of the Code of the Town of Nantucket, shall be the responsibility of the owner/applicant. The burden of proof to show no reasonable alternative shall be the responsibility of the owner/applicant and shall consist of a written alternatives analysis detailing why the proposed project cannot otherwise proceed in compliance with the performance standards in these regulations, with an explanation of why each is not feasible. It shall be the responsibility of the applicant to provide the Commission with any information which the Commission may request in order to enable the Commission to ascertain such adverse effects. The failure of the applicant to furnish any information which has been so requested may result in the denial of a request for a waiver pursuant to this subsection.
 - b) The Commission may grant a waiver from these regulations when portions of the buffer zone between the proposed project and adjacent resource area are previously altered and are not within the control of the project owner/ applicant, such as public or semi-public pedestrian and vehicular accessways.
 - c) The Commission may grant a waiver from these regulations when the Commission finds that a project will provide a long-term net benefit/ improvement to the resource area, provided any adverse effects are minimized by carefully considered conditions. However, no such project

- may be permitted which could have an adverse effect on rare wildlife species.
- d) The Commission shall grant a waiver from these regulations when the work proposed is grandfathered and qualifies as a preexisting use, as defined in § 390-2 of these regulations.
 - e) The Commission may grant a waiver from these regulations when the project as proposed provides a significant public benefit and adverse impacts are minimized by project design or conditions imposed by the Commission.
- 4) The Commission may impose additional conditions in granting a permit pursuant to this section, including imposing limits on project size or effect or requiring other compensatory measures, such as wetland replication.

I. Fees. – See attached fee schedule for amounts

- 1) Fees for the following, set from time to time by the Conservation Commission and payable to the Town of Nantucket, must be paid under the provisions of the Bylaw (and in addition to the fees required by MGL c. 131, § 40) before the pertinent application can be accepted by the Commission. **[Amended during codification]**
- a) Request for Determination of Applicability.
 - b) Notice of Intent.
 - c) Certificate of Compliance.
 - d) Extension permit.
 - e) Minor modification/Plan change.
 - f) Amended Order of Conditions.
 - g) Minor activity permit
 - h) When the Town, County of Nantucket, or Nantucket Islands Land Bank is the applicant, the fee will be waived.

J. Recording of documents.

- 1) The following documents issued by the Commission are required to be properly recorded in the Registry of Deeds or the Land Court, within the chain of title of the affected property:
- a) Order of conditions.
 - b) Amended order of conditions.
 - c) Extension permit.
 - d) Certificate of compliance.

K. Additional information.

- 1) Additional information to be provided with filings.
- a) In addition to information already required by the Commonwealth of Massachusetts, the following information is required with each notice of intent filed with the Commission:
 - 1. One paper set and one electronic set of notices of intent with all supportive plan, maps, and documents.
 - 2. Filing costs as separate checks for:
 - i. Town share of state filing fee.
 - ii. Town Bylaw fee.
 - iii. Advertising fee.
 - iv. Cost and expense of technical consultants.
 - 3. Supportive plans, maps and documents shall include, at a minimum:
 - i. DEP wetland delineation forms for all vegetated wetland resource areas (two completed forms required to show boundary, one wetland and one upland).
 - ii. Locus map.
 - iii. Project plans shall include:
 - a. Assessor's reference numbers.

ARTICLE II Regulations for Coastal Wetlands

§ 390-6. Land under ocean.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving land under the ocean are necessary and proper for the following reasons: Land under the ocean provides feeding areas, spawning and nursery grounds, and shelter for many coastal organisms related to marine fisheries and wildlife. Destruction of eelgrass beds (*Zostera marina*) will harm scallop production. Eelgrass beds also buffer against climate change by sequestering carbon and diminishing wave energy during storms. Nearshore areas, and in some cases offshore areas, of land under the ocean help reduce storm damage, erosion, and flooding by diminishing and buffering the high-energy effects of storms. Submerged sand bars dissipate wave energy. Such areas provide a source of sediment for seasonal rebuilding of coastal beaches and dunes. The bottom topography and sediment type of nearshore areas of land under the ocean are critical to erosion control, storm damage protection, flood control and resiliency. Water circulation and flushing rates, distribution of grain size, water quality (including but not limited to turbidity, temperature, nutrients, pollutants, salinity, and dissolved oxygen), and the habitat of wildlife, finfish, and shellfish are all factors critical to the protection of significant wildlife habitat and marine fin and shell fisheries. Land under the ocean in an unobstructed state is important to recreational swimming, fishing, and shellfishing, to recreational boating and sailing, to commercial fishing and shellfishing, and to wetland scenic views.
- 2) Disturbance to benthic habitats have been shown to impact the following interests of the Wetlands Protection Act:
 - a) Protection of Wildlife Habitat
 - b) Protection of Marine Fisheries (particularly juvenile Cod and other species)
 - c) Protection of Land Containing Shellfish
 - d) Storm Damage Prevention
- 3) The maintenance of the productive benthic habitats not only assures the continuance of the habitats themselves, but also plays a direct role in supporting fish and shellfish stocks by providing a major food source. The young shellfish in the planktonic larval stage that are produced in large quantities during spring and summer are an important source of food for the young stages of marine fishes and many crustaceans. When a resource area is found to be significant to the protection of land containing shellfish under 310 CMR 10.34(3), and is also significant to marine fisheries, the following factors are critical to the protection of those interests:
 - a) shellfish,
 - b) water quality,
 - c) water circulation, and
 - d) the natural relief, evaluation or distribution of sediment grain size of such land.
- 4) Under 310 CMR 10.25, the jurisdiction of the Conservation Commission extends into the Nearshore Areas of Land under the Ocean, extending seaward to a point where the land is at a depth of 40 feet below the level of the ocean at mean low water in Cape Cod Bay, and to a depth of 80 feet below mean low water in all other areas.
- 5) Under 310 CMR 34(4), "any [activity on] land containing shellfish shall not adversely affect such land or marine fisheries by a change in the productivity of such land caused by:
 - a) alterations of water circulation,
 - b) alterations in relief elevation,
 - c) the compacting of sediment by vehicular traffic,
 - d) alterations in the distribution of sediment grain size,

- e) alterations in natural drainage from adjacent land, or changes in water quality, including, but not limited to, other than natural fluctuations in the level of salinity, dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.
- 6) No activity may adversely affect land containing shellfish in the following manner:
- a) The turbulence generated by hydraulic dredging significantly increases turbidity levels. High turbidity levels attenuate light, which is necessary for photosynthetic process responsible for the primary productivity and oxygen regeneration of the water.
 - b) The suspended sediments settle on shellfish beds, smothering existing shellfish and altering the quality of the benthic environment essential for spat (mollusk larvae) settlement.
 - c) Resuspension of bottom sediments causes redistribution of sediments, alteration in sediment grain size distribution and causes changes in bottom topography relief, elevation and grade, including the creation of depressions in the bottom. Settlement of sediments into depressions can create deep pockets of highly fluid like sediment which may not be able to physically support shellfish or which can become anoxic and therefore not support shellfish.
 - d) Disturbance of sediments during the period of shellfish larval settlement hinders or prevents the effective settlement of shellfish larvae. Hydraulic dredging has also been shown to adversely impact the interest of storm damage prevention, by uprooting vegetation and undermining the stability of land under the ocean. The underwater "terrace" contours of the trenches created by hydraulic dredging contributes to erosion of the adjacent beach, coastal dunes and banks during storm events.
- 7) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon land under the ocean, the Commission shall find that such land is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, significant wildlife habitat, recreation, resiliency and wetland scenic views. These findings may be overcome only upon a clear showing that the land under the ocean does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.
- B. Performance standards. Land under the ocean shall be presumed significant to an interest protected by the Bylaw as referenced in Subsection A; therefore, the following regulations apply:
- 1) Dredging shall be designed and carried out using the best available measures as determined by the Commission so as to have the least possible adverse effects or changes in marine productivity caused by changes in, or resulting from suspension or transport of pollutants, sediment transport, smothering of bottom organisms, accumulation of pollutants by organisms, destruction of habitat or nutrient source areas, or changes in water circulation and water quality.
 - 2) All dredging shall use best available measures to minimize adverse effects caused by changes in bottom topography resulting in an increase in height and velocity of waves hitting the shore, localized changes in circulation patterns or in changes in sediment transport which affect natural replenishment of beaches or maintenance of channels.
 - 3) Residential piers shall be constructed so as not to change shoreline movement of sediment, harm shellfish resources, obstruct commercial shellfishing, or obstruct the reserved public rights of fishing, fowling, navigation, or passage. Residential piers shall be constructed so as to withstand projected sea level rise and associated impacts based on the best available scientific data and modeling during the cradle-to-grave life of the structure. Residential piers shall not displace public moorings without written approval from the Harbormaster. No solid-fill piers shall be permitted.
 - 4) Construction of commercial piers shall be in compliance with Chapter 139, Zoning, of the Code

of the Town of Nantucket and shall not affect sediment transport and shall not destroy or pollute fisheries and shellfish habitat or nutrient source areas for those resources. Commercial piers shall be constructed so as to withstand projected sea level rise and associated impacts based on the best available scientific data and modeling during the cradle-to-grave life of the structure. No solid-fill piers or new residential piers shall be permitted.

- 5) Best available measures, as determined by the Commission, shall be used to minimize adverse effects of a commercial or residential pier on the interests protected by the Bylaw.
- 6) Aquaculture projects shall be undertaken pursuant to such means as may be established by the Commission so as to have the least possible adverse effect on wildlife, erosion control, storm damage prevention, flood control, recreation, resiliency or public access. No destruction of habitat or areas where shellfish feed, or change in water quality or circulation in any manner which adversely affects productivity of marine fisheries or shellfish beds shall be permitted.
- 7) No new bulkheads, groins or coastal engineering structures shall be permitted to protect structures constructed or substantially improved after August 1978. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem. An alternatives analysis must examine living shorelines or in appropriate cases the moving of the threatened building. If either of these methods is feasible then the bulkhead or groin may not be rebuilt. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to September 1978, but not substantially improved, from imminent danger. The use of any or all forms of coastal engineering structures requires an appropriate annual mitigation plan and implementation to ensure no adverse impacts as set forth by the Commission. Mitigation shall reflect current and future needs to ensure no adverse impacts.
- 8) Water-dependent projects shall be designed and performed so as to cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control, recreation, resiliency and aquatic vegetation.
- 9) No activity that disturbs benthic habitats shall occur within the waters under the jurisdiction of the Nantucket Conservation Commission without a proper filing before the Conservation Commission.
- 10) Taking of shellfish or finfish by mechanical means including but not limited to trawls, drags, rakes and hydraulic gear with the assistance of machinery is prohibited within Nantucket waters. This does not include the use of bay scallop dredges, manual rakes or other hand operated devices for the collection of shellfish or baitfish with or without the use of scuba gear.
- 11) No activity on land under the ocean which is not water-dependent shall be permitted by the Commission, except activity allowed pursuant to a waiver from these regulations, as set forth in § 390-3F.
- 12) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-7. Coastal beaches (and tidal flats).

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving coastal beaches and tidal flats are necessary and proper for the following reasons: Coastal beaches and tidal flats aid in storm damage prevention, erosion and flood control; and coastal resilience in buffering inland areas from climate change impacts including but not limited to sea-level rise and increased storm frequency; serve as a source of sediment for downdrift coastal resource areas; serve to provide wildlife habitat to rare, endangered, and otherwise significant wildlife; serve to protect and provide habitat for marine fisheries and shellfish; and serve to provide important wetland scenic views and recreation. Coastal beaches dissipate wave energy by their gentle slope, their permeability, and their granular nature, which permit changes in beach form in response to changes in wave conditions. Coastal beaches serve as a sediment source for dunes and subtidal

areas. Steep storm waves cause beach sediment to move offshore, resulting in a gentler beach slope and greater energy dissipation. Less steep waves cause an onshore return of beach sediment, where it will be available to provide protection against future storm waves. A coastal beach at any point serves as a sediment source for coastal areas downdrift from that point. The oblique approach of waves moves beach sediment alongshore in the general direction of wave action. Thus, the coastal beach is a body of sediment which is moving along the shore. Coastal beaches serve the purpose of storm damage prevention, erosion control, and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean, and other coastal beaches. As relative sea level continues to rise, and possibly accelerate as predicted, it is important to provide source material to allow these inter-tidal and sub-tidal areas to vertically accrete and continue to reduce storm damage, increase flood control, protection of land containing shellfish, and protection of wildlife habitat. Interruptions of these natural processes by man-made structures and/or activities reduce the ability of the coastal beach to perform these functions. Tidal flats are important to the protection of marine fisheries because they provide habitats for marine organisms, such as polychaete worms and mollusks, which in turn are food sources for fish. Tidal flats are also sites where organic and inorganic materials are entrapped and then returned to the photosynthetic zone of the water column to support algae and other primary producers of the marine food web. Coastal beaches and flats serve as important habitats for a wide variety of wildlife, including but not limited to coastal birds, turtles, shellfish and finfish. In particular, they are used by coastal birds for feeding areas and nesting sites. The natural erosional and depositional cycles, sediment grain size, water quality (including but not limited to turbidity, temperature, nutrients, pollutants, salinity, and dissolved oxygen) and circulation, and elevation of the land surface are all features of wildlife habitat which are critical characteristics for the protection of wildlife. Characteristics of coastal beaches and flats which are critical to the protection of marine fisheries, and shellfish and their habitat include: distribution of sediment grain size, movement of sediment, water quality (including the characteristics given above) and circulation, and beach relief and elevation. Characteristics of coastal beaches and flats which are critical to storm damage prevention, erosion control, or flood control and coastal resilience include sediment volume and form, their ability to respond to wave action, natural erosional and depositional cycles, and wave intensities. Characteristics of coastal beaches and flats which are critical to recreation are topography, sediment grain size, water quality (including the characteristics given above), water circulation rates and patterns, unobstructed access along shore, natural erosional and depositional cycles, and wave intensity. Characteristics of coastal beaches which are critical to wetland scenic views are natural erosion and deposition cycles, relief and elevation, sense of openness, and solitude. Land within 100 feet of a coastal beach or tidal flat is considered to be important to the protection and maintenance of coastal beaches and tidal flats, and therefore to the protection of the wetland values which these areas contain.

- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering, or building upon a coastal beach or flat, the Commission shall find that the beach or flat is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, recreation, resiliency and wetland scenic views. These findings may be overcome only upon a clear showing that the beach or flat does not play a role in protecting any of the interests given above and upon only a specific written determination to that effect by the Commission.
- 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 Subsection A; therefore, the following regulations shall apply:

- 1) The provisions of § 390-6B(1) through (8) (regarding land under the ocean) shall apply to coastal beaches and tidal flats.
- 2) No new bulkheads, groins or coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after August 1978. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem. An alternatives analysis must examine a green infrastructure alternative such as a living shoreline or in appropriate cases the moving of the threatened building. If either of these methods is feasible then the bulkhead or groin may not be rebuilt. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to September 1978, and not substantially improved, from imminent danger. The use of any and all forms of coastal engineering structures requires an appropriate annual mitigation plan and implementation to ensure no adverse impacts as set forth by the Commission. Mitigation shall reflect current and future needs to ensure no adverse impacts to the littoral system or adjacent coastal beach and/or coastal dunes.
- 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.
- 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.
- 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.
- 6) Proposed projects which are not water dependent shall maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the twenty-five-foot buffer zone and fifty-foot setback disturbed. All structures which are not water dependent shall be located at least 75 feet from a coastal beach.
Exception: Structures shall be permitted down to the 50-foot setback provided that the undisturbed buffer zone is enhanced by 1.5X the structural area between the 50' setback and 75' setback in a manner contiguous with the undisturbed buffer zone. Any constructed bioswale shall count against this area so long as it is contiguous with the original undisturbed buffer zone. All structures in existence at the enactment of this performance standard will only be required to meet this requirement upon any expansion of the structure based on the area of expansion.
- 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 less. The average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a one-hundred-fifty-year period ending the date the NNOI was filed or, if no NNOI was filed, the date construction began. If erosion data are not available for the one-hundred-fifty-year period, the Commission shall determine the average annual erosion rate from such lesser time period for which erosion data is available. A second annual average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 10 year period ending the date the NOI was filed, or if no NOI was filed, the date construction began to determine if erosion has accelerated. If erosion has accelerated over the contemporary time period, the higher erosion rate shall be used to determine mitigation requirements for the application. In cases where documentation can be provided to show that the use of the 10- or one-hundred-fifty-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.
- 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.
- 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 A¹).

- 10) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-8. Coastal dunes.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving coastal dunes are necessary and proper for the following reasons: Coastal dunes, including coastal dune fields, aid in storm damage prevention, erosion and flood control; protect land in coastal areas from storm damage and flooding; serve as a sediment source for beach and intertidal areas; serve to provide wildlife habitat to rare, endangered, and otherwise significant wildlife; and serve to provide important wetland scenic views and recreation. Coastal dunes aid in storm damage prevention, erosion control, and flood control by supplying sand to coastal beaches. Coastal dunes do not significantly inhibit transport of pollutants into groundwater. Coastal dunes protect inland coastal areas from storm damage and flooding by storm waves and elevated sea levels because such dunes are higher than the coastal beaches which they border. Vegetated cover contributes to the growth and stability of coastal dunes by providing conditions favorable to sand deposition. On retreating shorelines, the ability of coastal dunes bordering a coastal beach to move landward at a rate of shoreline retreat allows these dunes to maintain their form and volume. Characteristics of coastal dunes which are critical for storm damage prevention, flood control, and erosion control include: ability of the dune to erode and change in response to coastal beach conditions; dune volume, sediment grain size, and slope; dune form, which can change with wind and natural water flow; amount, continuity, and density of vegetative cover; wildlife habitat and ability of a dune to move landward and laterally. Coastal dunes are important habitats for a wide variety of wildlife, particularly turtles and birds for feeding and nesting areas. The amount of vegetation, dune height and slope, sediment grain size, and degree of isolation from human-caused disturbances are all features of dunes which are critical characteristics for the protection of wildlife. Characteristics of coastal dunes which are critical to wetland scenic views are dune form, slope, elevation, size of dunefield, proportion and scale of dunes in relationship with other land forms. Land within 100 feet of a coastal dune is considered to be significant to the protection and maintenance of coastal dunes, and therefore to the protection of the wetland values which these areas contain.
- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon a coastal dune, the Commission shall find that the dune is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, prevention of pollution, resiliency wildlife, and wetland scenic views. These findings may be overcome only upon a clear showing that the dune does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.

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 Subsection A; therefore, the following regulations shall apply:

- 1) No coastal revetments or coastal engineering structures of any type shall be constructed, rebuilt, or repaired.
- 2) Proposed projects which are not water dependent shall maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the twenty-five-foot buffer zone and fifty-foot setback disturbed. All structures which are not water dependent shall be located at least 75 feet from a coastal dune.

Exception: Structures shall be permitted down to the 50-foot setback provided that the undisturbed buffer zone is enhanced by 1.5X the structural area between the 50' setback and 75' setback in a manner contiguous with the undisturbed buffer zone. Any constructed bioswale shall count against this area so long as it is contiguous with the original undisturbed buffer zone. All structures in existence at the enactment of this performance standard will only be required to meet this requirement upon any expansion of the structure based on the area of expansion.

- 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.
- 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.
- 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.
- 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.
- 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.
- 8) Any pedestrian or elevated walkway must be designed as determined by the Commission so as to minimize disturbances of 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 A²).
- 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.
- 11) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-9. Barrier beaches.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving barrier beaches are necessary and proper for the following reasons: Barrier beaches are composed of tidal flats, beaches, and dunes. As such, barrier beaches perform the same functions and are critical to the same interests as referenced in § 390-7 and § 390-8 of these regulations and therefore these provisions shall also apply to barrier beaches. Barrier beaches protect landward areas from flooding and erosion because they provide a buffer to storm waves and to sea levels elevated by storms. Barrier beaches protect from wave action such highly productive areas as dunes, tidal flats, salt marshes, estuaries, lagoons, harbors, salt ponds, and freshwater marshes and ponds, which are in turn important to fisheries, shellfish and wildlife habitat. Barrier beaches are maintained by the alongshore movement of beach sediment caused by wave action. The coastal dunes, beaches, and tidal flats of a barrier beach are made up of sediment supplied by wind action, storm wave overwash, and tidal inlet deposition. Barrier beaches in Massachusetts undergo a landward or alongshore migration caused by the landward and alongshore movement of sediment by wind, storm waves, and tidal current processes. The continuation of these processes maintains the volume of the landform which is necessary to carry out its storm and flood buffer functions. The ability of barrier beaches to respond to wave action, including storm overwash sediment transport, is critical to the protection of wetlands values of barrier beaches.
- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon a barrier beach, the Commission shall find that the barrier beach is significant to the protection of the following interests: flood control, erosion control,

resiliency, water pollution, storm damage prevention, fisheries, shellfish, wildlife habitat, recreation, and wetland scenic views. Barrier beaches shall be found significant to private water supply and groundwater if there are existing houses with wells on or near the barrier beach or if the barrier beach abuts, creates, or protects a swamp, freshwater marsh, or pond. These findings may be overcome only upon a clear showing that the barrier beach does not play a role in protecting any of these interests given above and only upon specific written determination to that effect by the Commission.

B. Performance standards. A barrier beach or land within 100 feet of a barrier beach shall be presumed significant to the interests protected by the Bylaw as referenced in Subsection A; therefore, the following regulations shall apply:

- 1) No coastal revetments or coastal engineering structures of any type shall be constructed, rebuilt, or repaired.
- 2) Fill may be used only if the Commission authorizes its use and only if such fill is to be used for beach or dune nourishment projects.
- 3) No septic system or buildings shall be constructed on a barrier beach. Buildings which pre-exist these regulations may be maintained and repaired. Existing septic systems may be maintained, repaired and upgraded to the best available measures. No expansion of septic systems shall be permitted. [Amended during codification]
- 4) Excavation of sand around existing houses may be permitted, but no new projects shall be permitted which will require periodic sand removal for maintenance. All disturbed areas (including blowouts) shall be stabilized through planting of vegetation. The evacuated sand must be retained in the area and be part of the barrier beach.
- 5) Vehicular access for existing houses or for recreational use shall be unpaved roads and shall be done in accordance with such procedures as the Commission determines will minimize any adverse effect on the barrier beach.
- 6) No excavation or disturbance of vegetation shall be permitted on a barrier beach unless the area is completely restored, replanted, and stabilized to its original form and volume.
- 7) 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 A³).
- 8) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-10. Coastal banks.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving coastal banks are necessary and proper for the following reasons: Coastal banks may serve as a source of sediment for other coastal landforms, including beaches, dunes, tidal flats, barrier beaches, and land under the ocean; act as a vertical buffer which protects upland areas from storm damage, erosion, and flooding; provide wildlife habitat to common as well as rare, endangered, and otherwise significant wildlife; and serve to provide important wetland scenic views. Coastal banks composed of unconsolidated sediment and exposed to wave action serve as a major source of sediment for other coastal landforms, including beaches, dunes, and barrier beaches. The supply of sediment is removed from banks by wave action. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes, and barrier beaches. These areas dissipate storm wave energy, thus protecting structures and coastal wetlands landward of them from storm damage, erosion, and flooding. Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage, erosion, and flooding. While erosion caused by wave action is an integral part of shoreline processes and furnishes important sediment to downdrift landforms, erosion of a coastal bank by wind and rain runoff, which plays a minor role in beach nourishment, should not be

increased unnecessarily. Disturbances to a coastal bank which reduce its natural resistance to wind and rain erosion cause cuts and gullies in the bank, and decrease its value as a buffer. As relative sea level continues to rise, and possibly accelerate, Coastal Banks' role in providing sediment to inter- and sub-tidal areas, and as a physical barrier to storm damage, flood control, and protection of wildlife habitat also increases. Vegetation tends to stabilize a coastal bank and reduce the rate of erosion due to wind and rain runoff. Vegetated banks are critical to reducing wind and rain erosion and for providing important habitat and biodiversity. A particular coastal bank may serve both as a sediment source and as a buffer or it may serve only one role. Coastal banks provide habitat for wildlife, particularly nesting birds. Characteristics of coastal banks which are critical to wildlife are bank steepness, height, stability, soil size and compaction, and vegetative cover and diversity. Characteristics of coastal banks that are critical to wetland scenic views are bank form, slope, elevation, proportion and scale in relationship to other landforms, vegetative characteristics and diversity, wildlife and habitat, and a sense of presence and solitude. All coastal banks are defined as primary coastal banks for the purposes of Town of Nantucket bylaws.

- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering, or building upon a coastal bank, the Commission shall find that the bank is significant to the protection of the following interests: flood control, erosion control, resiliency, storm damage prevention, wetland scenic views, and wildlife. These findings may be overcome only upon a clear showing that the coastal bank does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.

B. Performance standards. Coastal banks or land within 100 feet of a coastal bank shall be presumed significant to the interests protected by the Bylaw as referenced in Subsection A; therefore, the following regulations shall apply:

- 1) No new bulkheads, coastal revetments, groins, or other coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after August 1978.. Bulkheads and groins may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem. An alternatives analysis must examine living shorelines or in appropriate cases the moving of the threatened building or infrastructure. If either of these methods is feasible then the bulkhead or groin may not be rebuilt. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure that has not been substantially improved or public infrastructure built prior to September 1978 from imminent danger. The mitigation provided for use of any structure to protect against erosion must have no adverse impact on adjoining coastal beach, coastal dune, barrier beach, or coastal banks.
- 2) Piers shall be constructed in compliance with Chapter 139, Zoning, of the Code of the Town of Nantucket using procedures determined by the Commission to be the best available measures to minimize adverse effects on interests protected by the Bylaw.
- 3) All projects shall be restricted to activity as determined by the Commission to have no adverse effect on bank height, bank stability, wildlife habitat, vegetation, wetland scenic view, or the use of a bank as a sediment source.
- 4) Elevated walkways designed not to affect bank vegetation shall be required for pedestrian passage over a bank.
- 5) Proposed projects which are not water dependent shall maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the twenty-five-foot buffer zone and fifty-foot setback disturbed. All structures which are not water dependent shall be located at least 75 feet from a coastal bank.
Exception: Structures shall be permitted down to the 50-foot setback provided that the

undisturbed buffer zone is enhanced by 1.5X the structural area between the 50' setback and 75' setback in a manner contiguous with the undisturbed buffer zone. Any constructed bioswale shall count against this area so long as it is contiguous with the original undisturbed buffer zone. All structures in existence at the enactment of this performance standard will only be required to meet this requirement upon any expansion of the structure based on the area of expansion.

- 6) The septic leach facility of a septic system shall be constructed at least 100 feet from the top of the coastal bank and shall not be located within the face of the coastal bank.
- 7) In areas of an eroding coastal bank, the distance from all new structures to the coastal bank shall be at least 20 times the average annual erosion rate or 100 feet, whichever is lesser. The average annual erosion rate shall be determined by averaging the annual erosion over a one-hundred-fifty-year period ending with the date the NOI was filed or, if no NOI was filed, the date construction began. If erosion data are not available for the one-hundred-fifty-year period, the Commission shall determine the average annual erosion rate from such lesser time for which erosion data is available. A second annual average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 10 year period ending the date the NOI was filed, or if no NOI was filed, the date construction began to determine if erosion has accelerated. If erosion has accelerated over the contemporary time period, the higher erosion rate shall be used to determine mitigation requirements for the application. In cases where documentation can be provided to show that the use of the one-hundred-fifty-year period is inappropriate to existing coastal shoreline characteristics and trends, alternate shoreline change rates may be used with the approval of the Commission.
- 8) All permits issued for the substantial improvement of an existing building or new construction of buildings under the Bylaw within 100 feet landward of the top of a coastal bank shall contain the specific condition that no coastal engineering structure of any kind shall be permitted on an eroding bank in the future to protect the project allowed by this permit, except those coastal engineering structures allowed by a waiver issued pursuant to § 390-3F of these regulations.
- 9) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-11. Salt marshes.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving salt marshes are necessary and proper for the following reasons: Salt marshes serve to support marine organisms, including finfish and shellfish; serve to provide critical wildlife habitat; serve to remove pollutants from surrounding waters; serve to aid in erosion control and storm damage prevention; and are important to fishing, shell fishing, recreation, and wetland scenic views. A salt marsh produces large amounts of organic matter. A significant portion of this material is exported as detritus and dissolved organics to estuarine and coastal waters, where it provides the basis for a large food web that supports many marine organisms, including finfish and shellfish. Salt marshes also provide spawning and nursery habitat for several important estuarine forage finfish. Salt marsh plants and substrate remove pollutants from surrounding waters. The network of salt marsh vegetation roots and rhizomes binds the sediments together. The sediments absorb chlorinated hydrocarbons and heavy metals such as lead, copper, and iron. The marsh also helps retain nitrogen and phosphorous compounds which can cause algal blooms and changes in ocean plankton and plant communities, particularly eelgrass. The underlying peat serves as a barrier between fresh groundwater landward of the marsh and the ocean, thus helping to maintain the level of the groundwater. Salt marsh cord grass and underlying peat are resistant to erosion and dissipate wave energy, thereby providing a buffer that reduces wave damage and coastal erosion. A saltmarsh is an important feeding and spawning area for many types of fish and aquatic and terrestrial wildlife. The marsh, including its creeks and open water, also provides important shelter for many aquatic and migratory birds. Marshes help absorb pollutants, but there is a

§ 390-16. Estimated habitat for rare/significant wildlife and rare/significant flora and fauna (for coastal wetlands).

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving estimated habitat for rare/significant wildlife and rare/significant flora and fauna for coastal wetlands are necessary and proper for the following reasons: Any coastal resource area identified in Chapter 136, Wetlands, § 136-3, of the Code of the Town of Nantucket within which is found any state rare species (plant or animal) officially listed by the Massachusetts Division of Fisheries and Wildlife, or in which is found any species (plant or animal) the Commission has recognized as significant under the Bylaw, or any coastal resource area falling within any of the most recent Estimated Habitat Maps of the Massachusetts Natural Heritage and Endangered Species Program, shall be considered rare/significant species habitat, as defined in § 390-2 of these regulations. Rare/Significant species habitat preservation is important in order to maintain healthy ecosystems, wetland resources and biodiversity, and is important for protecting recreational interests, and in protecting wetland scenic views.
- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building within areas of estimated habitat for rare/significant wildlife and rare/significant fauna for coastal wetlands, the Commission shall find that such land is significant to the protection of the following interests: fisheries, shellfish, wildlife, biodiversity, recreation, and wetland scenic views. These findings may be overcome only upon a clear showing that these estimated habitat areas do not play a role in protecting any of the interests given above and only upon a specific determination to that effect by the Commission.

B. Performance standards. Estimated habitat areas shall be presumed significant to the interests protected by the Bylaw as referenced in Subsection A; therefore, the following regulations shall apply:

- 1) No activity shall be permitted that alters existing vegetation within 25 feet of verified rare/significant species habitat.
- 2) No activity shall be permitted that results in the construction or enlargement of a structure within 50 feet of verified rare/significant species habitat.
- 3) No alteration of topography (filling or cutting) and/or drainage characteristics shall be permitted within 50 feet of verified rare/significant species habitat.
- 4) No new construction or enlargement of drainage facilities within 25 feet of verified rare/significant species habitat shall be permitted.
- 5) No part of any septic system shall be placed within 50 feet and no leaching facility shall be placed within 100 feet of a verified rare/significant species habitat.
- 6) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

ABUTTER NOTIFICATION INFORMATION

Abutters Listing

MBLJ	Lot	Lo/Cl	Name Line 1	Name Line 2	Address Line 1	City	State	Zip	Location
82	29		GRIBBEL JAMES L TRST ET AL	C/O CAVANAUGH NANCY	15 OLD STAMFORD RD UNIT B	NEW CANAAN	CT	06840	12 CAROLINE WY
82	31		EVERETT RICHARD M III & MCNEIL BRIAN W & MARGARET TRS MACACK LLC	CORDELIA C & OWNERS UNKNOWN ET	115 PATTON AVE 40 BRISTOL RD	PRINCETON WELLESLEY	NJ MA	06840 02481	240 HUMMOCK POND RD 10 MATTAPOISETT AV
82	117		JENNER KYLE W TR	SIX SACCACHA AVE REALTY TRUST	203 SABLE OAK DRIVE	INDIAN RIVER SHORE	FL	32963	3 MARION AV
82	336		LHOTA JOSEPH J & TAMRA ROBERTS	11 MATTAPOISETT AVE NOM TRUST	3323 N SUMMERHILL DR	FAYETTEVILLE	AR	72703	6 SACCACHA AV
82	356		CONNOLLY SARAH T TR	NANTUCKET CONSERVATION FOUND	35 PIERREPOINT ST	BROOKLYN HEIGHTS	NY	11201	6 FAIRHAVEN AV
82	376		VOZELLA PAUL F TRUSTEE & JENNINGS JANICE M TRST	JENNINGS GENERATIONAL TRUST	74 BEARD WY 83 PAKACHOAG ST	NEEDHAM AUBURN	MA MA	02492 01501	11 MATTAPOISETT AV MARION AV
82	402		JENNINGS JANICE M TRST	JENNINGS GENERATIONAL TRUST	11674 LAKE HOUSE CT	NORTH PALM BEACH	FL	33408	2 MARION AV
82	409		SWORDS BRENDAN J	JENNINGS GENERATIONAL TRUST	57 BEACON ST APT 2	BOSTON	MA	02108	10 MARION AV
82	409	1	NANTUCKET TOWN OF	JENNINGS GENERATIONAL TRUST	16 BROAD ST	NANTUCKET	MA	02554	MARION AV
82	411		POWERS MARIANNE ELMASRI TR	POWERS MARIANNE ELMASRI TRUST	1473 NORTH OCEAN BLVD	PALM BEACH	FL	33480	1 FALMOUTH AV
82	413		CALCAM BEACH HOME LLC	C/O PETER STEINGRABER	292 NEWBURY ST UNIT 501	BOSTON	MA	02115	3 FALMOUTH AV
82	423		OCEAN HEATH LLC	SAMANTHA JANE TRUST	PO BOX 7759	GREENWICH	CT	06836-7759	9 FALMOUTH AV
83	23		BELFORD PATRICIA R TRUSTEE	SAMANTHA JANE TRUST	3080 GRAND BAY BLVD #544	LONGBOAT KEY	FL	34228	1 TAUTEMO WY
83	25		FLAVIN GERARD C & SANDRA K	SAMANTHA JANE TRUST	6754 N GRAPE CREEK RD	FREDERICKSBURG	TX	78624	249 HUMMOCK POND RD
83	26		251 HUMMOCK POND ROAD LLC	C/O KATHERINE & ANTHONY VERNACE	52 CENTRE ST	RYE	NY	10580	251 HUMMOCK POND RD
83	29		LEIGHTON ILANA H & DOUGLAS	C/O KATHERINE & ANTHONY VERNACE	253 HUMMOCK POND RD	NANTUCKET	MA	02554	253 HUMMOCK POND RD
83	30		NANTUCKET ISLANDS LAND BANK ETAL	C/O KATHERINE & ANTHONY VERNACE	22 BROAD STREET	NANTUCKET	MA	02554	260 HUMMOCK POND RD
83	31		NANTUCKET CONSERVATION FOUND I	C/O KATHERINE & ANTHONY VERNACE	PO BOX 13	NANTUCKET	MA	02554	260R HUMMOCK POND RD
Count:									20

TOWN OF NANTUCKET
CONSERVATION COMMISSION

LIST OF PARTIES IN INTEREST IN THE MATTER OF THE PETITION OF:

PROPERTY OWNER: Nantucket Islands Land Bank

MAILING ADDRESS: 22 Broad Street Nantucket, MA 02554

PROPERTY LOCATION: Smooth Hummocks (Cisco Beach)

ASSESSOR MAP/PARCEL: 82/30

SUBMITTED BY: Liz Phelps

SEE ATTACHED PAGES

I certify the foregoing is a list of persons who are owners of land directly abutting the property on which the proposed activity will occur (the locus), owners of land separated a distance of one hundred feet or less from the locus by a public or private street or way or stream and owners of land separated a distance of three hundred feet or less from the locus by a body of water, all as they appear on the most recent applicable tax list.

NOVEMBER 7, 2025

DATE

ASSESSOR'S OFFICE
TOWN OF NANTUCKET



Nantucket Conservation Commission Notice of Public Hearing

Dear Abutter:

In accordance with MGL Chapter 131, Section 40 and pursuant to 310 CMR 10.05, et seq., and Nantucket By-law Chapter 136, Section 4, you are hereby notified that a Public Hearing will be held during the Conservation Commission Meeting, which will be held in hybrid format starting at 5:00 PM. In-person participation will be located in the Trailer, Room A, 131 Pleasant Street, and remote participation is via Zoom and You Tube. Information on viewing the meeting can be found at: <https://www.nantucket-ma.gov/138/Boards-Commissions-Committees>

The purpose of the meeting is to open a Public Hearing for a Notice of Intent, the cover sheet of which is enclosed.

January 8, 2026

Date of Public Hearing

Smooth Hummocks
(Map 82, Parcel 30)

Street Address/Map & Parcel

Nantucket Islands Land Bank

Applicant Name

The Applicant proposes to relocate a portion of Falmouth Ave, which provides access to the Cisco Beach parking lot, due to erosion concerns.

Description of Proposed Work

For a digital copy of the filing please email Lisa Graves at lgraves@nantucket-ma.gov. Copies of the complete application are available for examination at the Conservation Commission/Natural Resources office at 131 Pleasant Street during normal business hours, or by appointment made by calling the Commission Office at (508) – 228 – 7230.

EXHIBIT B



**Notice of Intent Application
Falmouth Ave Relocation
Smooth Hummocks (Map 82, Parcel 30), Nantucket, MA**

**Prepared for:
The Nantucket Conservation Commission
131 Pleasant Street
2nd Floor
Nantucket, MA 02554**

**Prepared by:
The Nantucket Islands Land Bank**

January 30, 2025



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **EPHELPSLB**

Transaction ID: **1867749**

Document: **WPA Form 3 - NOI**

Size of File: **272.34K**

Status of Transaction: **In Process**

Date and Time Created: **1/30/2025:11:23:01 AM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



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 #:1867749
City/Town:NANTUCKET

A.General Information

1. Project Location:

a. Street Address	SMOOTH HUMMOCKS	c. Zip Code	02554
b. City/Town	NANTUCKET	e. Longitude	70.15124W
d. Latitude	41.25229N	g.Parcel/Lot #	30
f. Map/Plat #	82		

2. Applicant:

Individual Organization

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	508-228-9369
j. Email	ephelps@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	508-228-9369
j. Email	ephelps@nantucketlandbank.org		

4. Representative:

a. First Name	ELIZABETH	b. Last Name	PHELPS
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	508-228-9369
j. Email	ephelps@nantucketlandbank.org		

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
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6. General Project Description:

THE APPLICANT PROPOSES TO RELOCATE A PORTION OF FALMOUTH AVE, A SAND ROAD THAT PROVIDES ACCESS TO THE CISCO BEACH PARKING LOT, DUE TO THE THREAT OF EROSION.

7a. Project Type:

- | | |
|---|--|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Limited Project Driveway Crossing | 4. <input type="checkbox"/> Commercial/Industrial |
| 5. <input type="checkbox"/> Dock/Pier | 6. <input type="checkbox"/> Utilities |
| 7. <input type="checkbox"/> Coastal Engineering Structure | 8. <input type="checkbox"/> Agriculture (eg., cranberries, forestry) |
| 9. <input type="checkbox"/> Transportation | 10. <input checked="" type="checkbox"/> 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



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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:	c. Book:	d. Page:
NANTUCKET		646	258

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

1. Buffer Zone & Resource Area Impacts (temporary & permanent):

This is a Buffer Zone only project - 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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
---------------	-----------------------------	-------------------------------

a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
----------------------------------	----------------	----------------

b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
---	----------------	----------------

c. <input type="checkbox"/> Land under Waterbodies and Waterways	1. Square feet	2. square feet
--	----------------	----------------

3. cubic yards dredged

d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
--	----------------	----------------

3. cubic feet of flood storage lost 4. cubic feet replaced

e. <input type="checkbox"/> 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 any)

- 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.



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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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Designated Port Areas	Indicate size under	Land under the ocean below,
b. <input type="checkbox"/> Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes, below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. <input checked="" type="checkbox"/> Coastal Dunes	1500	
	1. square feet	2. cubic yards dune nourishment
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab, crea.
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet	
k. <input type="checkbox"/> 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. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet	

4.Restoration/Enhancement

Restoration/Replacement

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 entered the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5.Projects Involves Stream Crossings

Project Involves Streams Crossings



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If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

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 of Endangered Species program (NHESP)?

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

b. Date of map:2021

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18)...

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

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

3. Project plans for entire project site, including wetland resource areas and areas outside of wetland 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

c. MESA filing fee (fee information available at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html>)

Make check payable to "Natural Heritage & Endangered Species Fund" 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

d. 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/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14>; 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 Number

b. Date submitted to NHESP



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 #:1867749
City/Town:NANTUCKET

3. Separate MESA review completed.

Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

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

a. Not applicable - project is in inland resource area only

b. Yes No

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

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

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 S. Rodney French Blvd
New Bedford, MA 02744

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it 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.

3. 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 DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. 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

5. 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

6. 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, Explain why the project is exempt:

1. Single Family Home

2. Emergency Road Repair



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 #:1867749
City/Town:NANTUCKET

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

D. Additional Information

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 by regular mail delivery.

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.
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.

a. Plan Title: b. Plan Prepared By: c. Plan Signed/Stamped By: c. Revised Final Date: e. Scale:

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.



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 #:1867749
City/Town:NANTUCKET

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:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payer name on check: First Name

7. Payer name on check: Last Name

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.

1. Signature of Applicant

2. Date

3. Signature of Property Owner(if different)

4. Date

Elizabeth Phelps

1/30/2025

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 Section C, Items 1-3, 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.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Wetland Fee Transmittal
Form

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

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1867749
City/Town:NANTUCKET

A. Applicant Information

1. Applicant:

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 5082287240 i. Fax 5082289369 j. Email ephelps@nantucketlandbank.org

2. Property Owner:(if different)

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 5082287240 i. Fax 5082289369 j. Email ephelps@nantucketlandbank.org

3. Project Location:

a. Street Address SMOOTH HUMMOCKS b. City/Town NANTUCKET

Are you exempted from Fee? (YOU HAVE SELECTED 'YES')

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than \$100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total
	City/Town share of filing fee	State share of filing fee	Total Project Fee	
	\$0.00	\$0.00	\$0.00	



List of Plans and Supporting Documents

Falmouth Ave Relocation

Smooth Hummocks (Map 82/Parcel 30), Nantucket, Massachusetts

Notice of Intent

1. Project Narrative, Resource Area Descriptions, and Waiver Request
2. Figures
 - 1: Site Locus
 - 2: Existing Conditions
 - 3: Resource Areas
 - 4: NHESP Habitat and Land Subject to Flooding
 - 5: Proposed Restoration Plan
3. Photographs
4. Project Plan
5. Abutter Notification
6. NHESP Notification Letter

**PROJECT NARRATIVE, RESOURCE AREA DESCRIPTIONS,
AND WAIVER REQUESTS**



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

Site Description and Background

The Nantucket Islands Land Bank (“Land Bank”) is submitting this Notice of Intent (NOI) application to relocate a portion of a dirt road, known as Falmouth Ave, at the Cisco Beach property identified as Smooth Hummocks (Map 82/Parcel 30) in Nantucket, Massachusetts (the site). Falmouth Ave provides access to the southern Cisco Beach parking lot from the residential neighborhoods to the east.

The site is bound to the north by a vacant parcel beyond which is Hummock Pond Road, to the east by residences, to the south by the Atlantic Ocean, and to the west by an access driveway to the Cisco Beach parking lot off of Hummock Pond Road. Much of the site is sandplain-heathland. Falmouth Ave and the Cisco Beach parking lot are located within the southern portion of the site, beyond which is Cisco Beach. Figures 1 and 2 (Attachment 2) depict the site location and existing conditions, and photographs are included in Attachment 3.

Bank erosion has compromised the southern parking lot, forcing the closure of the front (southern) section, and the Land Bank recently permitted a secondary parking area on the opposite side of the access driveway to the north. The new parking area required coordination with the Massachusetts Natural Heritage Endangered Species Program (NHESP) but is not within the 100-foot buffer to any wetland resource areas. The rear (northern) section of the original parking lot is still being used to provide public access to Cisco Beach; however, erosion is threatening the southwestern portion of Falmouth Ave, which provides access to the lot from the east.

The purpose of this Notice of Intent is to request permission to relocate the southwestern section of Falmouth Ave to the north, connect it to the existing northern portion, and restore the abandoned roadbed with native plantings.

Wetland Resource Areas

Resource areas on the site subject to protection under the Massachusetts Wetlands Protection Act (M.G.L., c. 131, s.40) and the Nantucket Wetland Bylaw Regulations (Chapter 136) include Land Under the Ocean (310 CMR 10.25/ Bylaw Section 2.01), Coastal Beach (310 CMR 10.27/Bylaw Section 2.02), Coastal Dune (310 CMR 10.28/Bylaw Section 2.03), Coastal Bank (310 CMR 10.30/Bylaw Section 2.05), and Land Subject to Coastal Storm Flowage (310 CMR 10.04 Bylaw Section 2.10). Please refer to Figures 3 and 4 for a depiction of the resource areas on the site.

As shown on the engineered plan included in Attachment 4, portions of the proposed new section of Falmouth Ave are within the 75-foot and/or the 100-foot buffer zones to the Coastal Dune; however, it is not within any of the other resource areas or buffer zones. As shown on the plan, we are also proposing a swale to the south of the roadway for drainage purposes. The swale is outside the 50-foot buffer to the Coastal Dune. The existing southwestern portion of Falmouth Ave for proposed restoration (native plantings) is located partially within the dune and its 25-foot buffer zone, as well as partially within the buffer to the Coastal Bank and the Coastal Beach. None of the proposed work areas are within Land Subject to Flooding or Land Subject to Coastal Storm Flowage.



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

NHESP Rare Species Habitat

According to the 15th Edition of the Massachusetts Natural Heritage Atlas (August 2021) published by the NHESP, the site is within an Estimated Habitat of Rare Wildlife and a Priority Habitat of Rare Species. A copy of this NOI has been submitted to NHESP for review, and the Land Bank has been coordinating directly with the agency to develop this restoration plan (NHESP file numbers 24-18497, 24-18458 and Heritage Hub ID RC-85801).

Project Details

The southern portion of the southern Cisco Beach parking lot has eroded, forcing the closure of this area to parking. Erosion is also threatening the southwestern portion of Falmouth Ave. To preserve this parking lot access, we are proposing to relocate the southernmost section of the road northward, connecting it to the existing northern portion of Falmouth Ave. The new section of the road would match the existing road and parking lot, and would require vegetation/topsoil removal, grading, and the installation of a stone/hardener mix. We are also proposing to grade a swale on the south side of the new section of road for drainage purposes. Post and rail fence will be installed on either side of the roadway. An engineered plan for the roadway construction is included in Attachment 4.

As discussed with NHESP, individual rare plant species have been surveyed and flagged and will be translocated out of the project area to a previously approved translocation area. Once relocated, the abandoned portion of Falmouth Ave will be restored as depicted on Figure 5. Removed plants from the new section of the road (other than those flagged for translocation) will be moved to the old roadbed as large sods. Beach grass will be planted in the areas of the existing road where dune has started to take over. The old roadbed will be closed to traffic.

Alternatives Analysis

Alternatives to relocating the southwestern portion of Falmouth Ave were evaluated as follows:

- 1) **No Action:** The dune erosion will ultimately destroy the southwestern section of Falmouth Ave, making access to the Cisco Beach parking lot unsafe in the short term and eventually not possible. As such, the no-action alternative is not considered a viable option.
- 2) **Road Closure:** Falmouth Ave provides access to some of the residences off of Westerwyck Way to the east. The Land Bank could therefore only close the western portion of the road that provides access to the Cisco Beach parking lot. Doing so would eliminate this beach access from the residential neighborhoods to the east. Although traffic could go around via Hummock Pond Road, this would funnel all beach traffic into one area and cause more congestion. It could also encourage vehicular access through other areas of the site to gain access from the east, potentially causing adverse impacts to rare species and wetland resource areas on the site.



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

- 3) **Relocate Outside the 100-foot Buffer:** During the planning of this proposed project, consideration was given to alternative routes that would be completely outside of the 100-foot buffer to the Coastal Dune. Any alternatives were determined to result in an increased number of rare species that would be impacted; and would also cause greater habitat disturbance due to the increased length of roadway required. Additionally, the only portion of the proposed work that is within the resource area and the 25-foot buffer is restoration of the old roadbed. Based on these factors, we believe the current configuration is the option that would cause the least impact to the habitat and resource areas while continuing to provide this public accessway to Cisco Beach.

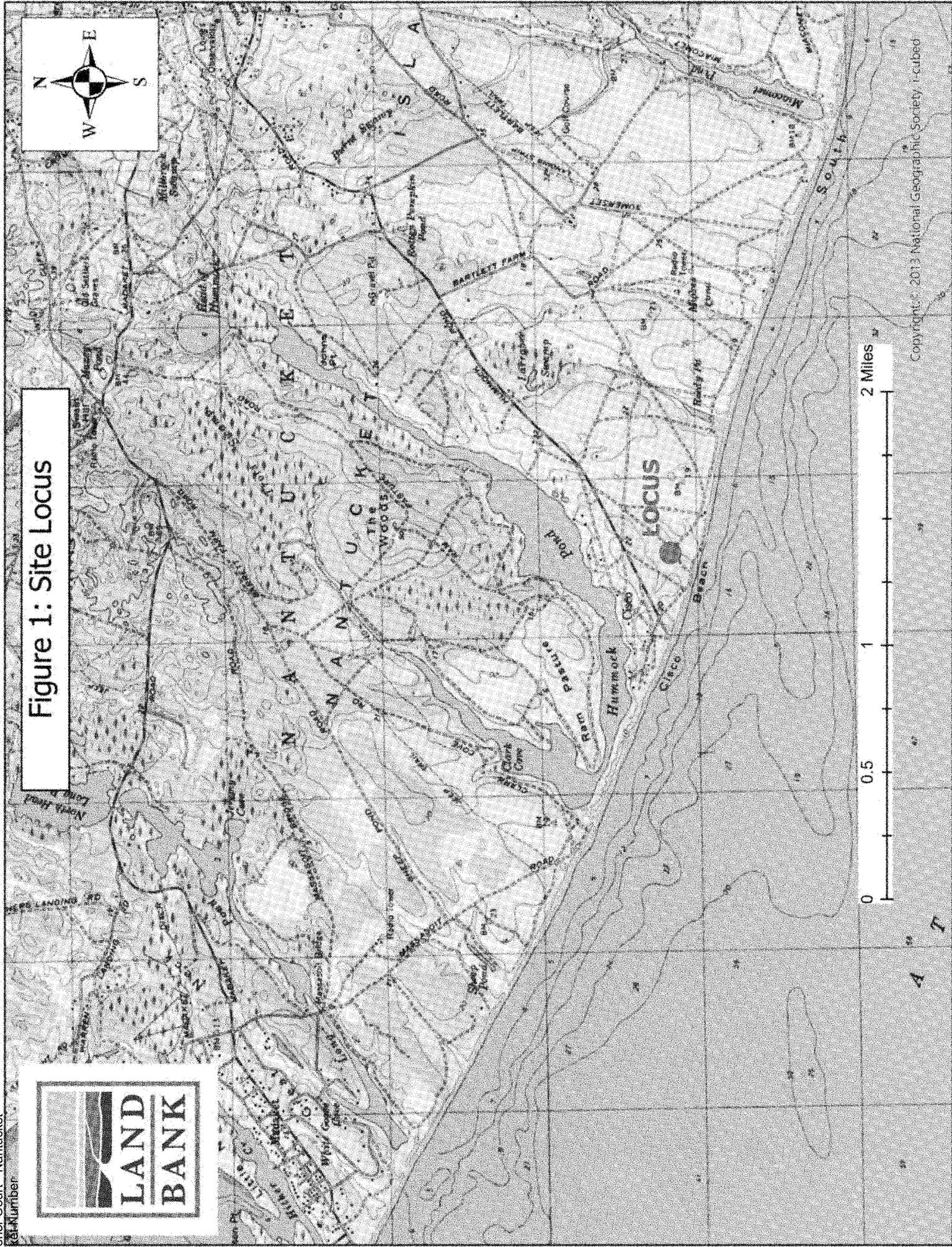
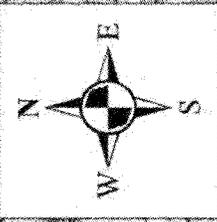
Performance Standards and Waivers

It is our understanding that the proposed sand and gravel road and drainage swale do not meet the definition of structures based on their pervious nature. As such, no waivers are required for this portion of the proposed work. The road and swale will maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the 25-foot and 50-foot setbacks disturbed.

An approximate 1,500 square foot section of Falmouth Ave for proposed abandonment and restoration with native plants is within the Coastal Dune and 25-foot buffer, and the 25-foot buffer to the Coastal Bank. It is our understanding that a waiver is required only for the restoration portion of the project. We are seeking a waiver under the premise that the proposed restoration will provide a long-term net benefit and will not cause adverse impacts to the resource areas.

FIGURES

Figure 1: Site Locus



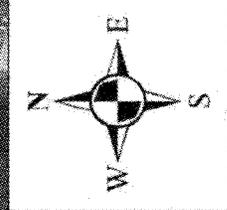
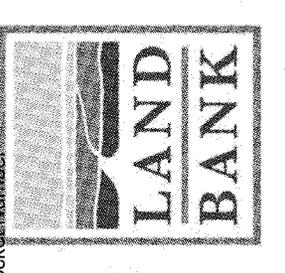


Figure 2: Existing Conditions

Hummock Pond Road

Cisco Beach Access Drive

Approximate Location of Northern Parking Area

Smooth Hummocks Map 82/Parcel 30

Cisco Beach Parking Lot

Approximate Proposed Relocation Area (Dashed)

Closed Portion of parking Lot

Existing Falmouth Ave

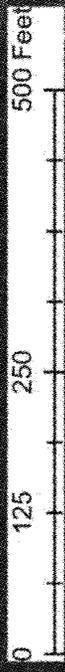
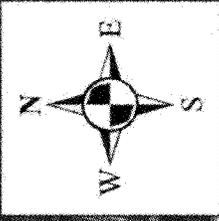




Figure 3: Resource Areas



Approximate Proposed Relocation Area (Dashed)

Existing Falmouth Ave For Proposed Restoration

Cisco Beach Parking Lot

Closed Section of Parking Lot

Coastal Bank

Coastal Dune

Coastal Beach

Legend

- LEC Dune Flags
- Coastal Beach Line

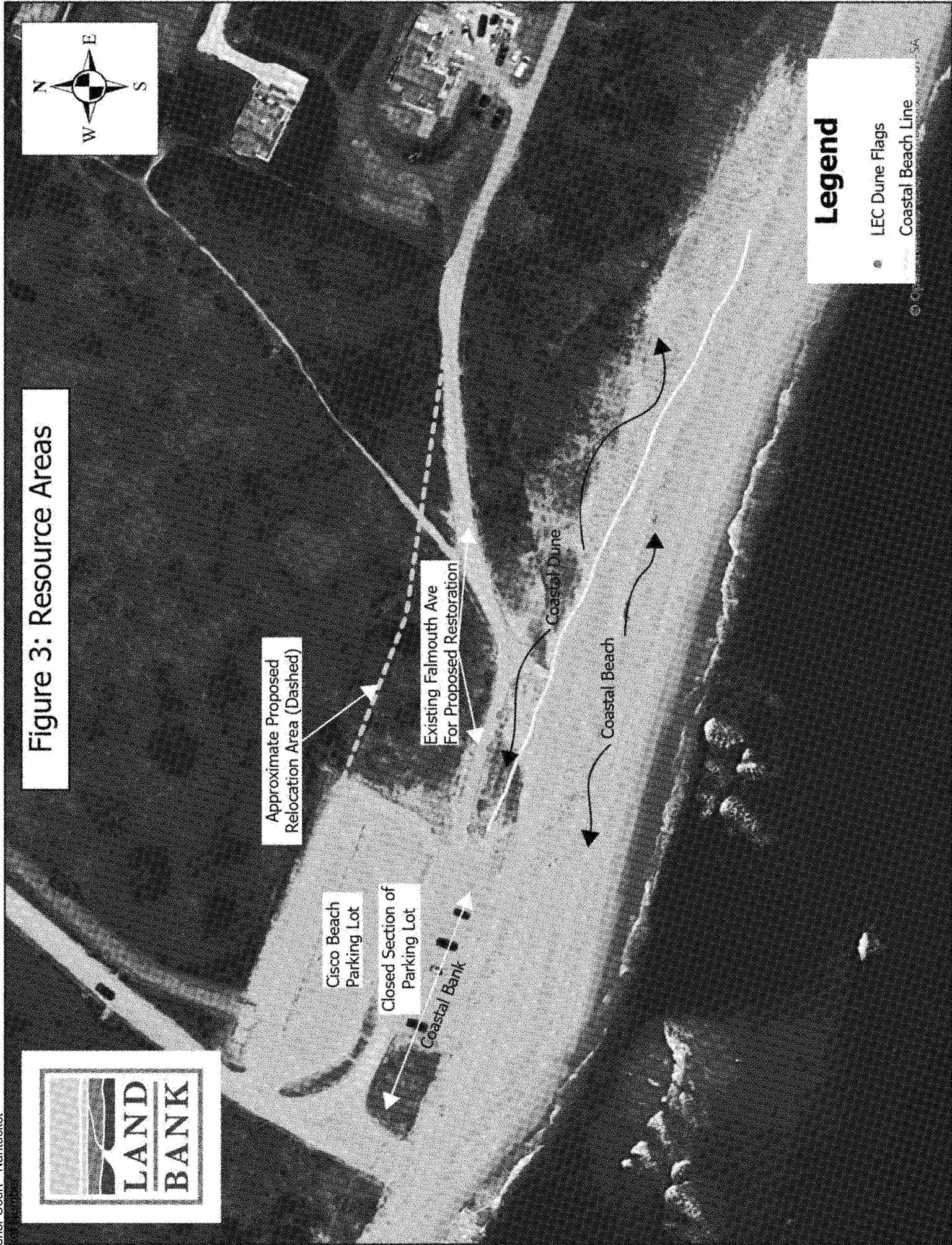
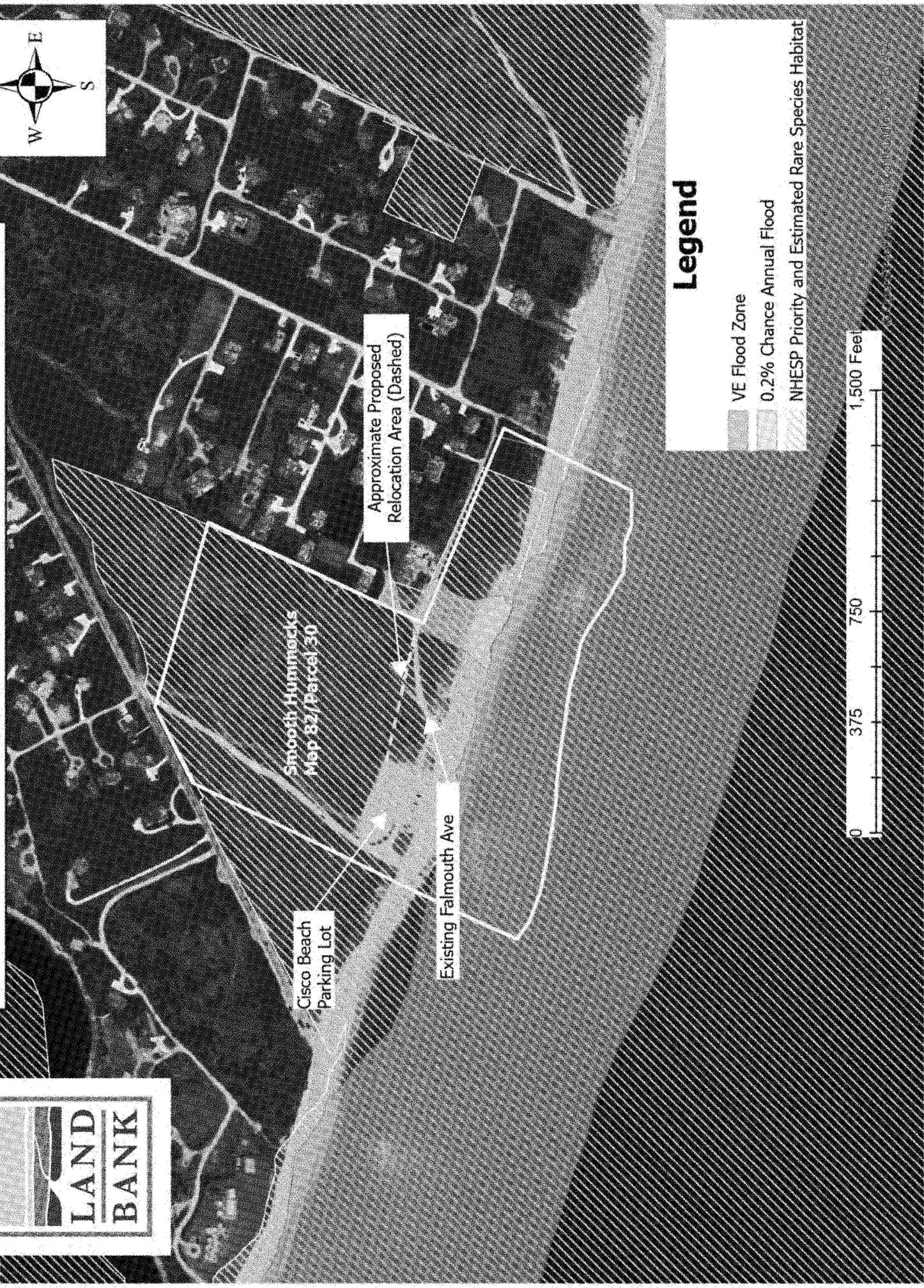
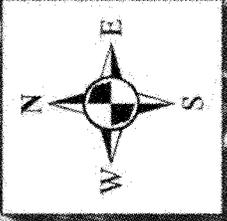


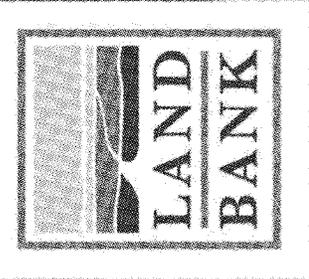
Figure 4: NHESP Habitat and Land Subject to Flooding



Legend

- VE Flood Zone
- 0.2% Chance Annual Flood
- NHESP Priority and Estimated Rare Species Habitat

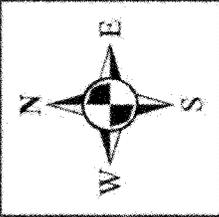




Cisco Beach Parking Lot

Coastal Bank

Figure 5: Proposed Restoration Plan

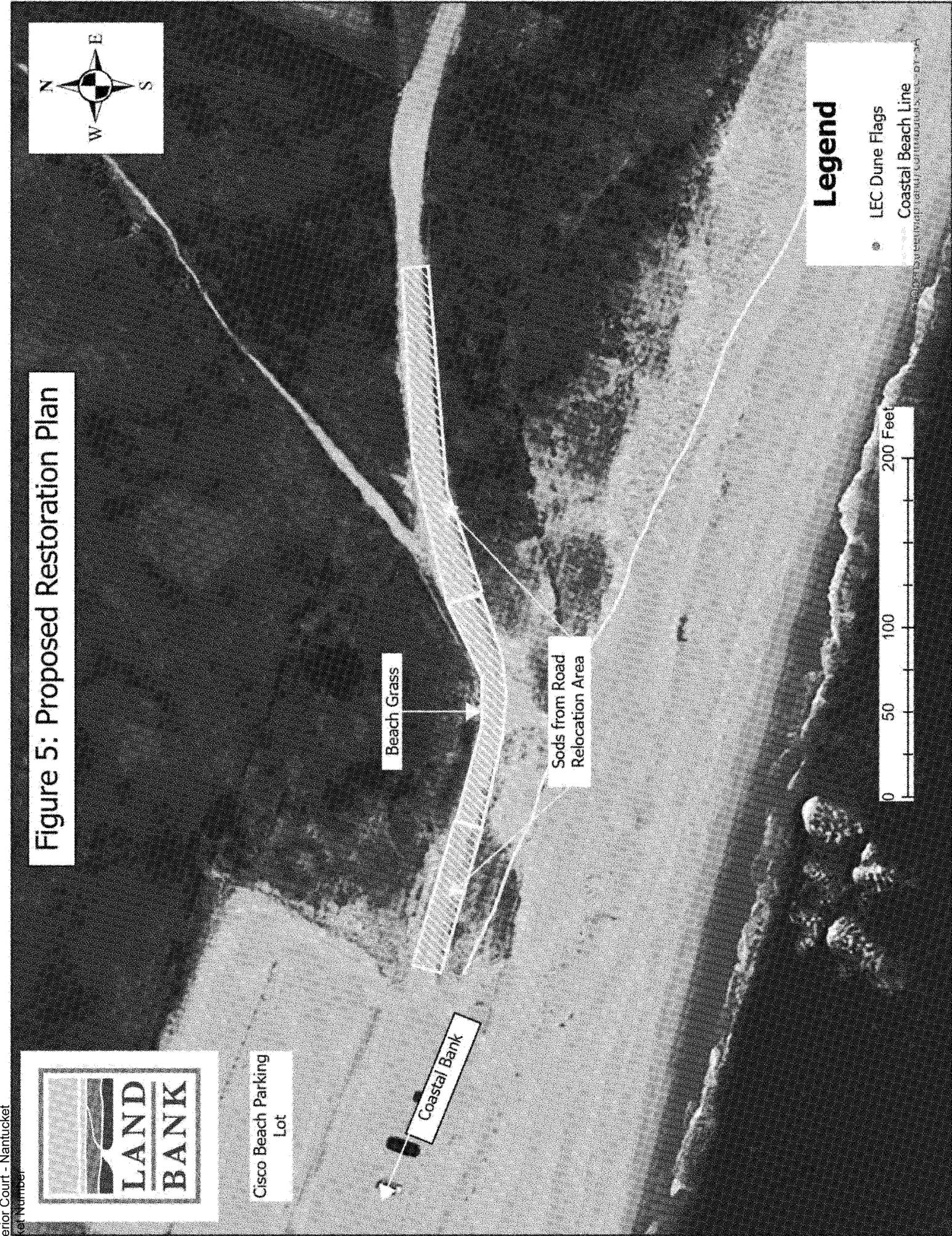


Beach Grass

Sods from Road Relocation Area

Legend

- LEC Dune Flags
- Coastal Beach Line



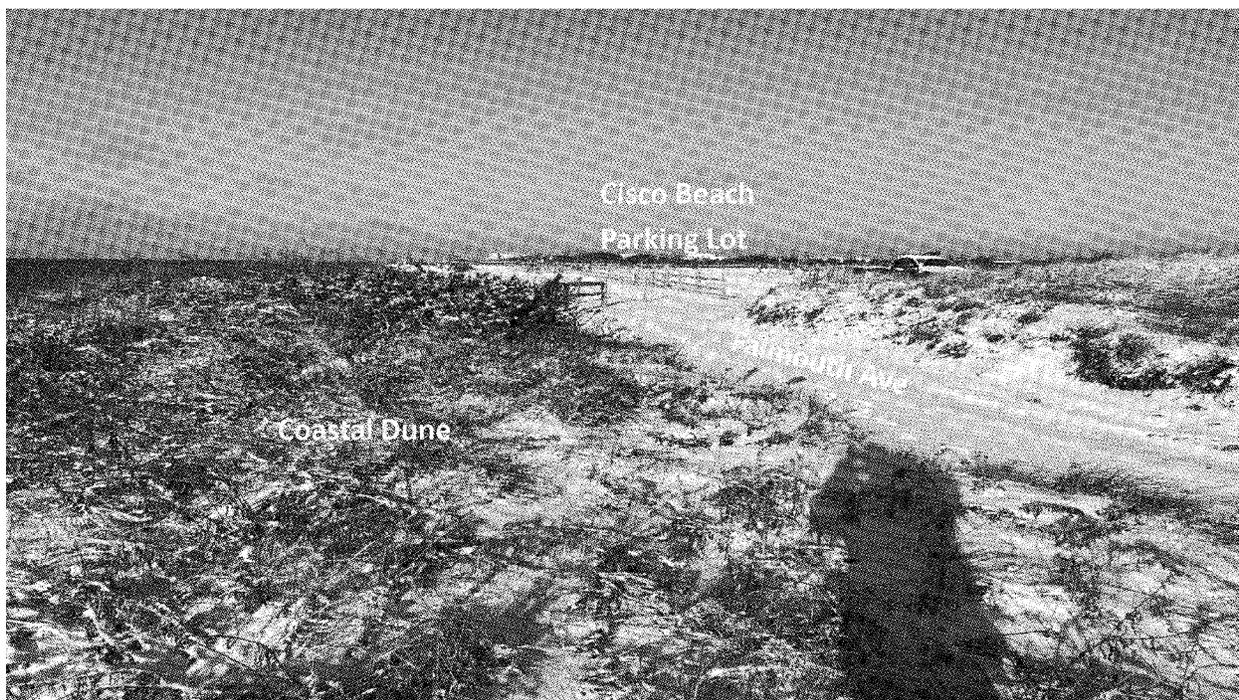
PHOTOGRAPHS

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
January 2025

Photographs



Existing Falmouth Ave access to Cisco Beach parking lot, coastal dune to right (south).



Existing Falmouth Ave access to Cisco Beach parking lot.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
January 2025



Closed section of Cisco Beach parking lot at west terminus of dune.



Flagged dune, south of existing Falmouth Ave.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
January 2025



Dune crest, east of Cisco Beach parking lot.



Coastal Beach and Coastal Dune.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
January 2025



Northern portion of southern Cisco Beach parking lot during summer months.



Western entrance to southern Cisco Beach parking lot during summer months.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
January 2025



North section of southern Cisco Beach parking lot.



Approximate proposed area for Falmouth Ave relocation, north of existing Falmouth Ave.

PROJECT PLAN

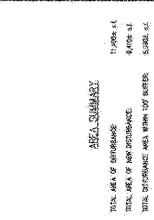
Scale: 1" = 100'



- Notes**
1. LOCUS: SMOOTH HUMMOCKS MAP 82 PARCEL 30
 2. OWNER: NANTUCKET ISLANDS LAND BANK NANTUCKET, MA 02584
 3. DED REF: BK 646 PG 259
 4. PLAN REF: Promenade Plan Bk 1 Pg 84 Plot No. 2014-44
 5. LOCUS DOES NOT FALL WITHIN A DESIGNATED FLOOD HAZARD AREA. INSURANCE RATE MAP NO. 2508C-089-G dated 06/09/2014.
 6. LOCUS DOES NOT FALL WITHIN THE NATURAL PROGRAM DESIGNATED AREAS OF ESTIMATED PROBABLY UNDESIRABLE PROPERTY DAMAGE FROM STORM SURGES.

AREA SUMMARY

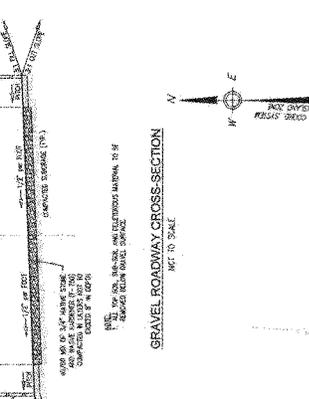
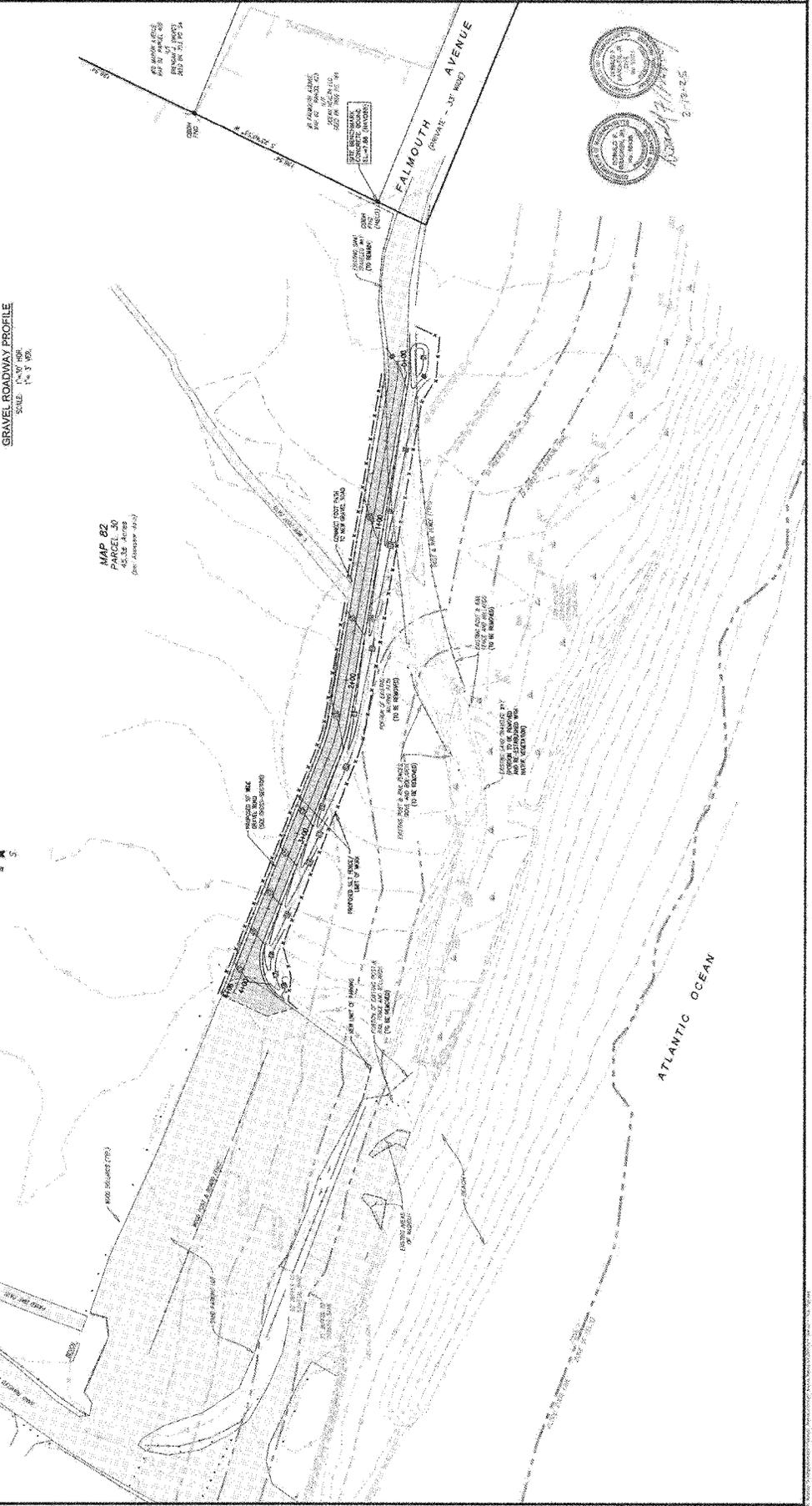
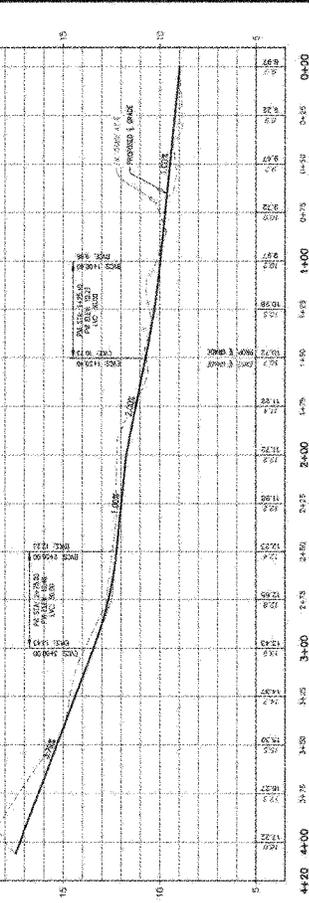
TOTAL AREA OF ADDRESS	17,000.41
TOTAL AREA OF THIS PROJECT	4,800.41
TOTAL DISTANCE WITHIN OF WATER	5,800.00



Prepared by
BRACKEN ENGINEERING
 40 WINDSOR ROAD
 NANTUCKET, MA 02584
 TEL: 508.553.2323
 FAX: 508.553.2322
 WWW.BRACKEN-ENGINEERING.COM

Conservation Site Plan
 IN NANTUCKET, MASSACHUSETTS
 Prepared For:
 SMOOTH HUMMOCKS
 MAP 82 PARCEL 30

No.	Date	Revised/Submitted/Checked/Drawn
1	02/12/25	BRACKEN ENGINEERING
2	02/12/25	BRACKEN ENGINEERING
3	02/12/25	BRACKEN ENGINEERING
4	02/12/25	BRACKEN ENGINEERING
5	02/12/25	BRACKEN ENGINEERING
6	02/12/25	BRACKEN ENGINEERING
7	02/12/25	BRACKEN ENGINEERING
8	02/12/25	BRACKEN ENGINEERING
9	02/12/25	BRACKEN ENGINEERING
10	02/12/25	BRACKEN ENGINEERING



BRACKEN ENGINEERING
 40 WINDSOR ROAD
 NANTUCKET, MA 02584
 TEL: 508.553.2323
 FAX: 508.553.2322
 WWW.BRACKEN-ENGINEERING.COM

ABUTTER NOTIFICATION INFORMATION

TOWN OF NANTUCKET
CONSERVATION COMMISSION

LIST OF PARTIES IN INTEREST IN THE MATTER OF THE PETITION OF:

PROPERTY OWNER: Nantucket Islands Land Bank

MAILING ADDRESS: 22 Broad Street Nantucket, MA 02554

PROPERTY LOCATION: Smooth Hummocks (Cisco Beach)

ASSESSOR MAP/PARCEL: 82/30

SUBMITTED BY: Liz Phelps

SEE ATTACHED PAGES

I certify the foregoing is a list of persons who are owners of land directly abutting the property on which the proposed activity will occur (the locus), owners of land separated a distance of one hundred feet or less from the locus by a public or private street or way or stream and owners of land separated a distance of three hundred feet or less from the locus by a body of water, all as they appear on the most recent applicable tax list.

January 29, 2025

DATE

ASSESSOR'S OFFICE
TOWN OF NANTUCKET

Abutters Listing

MBLU	Lot	Lot Cut	Name Line 1	Name Line 2	Address Line 1	City	State	Zip	Location
82	23		STARISHACK LLC		ONE HARBOR DR	GREENWICH	CT	06830	1 SACCACCHA AV
82	26		NANTUCKET CONSERVATION FOUND		PO BOX 13	NANTUCKET	MA	02554	10 CAROLINE WY
82	29		GREBEL JAMES L TRST ETAL		15 OLD STAMFORD RD UNIT B	NEW CANAAN	CT	06840	12 CAROLINE WY
82	31		EVERETT RICHARD W III & CORDELIA C & OWNERS UNKNOWN ET		115 PATTON AVE	PRINCETON	NJ	08540	240 HUMMOCK POND RD
82	32		COHEN STEVEN L TR		MAVERICK TRUST	NANTUCKET	MA	02554	245 HUMMOCK POND RD
82	62		SPF CISCO LLC		PO BOX 2546	SAN FRANCISCO	CA	94126	5 CAROLINE WY
82	63		NANTUCKET CONSERVATION FOUND		PO BOX 13	NANTUCKET	MA	02554	1 TRINITY AV
82	80		SOHREINER EDWIN A TRST		22701 SANDY BAY DR # 102	ESTERO	FL	33928	7 WALL ST
82	108		LYNCH SUSAN A & THOMAS A		122 GRAY STREET	WARWICK	RI	02889	4 SACCACCHA AV
82	117		MCNEIL BRIAN W & MARGARET TRS		40 BRISTOL RD	WELLESLEY	MA	02481	10 MATTAPoisETT AV
82	127		MACACK LLC		2103 SABLE OAK DRIVE	INDIAN RIVER SHORE	FL	32963	3 MARION AV
82	137		BLANEY BERNARD F		PO BOX 3230	NANTUCKET	MA	02554	6 MARION AV
82	336		JENNER KYLE W TR		3323 N SUMMER-HILL DR	FAYETTEVILLE	AR	72703	8 SACCACCHA AV
82	356		LHOTA JOSEPH J & TAMRA ROBERTS		35 PIERREPONT ST	BROOKLYN HEIGHTS	NY	11201	6 FAIRHAVEN AV
82	373		BALSBAUGH RICHARD M		2400 BEACON ST APT 302	CHESTNUT HILL	MA	02467	7 MATTAPoisETT AV
82	376		CONNOLLY SARAH T TR		74 BEARD WAY	NEEDHAM	MA	02492	11 MATTAPoisETT AV
82	386		CARREAU DAVID & JANET TRST		234 WARREN AVE	PLYMOUTH	MA	02360	4 MATTAPoisETT AV
82	384		DLS ACK LLC		94 PARADE HILL	NEW CANAAN	CT	06840	6 MATTAPoisETT AV
82	399		VOZELLA PAUL F TRUSTEE &		63 PAKACHOAG ST	AUBURN	MA	01501	MARION AV
82	400		GREEN MARILYN		130 MAIN ST	SOUTH-BORO	MA	01772	27 WESTERWYCK WY
82	402		JENNINGS JANICE M TRST		11674 LAKE HOUSE CT	NORTH PALM BEACH	FL	33408	2 MARION AV
82	408		NANTUCKET TOWN OF		16 BROAD ST	NANTUCKET	MA	02554	MARION AV
82	408	1			16 BROAD ST	NANTUCKET	MA	02554	MARION AV
82	409		SWORDS BRENDAN J		57 BEACON ST APT 2	BOSTON	MA	02108	10 MARION AV
82	409	1			16 BROAD ST	NANTUCKET	MA	02554	MARION AV
82	411		POWERS MARIANNE ELMASRI TR		1473 NORTH OCEAN BLVD	PALM BEACH	FL	33480	1 FALMOUTH AV
82	413		CALCANI BEACH HOME LLC		282 NEWBURY ST UNIT 501	BOSTON	MA	02115	3 FALMOUTH AV
82	423		OCEAN HEATH LLC		PO BOX 7759	GREENWICH	CT	06836-7759	9 FALMOUTH AV
83	22		JACOBY JONATHAN A & SUZANNE L		2425 SIDEWINDER DR	PARK CITY	UT	84060	3 TAUTEMO WY
83	25		FLAVIN GERARD C & SANDRA K		6754 N GRAPE CREEK RD	FREDERICKSBURG	TX	78624	249 HUMMOCK POND RD
83	26		251 HUMMOCK POND ROAD LLC		52 CENTRE ST	RYE	NY	10580	251 HUMMOCK POND RD
83	27		REACH BACK LLC		2 TAUTEMO WAY	NANTUCKET	MA	02554	2 TAUTEMO WY
83	28		MACK GERALD R & NANCY MCGEE TRS		4 TAUTEMO WY	NANTUCKET	MA	02554	4 TAUTEMO WY
83	29		LEIGHTON LANA H & DOUGLAS		253 HUMMOCK POND RD	NANTUCKET	MA	02554	253 HUMMOCK POND RD
83	29	1			22 BROAD STREET	NANTUCKET	MA	02554	261 HUMMOCK POND RD
83	29	4	MCNEIL ROBERT L III TRST ETAL		245 ABRAHAMIS LANE	VILLANOVA	PA	19065	257 HUMMOCK POND RD
83	30		NANTUCKET ISLANDS LAND BANK ETAL		22 BROAD STREET	NANTUCKET	MA	02554	260 HUMMOCK POND RD
83	31		NANTUCKET CONSERVATION FOUND		PO BOX 13	NANTUCKET	MA	02554	260R HUMMOCK POND RD

Count: 38



Nantucket Conservation Commission Notice of Public Hearing

Dear Abutter:

In accordance with MGL Chapter 131, Section 40 and pursuant to 310 CMR 10.05, et seq., and Nantucket By-law Chapter 136, Section 4, you are hereby notified that a Public Hearing will be held during the Conservation Commission Meeting, which will be held in hybrid format starting at 5:00 PM. In-person participation will be located in the Trailer, Room A, 131 Pleasant Street, and remote participation is via Zoom and You Tube. Information on viewing the meeting can be found at: <https://www.nantucket-ma.gov/138/Boards-Commissions-Committees>

The purpose of the meeting is to open a Public Hearing for a Notice of Intent, the cover sheet of which is enclosed.

February 20, 2025

Date of Public Hearing

Smooth Hummocks
(Map 82, Parcel 30)

Street Address/Map & Parcel

Nantucket Islands Land Bank

Applicant Name

The Applicant proposes to relocate a portion of Falmouth Ave, which provides access to the Cisco Beach parking lot, due to erosion concerns.

Description of Proposed Work

For a digital copy of the filing please email Lisa Graves at lgraves@nantucket-ma.gov. Copies of the complete application are available for examination at the Conservation Commission/Natural Resources office at 131 Pleasant Street during normal business hours, or by appointment made by calling the Commission Office at (508) – 228 – 7230.

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City, State, ZIP+4®		

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Street and Apt. No.	BLANEY BERNARD F PO BOX 3230 NANTUCKET, MA 02554	
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Street and Apt. No.	BAL SBAUGH RICHARD M 2400 BEACON ST APT 302 CHESTNUT HILL, MA 02467	
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<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	\$ <u>5.54</u>	
Street and Apt. No.	MACACK LLC 203 SABLE OAK DRIVE INDIAN RIVER SHORE, FL 32963	
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Postage	\$	
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Sent To	\$ <u>5.54</u>	
Street and Apt. No.	SPF CISCO LLC PO BOX 2548 SAN FRANCISCO, CA 94126	
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<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	\$ <u>5.54</u>	
Street and Apt. No.	JENNER KYLE W TR SIX SACCACHA AVE REALTY TRUST 3323 N SUMMERHILL DR FAYETTEVILLE, AR 72703	
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\$ 5.54		
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<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
\$ 5.54		
Sent To	SCHREINER EDWIN A TRST 22701 SANDY BAY DR # 102 ESTERO, FL 33928	
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<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
\$ 5.54		
Sent To	GRIBBEL JAMES L TRST ETAL C/O CAVANAUGH NANCY 15 OLD STAMFORD RD UNIT B NEW CANAAN, CT 06840	
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<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
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Sent To	LYNCH SUSAN A & THOMAS A 122 GRAY STREET WARWICK, RI 02889	
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Postage	\$	
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Postage	\$	
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<input type="checkbox"/> Adult Signature Required	\$
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ONE HARBOR DR
GREENWICH, CT 06830

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$
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TRS
MACK REALTY TRUST
4 TAUTEMO WY
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Street and Apt. #
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NANTUCKET, MA 02554
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<input type="checkbox"/> Adult Signature Required	\$
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POWERS MARIANNE ELMASRI TR
POWERS MARIANNE ELMASRI
TRUST
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1473 NORTH OCEAN BLVD
PALM BEACH, FL 33480
City, State, ZIP+4

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FREDERICKSBURG, TX 78624
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C/O KATHERINE & ANTHONY
VERNACE
Street and Apt. No.
52 CENTRE ST
RYE, NY 10580
City, State, ZIP+4

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<input type="checkbox"/> Adult Signature Required	\$
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Street and Apt. No.
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NANTUCKET, MA 02554
City, State, ZIP+4

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	DLS ACK LLC	
Street and Apt. N	94 PARADE HILL	
City, State, ZIP+4	NEW CANAAN, CT 06840	

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<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	CALCAM BEACH HOME LLC C/O PETER STEINGRABER	
Street and Apt. N	292 NEWBURY ST UNIT 501	
City, State, ZIP+4	BOSTON, MA 02115	

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	VOZELLA PAUL F TRUSTEE & NANTUCKET CONSERVATION	
Street and Apt. N	FOUND	
City, State, ZIP+4	93 PAKACHOAG ST AUBURN, MA 01501	

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Extra Services & Fees (check box, add fee as appropriate)		
<input type="checkbox"/> Return Receipt (hardcopy)	\$	
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	JACOBY JONATHAN A & SUZANNE L	
Street and Apt.	2425 SIDEWINDER DR	
City, State, ZIP	PARK CITY, UT 84060	

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1061 3630 18

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Certified Mail Fee	\$	Postmark Here
Extra Services & Fees (check box, add fee as appropriate)		
<input type="checkbox"/> Return Receipt (hardcopy)	\$	
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	GREEN MARILYN	
Street and Apt. N	130 MAIN ST	
City, State, ZIP+4	SOUTHBORO, MA 01772	

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Certified Mail Fee	\$	Postmark Here
Extra Services & Fees (check box, add fee as appropriate)		
<input type="checkbox"/> Return Receipt (hardcopy)	\$	
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	CARREAU DAVID & JANET TRST	
Street and Apt. N	DJC REALTY TRUST	
City, State, ZIP+4	234 WARREN AVE PLYMOUTH, MA 02360	

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Certified Mail Fee	\$	
Extra Services & Fees (check box, add fee as appropriate)		
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<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
Total Postage and	\$	
Sent To	\$	5.54
Street and Apt. No.		
City, State, ZIP+4®		

Postmark Here

JENNINGS JANICE M TRST
JENNINGS GENERATIONAL TRUST
11674 LAKE HOUSE CT
NORTH PALM BEACH, FL 33408

Form 3800, January 2015

NHESP NOTIFICATION LETTER



**National Heritage and Endangered Species Program
Division of Fish and Wildlife**

ATTN: Emily Holt
1 Rabbit Hill Road
Westborough, MA 01581
Cc: Amy Hoenig, Nik Gualco

RE: Notice of Intent Application
Cisco Beach Roadway Relocation
Smooth Hummocks (Map 82, Parcel 30), Nantucket, MA 02554

January 30, 2025

Dear Ms. Holt:

The Nantucket Islands Land Bank is submitting the enclosed Notice of Intent (NOI) for Smooth Hummocks (Map 82, Parcel 30), Nantucket, MA for your review. We are proposing to relocate the southwestern portion of Falmouth Ave, a sand access road to the Cisco Beach parking lot, due to erosion. This area falls within an area designated as Estimated Habitat of Rare Wildlife. This NOI has been submitted to the Nantucket Conservation Commission and to the Massachusetts Department of Environmental Protection.

We are requesting permission to do this work via an amendment application to the existing Conservation Management Permit (file number 24-18497). Other NHESP numbers associated with the site are file number 24-18458 and Heritage Hub ID RC-85801. Should you have any questions regarding this matter, please feel free to contact Liz Phelps or Emily Goldstein Murphy at our office.

Sincerely,



Liz Phelps
Nantucket Islands Land Bank
Environmental Permitting Coordinator

Attachments

Notice of Intent

February 19, 2025

Hi Lisa,

My name is Matt Erisman and I am Co-President of the Cisco Civic Association. First and foremost, I would like to thank and applaud the Land Bank for several decades as wonderful and respectful neighbors.

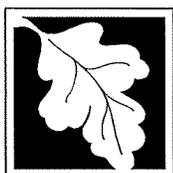
I wanted to reach out ahead of tomorrow night's meeting regarding the relocation of portions of Falmouth Ave. Several times in the past 10 years, our association has proposed a vehicle closure to Falmouth Ave at the entry to the Public Beach at Cisco, which received strong consideration from the Land Bank at various times. In the past year or so, the Western end of Falmouth Ave has become problematic in many ways and has prompted the Land Bank to understandably take action. I feel that this would be an opportune time to once again pitch our argument to close that road to vehicles.

As you know, the public parking lot is being moved West, to the other side of the access road from Hummock Pond Road. The West end of Falmouth Ave is very close to the dune and almost on top of it, which has created dangerous conditions for vehicles and the precious dune. In my opinion, moving this stretch of road back would be a very temporary fix. Falmouth Ave currently serves as a cut through between a busy public parking lot and a private road at the South end of Westerwyck Way, which continues through another private road (Caroline Way) before getting to Austine Locke Way which abuts the moors to the East. The unnecessary traffic passing through our neighborhood via Falmouth Ave has been a danger to kids, dogs and pedestrians for many years. The nearest suitable parking area East of the public beach at Cisco is Beach Access 10, which is in the moors near Smooth Hummocks and Lady's beach. That is a substantial distance from the Public Beach, and has access roads at Heller Way, Walbang and Bartlett Farm Road which serve as far more direct routes. Why is this cut through beneficial? Our neighborhood uses Falmouth Ave for pedestrian traffic and for access to two driveways. If vehicle access was closed at the West end of Falmouth, the two driveways in question would be accessible via Westerwyck Way, which has served as their only access in the past several years due to the conditions of Western Falmouth Ave anyway. I feel the Land Bank can benefit as well by not only saving money on relocating the road, but also saving on road maintenance and wear and tear which has been a significant yearly cost and nuisance.

The Cisco Civic Association greatly appreciates your consideration of our proposal, and as always, thank you for being such great neighbors.

-Matt Erisman

EXHIBIT C



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:
SE48-3947
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:

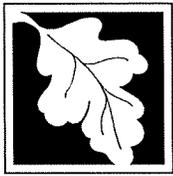
a. First Name Nantucket Islands Land Bank b. Last Name _____
c. Organization 22 Broad Street
d. Mailing Address Nantucket MA 02554
e. City/Town Nantucket f. State g. Zip Code

4. Property Owner (if different from applicant):

a. First Name _____ b. Last Name _____
c. Organization _____
d. Mailing Address _____
e. City/Town _____ f. State _____ g. Zip Code _____

5. Project Location:

Smooth Hummocks Nantucket
a. Street Address b. City/Town
82 30
c. Assessors Map/Plat Number d. Parcel/Lot Number
Latitude and Longitude, if known: 41.25287N 70.15349W
d. Latitude e. Longitude



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
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City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
Nantucket

a. County

b. Certificate Number (if registered land)

646

258

c. Book

d. Page

7. Dates: December 11, 2025 January 8, 2026 January 14, 2026
a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Conservation Site Plan

a. Plan Title

Bracken Engineering, Inc.

Donald F. Bracken, Jr., P.E, P.L.S

b. Prepared By

c. Signed and Stamped by

April 1, 2025

1" =30'

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

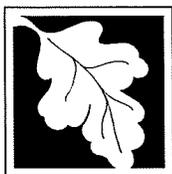
Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. Public Water Supply
- b. Land Containing Shellfish
- c. Prevention of Pollution
- d. Private Water Supply
- e. Fisheries
- f. Protection of Wildlife Habitat
- g. Groundwater Supply
- h. Storm Damage Prevention
- i. Flood Control
- j. Wetland Scenic Views (bylaw)
- k. Recreation (Bylaw)

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



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

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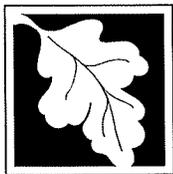
B. Findings (cont.)

Denied because:

- b. the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
- 3. Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) 30'
a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	a. square feet e. c/y dredged	b. square feet f. c/y dredged	c. square feet	d. square feet
7. <input type="checkbox"/> Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. <input type="checkbox"/> Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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:
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Nantucket
 City/Town

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

- | | Proposed
Alteration | Permitted
Alteration | Proposed
Replacement | Permitted
Replacement |
|--|---|-------------------------|-------------------------|---------------------------------|
| 10. <input type="checkbox"/> Designated Port Areas | Indicate size under Land Under the Ocean, below | | | |
| 11. <input type="checkbox"/> Land Under the Ocean | _____ | _____ | | |
| | a. square feet | b. square feet | | |
| | _____ | _____ | | |
| | c. c/y dredged | d. c/y dredged | | |
| 12. <input type="checkbox"/> Barrier Beaches | Indicate size under Coastal Beaches and/or Coastal Dunes below | | | |
| 13. <input type="checkbox"/> Coastal Beaches | _____ | _____ | _____ | _____ |
| | a. square feet | b. square feet | c. nourishment | d. nourishment ^{cu yd} |
| 14. <input type="checkbox"/> Coastal Dunes | _____ | _____ | _____ | _____ |
| | a. square feet | b. square feet | c. nourishment | d. nourishment |
| 15. <input type="checkbox"/> Coastal Banks | _____ | _____ | | |
| | a. linear feet | b. linear feet | | |
| 16. <input type="checkbox"/> Rocky Intertidal Shores | _____ | _____ | | |
| | a. square feet | b. square feet | | |
| 17. <input type="checkbox"/> Salt Marshes | _____ | _____ | _____ | _____ |
| | a. square feet | b. square feet | c. square feet | d. square feet |
| 18. <input type="checkbox"/> Land Under Salt Ponds | _____ | _____ | | |
| | a. square feet | b. square feet | | |
| | _____ | _____ | | |
| | c. c/y dredged | d. c/y dredged | | |
| 19. <input type="checkbox"/> Land Containing Shellfish | _____ | _____ | _____ | _____ |
| | a. square feet | b. square feet | c. square feet | d. square feet |
| 20. <input type="checkbox"/> Fish Runs | Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above | | | |
| | _____ | _____ | | |
| | a. c/y dredged | b. c/y dredged | | |
| 21. <input type="checkbox"/> Land Subject to Coastal Storm Flowage | _____ | _____ | | |
| | a. square feet | b. square feet | | |



Massachusetts Department of Environmental Protection
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B. Findings (cont.)

22. Restoration/Enhancement *:

a. square feet of BVW

b. square feet of salt marsh

23. Stream Crossing(s):

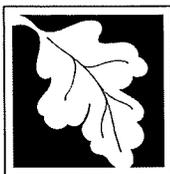
a. number of new stream crossings

b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. the work is a maintenance dredging project as provided for in the Act; or
 - b. the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on **01/14/2029** unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.



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

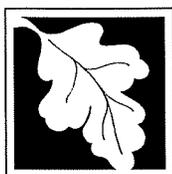
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Nantucket
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
"File Number SE48-3947 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.
17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

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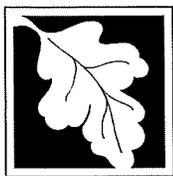
C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

NOTICE OF STORMWATER CONTROL AND MAINTENANCE REQUIREMENTS

19. **The work associated with this Order (the “Project”) is (1) is not (2) subject to the Massachusetts Stormwater Standards. If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:**

- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
- i.* all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii.* as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii.* any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;
 - iv.* all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;
 - v.* any vegetation associated with post-construction BMPs is suitably established to withstand erosion.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

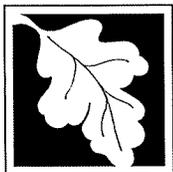
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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following: *i.*) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and *ii.*) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.
- d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.
- e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.
- f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



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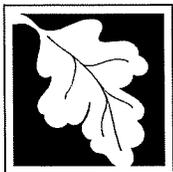
City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
 - 1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 - 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 - 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):



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:
SE48-3947
MassDEP File #

eDEP Transaction #

Nantucket

City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? Yes No
2. The Nantucket hereby finds (check one that applies):
Conservation Commission

- a. that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw

2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

- b. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

1. Municipal Ordinance or Bylaw

2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

Please view additional findings and conditions page(s)



Town of Nantucket, Massachusetts
WPA Form 5 – Order of Conditions
The Town of Nantucket Bylaw Chapter 136

DEP File Number:

SE48-3947

Provided by DEP

B1. Additional Conditions

The Town of Nantucket Conservation Commission has found it necessary to include these additional conditions as a standard part of every Order. If the condition applies, then the corresponding box will be checked:

- 1. Pursuant to General Condition Number 8, this Order of Conditions must be registered with the Registry of Deeds for Nantucket, and proof of recording shall be submitted to the Commission prior to the commencement of any work approved in this Order.
- 2. No work approved under this Order shall take place until all administrative appeal periods from the Order have elapsed, or, if an appeal has been filed, until all proceedings have been completed.
- 3. The landowner, applicant, and/or the contractor will notify the Commission in writing five days prior to the start of work. The letter shall state the name, address, and telephone number of the project supervisor who will be responsible for insuring onsite compliance with this Order. (All erosion/sedimentation control devices shall be installed BEFORE the start of work.)
- 4. Prior to any activity at the site, a snow fence, siltation fence or a line of straw bales shall be staked as shown on the plan of record. After the fence or straw bales are installed, notice shall be given to the Nantucket Conservation Commission. **No work shall begin on the site for 72 hours after said notice is given; so as to allow Commission members time to inspect all siltation devices.** The snow fence, siltation fence, or straw bale line erected to prevent siltation, erosion, filling of the wetland, and trap windblown debris during construction, will also serve as a limit of the activity for work crews. It shall remain in good repair during all phases of construction, and it shall not be removed until all soils are stabilized and revegetated or until permission to remove it is given by the Commission.
- 5. An as-built plan, signed and stamped by a registered professional engineer or land surveyor in the Commonwealth of Massachusetts and having the same scale as the final approved plans, shall be submitted to the Commission at the same time as a written request for a Certificate of Compliance, and shall specify how, if at all, the completed plan differs from the final approved plan. The as-built plan shall include, but not be limited to, the following: any/culvert inverts for inflow and outfalls; pipe slope, size, and composition; location of any other drainage structures and their composition; limits of fill or alteration; location of all structures and pavement within 100 feet of the wetland; the edge of the wetland; the grade contours within 100 feet of the wetland.
- 6. Members, employees, and agents of the Commission shall have the right to enter and inspect the premises to evaluate compliance with the conditions and performance standards stated in this Order, the Massachusetts Wetlands Protection Act, and pertinent Massachusetts regulations (310CMR10:00 through 10:99). The Commission may require the submittal of any data deemed necessary by the Commission for that evaluation.
- 7. The applicant, owners, successors, or assignees shall be responsible for maintaining any on-site drainage structures and outfalls, assuring the lasting integrity of vegetative cover on the site, and monitoring of site activities so as to prevent erosion, siltation, sedimentation, chemical contamination, or other detrimental impact to any on-site or off-site resource area. It shall be the responsibility of the property owner of record to ensure compliance with the maintenance conditions required by this Order.



Town of Nantucket, Massachusetts
WPA Form 5 – Order of Conditions
The Town of Nantucket Bylaw Chapter 136

DEP File Number:

SE48-3947
Provided by DEP

B1. Additional Conditions (cont.)

- 8. This document shall be included in all construction contracts and subcontracts dealing with the work proposed and shall supersede other contract requirements.
- 9. A complete copy of this permit, including its drawings, Special Conditions, and any Amendments shall be available at the work site whenever work is being performed. The permittee shall provide a copy of this permit to all contractors, subcontractors, and other personnel performing work relating to this project in order to assure full knowledge and compliance with the permit's terms and conditions.
- 10. Natural vegetation between the wetland edge and upland edge of the Undisturbed Buffer shall be left intact. Within 48 hours of project completion, weather permitting, all disturbed areas shall be replanted as previously approved by the Commission. There shall be at least a 25-foot undisturbed buffer on the upland side of the wetland boundary, unless otherwise specified by this Order. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.
- 11. To minimize adverse effects on wildlife and water resources, the use of any pesticide or fertilizer requires explicit permission to be granted by the Commission. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.
- 12. In all cases, no part of any structure, including decks, stairs, cantilevers, etc., may be closer than 50 feet from the approved wetland boundary unless otherwise specified in this Order. This shall be an ongoing Condition that shall survive the expiration of this permit and shall be so noted on the Certificate of Compliance.
- 13. Any refuse material found on the site shall be disposed of at an approved landfill and in no case may these materials be buried or disposed of in or near a wetland.
- 14. This Order of Conditions shall apply to any successor in interest or successor in control of the property.
- 15. No underground petroleum product storage tanks are allowed within 100 feet of any wetland or within any velocity (V) flood zone as indicated on the most recent FEMA floodplain maps.
- 16. No work under this Order of Conditions may proceed until the applicant has filed all necessary permits and applications with:
Board of Health, ZBA, HDC, Building Inspector, Army Corps of Engineers, DEP, Waterways, MNH, etc.
- 17. All construction and alterations must comply with the above referenced plans and the Conditions of this Order. Any changes intended to be made in the plans or in the work shall require the applicant to file a new Notice of Intent, or to inquire of the Commission in writing whether the change is substantial enough to require a new filing. No change in plan or work under this filing is permissible without a new Notice of Intent, or permission from the Commission.

+FINDINGS and ADDITIONAL CONDITIONS
Massachusetts Wetlands Protection Act (MGL Chapter 131, Section 40)
Town of Nantucket Wetlands Bylaw (Chapter 136)

Address: Smooth Hummocks
Assessor's Map and Parcel: 82 – 30
Property Owner: Nantucket Islands Land Bank
Applicant: Nantucket Islands Land Bank
DEP File Number: SE48-3947
Filing Date: December 11, 2025
Date Hearing Closed: January 8, 2026
Date Orders Issued: January 14, 2026
Plan of Record Information: Conservation Site Plan, prepared by Bracken Engineering, Inc., dated 3/5/25, signed and stamped by Donald F. Bracken, Jr., P.E, P.L.S

Permit Overview:

This order permits the proposed relocation of a section of dirt road and restoration of the abandoned portion at Smooth Hummocks within Land Subject to Coastal Storm Flowage and the buffer zones to Land Under the Ocean, Coastal Dune, Beach, and Bank. A waiver is required for this project as proposed.

Additional Findings:

1. The area falls within mapped NHESP habitat and requires NHESP review.

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, and protocols.
19. Any fill needed for the site needs to come from the site itself or any fill brought to the site shall provide a soil test for staff to review, this shall include nutrient content, heavy metals and VOC's at a minimum. Any invasive species found in these areas with fill shall be removed and appropriately disposed of off property.
20. No fertilizer or other agricultural chemicals are allowed within commission jurisdiction.
21. All plantings within Commission jurisdiction shall be native species with no cultivars allowed.
22. The applicant shall present a yearly report including photographs demonstrating the condition and survivorship of the replanted area and the existing vegetated areas. Should the Commission determine that additional plantings are necessary they will be authorized based on this discussion.
23. Should the project area show less than 50% regrowth of native species within the first two years and six months of the permit the applicant shall file a new notice or amendment for supplementing the area with native plantings and or seedings.
24. Any invasive species found in these areas shall be removed and appropriately disposed of off property.

25. All reports are required annually by the anniversary of this order's issuance, until a Certificate of Compliance is issued or this order expires.
26. Educational signage shall be installed by the Land Bank advising pedestrians and vehicles to remain on the designated road surface to avoid encroachment on the surrounding resource areas.
27. On an annual basis, the road width shall be measured to determine if it has expanded beyond its permitted width. These measurements shall be included with the annual monitoring report. Should these measurements show an expansion of road width, the Commission shall require additional plantings to maintain the road at its permitted width.
28. Prior to road construction, the applicant shall submit the updated Conservation Management Plan provided by the Natural Heritage and Endangered Species Program to Commission staff.

WAIVERS UNDER THE NANTUCKET WETLANDS BYLAW/REGULATIONS

Waivers are required to § 390-16B(1), (3), and (4) for alteration and disturbance of vegetation within verified rare or significant species habitat. The Commission finds the project as proposed will provide a significant public benefit while minimizing potential adverse impacts to rare species habitat through project design and therefore grants a waiver under § 390-3(H)(3)(e) of the Nantucket Wetlands Regulations.

Map No. 2026-001



NOTES

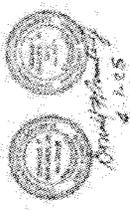
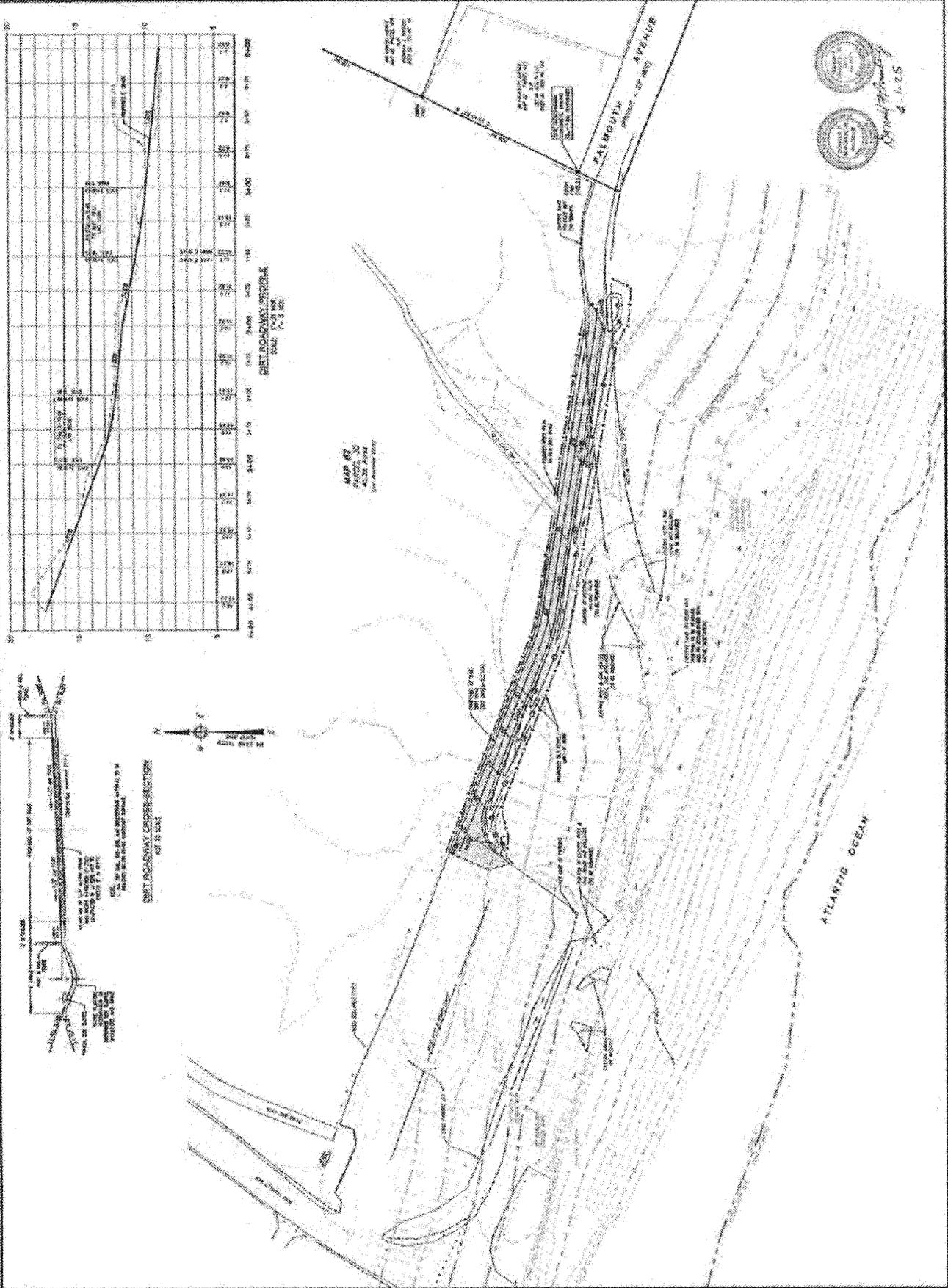
1. LOCUS ENGINEERING, INC. MAP NO. 2026-001
2. OWNER: NANTUCKET ISLANDS LAND BANK, NANTUCKET, MA 02554
3. SHEET NO. 1 OF 2
4. PLAN NO. 2026-001
5. LOCUS ENGINEERING, INC. 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
6. LOCUS ENGINEERING, INC. 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
7. LOCUS ENGINEERING, INC. 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
8. LOCUS ENGINEERING, INC. 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
9. LOCUS ENGINEERING, INC. 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
10. LOCUS ENGINEERING, INC. 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554

PROFILES

1. PROFILE SCALE: 1" = 10' (VERTICAL)
 2. PLAN SCALE: 1" = 50' (HORIZONTAL)

PROJECT BY:
BRACKEN ENGINEERING
 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
 TEL: (508) 558-1111
 FAX: (508) 558-1112
 WWW.BRACKENENGINEERING.COM

**CONSERVATION SITE PLAN
 IN NANTUCKET, MASSACHUSETTS**
 Prepared for:
NANTUCKET ISLANDS LAND BANK
 100 STATE STREET, SUITE 200, NANTUCKET, MA 02554
 MAP NO. 2026-001





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- 3947
MassDEP File #

eDEP Transaction #
Nantucket
City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

Please indicate the number of members who will sign this form.

This Order must be signed by a majority of the Conservation Commission.

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

01/14/26

1. Date of Issuance

6

2. Number of Signers

Signatures:

Linda F. Williams
Linda F. Williams
Seth Engelbourg(C)
Seth Engelbourg

Joe Plandowski
Joe Plandowski
Linda Williams(VC)
Linda Williams

by hand delivery on

Date

Tim Braine
Tim Braine
John Schaffer
John Schaffer

RJ Turcotte
RJ Turcotte
John Schaffer
John Schaffer

by certified mail, return receipt requested, on

Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request of Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

SIGNATURE CERTIFICATE

	REFERENCE NUMBER 9F56B4F8-7FCE-4965-91E5-2C7C96ABA688
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TRANSACTION DETAILS

Reference Number
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Transaction Type
Signature Request

Sent At
01/09/2026 02:52:05 PM EST

Executed At
01/13/2026 11:54:50 AM EST

Identity Method
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Distribution Method
email

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Signer Sequencing
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Document Passcode
Disabled

DOCUMENT DETAILS

Document Name
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Pages
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Content Type
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File Size
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SIGNERS

SIGNER

Name
Linda Williams
Email
ackczarina1@gmail.com
Components
2

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SIGNER

Name
RJ Turcotte
Email
rturcottejr@gmail.com
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6

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Joe Plandowski
Email
jwpmail@gmail.com
Components
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Email
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Email
john@stowemountainbuilders.com
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AUDIT

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Tim Braine (timbraine@gmail.com) was emailed a link to sign.
RJ Turcotte (rturcottejr@gmail.com) was emailed a link to sign.
Joe Plandowski (jwpmail@gmail.com) was emailed a link to sign.
John Schafer (john@stowemountainbuilders.com) was emailed a link to sign.
Linda Williams (ackczarina1@gmail.com) was emailed a link to sign.
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RJ Turcotte (rturcottejr@gmail.com) was emailed a reminder.
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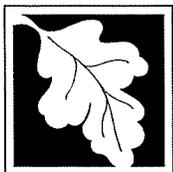
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01/13/2026 11:54:50 AM EST

AUDIT

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Linda Williams (ackczarina1@gmail.com) signed the document on Chrome via GNU/Linux from 73.197.94.89.



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:
SE48-3947
MassDEP File #

eDEP Transaction #
Nantucket
City/Town

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Conservation Commission

Please be advised that the Order of Conditions for the Project at:

Project Location

MassDEP File Number

Has been recorded at the Registry of Deeds of:

County

Book

Page

for: _____
Property Owner

and has been noted in the chain of title of the affected property in:

Book

Page

In accordance with the Order of Conditions issued on:

Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant



**Notice of Intent Application
Falmouth Ave Relocation
Smooth Hummocks (Map 82, Parcel 30), Nantucket, MA**

**Prepared for:
The Nantucket Conservation Commission
131 Pleasant Street
2nd Floor
Nantucket, MA 02554**

**Prepared by:
The Nantucket Islands Land Bank**

December 8, 2025



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 #:1960681
City/Town:NANTUCKET

A.General Information

1. Project Location:

a. Street Address	SMOOTH HUMMOCKS	c. Zip Code	02554
b. City/Town	NANTUCKET	e. Longitude	70.15349W
d. Latitude	41.25287N	g.Parcel/Lot #	30
f. Map/Plat #	82		

2. Applicant:

Individual Organization

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	508-228-9369
j. Email	ephelps@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	508-228-9369
j. Email	ephelps@nantucketlandbank.org		

4. Representative:

a. First Name	ELIZABETH	b. Last Name	PHELPS
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	ephelps@nantucketlandbank.org		

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
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6. General Project Description:

THE APPLICANT PROPOSES TO RELOCATE A PORTION OF THE EXISTING DIRT ROADWAY ON THE PROPERTY FURTHER FROM THE BEACH/DUNE, AND TO RESTORE THE ABANDONED ROADWAY WITH NATIVE PLANTINGS.

7a. Project Type:

- | | |
|---|--|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Limited Project Driveway Crossing | 4. <input type="checkbox"/> Commercial/Industrial |
| 5. <input type="checkbox"/> Dock/Pier | 6. <input type="checkbox"/> Utilities |
| 7. <input type="checkbox"/> Coastal Engineering Structure | 8. <input type="checkbox"/> Agriculture (eg., cranberries, forestry) |
| 9. <input type="checkbox"/> Transportation | 10. <input type="checkbox"/> Other |



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

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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:	c. Book:	d. Page:
NANTUCKET		646	258

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

1. Buffer Zone & Resource Area Impacts (temporary & permanent):

This is a Buffer Zone only project - 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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input type="checkbox"/> Land under Waterbodies and Waterways	1. Square feet	2. square feet
	3. cubic yards dredged	
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input type="checkbox"/> Riverfront Area	1. Name of Waterway (if any)	
	2. Width of Riverfront Area (check one)	
	<input type="checkbox"/> 25 ft. - Designated Densely Developed Areas only	
	<input type="checkbox"/> 100 ft. - New agricultural projects only	
	<input type="checkbox"/> 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.



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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)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Designated Port Areas	Indicate size under	Land under the ocean below,
b. <input type="checkbox"/> Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes, below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	1. square feet	2. cubic yards dune nourishment
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab, crea.
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet	
k. <input type="checkbox"/> 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. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet	

4.Restoration/Enhancement

Restoration/Replacement

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 entered the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5.Projects Involves Stream Crossings

Project Involves Streams Crossings



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If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

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 of Endangered Species program (NHESP)?

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

b. Date of map:2021

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18)...

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

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

3. Project plans for entire project site, including wetland resource areas and areas outside of wetland 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

c. MESA filing fee (fee information available at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html>)

Make check payable to "Natural Heritage & Endangered Species Fund" 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

d. 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/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14>; 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 Number

b. Date submitted to NHESP



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

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3. Separate MESA review completed.

Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

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

a. Not applicable - project is in inland resource area only

b. Yes No

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

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

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 S. Rodney French Blvd
New Bedford, MA 02744

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it 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.

3. 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 DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. 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

5. 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

6. 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, Explain why the project is exempt:

1. Single Family Home

2. Emergency Road Repair



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

D. Additional Information

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 by regular mail delivery.

- 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.
- 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.

a. Plan Title: b. Plan Prepared By: c. Plan Signed/Stamped By: c. Revised Final Date: e. Scale:

- 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.



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 #:1960681
City/Town:NANTUCKET

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:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payer name on check: First Name

7. Payer name on check: Last Name

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.

1. Signature of Applicant

2. Date

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 Section C, Items 1-3, 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.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Wetland Fee Transmittal
Form

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

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1960681
City/Town:NANTUCKET

A. Applicant Information

1. Applicant:

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 5082287240 i. Fax 5082289369 j. Email ephelps@nantucketlandbank.org

2. Property Owner:(if different)

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 5082287240 i. Fax 5082289369 j. Email ephelps@nantucketlandbank.org

3. Project Location:

a. Street Address SMOOTH HUMMOCKS b. City/Town NANTUCKET

Are you exempted from Fee? (YOU HAVE SELECTED 'YES')

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than \$100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total
	City/Town share of filing fee	State share of filing fee	Total Project Fee	
	\$0.00	\$0.00	\$0.00	



List of Plans and Supporting Documents

Falmouth Ave Relocation

Smooth Hummocks (Map 82/Parcel 30), Nantucket, Massachusetts

Notice of Intent

1. Project Narrative, Resource Area Descriptions, and Waiver Request
2. Figures
 - 1: Site Locus
 - 2: Existing Conditions
 - 3: Resource Areas
 - 4: NHESP Habitat and Land Subject to Flooding
 - 5: Proposed Restoration Plan
3. Photographs
4. Project Plan
5. Roadway Blend Material Permeability and Structural Classification (Bracken Engineering, Inc.)
6. NPD and NFD Letters of Support
7. Performance Standards Analysis and Waiver Request (Verill Law)
8. Abutters Information

**PROJECT NARRATIVE, RESOURCE AREA DESCRIPTIONS,
AND WAIVER REQUESTS**



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

Site Description and Background

The Nantucket Islands Land Bank (“Land Bank”) is submitting this Notice of Intent (NOI) application to relocate a portion of a dirt road, known as Falmouth Ave, at the Cisco Beach property identified as Smooth Hummocks (Map 82/Parcel 30) in Nantucket, Massachusetts (the site). Falmouth Ave provides access to the Cisco Beach parking lot from the residential neighborhoods to the east.

The site is bound to the north by a vacant parcel beyond which is Hummock Pond Road, to the east by residences, to the south by the Atlantic Ocean, and to the west by an access driveway to the Cisco Beach parking lot off of Hummock Pond Road. Much of the site is sandplain-heathland. Falmouth Ave and the Cisco Beach parking lot are located within the southern portion of the site, beyond which is Cisco Beach. Figures 1 and 2 (Attachment 2) depict the site location and existing conditions, and photographs are included in Attachment 3.

Bank erosion has compromised the southern parking lot, forcing the closure of the front (southern) section, and the Land Bank recently permitted a secondary parking area on the opposite side of the access driveway to the north. At the time, the new parking area required coordination with the Massachusetts Natural Heritage Endangered Species Program (NHESP) but is not within the 100-foot buffer to any wetland resource areas. NHESP issued a Conservation Management Permit (CMP-86043) for the parking lot expansion. Work on this lot is not yet complete.

The rear (northern) section of the original parking lot is still being used to provide public access to Cisco Beach; however, erosion is threatening the southwestern portion of Falmouth Ave, which provides access to the lot from the east. The purpose of this Notice of Intent is to request permission to relocate the southwestern section of Falmouth Ave to the north, connect it to the existing northern portion, and restore the abandoned roadbed with native plantings.

A NOI for the same project was previously submitted on January 30, 2025 and issued MassDEP file number SE48-3893. The NOI was withdrawn in September 2025. This is a new submittal; however, the proposed work is the same. When the NOI was first submitted, Daniel J. Bailey, III, Esq., of Pierce Atwood LLP submitted several letters to the Conservation Commission on behalf of Ocean Health, LLC, owner of 9 Falmouth Avenue, opposing the project. The letter submitted on August 25, 2025 challenges the Land Bank’s right to use Falmouth Ave. Peter Vetere, the Land Bank’s counsel at Verill Law, has responded to this letter, and the response is being submitted separately to the Conservation Commission for reference.

Wetland Resource Areas

Resource areas on the site subject to protection under the Massachusetts Wetlands Protection Act (M.G.L., c. 131, s.40) and the Nantucket Wetland Bylaw Regulations (Chapter 136) include Land Under the Ocean (310 CMR 10.25/ § 390-6.), Coastal Beach (310 CMR 10.27/ § 390-7), Coastal Dune (310 CMR 10.28/ § 390-8), Coastal Bank (310 CMR 10.30/ § 390-10), and Land Subject to Coastal Storm Flowage (310 CMR 10.04/ § 390-15). Please refer to Figures 3 and 4 (Attachment 2) for a depiction of the resource areas on the site. The proposed work plan prepared by Bracken Engineering, Inc. (Attachment 4) also depicts the resource areas.



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

As shown on the Bracken plan (Attachment 4), portions of the proposed new section of Falmouth Ave are within the 75 and 100-foot buffer zones to the Coastal Dune. As shown on the plan, we are also proposing a swale to the south of the roadway for drainage purposes. The swale is outside the 50-foot buffer to the Coastal Dune. The existing southwestern portion of Falmouth Ave for proposed restoration (native plantings) is located partially within the dune and its 25-foot buffer zone, as well as partially within the buffer to the Coastal Bank and the Coastal Beach. None of the proposed work areas are within Land Subject to Flooding or Land Subject to Coastal Storm Flowage.

NHESP Rare Species Habitat

According to the 15th Edition of the Massachusetts Natural Heritage Atlas (August 2021) published by the NHESP, the site is within an Estimated Habitat of Rare Wildlife and a Priority Habitat of Rare Species. A copy of this NOI has been submitted to NHESP for review, and the Land Bank is coordinating with the agency to obtain a CMP Amendment prior to starting work.

Project Details

The southern portion of the southern Cisco Beach parking lot has eroded, forcing the closure of this area to parking. Erosion is also threatening the southwestern portion of Falmouth Ave. To preserve this parking lot access, we are proposing to relocate the southernmost section of the road northward, connecting it to the existing northern portion of Falmouth Ave. The new section of the road would match the existing road and parking lot, and would require vegetation/topsoil removal, grading, and the application of a roadway material blend. We are also proposing to grade a swale on the south side of the new section of road for drainage purposes. Post and rail fence will be installed on either side of the roadway. The proposed work plan is included in Attachment 4.

The Land Bank requested that our consulting engineer, Bracken Engineering, Inc., conduct permeability testing on three potential roadway blends to ensure the selected material would not create an "impervious surface" which is defined in § 390-2 as "[a] manmade surface that does not allow infiltration of water into the underlying soil". The results indicated that all three materials were permeable to varying degrees (Attachment 5). Bracken recommends using the "Toscana Ack Pack" material blend, which rated as rapid permeability (18.4 inches per hour) based on USDA Natural Resources Conservation Service soil classification guidelines—comparable to natural sand and low-end gravel, and significantly more permeable than loamy sand, a commonly encountered permeable soil. The Land Bank is amendable to using this roadway material blend if the Commission were to condition approval of the notice of intent on its use.

As discussed with NHESP, individual rare plant species have been surveyed and flagged and will be translocated out of the project area to a previously approved translocation area. Once relocated, the abandoned portion of Falmouth Ave will be restored as depicted on Figure 5 (Attachment 2). Removed plants from the new section of the road (other than those flagged for translocation) will be moved to the old roadbed as large sods. Beach grass will be planted in the areas of the existing road where dune has started to take over. The old roadbed will be closed to traffic.



Notice of Intent Application
Falmouth Ave Relocation
Map 82/Parcel 30

Alternatives Analysis

Alternatives to relocating the southwestern portion of Falmouth Ave were evaluated as follows:

- 1) **No Action:** The dune erosion will ultimately destroy the southwestern section of Falmouth Ave, making access to the Cisco Beach parking lot from the east unsafe in the short term and eventually not possible. Therefore, the only feasible alternatives are to close the road or to relocate the portion that is compromised.
- 2) **Road Closure:** Falmouth Ave provides access to some of the residences off of Westerwyck Way to the east. The Land Bank could therefore only close the western portion of the road that provides access to the Cisco Beach parking lot. Doing so would eliminate this beach access from the residential neighborhoods to the east and may encourage people to park at the roadway terminus to access the beach, potentially causing adverse impacts to rare species. Although traffic could go around via Hummock Pond Road, this would funnel all beach traffic into one area.

Both Nantucket Fire Chief Michael Cranston and Nantucket Police Chief Jodi Kasper have submitted letters to the Conservation Commission (Attachment 6) in support of the project, stating that Falmouth Ave is advantageous for public safety and overall emergency preparedness. Maintaining this access point is therefore considered to be a better alternative than closing it.

- 3) **Relocate Outside the 100-foot Buffer:** During the planning of this proposed project, consideration was given to alternative routes that would be completely outside of the 100-foot buffer to the Coastal Dune. Any alternatives were determined to result in an increased number of rare species that would be impacted as well as greater habitat disturbance due to the increased length of roadway required. Additionally, the only portion of the proposed work that is within the resource area and the 25-foot buffer is restoration of the old roadbed. Based on these factors, we believe the current configuration is the option that would cause the least impact to the habitat and resource areas while continuing to provide this public accessway to Cisco Beach.

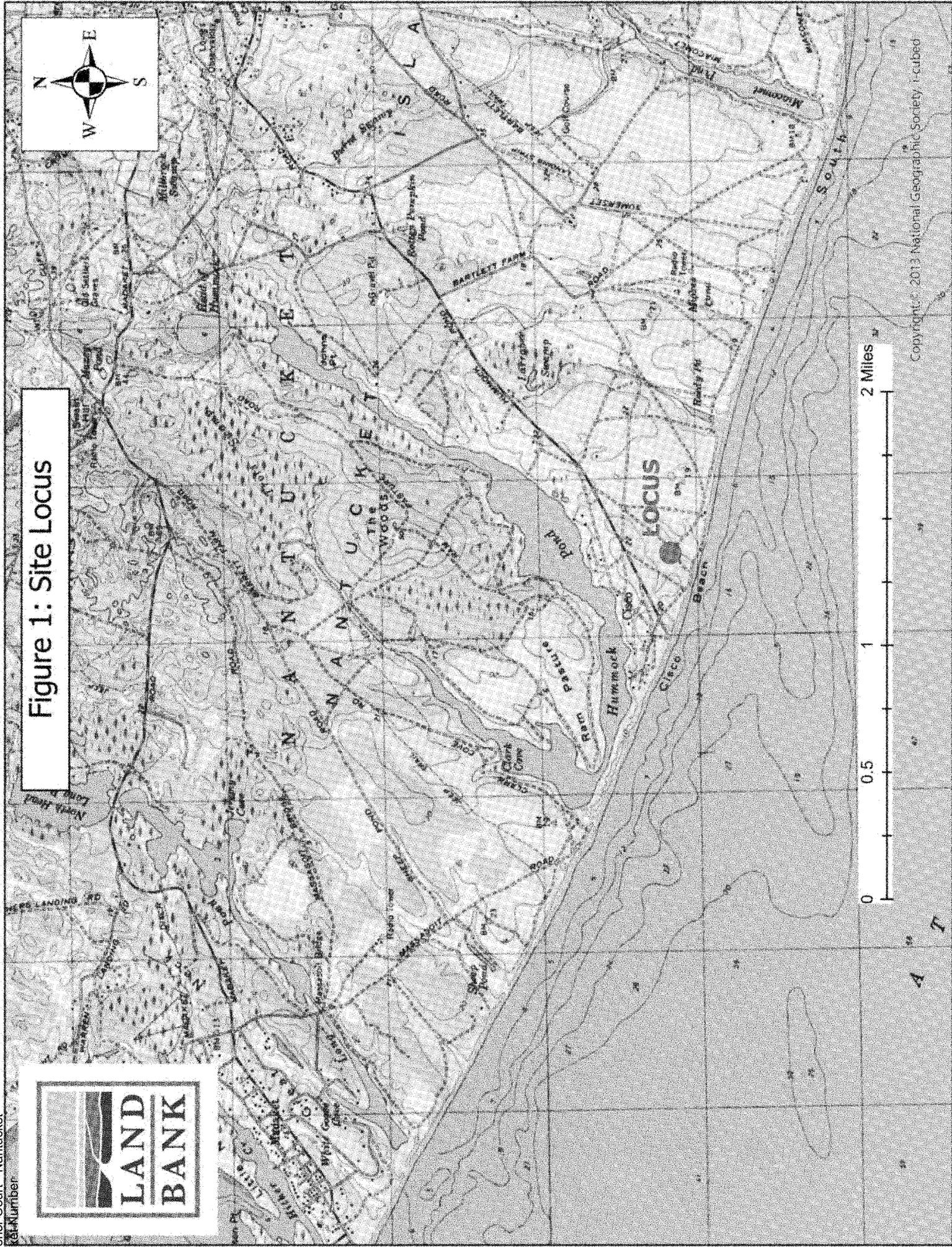
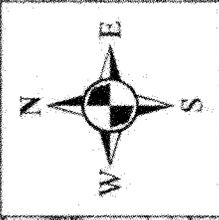
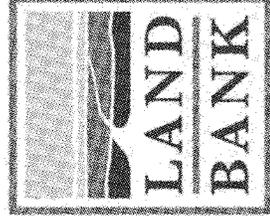
Performance Standards and Waivers

It is our opinion that the project would cause limited impacts to the resource areas at the site, which would be mitigated by the CMP Amendment that will be approved by NHESP prior to the start of work. The project involves moving the roadway further from the wetland resource areas and restoring the portion that is currently within the dune and 25-foot buffer.

It is our understanding that waivers from the Nantucket Wetland Regulations are required for altering existing vegetation within rare/significant species habitat. A separate performance standard analysis and waiver request was prepared by our counsel, Mr. Peter Vetere of Verill Law (Attachment 7).

FIGURES

Figure 1: Site Locus



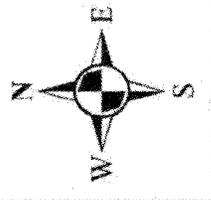
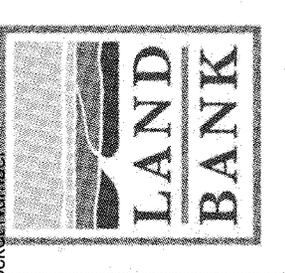


Figure 2: Existing Conditions



Approximate Location of Permitted Northern Parking Area

Cisco Beach Parking Lot

Closed Portion of parking Lot

Existing Falmouth Ave

Approximate Proposed Relocation Area (Dashed)

Smooth Hummocks Map 82/Parcel 30

Cisco Beach Access Drive

Hummock Pond Road

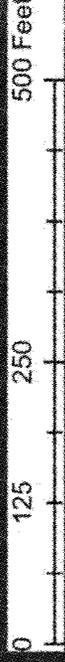
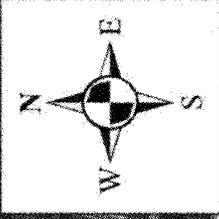




Figure 3: Resource Areas



Approximate Proposed Relocation Area (Dashed)

Existing Falmouth Ave For Proposed Restoration

Cisco Beach Parking Lot

Closed Section of Parking Lot

Coastal Bank

Coastal Dune

Coastal Beach

Legend

- LEC Dune Flags
- Coastal Beach Line

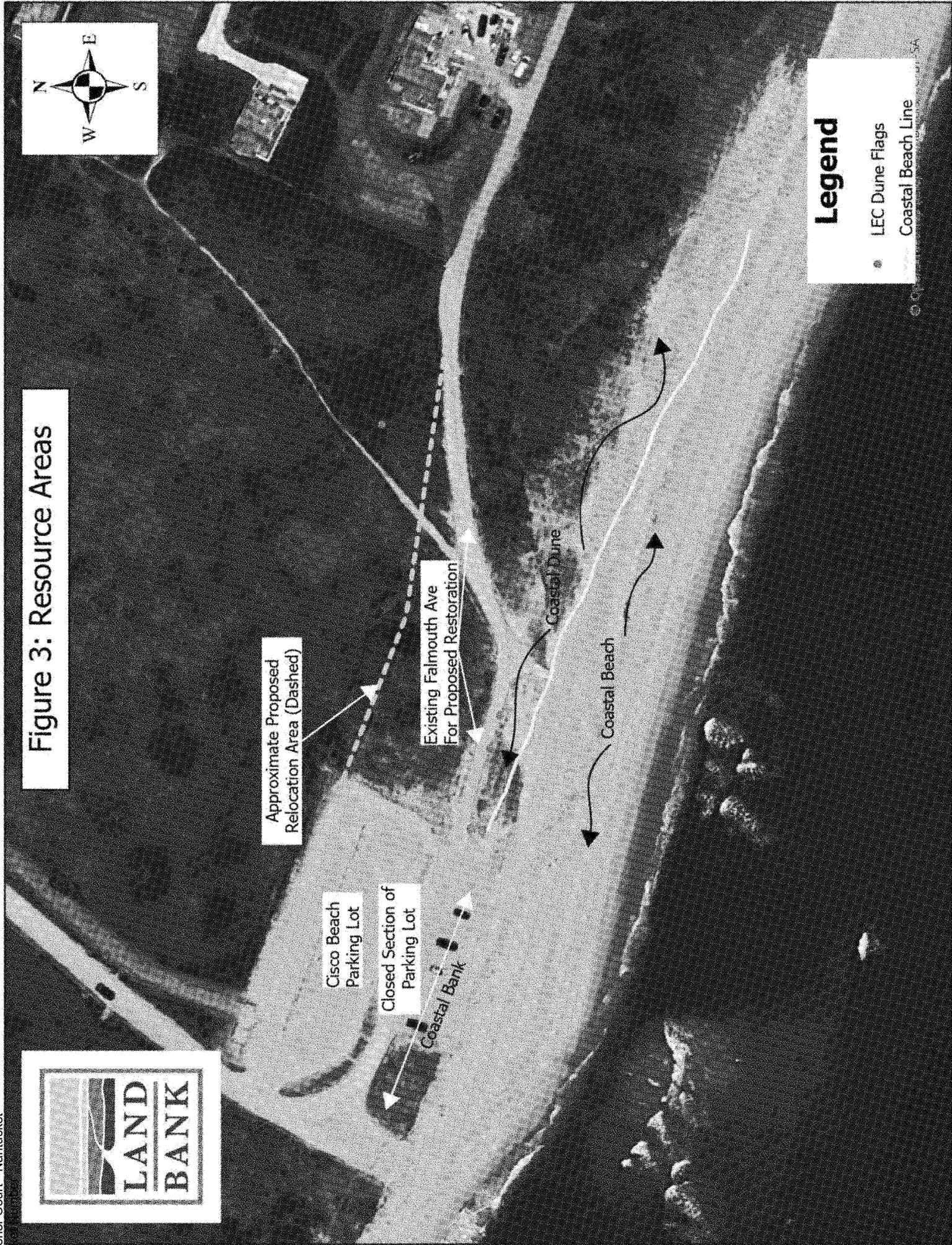
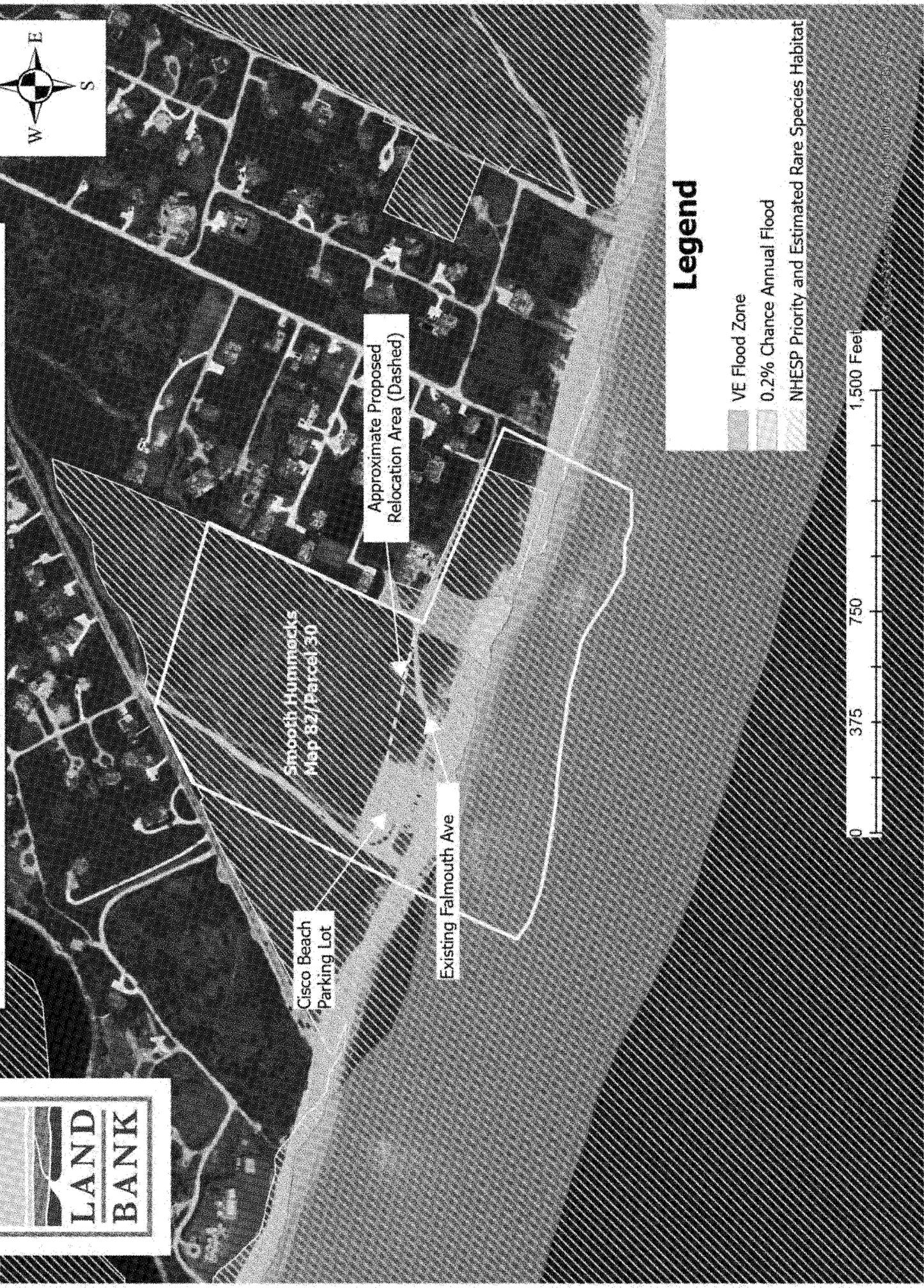
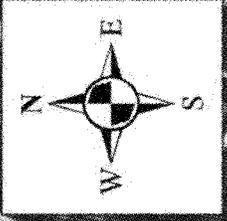


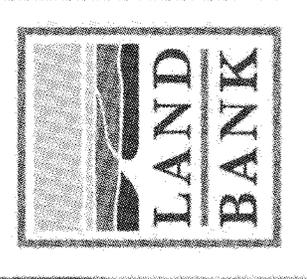
Figure 4: NHESP Habitat and Land Subject to Flooding



Legend

- VE Flood Zone
- 0.2% Chance Annual Flood
- NHESP Priority and Estimated Rare Species Habitat

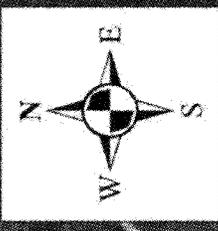




Cisco Beach Parking Lot

Coastal Bank

Figure 5: Proposed Restoration Plan



Beach Grass

Sods from Road Relocation Area

Legend

- LEC Dune Flags
- Coastal Beach Line



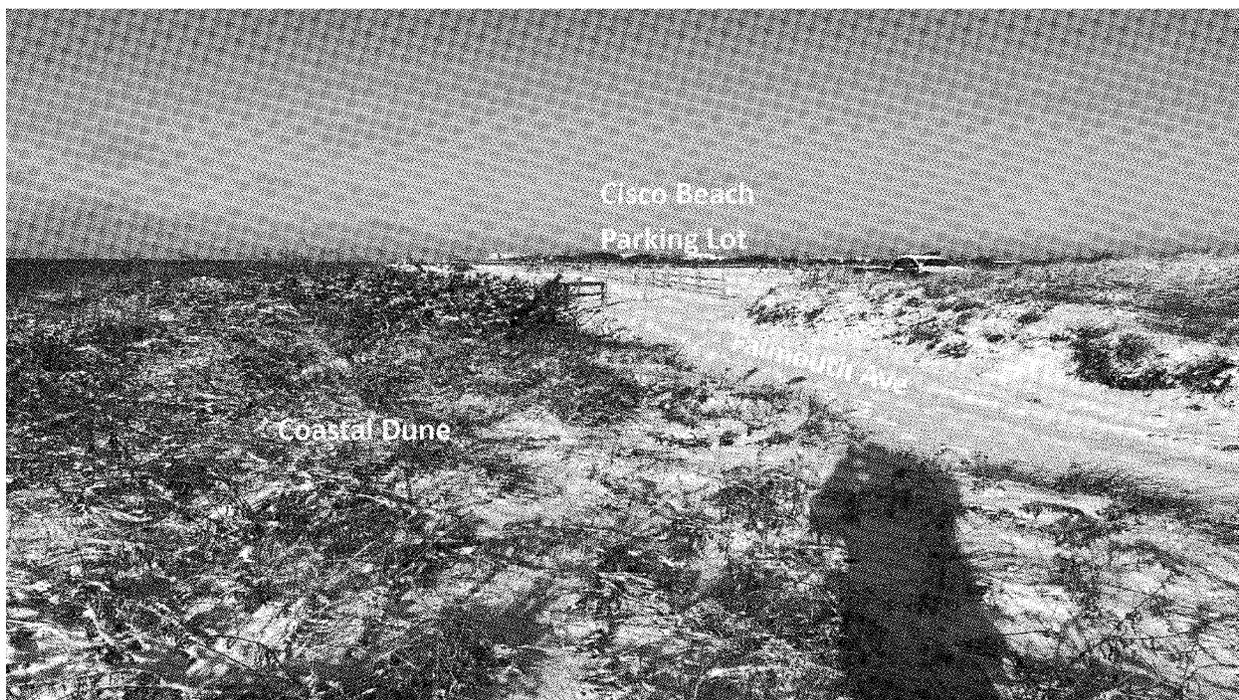
PHOTOGRAPHS

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
December 2025

Photographs



Existing Falmouth Ave access to Cisco Beach parking lot, coastal dune to right (south).



Existing Falmouth Ave access to Cisco Beach parking lot.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
December 2025



Closed section of Cisco Beach parking lot at west terminus of dune.



Flagged dune, south of existing Falmouth Ave.

Falmouth Ave Relocation NOI
Smooth Hummocks (Map 82/Parcel 30)
December 2025

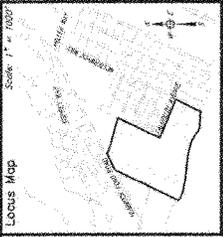


Falmouth Ave, facing east.



North side of Falmouth Ave facing northeast.

PROJECT PLAN



- Notes**
1. LOCUS: SMOOTH HUMMOCKS MAP 82 PARCEL 30
 2. OWNER: NANTUCKET ISLANDS LAND BANK NANTUCKET, MA 02584
 3. DEED REF: 36, 645 Pgs. 298
 4. PLAN REF: Smooth Hummocks, Map No. 2014-044 Non Eng. 25-0
 5. LOCUS GOES PARTIALLY FALL WITHIN A 75' WIDE BUFFER ZONE (SEASIDE) WITHIN THE NANTUCKET ISLANDS LAND BANK INSURANCE RISK MAP NO. 2018B-0089-C DATED 06/29/2018.
 6. LOCUS GOES PARTIALLY WITHIN THE NATURAL PROGRAM (NPRES) AREAS OF ESTIMATED HAZARDOUS MATERIALS AND RESIDUALS FROM PREVIOUS USES OF THESE AREAS.

AREA SUMMARY

TOTAL AREA OF DISTRICTS: 10,400 S.F.

TOTAL AREA OF THIS DISTRICT: 1,000 S.F.

TOTAL DISTRICTS WITHIN THIS AREA: 10



Prepared by:

BRACKEN ENGINEERING

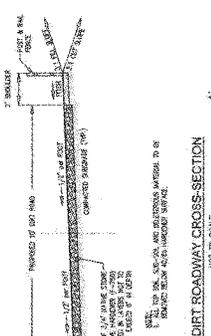
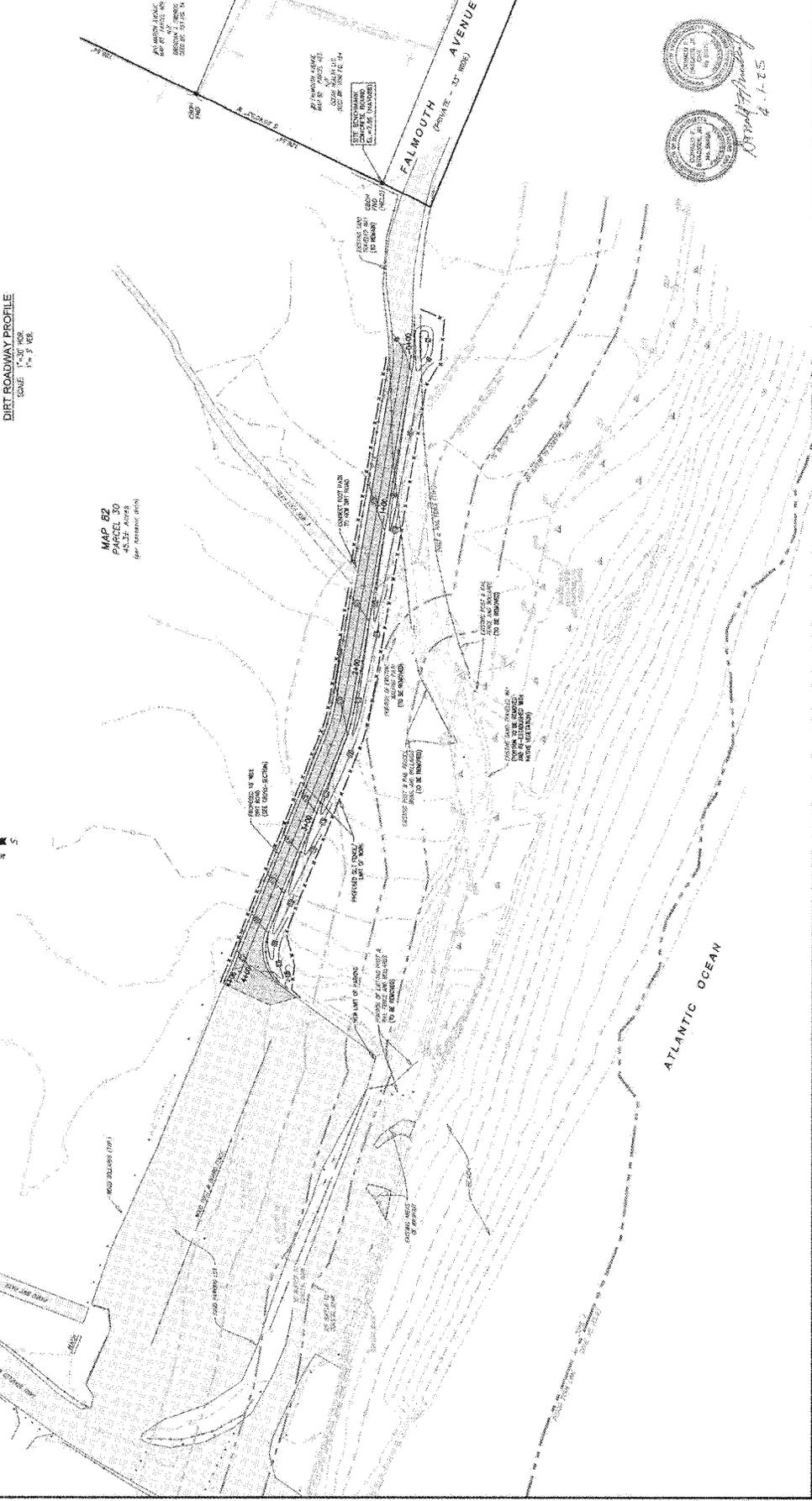
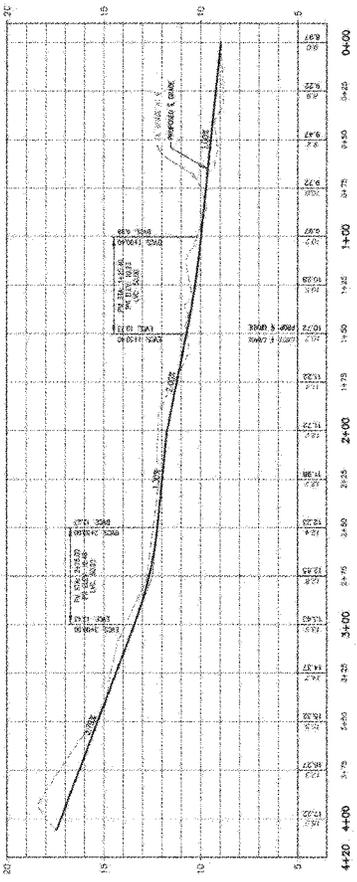
15 OLD SOUTH ROAD
NANTUCKET, MA 02584

TEL: 508-339-0300
FAX: 508-339-0301
WWW.BRACKENENGINEERING.COM

Conservation Site Plan
in Nantucket, Massachusetts

Prepared for:
SMOOTH HUMMOCKS
MAP 82 PARCEL 30

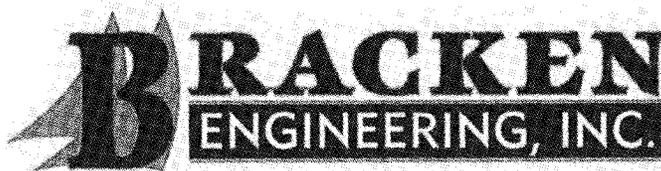
1.1	LOCUS: SMOOTH HUMMOCKS MAP 82 PARCEL 30
1.2	OWNER: NANTUCKET ISLANDS LAND BANK
1.3	DEED REF: 36, 645 Pgs. 298
1.4	PLAN REF: Smooth Hummocks, Map No. 2014-044
1.5	DATE: FEBRUARY 10, 2025 (AMENDED) (DATE)



**ROADWAY BLEND MATERIAL PERMEABILITY AND
STRUCTURAL CLASSIFICATION
(BRACKEN ENGINEERING, INC.)**

MAIN OFFICE:

49 Herring Pond Road
Buzzards Bay, MA 02532
TEL: (508) 833-0070
FAX: (508) 833-2282



NANTUCKET OFFICE:

19 Old South Road
Nantucket, MA 02554
TEL: (508) 325-0044
www.brackeneng.com

June 6, 2025

Nantucket Island Land Bank
Liz Phelps, Environmental Permitting Coordinator
22 Broad Street
Nantucket, MA 02554

RE: Falmouth Avenue Road Relocation – Material Permeability and Structural Classification

Dear Liz,

Per your request, we retained Thielsch Engineering of Cranston, Rhode Island, to perform laboratory testing on three roadway material blends. The material samples were locally sourced and include the "Toscana Ack Pack", the "Holdgate Hardener", and the "Toscana Road Blend". The goal was to obtain objective data regarding its physical characteristics and hydraulic behavior. The tests included a **sieve analysis and permeability (hydraulic conductivity) testing**, with results summarized below:

Laboratory Findings:

• **Sieve Analysis:**

The sample material blends were found to be approximately composed as follows:

- Toscana Ack Pack: 56% gravel, 43% sand, and 1% fines;
- Holdgate Hardener: 8% gravel, 88% sand, and 4% fines;
- Toscana Road Blend: 30% gravel, 68% sand, and 2% fines.

• **Permeability (Hydraulic Conductivity):**

The permeability rate of the sample material blends are as follows:

- Toscana Ack Pack: 1.3×10^{-2} cm/sec or approximately 18.4 in/hr;
- Holdgate Hardener: 6.6×10^{-4} cm/sec or approximately 0.94 in/hr;
- Toscana Road Blend: 3.1×10^{-3} cm/sec or approximately 4.4 in/hr.

Soil Type Comparison:

To provide context, according to the USDA Natural Resources Conservation Service (NRCS) soil classification guidelines:

Permeability Class	Code	Criteria: Estimated in/hr ¹
impermeable	IM	< 0.0015
very slow	VS	0.0015 to < 0.06
slow	SL	0.06 to < 0.2
moderately slow	MS	0.2 to < 0.6
moderate	MO	0.6 to < 2.0
moderately rapid	MR	2.0 to < 6.0
rapid	RA	6.0 to < 20
very rapid	VR	≥ 20

- Clean sand typically exhibits a permeability rate of 6–20 in/hr
- Gravel can range from 10–1000 in/hr depending on composition
- Loamy sand, a commonly encountered permeable soil, ranges between 2–6 in/hr

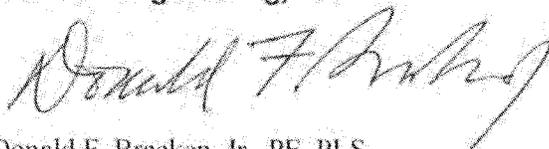
Conclusion:

Based on these laboratory findings, we would recommend using the “Toscana Ack Pack” material blend for the road construction. The tested material’s rate of 18.4 in/hr clearly places it in the “rapid” permeability category, under USDA soil taxonomy, comparable to natural sand and low-end gravel. It significantly exceeds the permeability of loamy or silty soils and is well within the range expected of an intentionally permeable surface.

If you have any further questions, please do not hesitate to contact us at 508-325-0044 or the undersigned at don@brackeneng.com.

Sincerely,

Bracken Engineering, Inc.



Donald F. Bracken, Jr., PE, PLS
President





195 Frances Avenue
 Cranston RI, 02910
 Phone: (401)-467-6454
 Fax: (401)-467-2398
 cts@tielsch.com
 Let's Build a Solid Foundation

Client Information:
 Bracken Engineering, Inc.
 Buzzards Bay, MA
 (508) 833-0070
 Project Contact: Ryan Maxwell
 Collected By: CO

Project Information:
 Falmouth Ave - Roadway Relocation
 Nantucket, MA
 Project Number: 7425-0002.100
 Summary Page: 1 of 1
 Report Date: 6/5/2025

LABORATORY TESTING DATA SHEET, Report No.: 7425-E-156

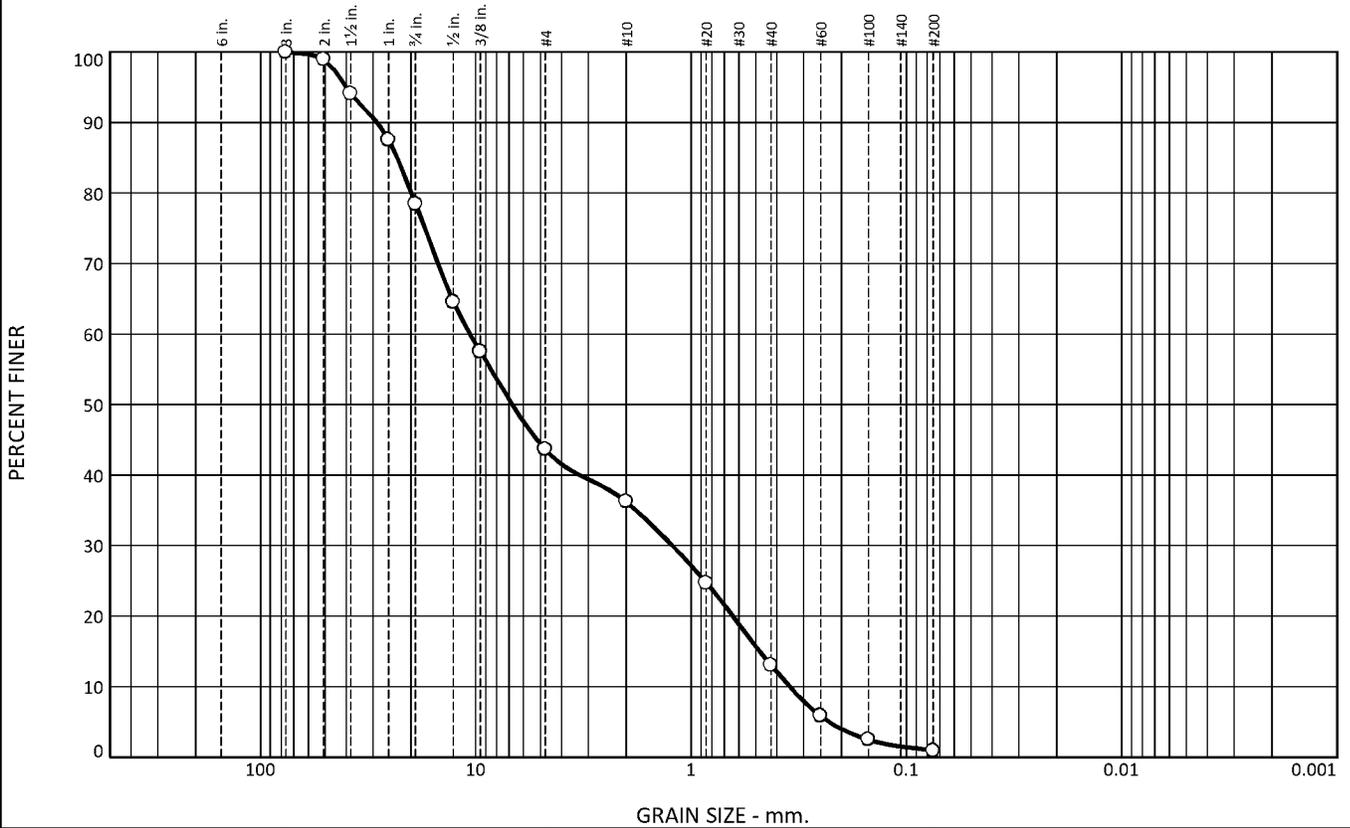
Material Source	Sample ID	Depth (ft)	Laboratory No.	Identification Tests						Proctor / CBR / Permeability Tests						Laboratory Log and Soil Description				
				As Rec'd Moisture Content % D2216	LL % D4318	PL % D4318	OD LL %	Gravel % D6913	Sand % D6913	Fines % D6913	Org. % D2974	pH D4792	g _s MAX (pcf) W _{opt} (%) D1557	g _s MAX (pcf) W _{opt} (%) D1557	Dry unit wt. (pcf)		Test Moisture Content %	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec
BEI #1	Toscana Ack Pack	Stockpile	25-S-1751					56.3	42.8	0.9		*		116.5	1.9	85			1.3x10 ⁻⁰²	Brown poorly graded gravel with sand
BEI #2	Holdgate Hardener	Stockpile	25-S-1752					7.8	88.6	3.6		125.2 6.5	126.6 6.2	113.3	0.0	85			6.6x10 ⁻⁰⁴	Brown poorly graded sand
BEI #3	Toscana Road Blend	Stockpile	25-S-1753					30.1	68.1	1.8		*		117.8	1.2	85			3.1x10 ⁻⁰³	Brown poorly graded sand with gravel

* Due to low sample volume, proctor testing was unable to be conducted, with the Client's permission, the permeability sample was compacted using an average pcf based on material's USCS classification from geotechnicalinfo.com.

Date Received: 5/19/2025 Reviewed By: Date Reviewed: 6/5/2025

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspected and/or tested. No warranty, expressed or implied, is made.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	21.6	34.7	7.4	23.3	12.1	0.9	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2"	99.0		
1 1/2"	94.1		
1"	87.6		
3/4"	78.4		
1/2"	64.5		
3/8"	57.5		
#4	43.7		
#10	36.3		
#20	24.7		
#40	13.0		
#60	5.9		
#100	2.5		
#200	0.9		

* (no specification provided)

Soil Description

Brown poorly graded gravel with sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 28.7287 D₈₅= 23.1658 D₆₀= 10.6554
 D₅₀= 6.7630 D₃₀= 1.2198 D₁₅= 0.4804
 D₁₀= 0.3467 C_u= 30.74 C_c= 0.40

Classification

USCS= GP AASHTO= A-1-a

Remarks

Source of Sample: BEI 1 thru 3 Depth: Stockpile
 Sample Number: Toscana Ack Pack

Date: 5.30.25

Thielsch Engineering Inc. Cranston, RI	Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Project No: 7425-0002.100
Fig. 25-S-1751	

Tested By: MS/TG

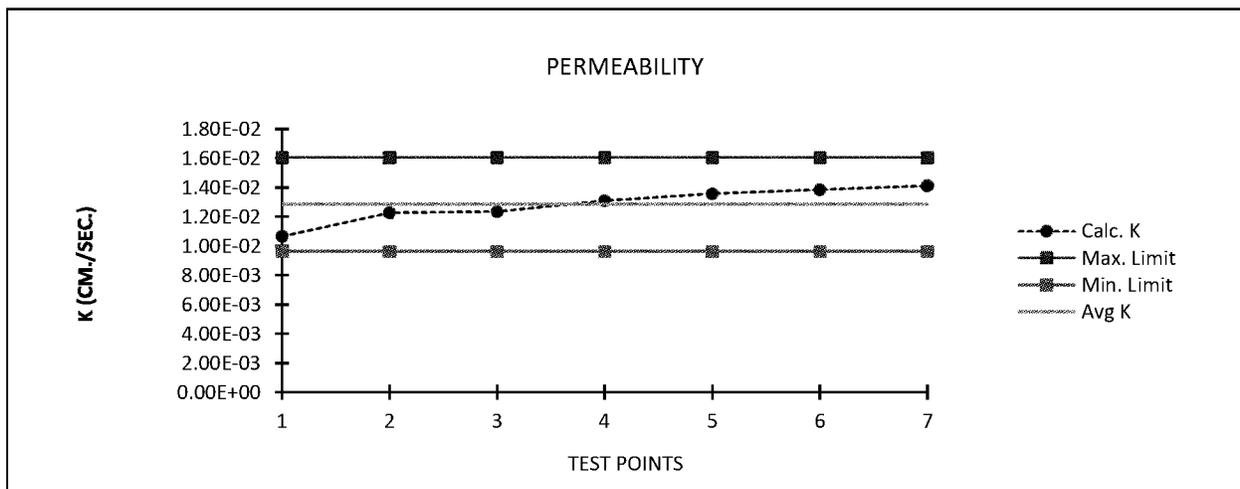
Checked By: Kris Roland

	195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 cts.thielsch.com	Client Information: Bracken Engineering, Inc. 49 Herring Pond Road Buzzards Bay, MA Ryan@Brackeneng.com	
	ASTM D2434: Permeability Test on Granular Soil		
Project Name:	Falmouth Ave - Roadway Relocation	Lab Number:	KR-1751
Project Number:	7425-0002.100	Location:	Nantucket, MA
Source:	BEI #1	Material:	Toscana Ack Pack
Oversized Material:	21.6%	% Passing #200 Sieve:	0.9%
Soil Description:	Brown poorly graded gravel with sand		
Materials Used:			

Unit Weight Determination					
Diameter, D (cm):	15.23	Net Weight (g):	6824.03	Volume, V (cm ³):	2728.99
Area, A (cm ²):	182.18	Net Height (cm):	19.71	Material Volume:	3590.52
Length, L (cm):	14.98	Relative Density, RD:	NA*		

Moisture Content:	1.9%
Air Dry Unit Weight, W (lb/ft ³):	116.5

Void Ratio, e	0.42
Percent of Proctor:	

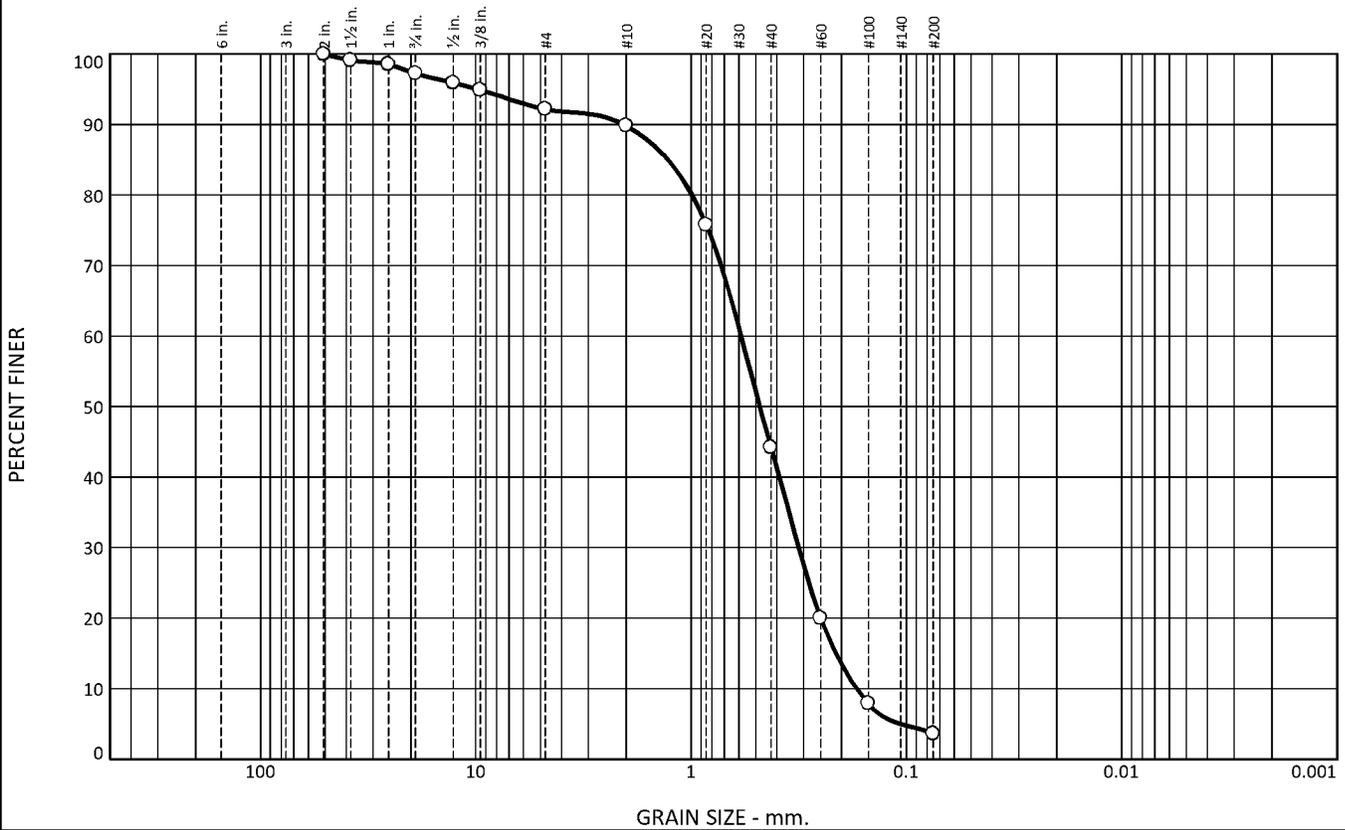


Average K cm/s	1.3E-02
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Comments			
Tap water was used to saturate sample.			
Specific Gravity is assumed as 2.65.			
*Maximum and Minimum Density tests were not part of the testing scope.			
Sample was split over a 3/4" sieve			
			
Technician:	Sophia Brooks-Randall	Reviewed By:	Kris Roland
Report Date:	06.02.25	Review Date:	06.05.25

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspected and/or tested. No warranty, expressed or implied, is made.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.7	5.1	2.3	45.7	40.6	3.6	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2"	100.0		
1 1/2"	99.1		
1"	98.5		
3/4"	97.3		
1/2"	95.9		
3/8"	94.9		
#4	92.2		
#10	89.9		
#20	75.8		
#40	44.2		
#60	20.0		
#100	7.9		
#200	3.6		

Soil Description

Brown poorly graded sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 2.0342 D₈₅= 1.2766 D₆₀= 0.5859
 D₅₀= 0.4798 D₃₀= 0.3167 D₁₅= 0.2124
 D₁₀= 0.1703 C_u= 3.44 C_c= 1.01

Classification

USCS= SP AASHTO= A-1-b

Remarks

* (no specification provided)

Source of Sample: BEI 1 thru 3 Depth: Stockpile
 Sample Number: Hldgate Hrdener

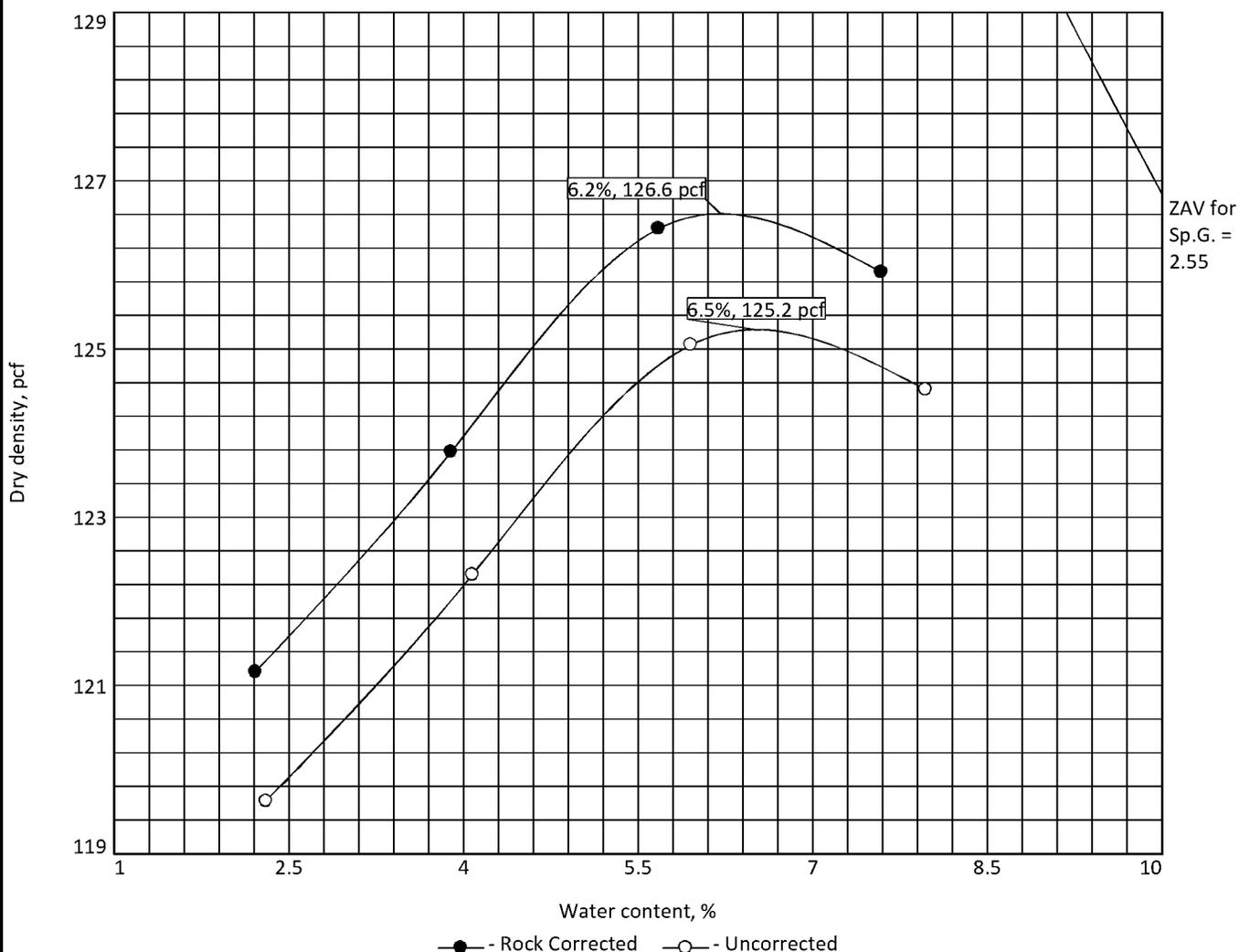
Date: 5.30.25

Thielsch Engineering Inc. Cranston, RI	Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Project No: 7425-0002.100
	Fig. 25-S-1752

Tested By: RKO/TG Checked By: Kris Roland

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspect and/or tested. No warranty, expressed or implied, is made.

COMPACTION TEST REPORT for Curve No. 25-MC-1752



Test specification: ASTM D 1557-12 Method B Modified
 ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
Stockpile	SP	A-1-b		2.55	NV	NP	5.1	3.6

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 126.6 pcf	125.2 pcf	Brown poorly graded sand
Optimum moisture = 6.2 %	6.5 %	

Project No. 7425-0002.100 Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Date: 05.30.25 Source of Sample: BEI 1 thru 3 Sample Number: IIoldgate IIardener	Remarks:
Thielsch Engineering Inc. Cranston, RI	

Fig. 25-MC-1752

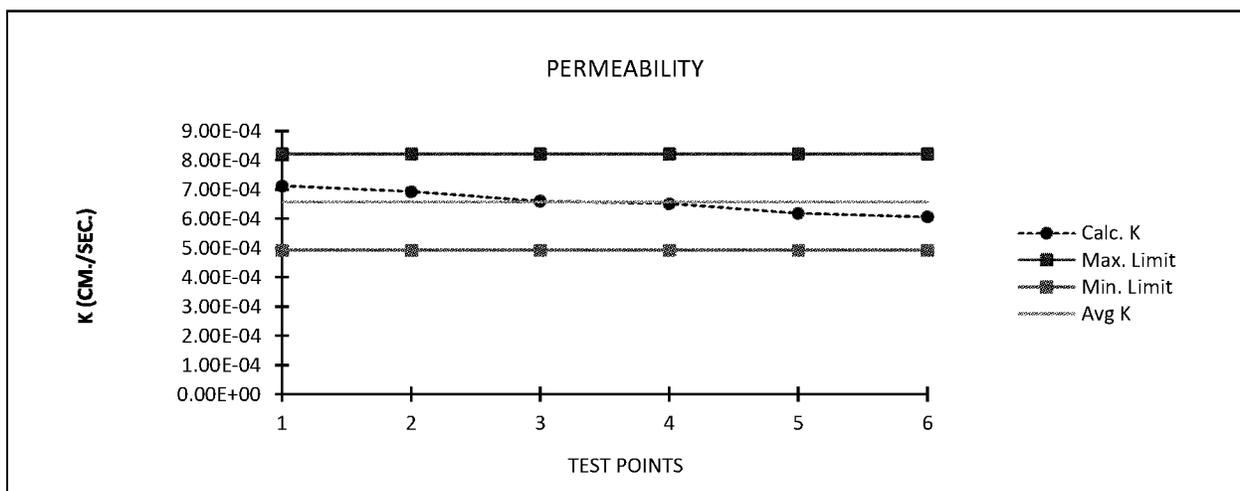
Tested By: RKO Checked By: Kris Roland

 DIVISION OF THE RISE GROUP	195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 cts.thielsch.com	Client Information: Bracken Engineering, Inc. 49 Herring Pond Road Buzzards Bay, MA Ryan@Brackeneng.com	
	ASTM D2434: Permeability Test on Granular Soil		
Project Name:	Falmouth Ave - Roadway Relocation	Lab Number:	KR-1752
Project Number:	7425-0002.100	Location:	Nantucket, MA
Source:	BEI #2	Material:	Holdgate Hardener
Oversized Material:	3.6%	% Passing #200 Sieve:	2.7%
Soil Description:	Brown poorly graded gravel with sand		
Materials Used:			

Unit Weight Determination			
Diameter, D (cm):	15.23	Net Weight (g):	6947.39
Area, A (cm ²):	182.18	Net Height (cm):	21.01
Length, L (cm):	14.98	Relative Density, RD:	NA*
		Volume, V (cm ³):	2728.99
		Material Volume:	3827.26

Moisture Content:	0.0%
Air Dry Unit Weight, W (lb/ft ³):	113.3

Void Ratio, e	0.46
Percent of Proctor:	89.5%

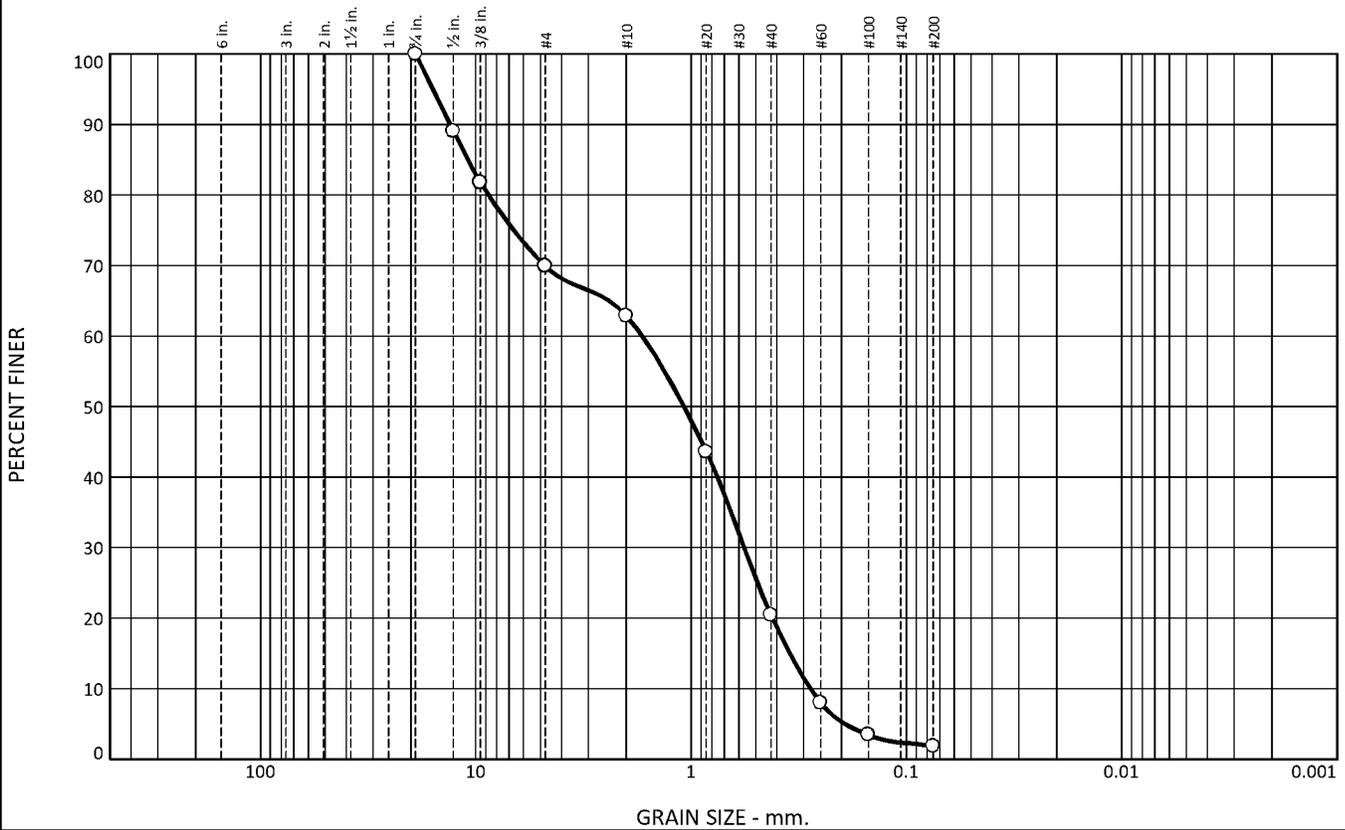


Average K cm/s 6.6E-04

Comments	
Tap water was used to saturate sample. Specific Gravity is assumed as 2.65. *Maximum and Minimum Density tests were not part of the testing scope. Sample was split over a 3/4" sieve	
	
Technician: Sophia Brooks-Randall Report Date: 6/5/2025	Reviewed By: Kris Roland Review Date: 6/5/2025

These results are for the exclusive use of the client for whom they were obtained. This report only relates to items inspected and/or tested. No warranty, expressed or implied, is made.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	30.1	7.0	42.5	18.6	1.8	

SIEVE SIZE OR DIAMETER	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4"	100.0		
1/2"	89.1		
3/8"	81.8		
#4	69.9		
#10	62.9		
#20	43.6		
#40	20.4		
#60	8.0		
#100	3.5		
#200	1.8		

Soil Description

Brown poorly graded sand with gravel

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D₉₀= 13.1601 D₈₅= 10.8927 D₆₀= 1.6907
 D₅₀= 1.0806 D₃₀= 0.5678 D₁₅= 0.3476
 D₁₀= 0.2793 C_u= 6.05 C_c= 0.68

Classification

USCS= SP AASHTO= A-1-b

Remarks

* (no specification provided)

Source of Sample: BEI 1 thru 3 Depth: Stockpile
 Sample Number: Toscana Road Blend

Date: 05.30.25

Thielsch Engineering Inc. Cranston, RI	Client: Bracken Engineering, Inc. Project: Falmouth Ave - Roadway Relocation Nantucket, MA Project No: 7425-0002.100
Fig. 25-S-1753	

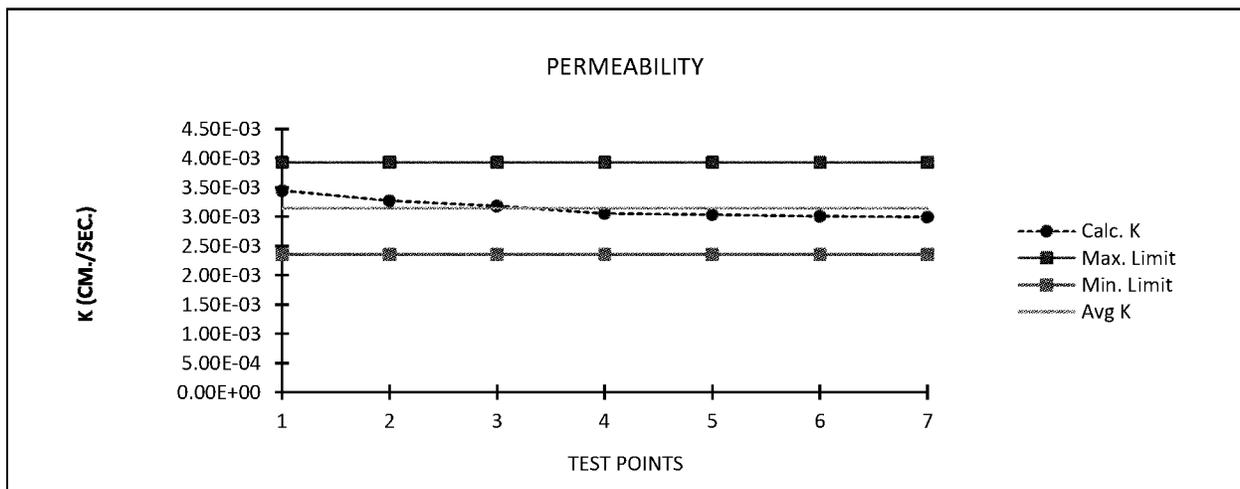
Tested By: MCS/TG Checked By: Kris Roland

	195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 cts.thielsch.com	Client Information: Bracken Engineering, Inc. 49 Herring Pond Road Buzzards Bay, MA Ryan@Brackeneng.com	
	ASTM D2434: Permeability Test on Granular Soil		
Project Name:	Falmouth Ave - Roadway Relocation	Lab Number:	KR-1753
Project Number:	7425-0002.100	Location:	Nantucket, MA
Source:	BEI #3	Material:	Toscana Road Blend
Oversized Material:	0.0%	% Passing #200 Sieve:	1.8%
Soil Description:	Brown poorly graded sand with gravel		
Materials Used:			

Unit Weight Determination					
Diameter, D (cm):	15.23	Net Weight (g):	7218.07	Volume, V (cm ³):	2728.99
Area, A (cm ²):	182.18	Net Height (cm):	20.75	Material Volume:	3780.47
Length, L (cm):	14.98	Relative Density, RD:	NA*		

Moisture Content:	1.2%
Air Dry Unit Weight, W (lb/ft ³):	117.8

Void Ratio, e	0.40
Percent of Proctor:	



Average K cm/s	3.1E-03
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Comments			
Tap water was used to saturate sample.			
Specific Gravity is assumed as 2.65.			
*Maximum and Minimum Density tests were not part of the testing scope.			
Sample was split over a 3/4" sieve			
			
Technician:	Sophia Brooks-Randall	Reviewed By:	Kris Roland
Report Date:	6/3/2025	Review Date:	6/5/2025

Chapter 2

Soils

Contents:	FL652.0204a	General	FL2-1
	FL652.0204b	Physical Soil Characteristics	FL2-1
		(a) Available Water Capacity	FL2-1
		(b) Permeability	FL2-3
		(c) Intake Rate	FL2-3
		(d) Slope	FL2-4
		(e) Wetness	FL2-4
		(f) Surface Texture	FL2-4
	(g) Restrictive Features	FL2-4	
Tables	FL2-1	Relative Permeability of Soils	FL2-3
	FL2-2	Drainage Classes of Soils	FL2-4
	FL2-3	Soil Texture Abbreviations	FL2-4
	FL2-4	Irrigation Restrictive Features	FL2-5
Figures	FL2-1	Soil Moisture Content – Types of Water in the Soil	FL2-2
	FL2-2	Moisture Release Curves for Three Soils	FL2-2
Exhibits	FL2-1	Navigating and Using the Web Soil Survey	FL2-6
	FL2-2	Navigating and Using the Soil Data Mart	FL2-15

FL652.0204a General

Knowledge of soils is essential for the efficient use of water for crop production. Soil survey maps for the areas mapped in the state are now available online through the NRCS Web Soil Survey (WSS), <http://websoilsurvey.nrcs.usda.gov/app/>. See Exhibit FL2-1 for instructions on how to use and access the NRCS WSS. The WSS is replacing the familiar, traditional paper copies of soil survey reports. As new and updated soil surveys are completed, NRCS is distributing the results of these surveys by means of the WSS instead of published reports. The WSS allows NRCS to update the information more rapidly and ensures a single source for official data. Those without computer access can still acquire soil survey information from an NRCS field office or local library.

Important physical and chemical characteristics of each kind of soil are recorded in soils handbooks or soil survey publications. This information is also available online through the NRCS Soil Data Mart, <http://soildatamart.nrcs.usda.gov/>. See Exhibit FL2-2 for instructions on how to access and use the NRCS Soil Data Mart. Some characteristics of these soils that are important to understanding soil-moisture plant relationships are discussed in this guide. They include available water capacity, permeability, intake rate, slope, wetness (drainage and depth to water table), and surface texture.

FL652.0204b Physical soil characteristics

Available Water Capacity

The available water capacity (AWC) of a soil is a measure of its capacity to make water available for plant growth. The AWC is the amount of water held between field capacity (FC) and the permanent wilting point (WP) as shown in Figure FL2-1. AWC is expressed as the water retained between 0.33 bar and 15 bar

tension for fine to medium textured soils and between 0.10 bar and 15 bar for moderately coarse to very coarse textured soils. AWC of a soil is primarily related to the soil texture, organic matter content, and bulk density. A formula for the computation of available water capacity is

$$AWC = (d_b \times T \times P_w) / (d_w \times 100)$$

Where:

AWC = Available water capacity in inches

d_b = Bulk density

$$= \frac{\text{Weight of oven-dry soil sample in grams}}{\text{Field volume of sample in cm}^3}$$

T = Thickness of soil horizon under consideration in inches

P_w = Moisture content between field capacity and wilting point in percentage by weight

d_w = Density of water taken as 1

There are two methods concerning when to irrigate. One method is based on the percentage of AWC within the root zone and the other is based on soil moisture tension. This difference in concept is shown in Figure FL2-2 which shows moisture release curves for three soils. In this figure moisture content is expressed as a percentage of AWC rather than a percentage by weight. FC is 100 percent of AWC and the WP is 0 percent of AWC (15 bars). Tension at any moisture level is different for the three soils. At the 50 percent level, for example, moisture tension for the clay is 4.3 bars; for the loam, 2 bars; and for the sand, 0.60 bars.

Moisture is more readily available to plants at low soil moisture tension (near field capacity). Since tension values are so different in the three soils shown in Figure FL2-2, it is possible that crop response would be different if the soils were irrigated when available moisture depletes to the 50 percent level. However, for most soils, irrigation should be started when the soil moisture content is no lower than the 50 percent level.

Figure FL2-1. Soil Moisture Content – Types of Water in the Soil

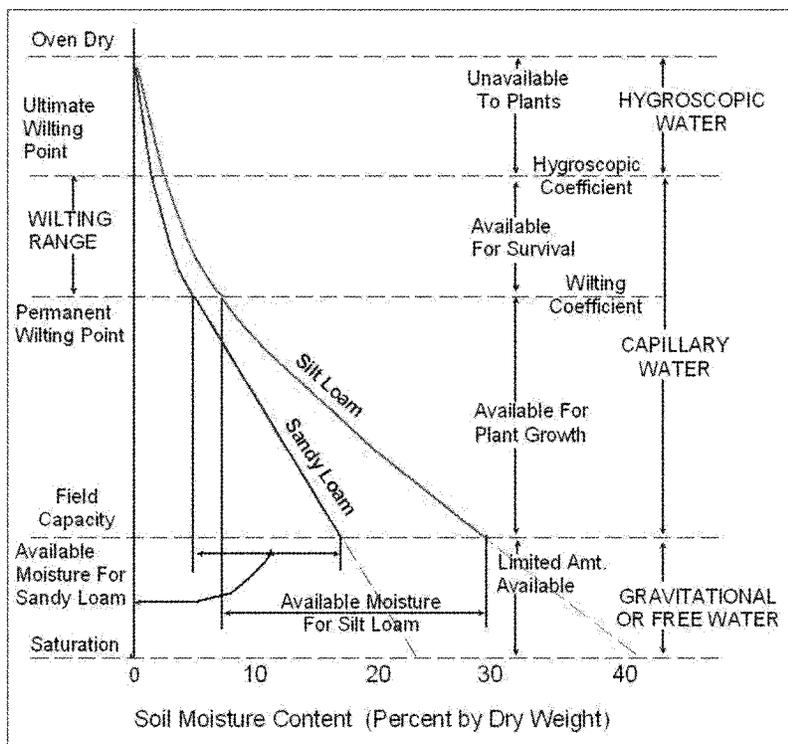
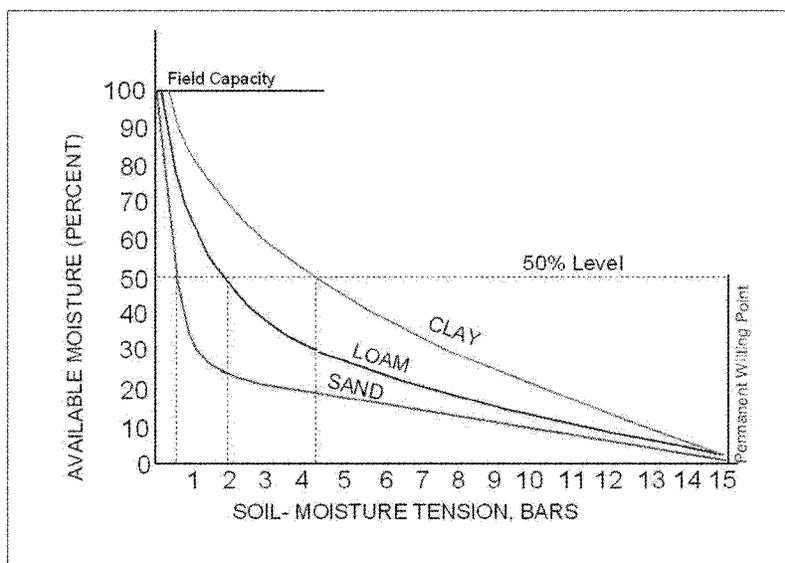


Figure FL2-2. Moisture Release Curves for Three Soils



The NRCS Soil Data Mart can be used to generate reports on physical soil properties for Florida soils, including AWC. For example, the water holding capacity for 36 inches of rooting depth on an Alpin soil is:

$$0\text{'-}1\text{'}, 0.056 \text{ in./in.} \times 12 \text{ in.} = 0.67 \text{ in.}$$

$$1\text{'-}2\text{'}, 0.050 \text{ in./in.} \times 12 \text{ in.} = 0.60 \text{ in.}$$

$$2\text{'-}3\text{'}, 0.050 \text{ in./in.} \times 12 \text{ in.} = \underline{0.60 \text{ in.}}$$

Total AWC for 36 in. depth = 1.87 in.

The weighted AWC for the rooting depth is obtained by dividing the total AWC by the rooting depth. For the above example, the weighted AWC is:

$$1.87 \text{ in./}36 \text{ in.} = 0.052 \text{ in./in.}$$

Permeability

Permeability is the quality of soil that enables it to transmit air and water. It is independent of the viscosity of water. The permeability of a soil is based on the most restrictive layer in the soil. The relative permeability of soils is described by the terms listed in Table FL2-1.

Table FL2-1. Relative Permeability of Soils

Term	Permeability Rate (in/hr)
Very slow	<0.06
Slow	0.06 - 0.2
Moderately slow	0.2 - 0.6
Moderate	0.6 - 2.0
Moderately rapid	2.0 - 6.0
Rapid	6.0 - 20.0
Very rapid	>20

Permeability rates for Florida soils are shown as saturated hydraulic conductivity, K_{sat} ($\mu\text{m}/\text{sec}$) in the Physical Soil Properties report in the NRCS Soil Data Mart. These values can be converted to in./hr. for design purposes.

Intake Rate

Intake rate is a measure of soil's capacity to absorb irrigation water from the surface, and move it into and through the soil profile. It is an expression of several factors, including infiltration and percolation. The term, "basic intake rate" is the rate at which water percolates into soil after infiltration has decreased to a low and nearly constant value.

Infiltration is the downward flow of water from the surface through the soil. Water enters the soil through pores, cracks, worm and decayed root holes, and cavities introduced by tillage. Surface sealing or crusting will restrict infiltration.

Percolation is the movement of water through the soil profile. In order for irrigation water to be effective in replenishing the soils water supply, it must be able to move through the profile, or percolate, to a predetermined irrigation depth. The percolation rate is governed by the permeability of the soil or its hydraulic conductivity. Both terms are used to describe the ease with which soil transmits water and air.

The amount of moisture already in the soil greatly influences the rate at which water enters the soil. The soil takes in and absorbs irrigation water rapidly when water is first applied to the field surface. As the irrigation application continues, the surface soil gradually becomes saturated and the intake rate decreases until it reaches a nearly constant value.

The intake of any soil is limited by any restriction to the flow of water into or through the soil profile. The soil layer with the lowest transmission rate, either at the surface or directly below it, usually determines intake rate. The most important general factors that influence intake rate are the physical properties of the soil and, in sprinkler irrigation, the plant cover. But for any given soil, other factors may affect the intake rate.

Since so many factors affect the water intake, it is not surprising that it varies so much among soils. Furthermore, the intake characteristics of a given field vary from place to place, from irrigation to irrigation, and from season to season. The intake characteristics that must be considered in sprinkler irrigation design differ from those for surface methods.

Actual measured intake rates are unavailable for Florida soils. Intake rates are estimates based on the characteristics of the top two feet of the soil. If the soil has a water table within two feet of the surface, the intake rate is assigned as if the soil is drained. Typically, for a well-drained soil, the intake rate is estimated at 3.0 in./hr. For other

soil types, consult with a soil scientist to determine an intake rate value.

Slope

Slope refers to the incline of the surface of the soil area. A simple, or single, slope is defined by its gradient, shape, and length. Slopes may also be defined as single or complex depending on the nature of the area. Soil slope is expressed in terms of percentage. It is the difference in elevation in feet for each 100-foot horizontal. A soil with a slope of 45 degrees is a slope of 100 percent since the difference in elevation of two points 100 feet apart horizontally is 100 feet.

Soil slope and intake rate are important factors in determining runoff.

Wetness

Wetness is expressed as a function of soil drainage and depth to water table. Internal soil drainage is a natural condition of the soil that refers to the frequency and duration of periods when the soil is free of saturation. For example, in well drained soils the water is removed readily but not rapidly; in poorly drained soils the root zone is waterlogged for long periods unless artificially drained. In excessively drained soils water is removed so completely that most plants suffer from lack of water.

Except for very young soils, the natural soil drainage conditions are reflected in soil morphology. The drainage class shown for the various soils is the drainage that existed during the development of the soil as opposed to altered drainage as the result of artificial drainage. Table FL2-2 lists classes (with their abbreviations) to define natural soil drainage in broad terms.

Table FL2-2. Drainage Classes of Soils

Drainage Class	Abbreviation
Very poorly drained	VP
Poorly drained	P
Somewhat poorly drained	SP
Moderately well drained	MW
Well drained	W
Somewhat excessively drained	SE
Excessively drained	E

High water table is defined as the top of the zone of saturation at the highest average depth elevation during the wettest season. It persists in the soil for more than a few days. The depth to water table is given for each soil in the Water Features report in the NRCS Soil Data Mart.

The presence of a saturated zone (water table) is a prime factor in determining soils adaptability for irrigation. If a saturated zone is at a shallow depth, a hazard always exists that heavy rains can raise the saturated zone to depths shallow enough to slow or inhibit plant growth. Thus, soils with wetness limitations are given different considerations than other similar soils that do not have a wetness limitation.

Surface Texture

Surface texture is displayed in the Engineering Properties report in the NRCS Soil Data Mart, for all soil series. The abbreviations in Table FL2-3 are used to describe soil texture.

Table FL2-3. Soil Texture Abbreviations

Soil Texture	Abbreviation
Sand	S
Coarse sand	COS
Fine sand	FS
Loamy coarse sand	LCOS
Loamy sand	LS
Loamy fine sand	LFS
Coarse sandy loam	COSL
Sandy loam	SL
Fine sandy loam	FSL
Very fine sandy loam	VFSL
Loam	L
Silt loam	SIL
Clay loam	CL
Sandy clay loam	SCL
Silty clay loam	SICL
Silty clay	SIC
Sandy clay	SC
Clay	C
Muck or peat	MK or PT
Additional Textural Modifiers	
Channery	CN
Gravelly	GR
Shaley	SII

Restrictive Features

Certain soil features affect design, layout, construction, management or performance of an irrigation system. Those features important in design and management of most irrigation systems are wetness or ponding and the need for drainage, flooding, available water capacity, intake rate, permeability, susceptibility to wind or water erosion, and slope. Soil features that

influence construction are large stones and depth to bedrock or cemented pan. The features that affect performance of the system are rooting depth, amount of salts or sodium, and soil acidity. These properties, limits, and restrictive features are shown in Table FL2-4. Particular soils with restrictive features are displayed in the Engineering Properties report in the NRCS Soil Data Mart.

Table FL2-4. Irrigation Restrictive Features

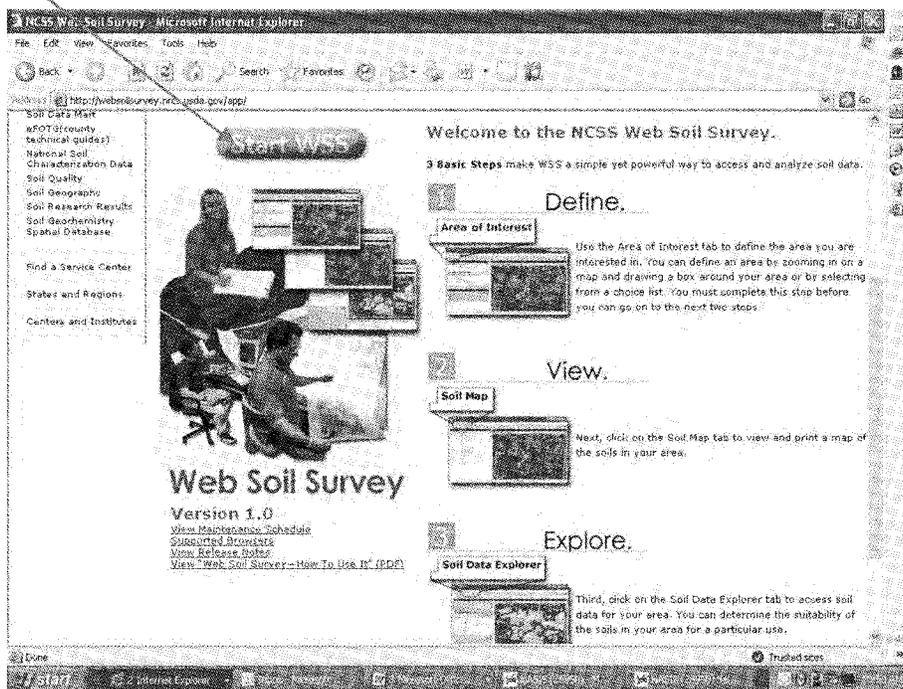
Property	Limits	Restrictive Factors
Fraction >3 in. (wt. %) ^{1/}	>25	Large Stones
Depth to High Water Table(ft)	<3	Wetness Ponding
Available Water Capacity (in./in.) ^{1/}	<0.10	Droughty
USDA Texture (Surface Layer)	S, FS, VFS, LS, LFS, VFSL	Fast Intake
USDA Texture (Surface Layer)	SIC, C, SC	Slow Intake
Wind Erodibility Group	1, 2, 3	Soil Blowing
Permeability (in./hr.) (0-60")	<0.2	Peres Slowly
Depth to Bedrock (in.)	<40	Depth to Rock
Depth to Cemented Pan (in.)	<40	Cemented Pan
Fragipan (Great Group)	All Fragi	Rooting Depth
Bulk Density (g/cc) (0-40")	>1.7	Rooting Depth
Slope (%)	>3	Slope
Erosion Factor (K) (Surface Layer)	>0.35	Erodes Easily
Flooding	Common	Floods
Sodium Absorption Ratio (Great Group)	>12 (Natric, Hialic)	Excess Sodium
Salinity (mmho/cm)	>8	Excess Salt
Soil Reaction (pH)	<3.6	Too Acidic
-----	None of Above	Favorable
^{1/} Weighted average to 40 inches.		

Exhibit FL2-1. Navigating and Using the Web Soil Survey

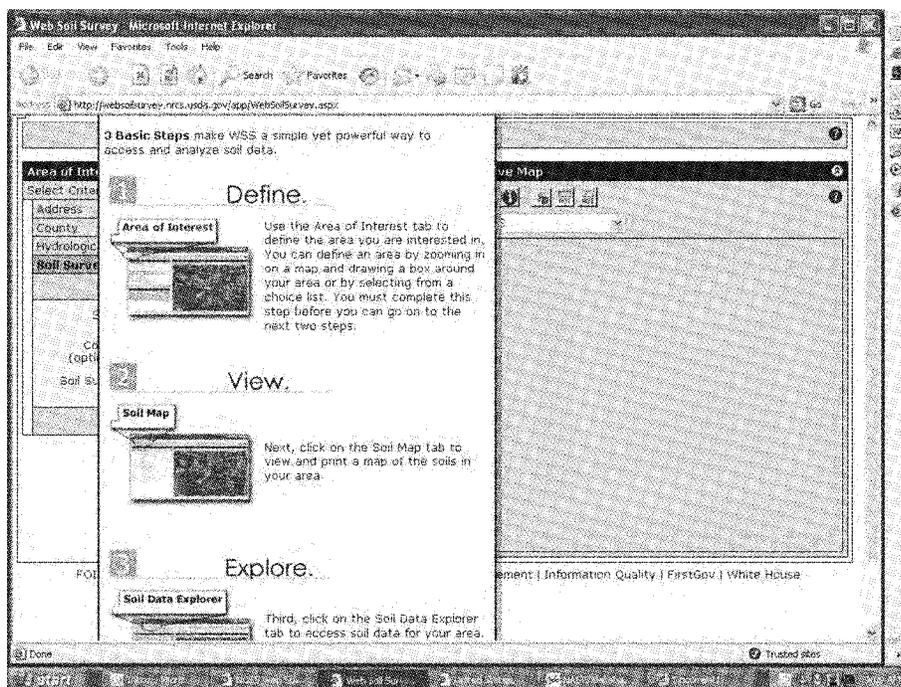
Accessing web soil survey: (ctrl + click link below)

<http://websoilsurvey.nrcs.usda.gov/app/>

Click on "Start WSS" button.



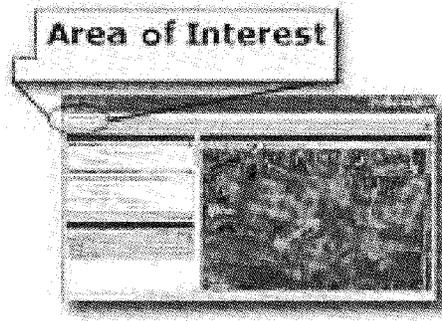
There are 3 basic steps in using Web Soil Survey (WSS): Define, View, Explore.



1) DEFINE: The first step in using Web Soil Survey is to define your area of interest.

You can select an area in the continental United States, Alaska, Hawaii, the Pacific Basin, Puerto Rico, or the U.S. Virgin Islands. You select an area by zooming in on a locator map or by specifying street address, county, or survey area.

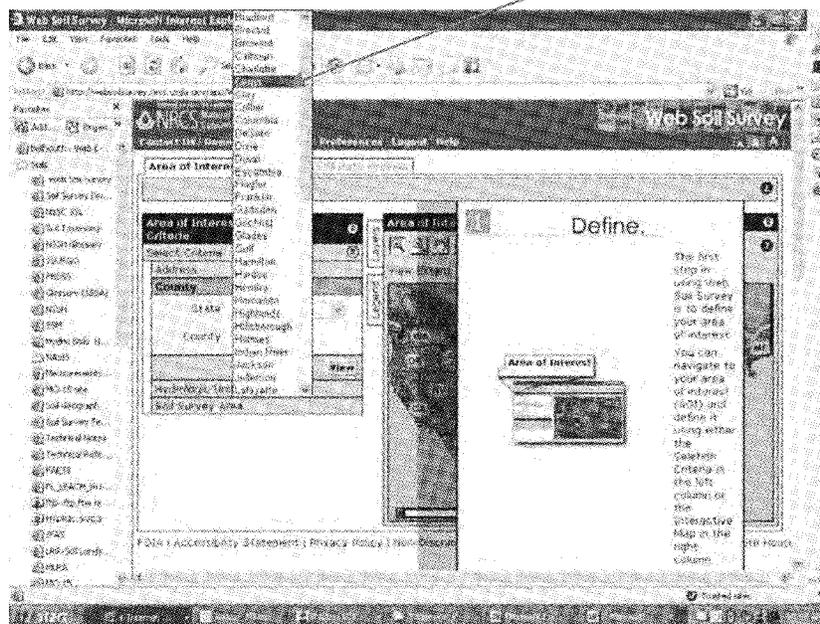
You can navigate to your area of interest (AOI) and define it using either the Selection Criteria in the left column or the Interactive Map in the right column.



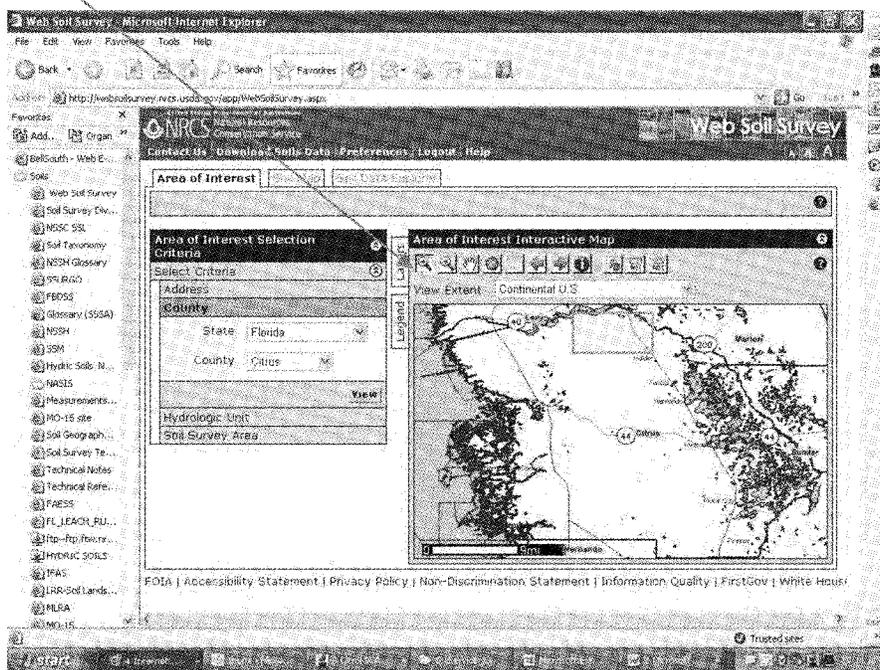
Note: The specified AOI must be smaller than 10,000 acres.

Click the upside-down help button  on the above button bar to close a help window.

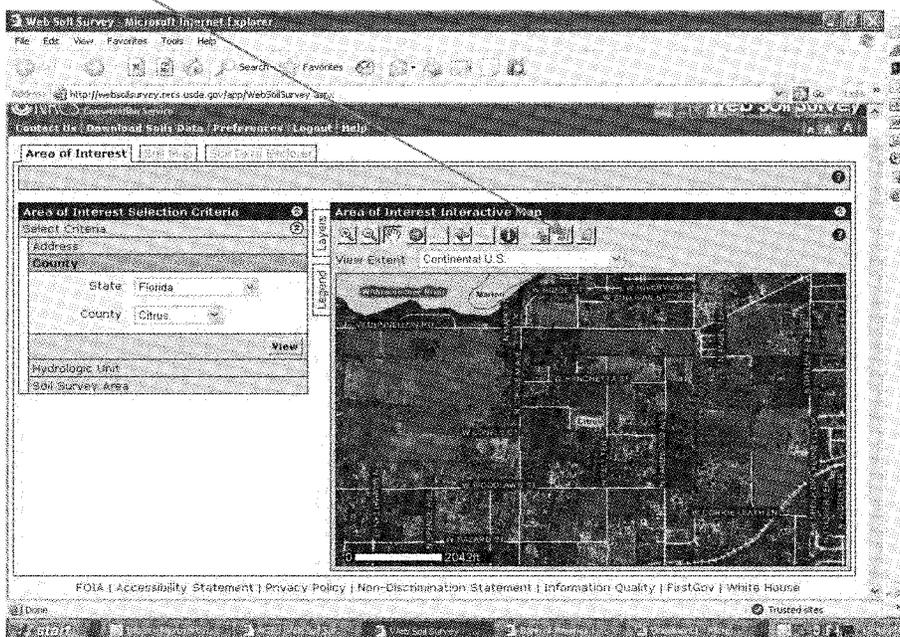
For this example, using Selection Criteria on the left side of the screen, select Citrus County, Florida.



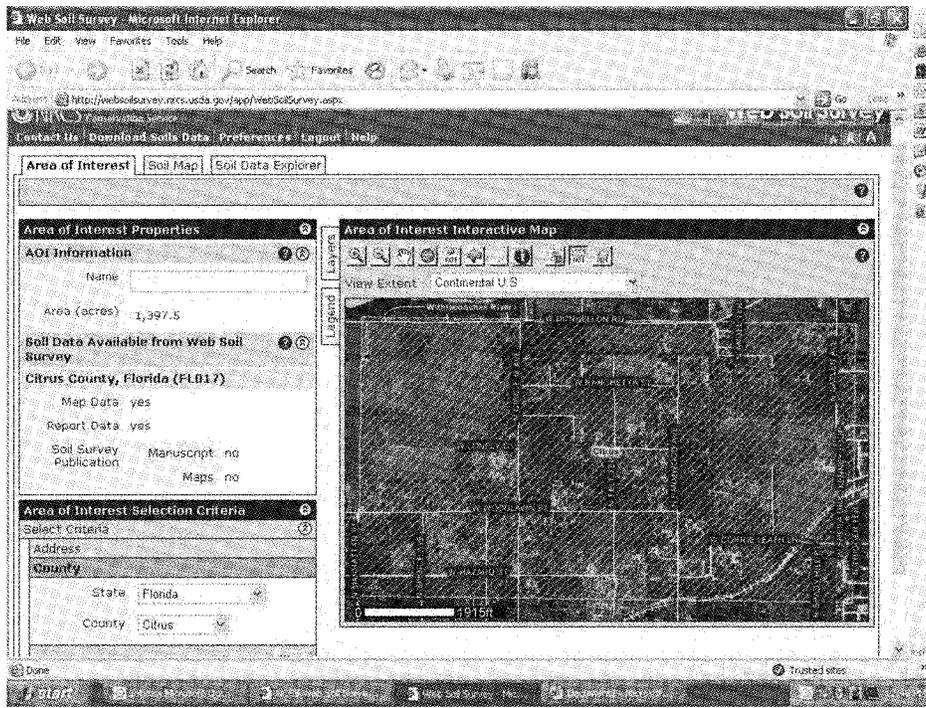
Using the Magnify tool (left side of tool bar); choose the exact area for viewing. In this case, the gray shaded area in northern Citrus County, near the Withalacoochee River is selected.



To define the AOI, use the Interactive Map, and select the button at the top of the page with the red rectangular AOI label. This selection will show a crosshair that will allow you to select the preferred area in rectangular shape.



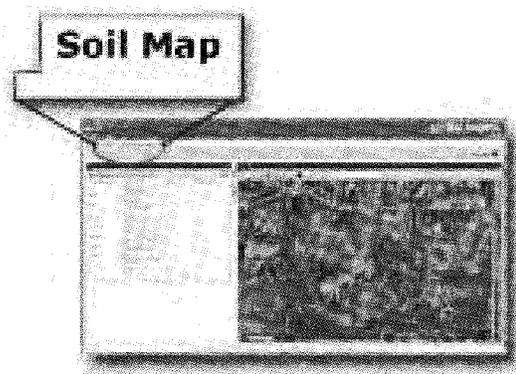
The defined AOI will show up in a crosshatched pattern and the soil data within your AOI is ready for viewing.



2) VIEW: The second step in using Web Soil Survey is to look at the Soil Map for your area of interest. The soil map shows the map unit symbols in your AOI.

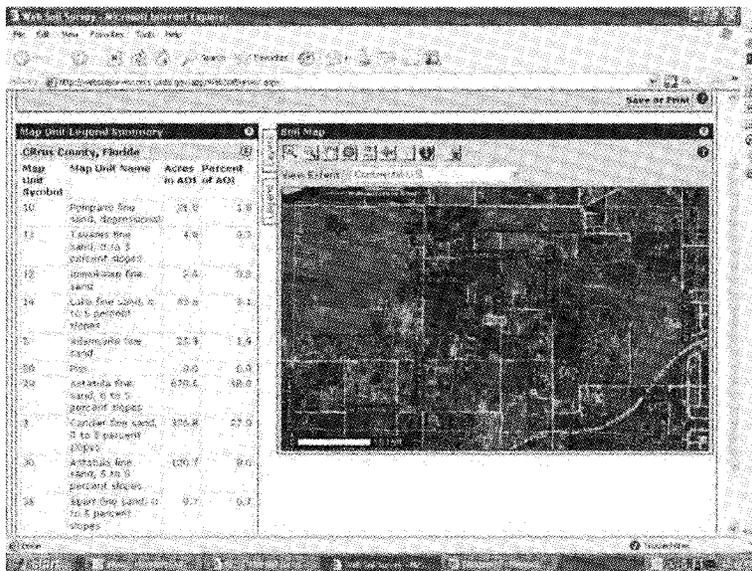
Soil maps are not yet available for all areas. The maps that are available consist of aerial photography overlain by lines that indicate the boundaries of the various types of soil.

The Map Unit Legend Summary table in the left column shows you the name and map symbol of each map unit, the percent of each map unit in the AOI, and the total acreage of each map unit in the AOI.



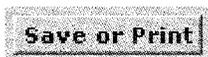
Once the AOI is selected, the map can be viewed by clicking on the "Soil Map" tab on the top left of the screen.

In addition, Map Unit Symbol, Map Unit Name, the Acres in AOI and Percent of AOI are viewable in the Map Unit Legend Summary in the far left column.



Viewing and printing the soil map

While using Web Soil Survey, you may want to refer back to your soil map. You can do so on the screen by clicking the Soil Map tab, or you can print the soil map by clicking the **Save or Print** button:

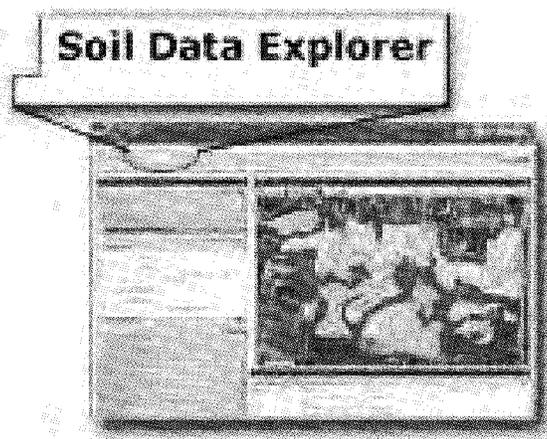


Closing the help window

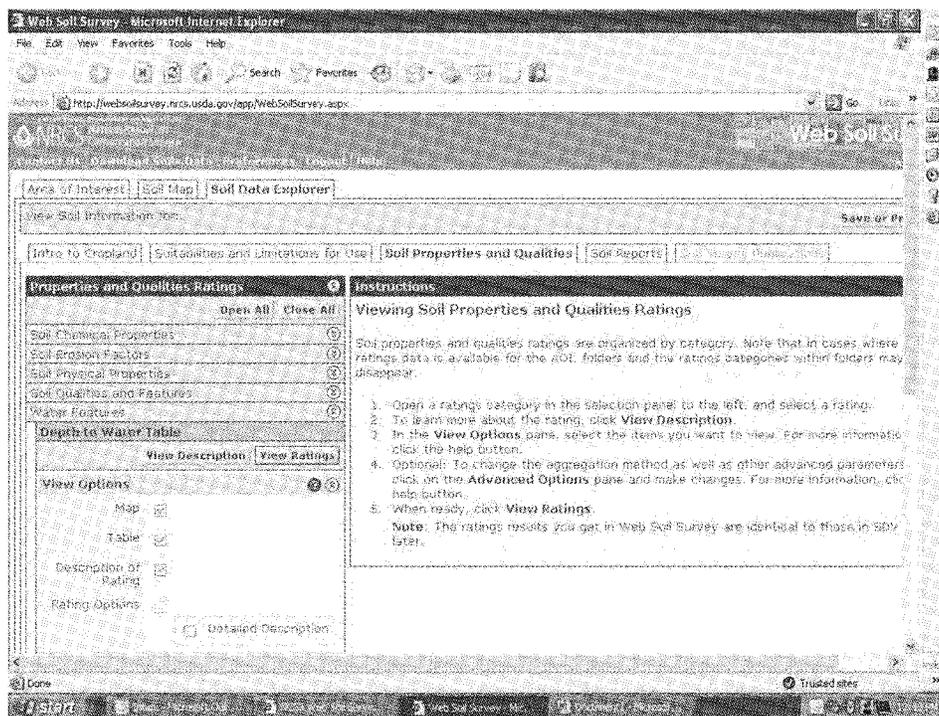
Click the upside-down help button  on the above button bar to close a help window.

3) Explore: The third and final step in using Web Soil Survey is to explore all of the available information associated with the soils in your area of interest. The Soil Data Explorer allows individuals to generate thematic maps based on land use rating and limitations, or by specific physical or chemical data attributes.

The Web Soil Survey can display the properties and qualities of the soils. It can also show interpretations about the suitabilities and limitations of the soils for many uses. Examples of properties and qualities include available water capacity and pII. Examples of suitabilities and limitations include interpretations about how productive the soils are for various crops and about how well the soils would function as a site for buildings. The information can be displayed in tables and, in many cases, on maps.

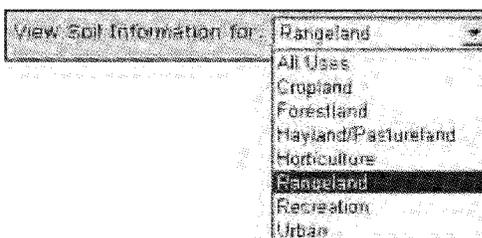


Click on the Soil Data Explorer tab to bring up the Explorer window.

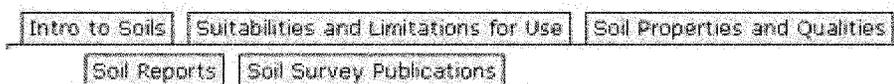


Finding relevant information

You can view soil information about a specific use, such as cropland, forestland, rangeland, urban development, and so forth, by selecting the use from the drop-down list on the button bar.

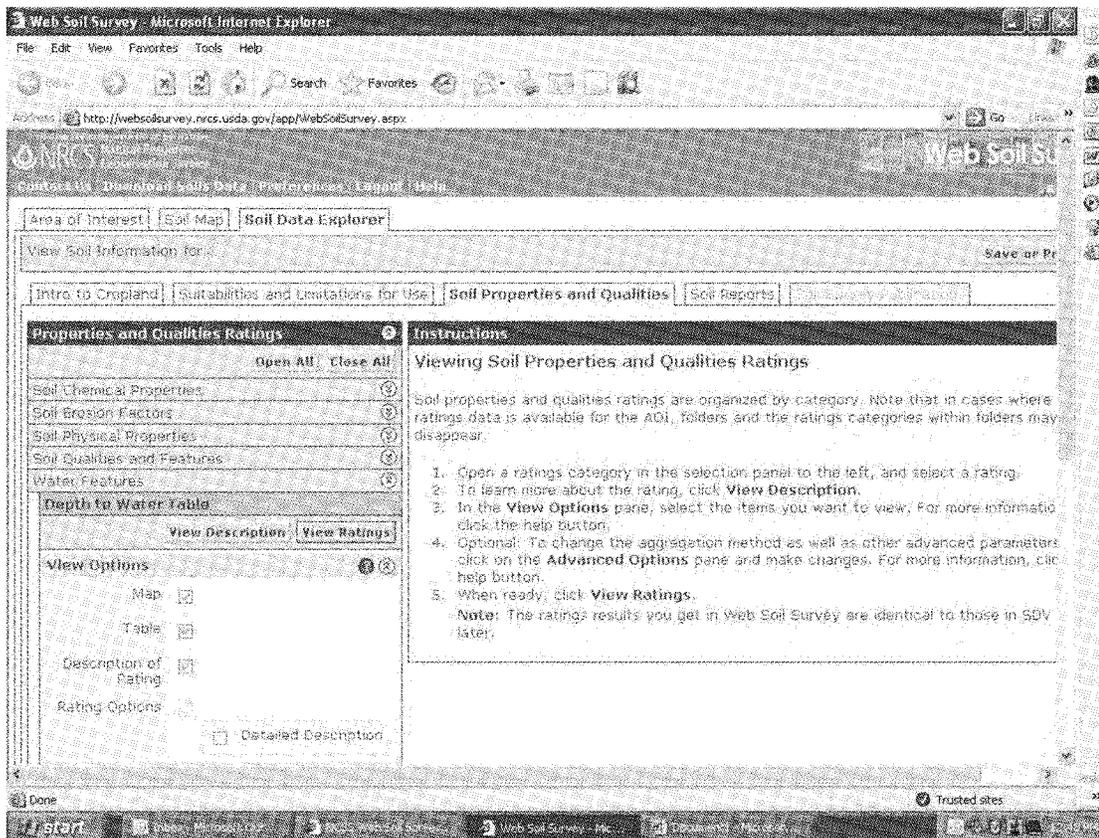


To get a particular type of soil information, use the Soil Data Explorer's inner tabs:

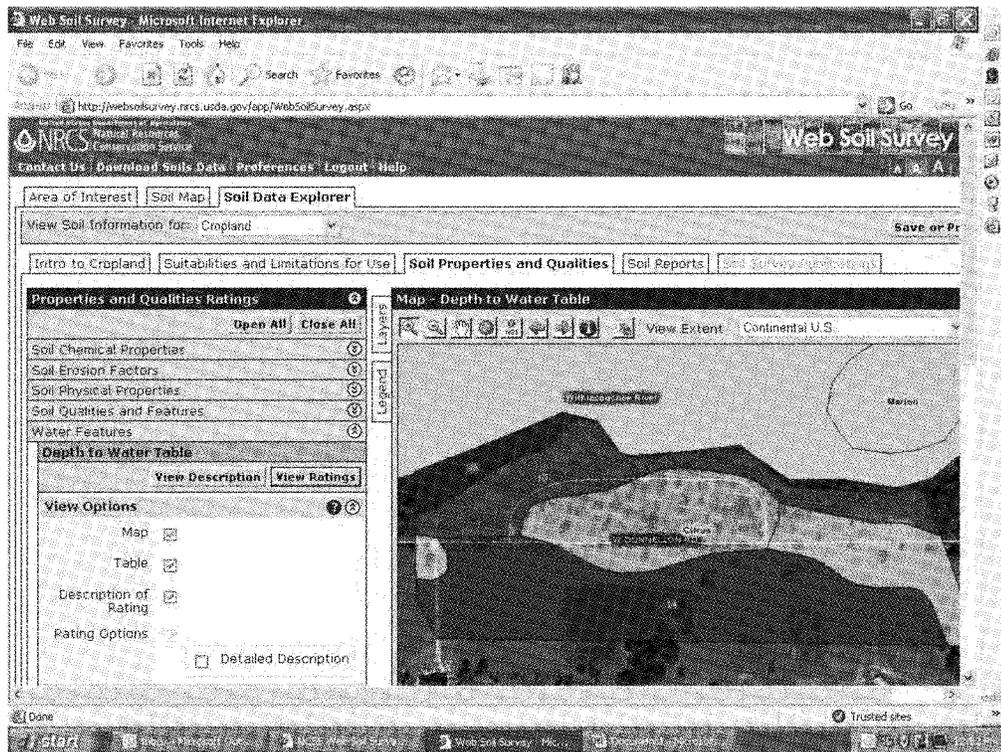


Depending on the use that you select in the drop-down list, the tabs and the contents of the tabs will change.

For example, click on the Soil Properties and Qualities tab.

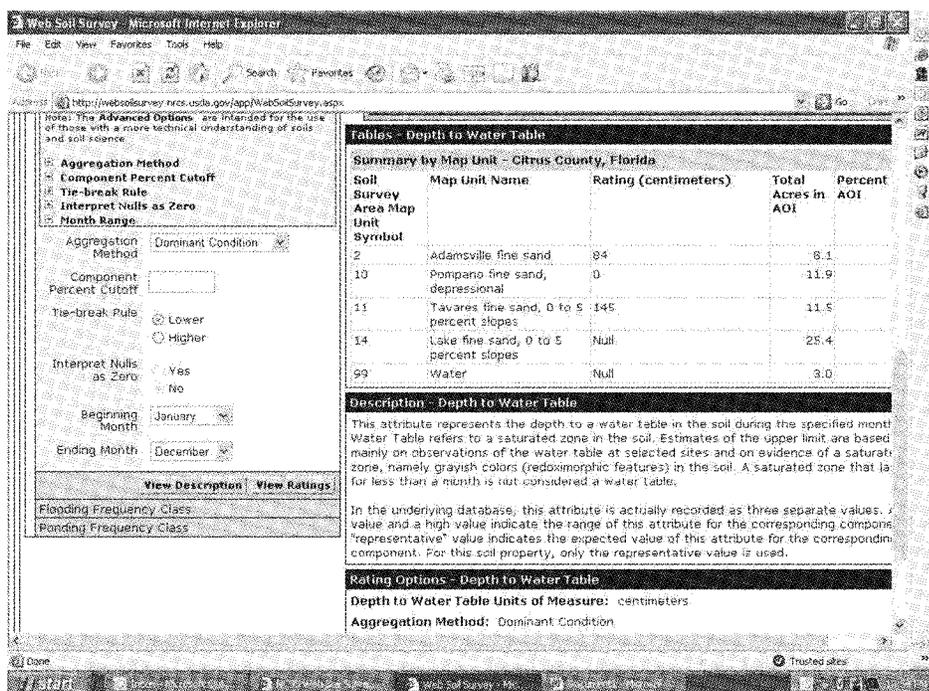


By clicking on **Water Features**, then **Depth to Water Table** and **View Ratings**, you can view the depth to the top of the seasonal high water table based on actual tabular data. An example from northern Citrus County, FL illustrates the water table depths near the Withalacoochee River, the actual depth to the top of the water table, total acres within your AOI, and the percent of the AOI with that rating.



The Legend tab on the left side of the map provides the Map Legend, including the soil ratings (in centimeters) and other map features.

As you scroll down the screen, you'll see the attribute table that illustrates the actual depth to the top of the water table for each map unit in your AOI, the total acres within your AOI, and the percent of the AOI with that rating.

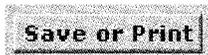


Other choices for thematic maps for Suitabilities and Limitations include Building Site Development for Shallow Excavations or Commercial Buildings, Cropland Productivity, Forestland Management, Hydric Soils Rating, Land Capability Classification, among others. For Soil Properties and Qualities, Chemical attributes such as, Cation Exchange Capacity, pH, Calcium Carbonate Equivalent, OR Physical Properties, such as Available Water Capacity, Organic Matter, Saturated Hydraulic Conductivity, Percent Sand, Silt, and Clay among others can be displayed thematically.

All maps can be printed locally for use.

Printing or saving the information you want

In Web Soil Survey, you select information in the left column and view it in the right column. When you want to print or save the information in the right column, click the **Save or Print** button:



Closing the help window

Click the upside-down help button  on the above button bar to close a help window.

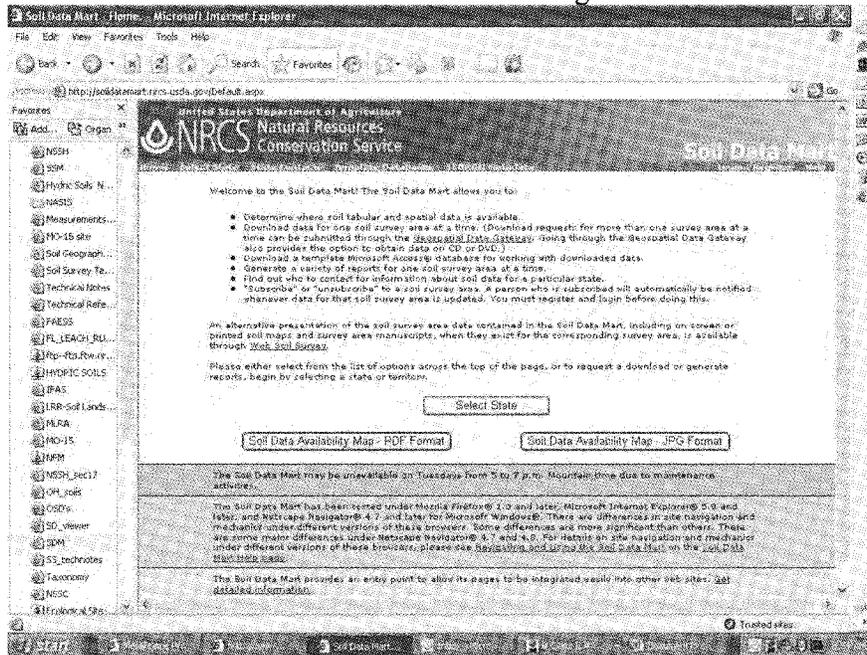
Exhibit FL2-2. Navigating and Using the Soil Data Mart

The Soil Data Mart allows one to generate and print reports or download data (spatial and/or tabular).

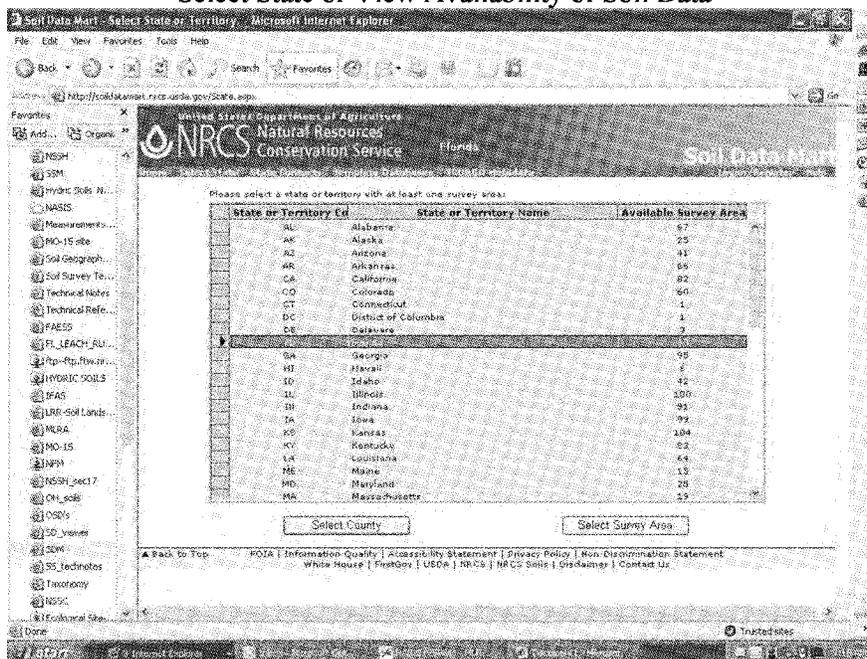
Accessing soil data mart: (ctrl + click link below)

<http://soildatamart.nrcs.usda.gov>

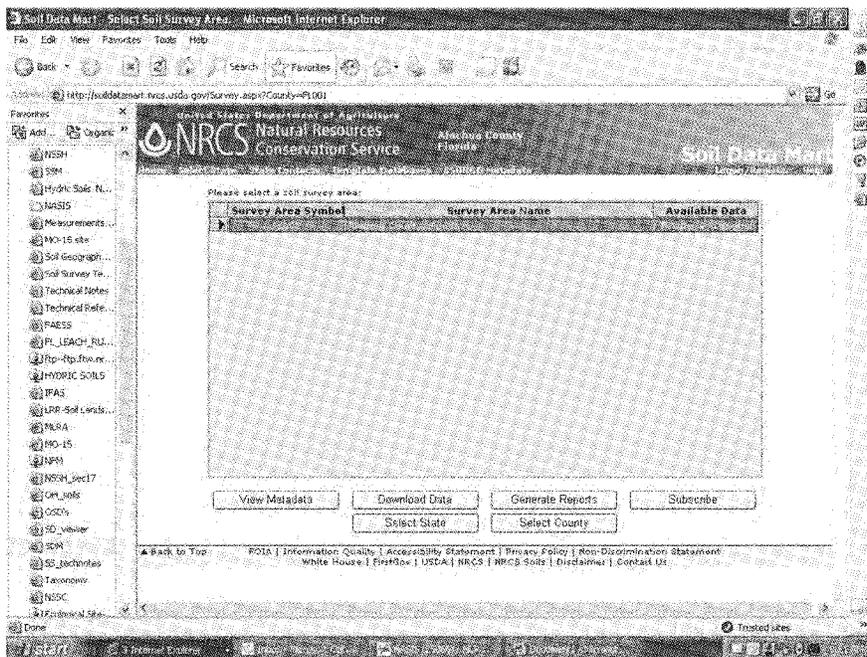
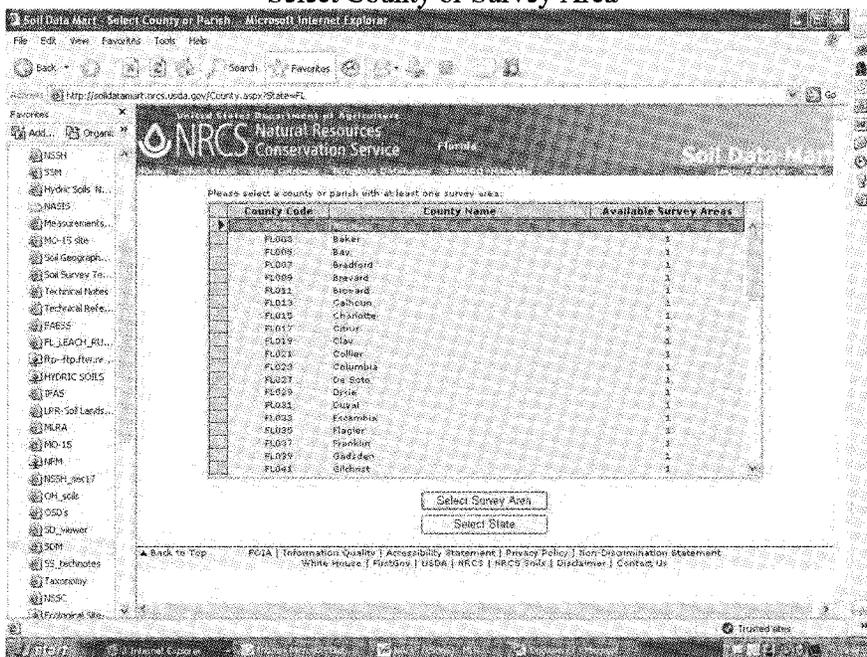
Soil Data Mart Home Page



Select State or View Availability of Soil Data



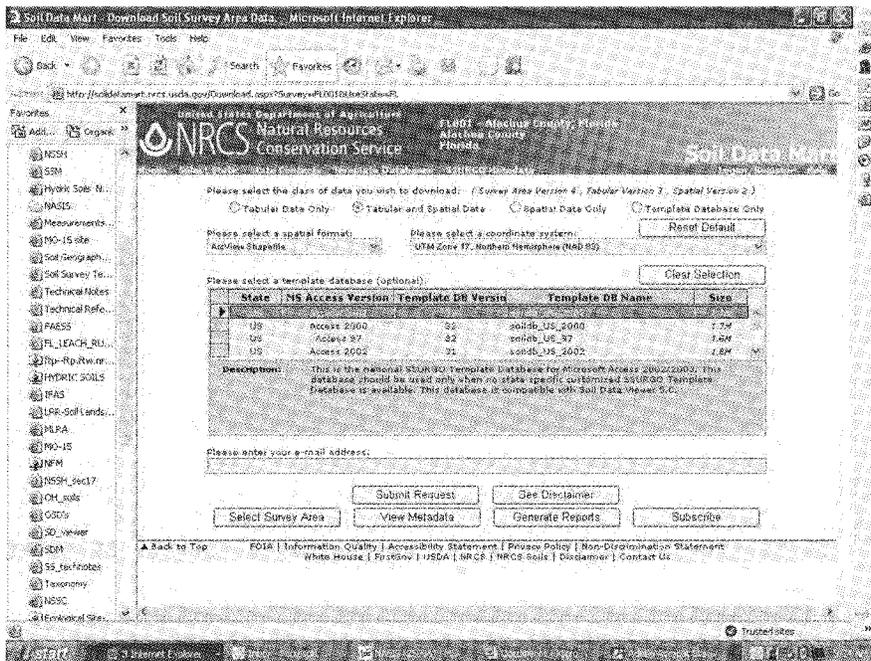
Select County or Survey Area



At this point, a decision is made as to download data directly or to generate and review specific soil reports. Other functions include viewing metadata or to add an email address to the County's subscription list to be notified when the data is updated.

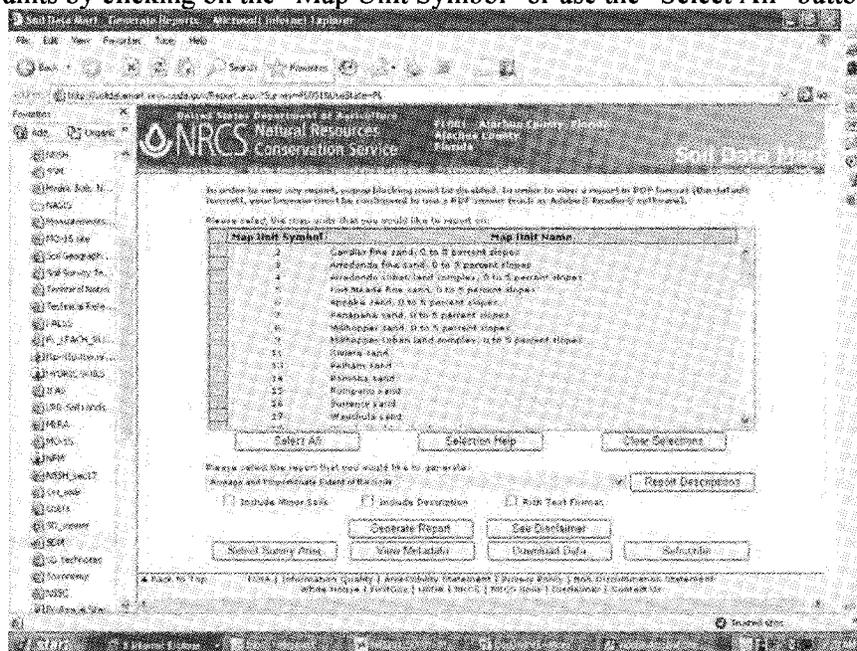
Downloading data

Either spatial or tabular data can be downloaded by selecting the specific data type. Spatial data can be downloaded by format type and coordinate system. Tabular data is downloaded and then viewed using Microsoft Access. Individuals may select the most applicable version for their computer. Enter an email address and submit a request. Notification will be received depending on one's location within the queue nationwide.

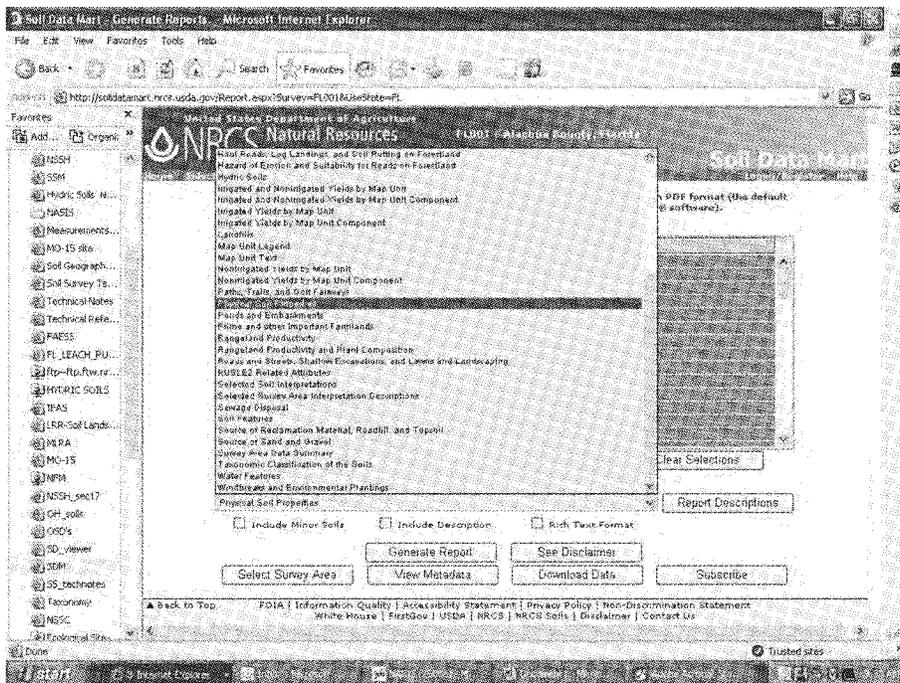


Generating Reports

To generate reports, determine which map units or all map units that you want a report for. Either select individual map units by clicking on the "Map Unit Symbol" or use the "Select All" button.



Then, using the drop down list, choose the report to view. For example, view the Saturated Hydraulic Conductivity (kSat) data for all map units in Alachua County. Select “Alachua County, Florida”, then select “All Map Units”, navigate to “Generate Reports”, and finally choose “Physical Properties Report”.



Click Generate Report and Physical Properties Report opens in a new window.

Map symbol and soil name	Depth	Sand			Silt			Clay			Moisture g/g	Saturated hydraulic conductivity		Available water capacity	Linear shrinkage	Organic matter	Shrinkage factors			Wind erodibility group	Mpd erosion risk index	
		%	wt	wt	%	wt	%	g/g	micro	macro		%	%				%	%	%			%
Gardner	0-6	—	—	—	5-3	1.25-1.55	42.34-141.14	0.04-0.08	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
	6-70	—	—	—	0-5	1.25-1.55	42.34-141.14	0.02-0.05	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
	70-80	—	—	—	5-0	1.25-1.55	42.34-141.14	0.02-0.03	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
Arredondo	0-6	—	—	—	1-7	1.25-1.55	42.34-141.14	0.05-0.10	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
	6-45	—	—	—	0-7	1.25-1.55	42.34-141.14	0.05-0.10	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
	45-54	—	—	—	0-13	1.45-1.70	141.14-234	0.05-0.15	0.0-0.9	0.0-0.0	20	20	—	—	—	—	—	—	—	—	—	—
	54-65	—	—	—	15-25	1.35-1.70	141.14-234	0.10-0.17	0.0-0.9	0.0-0.0	24	24	—	—	—	—	—	—	—	—	—	—
Urbanland	0-3	—	—	—	1-7	1.25-1.55	42.34-141.14	0.05-0.10	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
	3-45	—	—	—	1-7	1.25-1.55	42.34-141.14	0.05-0.10	0.0-0.9	0.0-0.0	10	10	5	—	—	—	—	—	—	—	—	—
	45-54	—	—	—	10-12	1.45-1.70	141.14-234	0.05-0.15	0.0-0.9	0.0-0.0	20	20	—	—	—	—	—	—	—	—	—	—
Fort Meade	0-14	—	—	—	0-13	1.45-1.70	141.14-234	0.05-0.15	0.0-0.9	0.0-0.0	15	15	5	—	—	—	—	—	—	—	—	—
	14-85	—	—	—	0-13	1.45-1.70	141.14-234	0.05-0.15	0.0-0.9	0.0-0.0	15	15	5	—	—	—	—	—	—	—	—	—

NPD AND NFD LETTERS OF SUPPORT

Town of Nantucket Police Department

Jody D. Kasper
Chief of Police

Charles Gibson
Deputy Chief of Police



4 Fairgrounds Road
Nantucket, Massachusetts
02554-2804

Telephone (508) 228-1212
Facsimile (508) 228-7246
www.nantucket-ma.gov

April 9, 2025

Seth Englebourg, Chair
Nantucket Conservation Commission
131 Pleasant Street
Nantucket, MA 02554

Dear Chair Englebourg,

I am writing to express my support for the proposed relocation of a portion of Falmouth Avenue, which is under consideration due to ongoing beach erosion in the area. As I understand it, the plan involves adjusting the alignment of a segment of the roadway in order to keep Falmouth Avenue connected.

From a public safety standpoint, I believe this proposed configuration is beneficial. Maintaining multiple access routes to any area of the island is a key priority for emergency services. Ensuring that responders can reach residents and visitors efficiently—even if one route becomes blocked, impassable, or heavily congested—is essential. These alternate routes are particularly critical during peak seasonal traffic and in emergency situations when every second counts.

I appreciate the thoughtful planning and collaboration that have gone into this proposal and offer my full support for the new roadway configuration as presented.

Thank you for your continued efforts to preserve and enhance our community's infrastructure.

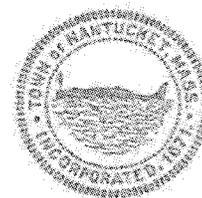
Sincerely,

Jody D. Kasper
Chief of Police
Nantucket Police Department



NANTUCKET FIRE DEPARTMENT

4 Fairgrounds Road
Nantucket, MA 02554
508-228-2323 or 508-228-2324
Michael Cranson, Chief
Tim Vamosi, Deputy Chief
Nicholas Esposito, Deputy Chief



April 15, 2025

Seth Englebourg, Chair
Nantucket Conservation Commission
2 Bathing Beach Road
Nantucket, MA 02554

Dear Chair Englebourg,

I am writing to express my support for maintaining two access points to the Cisco Beach parking area, including the existing access via Falmouth Avenue. From a public safety perspective, having multiple points of access to this popular area is a clear benefit.

I want to emphasize that maintaining Falmouth Avenue as an access route—though not strictly required for emergency response—is advantageous for public safety and overall emergency preparedness. Redundancy in access routes can prove critical during high-traffic periods, severe weather events, or emergency situations, when a single point of access may be compromised or delayed.

Thank you for your consideration, and for your continued commitment to thoughtful stewardship of Nantucket's natural resources. Please feel free to reach out if further clarification or input would be helpful.

Sincerely,

Michael Cranson
Nantucket Fire Chief

**PERFORMANCE STANDARDS ANALYSIS AND WAIVER
REQUEST**

PETER M. VETERE
COUNSEL
pveter@verrill-law.com
Direct: (617) 357-3770

Verrill Dana, LLP
One Federal Street, 20th Floor
Boston, MA 02110
Main 617-309-2600

SUBMITTED WITH NOTICE OF INTENT

December 8, 2025

Nantucket Conservation Commission
131 Pleasant Street, 2nd Floor
Nantucket, MA 02554

**Re: Notice of Intent – Falmouth Ave Relocation
Smooth Hummocks (Map 82, Parcel 30)
Applicant: Nantucket Islands Land Bank**

Dear Commission Members:

The Nantucket Islands Land Bank has re-submitted a notice of intent for the relocation of a portion of Falmouth Avenue near Cisco Beach (the “Project”). As detailed below, the Project meets applicable performance standards under the Massachusetts Wetlands Protection Act, G.L. c. 131, § 40 (“WPA”), and the Nantucket Wetlands Protection Regulations, or is otherwise eligible for a waiver under the Nantucket Wetlands Protection Regulations.

The only Project impact to a resource area will be to 1,500 square feet of Coastal Dune, but this work will consist solely of the restoration of the abandoned section of the current Falmouth Avenue to functioning dune. These impacts will therefore be entirely beneficial to wetland functions. The remaining Project impacts are limited to the buffer zones to Coastal Dune, Coastal Bank, and Coastal Beach. The Project will maintain the status quo of providing a second access route to the Cisco Beach parking lot while improving the existing condition of the coastal dune and buffer zone. The Nantucket police and fire departments agree that maintaining the second access route to the Cisco Beach parking lot is beneficial to public safety; letters in support are submitted with the notice of intent.

Moreover, the Land Bank’s project engineer, Donald F. Bracken, Jr., P.E., P.L.S., has recommended use of the “Toscana Ack Pack” material blend which has a permeability rating comparable to natural sand and low-end gravel, and which is significantly more permeable than loamy sand, a commonly encountered permeable soil. The Land Bank has included Mr. Bracken’s permeability analysis with the notice of intent and is amendable to utilizing this roadway material blend in the Project if the Commission were to condition approval of the notice of intent on its use. Consequently, because the new portion of Falmouth Avenue can be constructed with materials that would allow infiltration of water into the underlying soil, the Project does not contain any impervious surfaces or structures as defined in § 390-2 of the Nantucket Wetlands Protection Regulations.

The Project meets the applicable performance standards except for three performance standards related to work in rare or significant habitat under the Nantucket Wetlands Protection Regulations. The

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December 8, 2025
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Commission can adequately condition the Project to minimize any adverse effects of the Project on state-listed plant species, however. Accordingly, the Land Bank requests a waiver from the operation of §§ 390-16(1), (3), and (4), and for the Commission to issue an order of conditions approving the Project.

WPA Performance Standards

1. Coastal Dune. The performance standards at 310 CMR 10.28(3) through (6) apply to coastal dunes.¹

Performance Standard	Application to Project
310 CMR 10.28(3)	Meets performance standard. The alterations proposed in the coastal dune consist only of dune restoration work that will have a beneficial effect on the coastal dune and the dune attributes set forth in 310 CMR 10.28(3)(a) through (f). The alterations proposed within 100 feet of the coastal dune are far enough from the dune (outside the 50-foot buffer) that they will not have an adverse effect on the coastal dune itself.
310 CMR 10.28(4)	Not applicable. No building exists in the coastal dune.
310 CMR 10.28(5)	Meets performance standard in 310 CMR 10.28(5)(c). Project includes plantings compatible with the natural vegetative cover and it adheres to the provisions of 310 CMR 10.28(3). The proposed work within the coastal dune consists solely of dune restoration work that includes replanting of large sods of plants removed from the new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over.
310 CMR 10.28(6)	Meets performance standard. Project will not have any adverse effect on rare species habitat, as confirmed by the Division of Fisheries & Wildlife in the review letter dated March

¹ Copies of the applicable pages of the WPA Wetlands Regulations and the Nantucket Wetlands Protection Regulations are enclosed with this letter for the Commission's reference.

Nantucket Conservation Commission
December 8, 2025
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Performance Standard	Application to Project
	5, 2025 (a copy of which was sent to the Commission).

2. Coastal Bank. The performance standards at 310 CMR 10.30(3) through (5) apply to coastal banks that supply sediment to coastal beaches.

Performance Standard	Application to Project
310 CMR 10.30(3)	Not applicable. Project does not propose a new coastal engineering structure.
310 CMR 10.30(4)	Meets performance standard. Project's location within 100 feet of a coastal bank will not have any effect on the movement of sediment from the coastal bank to the coastal beach or land subject to tidal action. There is only a tiny portion of the new road that is located near the 100-foot buffer to the coastal bank. It is so remote and distant from the coastal bank's interface with the coastal beach that it should have no effect whatsoever on the coastal bank.
310 CMR 10.30(5)	Not applicable. Project does not propose any new building within 100 feet landward of the top of the coastal bank.

3. Coastal Beach. The performance standards at 310 CMR 10.27(3) through (7) apply to coastal beaches and tidal flats.

Performance Standard	Application to Project
310 CMR 10.27(3)	Not applicable. Project does not propose any work on a coastal beach.
310 CMR 10.27(4)	Not applicable. Project does not propose any solid fill structure which will interfere with littoral drift.

Nantucket Conservation Commission

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Performance Standard	Application to Project
310 CMR 10.27(5)	Not applicable. Project does not propose any beach nourishment.
310 CMR 10.27(6)	Not applicable. Project does not propose any work on a tidal flat.
310 CMR 10.27(7)	Meets performance standard. Project will not have any adverse effect on rare species habitat, as confirmed by NHESP. ²

4. Estimated Habitats of Rare Wildlife. The Project meets the performance standard in 310 CMR 10.37 because it will not have any adverse effects on the habitat of a state-listed species, as previously confirmed by NHESP.

Nantucket Wetlands Protection Regulations Performance Standards

1. Coastal Dune. The performance standards in § 390-8(B) of the Nantucket Wetlands Protection Regulations apply to coastal dunes.

Performance Standard	Application to Project
§ 390-8(B)(1)	Not applicable. Project does not propose any coastal engineering structures
§ 390-8(B)(2)	Meets performance standard. Project maintains a 25-foot undisturbed buffer zone and undisturbed 50-foot buffer zone to the dune. The proposed work within the coastal dune consists solely of dune restoration work that includes replanting of large sods of plants removed from the new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over. The work will result in a restored and undisturbed 50-foot buffer zone to the dune.

² See Letter from Jesse Leddick, Assistant Director of the Natural Heritage & Endangered Species Program, dated March 5, 2025 (a copy of which was sent to the Commission).

Nantucket Conservation Commission

December 8, 2025

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Performance Standard	Application to Project
§ 390-8(B)(3)	Meets performance standard. The proposed work within the coastal dunes consists of dune restoration work.
§ 390-8(B)(4)	Meets performance standard. Project does not propose importing any fill to restore the dune, only the re-use of transplanted sods from the proposed new portion of Falmouth Avenue.
§ 390-8(B)(5)	Not applicable. Project does not propose any septic system.
§ 390-8(B)(6)	Meets performance standard. Similar to 310 CMR 10.28(3), the alterations proposed in the coastal dune consist only of dune restoration work that will have a beneficial effect on the coastal dune and the dune attributes set forth in § 390-8(B)(6). The alterations proposed within 100 feet of the coastal dune are far enough from the dune (outside the 50-foot buffer) that they will not have an adverse effect on the coastal dune itself.
§ 390-8(B)(7)	Not applicable. Project does not propose any construction of a building on the coastal dune or within 50 feet of it.
§ 390-8(B)(8)	Not applicable. Project does not propose any pedestrian or elevated walkway.
§ 390-8(B)(9)	Not applicable. Project does not propose any use of fertilizers.
§ 390-8(B)(10)	Meets performance standard. The proposed relocated portion of Falmouth Avenue will be unpaved and located more than 50 feet from the coastal dune.

2. Coastal Bank. The performance standards in § 390-10(B) of the Nantucket Wetlands Protection Regulations apply to coastal banks and land within 100 feet of a coastal bank.

Nantucket Conservation Commission

December 8, 2025

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Performance Standard	Application to Project
§ 390-10(B)(1)	Not applicable. Project does not propose any coastal engineering structures.
§ 390-10(B)(2)	Not applicable. Project does not propose any piers.
§ 390-10(B)(3)	Meets performance standard. Only a tiny portion of the new road is located near the 100-foot buffer to the coastal bank. It is so remote and distant from the coastal bank that it should have no effect whatsoever on the coastal bank attributes set forth in § 390-10(B)(3).
§ 390-10(B)(4)	Not applicable. Project does not propose any elevated walkway.
§ 390-10(B)(5)	Meets performance standard. No work is proposed within the 75-foot buffer and therefore existing conditions will be maintained.
§ 390-10(B)(6)	Not applicable. Project does not propose any septic system.
§ 390-10(B)(7)	Not applicable. Project does not propose any new structures.
§ 390-10(B)(8)	Not applicable. Project does not propose any substantial improvement of an existing building or new construction of a building

3. Coastal Beach. The performance standards in § 390-7(B) of the Nantucket Wetlands Protection Regulations apply to coastal beaches, tidal flats, and land within 100 feet of a coastal beach or tidal flat. The first performance standard, § 390-7(B)(1), requires compliance with the performance standards for land under the ocean set forth in § 390-6(B)(1) through (8).

Performance Standard	Application to Project
§ 390-6(B)(1)	Not applicable. Project does not propose any dredging.
§ 390-6(B)(2)	Not applicable.

Nantucket Conservation Commission

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Performance Standard	Application to Project
	Project does not propose any dredging.
§ 390-6(B)(3)	Not applicable. Project does not propose any residential piers.
§ 390-6(B)(4)	Not applicable. Project does not propose any commercial piers.
§ 390-6(B)(5)	Not applicable. Project does not propose any piers.
§ 390-6(B)(6)	Not applicable. Project does not propose any aquaculture.
§ 390-6(B)(7)	Not applicable. Project does not propose any coastal engineering structures.
§ 390-6(B)(8)	Not applicable. Project is not water-dependent.
§ 390-7(B)(1)	Meets performance standard. Project complies with the performance standards for land under the ocean.
§ 390-7(B)(2)	Not applicable. Project does not propose any coastal engineering structures.
§ 390-7(B)(3)	Not applicable. Project does not propose any dredging.
§ 390-7(B)(4)	Not applicable. Project does not propose any fill on a coastal beach or tidal flat. The only work is to the coastal dune.
§ 390-7(B)(5)	Not applicable. Project does not propose any septic system.
§ 390-7(B)(6)	Meets performance standard. Project maintains a 25-foot undisturbed buffer zone and undisturbed 50-foot buffer zone to the beach. The proposed work within the coastal dune consists solely of dune restoration work that includes replanting of large sods of plants removed from the

Nantucket Conservation Commission

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Performance Standard	Application to Project
	new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over. The work will result in a restored and undisturbed greater than 50-foot buffer zone to the beach.
§ 390-7(B)(7)	Not applicable. Project does not propose any buildings.
§ 390-7(B)(8)	Meets performance standard. The proposed relocated portion of Falmouth Avenue will be unpaved and located more than 50 feet from the coastal dune and even further from the coastal beach.
§ 390-7(B)(9)	Not applicable. Project does not propose any use of fertilizers.

4. Estimated Habitat for Rare Wildlife, Flora, and Fauna. The performance standards in § 390-16(B) of the Nantucket Wetlands Protection Regulations apply to estimated habitat areas. NHESP determined that portions of the Project are located within the habitat for five state-listed invertebrate species, one state-listed avian species, and four state-listed plants. NHESP also determined that the Project will not adversely affect the resource area habitat of state-protected rare wildlife species for purposes of issuing an order of conditions under the WPA. However, the WPA performance standards apply only to rare wildlife habitat.

NHESP further determined that the Project will result in a take of state-listed plant species (Sandplain Blue-eyed Grass) under the Massachusetts Endangered Species Act (“MESA”). The Land Bank is pursuing an amendment to its MESA Conservation & Management Permit (CMP-86043) for the Cisco Beach Parking Lot, which NHESP determined would address the impacts to Sandplain Blue-eyed Grass and the cumulative habitat loss for state-listed species impacted by the Project. NHESP required the Land Bank to obtain the amendment prior to the start of work on the Project. The Land Bank is amenable to the Commission imposing a similar requirement as a special condition to any order of conditions for the Project.

Performance Standard	Application to Project
§ 390-16(B)(1)	Does not meet performance standard. Project will alter existing vegetation within rare/significant species habitat.
§ 390-16(B)(2)	Not applicable. Project does not propose any construction or

Performance Standard	Application to Project
	enlargement of a structure.
§ 390-16(B)(3)	Does not meet performance standard. Project will alter the topography and drainage characteristics of land within rare/significant species habitat.
§ 390-16(B)(4)	Does not meet performance standard. Project proposes new construction of portion of Falmouth Avenue with drainage swale within rare/significant species habitat.
§ 390-16(B)(5)	Not applicable. Project does not propose any septic system.

Waiver Standard

The Nantucket Wetlands Protection Regulations provide that “[t]he Commission may, in its discretion, for good cause shown, grant waivers from the operation of one or more of these regulations.” § 390-3(H)(2). The regulations further provide that a waiver shall be granted only for the specific reasons listed in § 390-3(H)(3)(a) through (e). The Project is eligible for a waiver for the following reasons:

Waiver Reason	Application to Project
§ 390-3(H)(3)(a)	Project will not adversely impact the interests identified in the Bylaw and there are no reasonable alternatives that would allow the Project to proceed in compliance with the regulations. <u>See</u> NOI Alternatives Analysis.
§ 390-3(H)(3)(c)	Project will provide a long-term net benefit or improvement to the resource area. Project work within the resource area consists solely of work to restore the abandoned section of the current Falmouth Avenue to functioning dune and will have a beneficial effect on the coastal dune. The proposed work includes replanting of large sods of plants removed from the new section of road and new beach grass plantings in areas of the existing road where the dune has started to take over. The remaining Project impacts are limited to the buffer zones to Coastal Dune, Coastal Bank, and Coastal

Waiver Reason	Application to Project
	Beach. The work will result in a restored and undisturbed 50-foot buffer zone to the dune. NHESP determined that the Project will not adversely affect any rare wildlife species. The Project can be conditioned to minimize adverse effects on rare plant species by requiring the Land Bank obtain an amendment to its Conservation & Management Permit.
§ 390-3(H)(3)(e)	Project will provide a significant public benefit. The relocated portion of Falmouth Avenue will maintain the status quo of providing alternative vehicular access to the Cisco Beach parking lot while improving the existing conditions of the coastal dune and buffer zone. The Nantucket police and fire departments agree that maintaining this second access route will be beneficial to public safety. The Project can be conditioned to minimize adverse effects on rare plant species by requiring the Land Bank obtain an amendment to its Conservation & Management Permit.

Abutters Ocean Heath, LLC, in a letter dated March 19, 2025, submitted in connection with the prior notice of intent, “question[ed] the need for the requested waiver [and] for the Proposed Project itself,” and claimed the Land Bank’s alternatives analysis was inadequate. Even were that the case, the Project is eligible for a waiver for other reasons as discussed above. Regardless, the existing access from Hummock Pond Road does not provide “full and adequate access” to the beach parking lot, as the abutters suggest, since the Nantucket police and fire departments agree that maintaining the second access route over Falmouth Avenue would be advantageous to public safety.

The Project merely maintains the status quo of access over Falmouth Avenue while improving the existing conditions of the coastal dune and buffer zone. If the Project is denied, portions of Falmouth Avenue will eventually be lost to erosion and abandoned, and the abandoned portions will remain as impacts to the resource area. The Project moves the road out of the resource area and deep into the buffer zone and restores the dune functions. The abutters would simply prefer the road be abandoned so there will be no traffic in front of their house. This is not a legitimate concern of the Commission.

The abutters also noted that “waivers should not be granted where the proposed work will impact a rare wildlife species.” However, NHESP determined that the Project “will not adversely affect the actual Resource Area Habitat of state-protected rare wildlife species.” NHESP Letter, at 2. The abutters’ concern is therefore unfounded. To the extent the Project will adversely affect rare plant species habitat, the Commission can adequately condition the Project to minimize adverse effects by

Nantucket Conservation Commission
December 8, 2025
Page 11 of 11

requiring the Land Bank obtain an amendment to its Conservation & Management Permit (which the Land Bank is already pursuing) before starting any work, as NHESP has already required.

Accordingly, the Land Bank requests a waiver from the operation of §§ 390-16(1), (3), and (4), and for the Commission to issue an order of conditions approving the Project.

The Land Bank thanks the Commission for its time and effort on this matter and looks forward to discussing the Project at the meeting on January 8, 2026.

Regards,

A handwritten signature in black ink, appearing to read "Peter M. Vetere".

Peter M. Vetere

cc: Rachael Freeman, Executive Director, Nantucket Islands Land Bank
Elizabeth Phelps, Environmental Permitting Coordinator, Nantucket Islands Land Bank

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

310 CMR 10.00: WETLANDS PROTECTION

Section

Regulations for All Wetlands

- 10.01: Introduction and Purpose
- 10.02: Statement of Jurisdiction
- 10.03: General Provisions
- 10.04: Definitions
- 10.05: Procedures
- 10.06: Emergencies
- 10.07: Compliance with M.G.L. c. 30, §§ 61 through 62II
- 10.08: Enforcement Orders
- 10.09: Severability
- 10.10: Effective Date
- 10.11: Actions Required Before Submitting a Notice of Intent for an Ecological Restoration Project
- 10.12: Notice of Intent for an Ecological Restoration Project
- 10.13: Eligibility Criteria for Restoration Order of Conditions
- 10.14: Restoration Order of Conditions

Additional Regulations for Coastal Wetlands

- 10.21: Introduction
- 10.22: Purpose
- 10.23: Additional Definitions for 310 CMR 10.21 through 10.37
- 10.24: General Provisions
- 10.25: Land under the Ocean
- 10.26: Designated Port Areas
- 10.27: Coastal Beaches
- 10.28: Coastal Dunes
- 10.29: Barrier Beaches
- 10.30: Coastal Banks
- 10.31: Rocky Intertidal Shores
- 10.32: Salt Marshes
- 10.33: Land under Salt Ponds
- 10.34: Land Containing Shellfish
- 10.35: Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes or Creeks that Underlie Anadromous/Catadromous ("Fish Run")
- (10.36: Reserved: Variance Provision is found at 310 CMR 10.05(10))
- 10.37: Estimated Habitats of Rare Wildlife (for Coastal Wetlands)

Additional Regulations for Inland Wetlands

- 10.51: Introduction
- 10.52: Purpose
- 10.53: General Provisions
- 10.54: Bank (Naturally Occurring Banks and Beaches)
- 10.55: Bordering Vegetated Wetlands (Wet Meadows, Marshes, Swamps and Bogs)
- 10.56: Land under Water Bodies and Waterways (under any Creek, River, Stream, Pond or Lake)
- 10.57: Land Subject to Flooding (Bordering and Isolated Areas)
- 10.58: Riverfront Area
- 10.59: Estimated Habitats of Rare Wildlife (for Inland Wetlands)
- 10.60: Wildlife Habitat Evaluations

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

10.26: continued

Land under the ocean often provides support for such structures. Some proposed activities may alter wave and current patterns so as to affect the stability of such structures or the depths or configurations of navigation channels.

Where a proposed project involves dredging, filling, removing, or altering land under the ocean in designated port areas, the issuing authority shall presume that the area is significant to marine fisheries, storm damage prevention and flood control. These presumptions may be overcome only upon a clear showing that land under the ocean in designated port areas does not play a role in the protection of marine fisheries, storm damage prevention or flood control, or that a salt marsh, coastal dune, land under a salt pond, coastal beach, tidal flat, barrier beach, rocky intertidal shore or land containing shellfish, in designated port areas, does play a role in marine fisheries, storm damage prevention or flood control, and if the issuing authority makes a written determination to such effect.

When a proposed project in a designated port area is on land under the ocean which is determined to be significant to marine fisheries, the following factors are critical to the protection of such interests:

- (a) water circulation; and
- (b) water quality.

When a proposed project in a designated port area is on land under the ocean which is determined to be significant to storm damage prevention or flood control, the ability of such land to provide support for adjacent coastal or human-made structures is critical to the protection of such interests.

(2) Definition.

Designation of Port Areas means those areas designated in 301 CMR 25.00: *Designation of Port Areas*.

WHEN LAND UNDER THE OCEAN IN DESIGNATED PORT AREAS IS FOUND TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, STORM DAMAGE PREVENTION OR FLOOD CONTROL, 310 CMR 10.26(3) AND (4) SHALL APPLY:

(3) Projects shall be designed and constructed, using best practical measures, so as to minimize adverse effects on marine fisheries caused by changes in:

- (a) water circulation;
- (b) water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

(4) Projects shall be designed and constructed, using the best practical measures, so as to minimize, adverse effects on storm damage prevention or flood control caused by changes in such land's ability to provide support for adjacent coastal banks or adjacent coastal engineering structures.

10.27: Coastal Beaches

(1) Preamble. Coastal beaches, which are defined to include tidal flats, are significant to storm damage prevention, flood control and the protection of wildlife habitat. In addition, tidal flats are likely to be significant to the protection of marine fisheries and where there are shellfish, to

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

land containing shellfish.²

Coastal beaches dissipate wave energy by their gentle slope, their permeability and their granular nature, which permit changes in beach form in response to changes in wave conditions.

Coastal beaches serve as a sediment source for dunes and subtidal areas. Steep storm waves cause beach sediment to move offshore, resulting in a gentler beach slope and greater energy dissipation. Less steep waves cause an onshore return of beach sediment, where it will be available to provide protection against future storm waves.

A coastal beach at any point serves as a sediment source for coastal areas downdrift from that point. The oblique approach of waves moves beach sediment alongshore in the general direction of wave action. Thus, the coastal beach is a body of sediment which is moving along the shore.

² For regulations concerning land containing shellfish see 310 CMR 10.34.

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

10.27: continued

Coastal beaches serve the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean and other coastal beaches. Interruptions of these natural processes by human-made structures reduce the ability of the coastal beach to perform these functions.

A number of birds also nest in the coastal berm, between the toe of a dune and the high tide line. In addition, isolated coastal beaches on small islands are important as haul out areas for harbor seals.

Tidal flats are likely to be significant to the protection of marine fisheries and wildlife habitat because they provide habitats for marine organisms such as polychaete worms and mollusks, which in turn are food sources for fisheries and migratory and wintering birds. Coastal beaches are extremely important in recycling of nutrients derived from storm drift and tidal action. Vegetative debris along the drift line is vital for resident and migratory shorebirds, which feed largely on invertebrates which eat the vegetation. Below the drift line in the lower intertidal zone are infauna (invertebrates such as mollusks and crustacea) which are also eaten by shore birds.

Tidal flats are also sites where organic and inorganic materials may become entrapped and then returned to the photosynthetic zone of the water column to support algae and other primary producers of the marine food web.

When a proposed project involves the dredging, filling, removing, or altering of a coastal beach, the issuing authority shall presume that the coastal beach is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a coastal beach does not play a role in storm damage prevention, flood control, or protection of wildlife habitat, or that tidal flats do not play a role in the protection of marine fisheries or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When coastal beaches are determined to be significant to storm damage prevention or flood control, the following characteristics are critical to the protection of those interests:

- (a) volume (quantity of sediments) and form; and
- (b) the ability to respond to wave action.

When coastal beaches are significant to the protection of marine fisheries or wildlife habitat, the following characteristics are critical to the protection of those interests:

- (a) distribution of sediment grain size;
- (b) water circulation;
- (c) water quality; and
- (d) relief and elevation.

When tidal flats are in a designated port area, 310 CMR 10.26(1) through (4) shall apply. When tidal flats are significant to land containing shellfish, 310 CMR 10.34(1) through (8) shall apply.

(2) Definitions.

Coastal Beach means 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.

Tidal Flat means any nearly level part of a coastal beach which usually extends from the mean low water line landward to the more steeply sloping face of the coastal beach or which may be separated from the beach by land under the ocean.

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

WHEN A COASTAL BEACH IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL, OR PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(3) THROUGH (7) SHALL APPLY:

(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 downdrift coastal beach.

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

10.27: continued

- (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:
- (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 downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift 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.

WHEN A TIDAL FLAT IS DETERMINED TO BE SIGNIFICANT TO MARINE FISHERIES OR THE PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(6) SHALL 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.

10.28: Coastal Dunes

(1) Preamble. All coastal dunes are likely to be significant to storm damage prevention and flood control, and all coastal dunes on barrier beaches and the coastal dune closest to the coastal beach, also known as the Primary Frontal Dune as defined in 310 CMR 10.04, in any area are per se significant to storm damage prevention and flood control. The Coastal High Hazard Area or Velocity Zone extends at a minimum to the inland limit of the Primary Frontal Dune along the open coast. Coastal dunes are also often significant to the protection of wildlife habitat.

Coastal dunes aid in storm damage prevention and flood control by supplying sand to coastal beaches. Coastal dunes protect inland coastal areas from storm damage and flooding by storm waves and storm elevated sea levels because such dunes are higher than the coastal beaches which they border. In order to protect this function, coastal dune volume must be maintained while allowing the coastal dune shape to conform to natural wind and water flow patterns.

Vegetation cover contributes to the growth and stability of coastal dunes by providing conditions favorable to sand deposition.

On retreating shorelines, the ability of the coastal dunes bordering the coastal beach to move landward at the rate of shoreline retreat allows these dunes to maintain their form and volume, which in turn promotes their function of protecting against storm damage or flooding.

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10.28: continued

When a coastal dune is significant to storm damage prevention, flood control or the protection of wildlife habitat, the following characteristics are critical to the protection of those interest(s):

- (a) the ability of the dune to erode in response to coastal beach conditions;
- (b) dune volume;
- (c) dune form, which must be allowed to be changed by wind and natural water flow;
- (d) vegetative cover;
- (e) the ability of the dune to move landward or laterally; or
- (f) the ability of the dune to continue serving as bird nesting habitat.

(2) Definition.

Coastal Dune means 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.

WHEN A COASTAL DUNE IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL OR THE PROTECTION OF WILDLIFE HABITAT, 310 10.28(3) THROUGH (6) SHALL APPLY:

(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;
- (b) disturbing the vegetative cover so as to destabilize the dune;
- (c) causing any modification of the dune form that would increase the potential for storm or flood damage;
- (d) interfering with the landward or lateral movement of the dune;
- (e) causing removal of sand from the dune artificially; or
- (f) interfering with mapped or otherwise identified bird nesting 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.

(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;
- (b) fencing and other devices designed to increase dune development; and
- (c) plantings compatible with the natural vegetative cover.

(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.

10.29: Barrier Beaches

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10.28: continued

Barrier beaches protect landward areas because they provide a buffer to storm waves and to sea levels elevated by storms. Barrier beaches protect from wave action such highly productive wetlands as salt marshes, estuaries, lagoons, salt ponds and fresh water marshes and ponds, which are in turn important to marine fisheries and protection of wildlife habitat. Barrier beaches and the dunes thereon are also important to the protection of wildlife habitat in the ways described in 310 CMR 10.27(1) (Coastal Beaches) and 10.28(1) (Coastal Dunes).

Barrier beaches are maintained by the alongshore movement of beach sediment caused by wave action. The coastal dunes and tidal flats on a barrier beach consist of sediment supplied by wind action, storm wave overwash and tidal inlet deposition. Barrier beaches in Massachusetts undergo a landward migration caused by the landward movement of sediment by wind, storm wave overwash and tidal current processes. The continuation of these processes maintains the volume of the landform which is necessary to carry out the storm and flood buffer function.

When a proposed project involves removal, filling, dredging or altering of a barrier beach, the issuing authority shall presume that the barrier beach, including all of its coastal dunes, is significant to the interest(s) specified above. This presumption may be overcome only upon a clear showing that a barrier beach, including all of its coastal dunes, does not play a role in storm damage prevention, flood control, or the protection of marine fisheries, wildlife habitat, or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When a barrier beach is significant to storm damage prevention and flood control, the characteristics of coastal beaches, tidal flats and coastal dunes listed in 310 CMR 10.27(1) and 10.28(1) and their ability to respond to wave action, including storm overwash sediment transport, are critical to the protection of the interests specified in 310 CMR 10.29.

(2) Definition.

Barrier Beach means 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.

(3) When a Barrier Beach Is Determined to Be Significant to Storm Damage Prevention, Flood Control, Marine Fisheries or Protection of Wildlife Habitat. 310 CMR 10.27(3) through (6) (coastal beaches) and 10.28(3) through (5) (coastal dunes) shall apply to the coastal beaches and to all coastal dunes which make up a barrier beach.

(4) Notwithstanding the provisions of 310 CMR 10.29(3), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.30: Coastal Banks

(1) Preamble. Coastal banks are likely to be significant to storm damage prevention and flood control. Coastal banks that supply sediment to coastal beaches, coastal dunes and barrier beaches are per se significant to storm damage prevention and flood control. Coastal banks that, because of their height, provide a buffer to upland areas from storm waters are significant to storm damage prevention and flood control.

Coastal banks composed of unconsolidated sediment and exposed to vigorous wave action serve as a major continuous source of sediment for beaches, dunes, and barrier beaches (as well as other land forms caused by coastal processes). The supply of sediment is removed from banks

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by wave action, and this removal takes place in response to beach and sea conditions. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes and barrier beaches which, in turn, dissipate storm wave energy, thus protecting structures of coastal wetlands landward of them from storm damage and flooding.

Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage and flooding. While erosion caused by wave action is an integral part of shoreline processes and furnishes important sediment to downdrift landforms, erosion of a coastal bank by wind and rain runoff, which plays only a minor role in beach nourishment, should not be increased unnecessarily. Therefore, disturbances to a coastal bank which reduce its natural resistance to wind and rain erosion cause cuts and gullies in the bank, increase the risk of its collapse, increase the danger to structures at the top of the bank and decrease its value as a buffer.

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10.30: continued

Bank vegetation tends to stabilize the bank and reduce the rate of erosion due to wind and rain runoff. Pedestrian and vehicular traffic damages the protective vegetation and frequently leads to gully erosion or deep "blowouts" on unconsolidated banks. Therefore, any project permitted by 310 CMR 10.30 should incorporate, when appropriate, elevated walkways.

A particular coastal bank may serve both as a sediment source and as a buffer, or it may serve only one role.

When a proposed project involves dredging, removing, filling, or altering a coastal bank, the issuing authority shall presume that the area is significant to storm damage prevention and flood control. This presumption may be overcome only upon a clear showing that a coastal bank does not play a role in storm damage prevention or flood control, and if the issuing authority makes a written determination to that effect.

When issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches, the ability of the coastal bank to erode in response to wave action is critical to the protection of that interest(s).

When the issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it is a vertical buffer to storm waters, the stability of the bank, *i.e.*, the natural resistance of the bank to erosion caused by wind and rain runoff, is critical to the protection of that interest(s).

(2) Definition.

Coastal Bank means 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.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT SUPPLIES SEDIMENT TO COASTAL BEACHES, COASTAL DUNES OR BARRIER BEACHES, 310 CMR 10.30(3) THROUGH (5) SHALL APPLY:

(3) No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on such a coastal bank except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to the effective date of 310 CMR 10.21 through 10.37 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.21 through 10.37 (August 10, 1978), including reconstructions of such buildings subsequent to the effective date of 310 CMR 10.21 through 10.37, provided that the following requirements are met:

- (a) a coastal engineering structure or a modification thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due to changes in wave action, and
- (b) the applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible.
- (c) protective planting designed to reduce erosion may be permitted.

(4) Any project on a coastal bank or within 100 feet landward of the top of a coastal bank, other than a structure permitted by 310 CMR 10.30(3), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.

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(5) The Order of Conditions and the Certificate of Compliance for any new building within 100 feet landward of the top of a coastal bank permitted by the issuing authority under M.G.L. c. 131, § 40 shall contain the specific condition: 310 CMR 10.30(3), promulgated under M.G.L. c. 131, § 40, requires that no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT IS A VERTICAL BUFFER TO STORM WATERS, 310 CMR 10.30(6) THROUGH (8) SHALL APPLY:

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10.30: continued

(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

(7) Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

(8) Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.31: Rocky Intertidal Shores

(1) Preamble. Rocky intertidal shores are likely to be significant to storm damage prevention, flood control, protection of marine fisheries and wildlife habitat and where there are shellfish, protection of land containing shellfish.⁴

Rocky shore environments are habitats for macroalgae and marine invertebrates and provide protection to and food for, larger marine organisms such as crabs, lobsters, and such fish species as winter flounder, as well as a number of birds. Most marine plants and animals found in rocky shore environments are uniquely adapted to survive there and cannot survive elsewhere. Harbor seals also use rocky intertidal shores, such as rock outcroppings or isolated shores of small islands, as haul out areas.

When a proposed project involves the filling, removing or altering of a rocky intertidal shore, the issuing authority shall presume that such shore is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a rocky intertidal shore does not play a role in storm damage prevention, flood control, protection of marine fisheries or wildlife habitat, and where there are shellfish, protection of land containing shellfish and if the issuing authority makes a written determination to such effect.⁴

When a rocky intertidal shore is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat the form and volume of exposed intertidal bedrock and boulders are critical to the protection of those interests.

When a rocky intertidal shore is significant to the protection of marine fisheries or wildlife habitat, water circulation and water quality are critical to the protection of those interests.

(2) Definition.

Rocky Intertidal Shores means naturally occurring rocky areas, such as bedrock or boulder-strewn areas between the mean high water line and the mean low water line.

(3) When a Rocky Intertidal Shore Is Determined to Be Significant to Storm Damage Prevention, Flood Control, or Protection of Wildlife Habitat, any proposed project shall be designed and constructed, using the best practical measures, so as to minimize adverse effects on the form and volume of exposed intertidal bedrock and boulders.

⁴ For regulations concerning land containing shellfish, see 310 CMR 10.34.

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10.35: continued

This presumption that the impacts of the crossing have been avoided, minimized and that mitigation measures have been provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40 may be rebutted by credible evidence from a competent source.

(10.36: Reserved. Variance Provision is Found at 310 CMR 10.05(10))

10.37: Estimated Habitats of Rare Wildlife (for Coastal Wetlands)

If a project is within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife (if any) published by the Natural Heritage and Endangered Species Program (hereinafter referred to as the Program), a fully completed copy of the Notice of Intent (including all plans, reports, and other materials required under 310 CMR 10.05(4)(a) and (b)) for such project shall be sent to the Program via the U.S. Postal Service by express or priority mail (or otherwise sent in a manner that guarantees delivery within two days). Such copy shall be sent no later than the date of the filing of the Notice of Intent with the issuing authority. Proof of timely mailing or other delivery to the Program of the copy of such Notice of Intent shall be included in the Notice of Intent which is submitted to the issuing authority and sent to the Department's regional office.

Estimated Habitat Maps shall be based on the estimated geographical extent of the habitats of all state-listed vertebrate and invertebrate animal species for which a reported occurrence within the last 25 years has been accepted by the Program and incorporated into its official data base.

Within 30 days of the filing of such a Notice of Intent with the issuing authority, the Program shall determine whether any state-listed species identified on the aforementioned map are likely to continue to be located on or near the site of the original occurrence and, if so, whether the area to be altered by the proposed project is in fact part of such species' habitat. Such determination shall be presumed by the issuing authority to be correct. Any proposed project which would alter a resource area that is not located on the most recent Estimated Habitat Map (if any) provided to the conservation commission, shall be presumed not to be within a rare species' habitat. Both of these presumptions are rebuttable and may be overcome upon a clear showing to the contrary. If the issuing authority fails to receive a response from the Program within 30 days of the filing of such a Notice of Intent, a copy of which was received by the Program in a timely manner, it shall issue its Order of Conditions based on available information; however, the fact that a proposed project would alter a resource area that is located on an Estimated Habitat Map shall not be considered sufficient evidence in itself that such project is in fact within the habitat of a rare species.

If the Program determines that a resource area which would be altered by a proposed project is in fact within the habitat of a state-listed species, it shall provide in writing to the applicant and to the Conservation Commission and the Department, the identification of the species whose habitat would be altered by the proposed project, and all other relevant information which the Program has regarding the species' location and habitat requirements, insofar as such information may assist the applicant and the issuing authority to determine whether the project is or can be designed so as to meet the performance standard set in 310 CMR 10.37.

Notwithstanding 310 CMR 10.24(7) and 10.25 and 10.27 through 10.35, if a proposed project is found by the issuing authority to alter a resource area which is part of the habitat of a state-listed species, such project shall not be permitted to have any short or long term adverse effects on the habitat of the local population of that species. A determination of whether or not a proposed project will have such an adverse effect shall be made by the issuing authority. However, a written opinion of the Program on whether or not a proposed project will have such

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an adverse effect shall be presumed by the issuing authority to be correct. This presumption is rebuttable and may be overcome upon a clear showing to the contrary.

The conservation commission shall not issue an Order of Conditions under 310 CMR 10.05(6) regarding any such project for at least 30 days after the filing of the Notice of Intent, unless the Program before such time period has elapsed has either determined that the resource area(s) which would be altered by the project is not in fact within the habitat of a state-listed species or, if it has determined that such resource area(s) is in fact within rare species habitat, rendered a written opinion as to whether the project will have an adverse effect on that habitat.

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10.37: continued

Notwithstanding any other provision of 310 CMR 10.37, should an Environmental Impact Report be required for a proposed project under the M.G.L. c. 60, §§ 6 through 62II, as determined by 301 CMR 11.00: *MEPA Regulations* the performance standard established under 310 CMR 10.37 shall only apply to proposed projects which would alter the habitat of a rare species for which an occurrence has been entered into the official data base of the Massachusetts Natural Heritage and Endangered Species Program prior to the time that the Secretary of the Executive Office of Energy and Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4), that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, §§ 6 through 62II (unless, subsequent to that determination, the Secretary requires supplemental information concerning state-listed species, in accordance with the provisions of 301 CMR 11.17: *Transition Rules*).

10.51: Introduction

310 CMR 10.51 through 10.60 applies to all work which will remove, fill, dredge or alter any bank, bordering vegetated wetland, land under water bodies and waterways, land subject to flooding or riverfront area. 310 CMR 10.51 through 10.60 pertains to inland (as opposed to coastal) wetlands, and is promulgated in addition to 310 CMR 10.01 through 10.10 and 10.21 through 10.37. A project may be subject to regulation under both 310 CMR 10.01 through 10.10 and 10.21 through 10.37, in which case compliance with all applicable regulations is required.

310 CMR 10.51 through 10.60 is grouped into five resource areas. Each section begins with a Preamble which specifies the interests identified in M.G.L. c. 131, § 40 to which that resource area is or is likely to be significant. The next subsection defines the resource area and describes the characteristics of that area which are critical to the protection of the interests so identified. The next subsection sets forth the presumptions concerning the significance of the resource area. The last subsection contains the general performance standards to be applied to any work that will remove, fill, dredge or alter the resource area.

10.52: Purpose

310 CMR 10.51 through 10.60 is intended to establish criteria and standards for the uniform and coordinated administration of the provisions of M.G.L. c. 131, § 40. It is intended to ensure that development in and near inland wetlands is sited, designed, constructed and maintained in a manner that protects the public interests identified in M.G.L. c. 131, § 40 and served by these resource areas.

310 CMR 10.51 through 10.60 is intended to ensure coordination between the divisions of the Department and between the Department and other Executive Office of Energy and Environmental Affairs agencies; and to ensure consideration by the Department of relevant policies, laws or programs of other Executive Office of Energy and Environmental Affairs agencies. 310 CMR 10.51 through 10.60 is, in addition, intended to be consistent with and form a part of the Commonwealth's Coastal Zone Management Program as it has been promulgated and defined by 301 CMR 20:00: *Coastal Zone Management Program* issued pursuant to M.G.L. c. 21A. 310 CMR 10.51 through 10.60, however, is adopted independently under M.G.L. c. 131, § 40 and would remain in full force and effect in the absence of 301 CMR 20.00.

310 CMR 10.51 through 10.60 is intended to notify both persons proposing work in Areas Subject to Protection Under M.G.L. c. 131, § 40 and those regulating that work as to the performance standards that should be applied. These standards are intended to identify the level of protection that the issuing authority must impose in order to contribute to the protection of the interests identified in M.G.L. c. 131, § 40. It is the responsibility of the person proposing work

Chapter 390 WETLANDS PROTECTION

ARTICLE I

General Provisions, Definitions and Procedures

- § 390-1. Introduction and purpose.
- § 390-2. Definitions.
- § 390-3. Procedures.
- § 390-4. Severability.
- § 390-5. When effective; applicability.

ARTICLE II

Regulations for Coastal Wetlands

- § 390-6. Land under ocean.
- § 390-7. Coastal beaches (and tidal flats).
- § 390-8. Coastal dunes.
- § 390-9. Barrier beaches.
- § 390-10. Coastal banks.
- § 390-11. Salt marshes.
- § 390-12. Salt ponds.
- § 390-13. Land containing shellfish.
- § 390-14. Anadromous/Catadromous fish runs, banks along and lands under fish runs.
- § 390-15. Land subject to coastal storm flowage.
- § 390-16. Estimated habitat for rare/ significant wildlife and rare/ significant flora and fauna (for coastal wetlands).

ARTICLE III

Regulations for Inland Wetlands

- § 390-17. Inland banks and beaches.
- § 390-18. Vegetated wetlands (meadows, marshes, swamps, and bogs).
- § 390-19. Inland water bodies (lakes, creeks, streams, ponds, ditches and flats).
- § 390-20. Land subject to flooding (both bordering and isolated areas).
- § 390-21. Estimated habitat for rare/ significant wildlife and rare/ significant flora and fauna (for inland wetlands).
- § 390-22. Riverfront area.
- § 390-23. Great Pond Area

ARTICLE IV

Activities in Buffer Zone

- § 390-23. Findings; RDA or NOI required.
- § 390-24. Significance of buffer zones.
- § 390-25. Measuring cumulative impact.
- § 390-26. Filing requirements and buffer zone setbacks.

ARTICLE V

Activities to Enhance Wetland Resource Health and Function

§ 390-27. Invasive exotic plants.

§ 390-28. Control and mitigation of invasive plant species.

§ 390-29. Permitting requirements.

APPENDICIES

Appendix A, Best Management Practices for Fertilizer Use

Appendix B, Invasive Species Lists

Appendix C, Swimming Pool Guidelines

Appendix D, Viewshed Management Guidelines

Fee Schedule

for a period of 10 years and maybe amended by written request at any time it is valid using the same procedure as described above.

G. Minor Activities

Certain projects may involve minimal activity and/or alteration within Resource Area Buffer Zone or any work with the Great Pond Area. The Commission may consider such projects, as defined below, to be minor in nature and is of opinion that requiring review under an RDA or an NOI would be unnecessary. Considering the Conservation Commission designee shall have the authority to review applications for minor activities and further issue Minor Project Permits for projects that meet the standards defined herein.

Applicability: Minor projects are defined as those that occur outside of the 50' setback but inside the 100' buffer zone or within the Great Pond Area.

Minor Activities: Minor activities include but are not limited to:

- 1) Unpaved pedestrian walkways;
- 2) Split-rail fencing so long as it does not constitute a barrier to wildlife movement.
- 3) Viewshed management within the adopted viewshed management guidelines
- 4) Planting of native trees, shrubs, or groundcover, but does not include turf lawns.
- 5) Conversion of impervious surface to natural vegetation.
- 6) Removal of dead or dying trees or pruning of live trees that pose a hazard to structures or public safety as determined by a certified arborist.
- 7) Benches installed for public use.

H. Waivers of requirements.

- 1) All requests for waivers shall be in writing.
- 2) The Commission may, in its discretion, for good cause shown, grant waivers from the operation of one or more of these regulations pursuant to this subsection. Such waivers shall be granted only in accordance with the provisions of this subsection.
- 3) A waiver shall be granted only for the following reasons and upon the following conditions:
 - a) The Commission may grant a waiver from these regulations when the Commission finds that, given existing conditions, the proposed project will not adversely impact the interests identified in the Bylaw and there are no reasonable conditions or alternatives that would allow that project to proceed in compliance with the regulations. The burden of proof to show no adverse impact to the interests identified in the Bylaw, Chapter 136, Wetlands, § 136-2, of the Code of the Town of Nantucket, shall be the responsibility of the owner/applicant. The burden of proof to show no reasonable alternative shall be the responsibility of the owner/applicant and shall consist of a written alternatives analysis detailing why the proposed project cannot otherwise proceed in compliance with the performance standards in these regulations, with an explanation of why each is not feasible. It shall be the responsibility of the applicant to provide the Commission with any information which the Commission may request in order to enable the Commission to ascertain such adverse effects. The failure of the applicant to furnish any information which has been so requested may result in the denial of a request for a waiver pursuant to this subsection.
 - b) The Commission may grant a waiver from these regulations when portions of the buffer zone between the proposed project and adjacent resource area are previously altered and are not within the control of the project owner/ applicant, such as public or semi-public pedestrian and vehicular accessways.
 - c) The Commission may grant a waiver from these regulations when the Commission finds that a project will provide a long-term net benefit/ improvement to the resource area, provided any adverse effects are minimized by carefully considered conditions. However, no such project

- may be permitted which could have an adverse effect on rare wildlife species.
- d) The Commission shall grant a waiver from these regulations when the work proposed is grandfathered and qualifies as a preexisting use, as defined in § 390-2 of these regulations.
 - e) The Commission may grant a waiver from these regulations when the project as proposed provides a significant public benefit and adverse impacts are minimized by project design or conditions imposed by the Commission.
- 4) The Commission may impose additional conditions in granting a permit pursuant to this section, including imposing limits on project size or effect or requiring other compensatory measures, such as wetland replication.

I. Fees. – See attached fee schedule for amounts

- 1) Fees for the following, set from time to time by the Conservation Commission and payable to the Town of Nantucket, must be paid under the provisions of the Bylaw (and in addition to the fees required by MGL c. 131, § 40) before the pertinent application can be accepted by the Commission. **[Amended during codification]**
 - a) Request for Determination of Applicability.
 - b) Notice of Intent.
 - c) Certificate of Compliance.
 - d) Extension permit.
 - e) Minor modification/Plan change.
 - f) Amended Order of Conditions.
 - g) Minor activity permit
 - h) When the Town, County of Nantucket, or Nantucket Islands Land Bank is the applicant, the fee will be waived.

J. Recording of documents.

- 1) The following documents issued by the Commission are required to be properly recorded in the Registry of Deeds or the Land Court, within the chain of title of the affected property:
 - a) Order of conditions.
 - b) Amended order of conditions.
 - c) Extension permit.
 - d) Certificate of compliance.

K. Additional information.

- 1) Additional information to be provided with filings.
 - a) In addition to information already required by the Commonwealth of Massachusetts, the following information is required with each notice of intent filed with the Commission:
 1. One paper set and one electronic set of notices of intent with all supportive plan, maps, and documents.
 2. Filing costs as separate checks for:
 - i. Town share of state filing fee.
 - ii. Town Bylaw fee.
 - iii. Advertising fee.
 - iv. Cost and expense of technical consultants.
 3. Supportive plans, maps and documents shall include, at a minimum:
 - i. DEP wetland delineation forms for all vegetated wetland resource areas (two completed forms required to show boundary, one wetland and one upland).
 - ii. Locus map.
 - iii. Project plans shall include:
 - a. Assessor's reference numbers.

ARTICLE II Regulations for Coastal Wetlands

§ 390-6. Land under ocean.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving land under the ocean are necessary and proper for the following reasons: Land under the ocean provides feeding areas, spawning and nursery grounds, and shelter for many coastal organisms related to marine fisheries and wildlife. Destruction of eelgrass beds (*Zostera marina*) will harm scallop production. Eelgrass beds also buffer against climate change by sequestering carbon and diminishing wave energy during storms. Nearshore areas, and in some cases offshore areas, of land under the ocean help reduce storm damage, erosion, and flooding by diminishing and buffering the high-energy effects of storms. Submerged sand bars dissipate wave energy. Such areas provide a source of sediment for seasonal rebuilding of coastal beaches and dunes. The bottom topography and sediment type of nearshore areas of land under the ocean are critical to erosion control, storm damage protection, flood control and resiliency. Water circulation and flushing rates, distribution of grain size, water quality (including but not limited to turbidity, temperature, nutrients, pollutants, salinity, and dissolved oxygen), and the habitat of wildlife, finfish, and shellfish are all factors critical to the protection of significant wildlife habitat and marine fin and shell fisheries. Land under the ocean in an unobstructed state is important to recreational swimming, fishing, and shellfishing, to recreational boating and sailing, to commercial fishing and shellfishing, and to wetland scenic views.
- 2) Disturbance to benthic habitats have been shown to impact the following interests of the Wetlands Protection Act:
 - a) Protection of Wildlife Habitat
 - b) Protection of Marine Fisheries (particularly juvenile Cod and other species)
 - c) Protection of Land Containing Shellfish
 - d) Storm Damage Prevention
- 3) The maintenance of the productive benthic habitats not only assures the continuance of the habitats themselves, but also plays a direct role in supporting fish and shellfish stocks by providing a major food source. The young shellfish in the planktonic larval stage that are produced in large quantities during spring and summer are an important source of food for the young stages of marine fishes and many crustaceans. When a resource area is found to be significant to the protection of land containing shellfish under 310 CMR 10.34(3), and is also significant to marine fisheries, the following factors are critical to the protection of those interests:
 - a) shellfish,
 - b) water quality,
 - c) water circulation, and
 - d) the natural relief, evaluation or distribution of sediment grain size of such land.
- 4) Under 310 CMR 10.25, the jurisdiction of the Conservation Commission extends into the Nearshore Areas of Land under the Ocean, extending seaward to a point where the land is at a depth of 40 feet below the level of the ocean at mean low water in Cape Cod Bay, and to a depth of 80 feet below mean low water in all other areas.
- 5) Under 310 CMR 34(4), "any [activity on] land containing shellfish shall not adversely affect such land or marine fisheries by a change in the productivity of such land caused by:
 - a) alterations of water circulation,
 - b) alterations in relief elevation,
 - c) the compacting of sediment by vehicular traffic,
 - d) alterations in the distribution of sediment grain size,

- e) alterations in natural drainage from adjacent land, or changes in water quality, including, but not limited to, other than natural fluctuations in the level of salinity, dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.
- 6) No activity may adversely affect land containing shellfish in the following manner:
 - a) The turbulence generated by hydraulic dredging significantly increases turbidity levels. High turbidity levels attenuate light, which is necessary for photosynthetic process responsible for the primary productivity and oxygen regeneration of the water.
 - b) The suspended sediments settle on shellfish beds, smothering existing shellfish and altering the quality of the benthic environment essential for spat (mollusk larvae) settlement.
 - c) Resuspension of bottom sediments causes redistribution of sediments, alteration in sediment grain size distribution and causes changes in bottom topography relief, elevation and grade, including the creation of depressions in the bottom. Settlement of sediments into depressions can create deep pockets of highly fluid like sediment which may not be able to physically support shellfish or which can become anoxic and therefore not support shellfish.
 - d) Disturbance of sediments during the period of shellfish larval settlement hinders or prevents the effective settlement of shellfish larvae. Hydraulic dredging has also been shown to adversely impact the interest of storm damage prevention, by uprooting vegetation and undermining the stability of land under the ocean. The underwater "terrace" contours of the trenches created by hydraulic dredging contributes to erosion of the adjacent beach, coastal dunes and banks during storm events.
 - 7) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon land under the ocean, the Commission shall find that such land is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, significant wildlife habitat, recreation, resiliency and wetland scenic views. These findings may be overcome only upon a clear showing that the land under the ocean does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.
- B. Performance standards. Land under the ocean shall be presumed significant to an interest protected by the Bylaw as referenced in Subsection A; therefore, the following regulations apply:
- 1) Dredging shall be designed and carried out using the best available measures as determined by the Commission so as to have the least possible adverse effects or changes in marine productivity caused by changes in, or resulting from suspension or transport of pollutants, sediment transport, smothering of bottom organisms, accumulation of pollutants by organisms, destruction of habitat or nutrient source areas, or changes in water circulation and water quality.
 - 2) All dredging shall use best available measures to minimize adverse effects caused by changes in bottom topography resulting in an increase in height and velocity of waves hitting the shore, localized changes in circulation patterns or in changes in sediment transport which affect natural replenishment of beaches or maintenance of channels.
 - 3) Residential piers shall be constructed so as not to change shoreline movement of sediment, harm shellfish resources, obstruct commercial shellfishing, or obstruct the reserved public rights of fishing, fowling, navigation, or passage. Residential piers shall be constructed so as to withstand projected sea level rise and associated impacts based on the best available scientific data and modeling during the cradle-to-grave life of the structure. Residential piers shall not displace public moorings without written approval from the Harbormaster. No solid-fill piers shall be permitted.
 - 4) Construction of commercial piers shall be in compliance with Chapter 139, Zoning, of the Code

of the Town of Nantucket and shall not affect sediment transport and shall not destroy or pollute fisheries and shellfish habitat or nutrient source areas for those resources. Commercial piers shall be constructed so as to withstand projected sea level rise and associated impacts based on the best available scientific data and modeling during the cradle-to-grave life of the structure. No solid-fill piers or new residential piers shall be permitted.

- 5) Best available measures, as determined by the Commission, shall be used to minimize adverse effects of a commercial or residential pier on the interests protected by the Bylaw.
- 6) Aquaculture projects shall be undertaken pursuant to such means as may be established by the Commission so as to have the least possible adverse effect on wildlife, erosion control, storm damage prevention, flood control, recreation, resiliency or public access. No destruction of habitat or areas where shellfish feed, or change in water quality or circulation in any manner which adversely affects productivity of marine fisheries or shellfish beds shall be permitted.
- 7) No new bulkheads, groins or coastal engineering structures shall be permitted to protect structures constructed or substantially improved after August 1978. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem. An alternatives analysis must examine living shorelines or in appropriate cases the moving of the threatened building. If either of these methods is feasible then the bulkhead or groin may not be rebuilt. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to September 1978, but not substantially improved, from imminent danger. The use of any or all forms of coastal engineering structures requires an appropriate annual mitigation plan and implementation to ensure no adverse impacts as set forth by the Commission. Mitigation shall reflect current and future needs to ensure no adverse impacts.
- 8) Water-dependent projects shall be designed and performed so as to cause no adverse effects on wildlife, erosion control, marine fisheries, shellfish beds, storm damage prevention, flood control, recreation, resiliency and aquatic vegetation.
- 9) No activity that disturbs benthic habitats shall occur within the waters under the jurisdiction of the Nantucket Conservation Commission without a proper filing before the Conservation Commission.
- 10) Taking of shellfish or finfish by mechanical means including but not limited to trawls, drags, rakes and hydraulic gear with the assistance of machinery is prohibited within Nantucket waters. This does not include the use of bay scallop dredges, manual rakes or other hand operated devices for the collection of shellfish or baitfish with or without the use of scuba gear.
- 11) No activity on land under the ocean which is not water-dependent shall be permitted by the Commission, except activity allowed pursuant to a waiver from these regulations, as set forth in § 390-3F.
- 12) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-7. Coastal beaches (and tidal flats).

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving coastal beaches and tidal flats are necessary and proper for the following reasons: Coastal beaches and tidal flats aid in storm damage prevention, erosion and flood control; and coastal resilience in buffering inland areas from climate change impacts including but not limited to sea-level rise and increased storm frequency; serve as a source of sediment for downdrift coastal resource areas; serve to provide wildlife habitat to rare, endangered, and otherwise significant wildlife; serve to protect and provide habitat for marine fisheries and shellfish; and serve to provide important wetland scenic views and recreation. Coastal beaches dissipate wave energy by their gentle slope, their permeability, and their granular nature, which permit changes in beach form in response to changes in wave conditions. Coastal beaches serve as a sediment source for dunes and subtidal

areas. Steep storm waves cause beach sediment to move offshore, resulting in a gentler beach slope and greater energy dissipation. Less steep waves cause an onshore return of beach sediment, where it will be available to provide protection against future storm waves. A coastal beach at any point serves as a sediment source for coastal areas downdrift from that point. The oblique approach of waves moves beach sediment alongshore in the general direction of wave action. Thus, the coastal beach is a body of sediment which is moving along the shore. Coastal beaches serve the purpose of storm damage prevention, erosion control, and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean, and other coastal beaches. As relative sea level continues to rise, and possibly accelerate as predicted, it is important to provide source material to allow these inter-tidal and sub-tidal areas to vertically accrete and continue to reduce storm damage, increase flood control, protection of land containing shellfish, and protection of wildlife habitat. Interruptions of these natural processes by man-made structures and/or activities reduce the ability of the coastal beach to perform these functions. Tidal flats are important to the protection of marine fisheries because they provide habitats for marine organisms, such as polychaete worms and mollusks, which in turn are food sources for fish. Tidal flats are also sites where organic and inorganic materials are entrapped and then returned to the photosynthetic zone of the water column to support algae and other primary producers of the marine food web. Coastal beaches and flats serve as important habitats for a wide variety of wildlife, including but not limited to coastal birds, turtles, shellfish and finfish. In particular, they are used by coastal birds for feeding areas and nesting sites. The natural erosional and depositional cycles, sediment grain size, water quality (including but not limited to turbidity, temperature, nutrients, pollutants, salinity, and dissolved oxygen) and circulation, and elevation of the land surface are all features of wildlife habitat which are critical characteristics for the protection of wildlife. Characteristics of coastal beaches and flats which are critical to the protection of marine fisheries, and shellfish and their habitat include: distribution of sediment grain size, movement of sediment, water quality (including the characteristics given above) and circulation, and beach relief and elevation. Characteristics of coastal beaches and flats which are critical to storm damage prevention, erosion control, or flood control and coastal resilience include sediment volume and form, their ability to respond to wave action, natural erosional and depositional cycles, and wave intensities. Characteristics of coastal beaches and flats which are critical to recreation are topography, sediment grain size, water quality (including the characteristics given above), water circulation rates and patterns, unobstructed access along shore, natural erosional and depositional cycles, and wave intensity. Characteristics of coastal beaches which are critical to wetland scenic views are natural erosion and deposition cycles, relief and elevation, sense of openness, and solitude. Land within 100 feet of a coastal beach or tidal flat is considered to be important to the protection and maintenance of coastal beaches and tidal flats, and therefore to the protection of the wetland values which these areas contain.

- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering, or building upon a coastal beach or flat, the Commission shall find that the beach or flat is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, fisheries, shellfish, wildlife, recreation, resiliency and wetland scenic views. These findings may be overcome only upon a clear showing that the beach or flat does not play a role in protecting any of the interests given above and upon only a specific written determination to that effect by the Commission.
- 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 Subsection A; therefore, the following regulations shall apply:

- 1) The provisions of § 390-6B(1) through (8) (regarding land under the ocean) shall apply to coastal beaches and tidal flats.
- 2) No new bulkheads, groins or coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after August 1978. Bulkheads may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem. An alternatives analysis must examine a green infrastructure alternative such as a living shoreline or in appropriate cases the moving of the threatened building. If either of these methods is feasible then the bulkhead or groin may not be rebuilt. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure built prior to September 1978, and not substantially improved, from imminent danger. The use of any and all forms of coastal engineering structures requires an appropriate annual mitigation plan and implementation to ensure no adverse impacts as set forth by the Commission. Mitigation shall reflect current and future needs to ensure no adverse impacts to the littoral system or adjacent coastal beach and/or coastal dunes.
- 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.
- 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.
- 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.
- 6) Proposed projects which are not water dependent shall maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the twenty-five-foot buffer zone and fifty-foot setback disturbed. All structures which are not water dependent shall be located at least 75 feet from a coastal beach.
Exception: Structures shall be permitted down to the 50-foot setback provided that the undisturbed buffer zone is enhanced by 1.5X the structural area between the 50' setback and 75' setback in a manner contiguous with the undisturbed buffer zone. Any constructed bioswale shall count against this area so long as it is contiguous with the original undisturbed buffer zone. All structures in existence at the enactment of this performance standard will only be required to meet this requirement upon any expansion of the structure based on the area of expansion.
- 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 less. The average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a one-hundred-fifty-year period ending the date the NNOI was filed or, if no NNOI was filed, the date construction began. If erosion data are not available for the one-hundred-fifty-year period, the Commission shall determine the average annual erosion rate from such lesser time period for which erosion data is available. A second annual average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 10 year period ending the date the NOI was filed, or if no NOI was filed, the date construction began to determine if erosion has accelerated. If erosion has accelerated over the contemporary time period, the higher erosion rate shall be used to determine mitigation requirements for the application. In cases where documentation can be provided to show that the use of the 10- or one-hundred-fifty-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.
- 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.
- 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 A¹).

- 10) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-8. Coastal dunes.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving coastal dunes are necessary and proper for the following reasons: Coastal dunes, including coastal dune fields, aid in storm damage prevention, erosion and flood control; protect land in coastal areas from storm damage and flooding; serve as a sediment source for beach and intertidal areas; serve to provide wildlife habitat to rare, endangered, and otherwise significant wildlife; and serve to provide important wetland scenic views and recreation. Coastal dunes aid in storm damage prevention, erosion control, and flood control by supplying sand to coastal beaches. Coastal dunes do not significantly inhibit transport of pollutants into groundwater. Coastal dunes protect inland coastal areas from storm damage and flooding by storm waves and elevated sea levels because such dunes are higher than the coastal beaches which they border. Vegetated cover contributes to the growth and stability of coastal dunes by providing conditions favorable to sand deposition. On retreating shorelines, the ability of coastal dunes bordering a coastal beach to move landward at a rate of shoreline retreat allows these dunes to maintain their form and volume. Characteristics of coastal dunes which are critical for storm damage prevention, flood control, and erosion control include: ability of the dune to erode and change in response to coastal beach conditions; dune volume, sediment grain size, and slope; dune form, which can change with wind and natural water flow; amount, continuity, and density of vegetative cover; wildlife habitat and ability of a dune to move landward and laterally. Coastal dunes are important habitats for a wide variety of wildlife, particularly turtles and birds for feeding and nesting areas. The amount of vegetation, dune height and slope, sediment grain size, and degree of isolation from human-caused disturbances are all features of dunes which are critical characteristics for the protection of wildlife. Characteristics of coastal dunes which are critical to wetland scenic views are dune form, slope, elevation, size of dunefield, proportion and scale of dunes in relationship with other land forms. Land within 100 feet of a coastal dune is considered to be significant to the protection and maintenance of coastal dunes, and therefore to the protection of the wetland values which these areas contain.
- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon a coastal dune, the Commission shall find that the dune is significant to the protection of the following interests: flood control, erosion control, storm damage prevention, prevention of pollution, resiliency wildlife, and wetland scenic views. These findings may be overcome only upon a clear showing that the dune does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.

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 Subsection A; therefore, the following regulations shall apply:

- 1) No coastal revetments or coastal engineering structures of any type shall be constructed, rebuilt, or repaired.
- 2) Proposed projects which are not water dependent shall maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the twenty-five-foot buffer zone and fifty-foot setback disturbed. All structures which are not water dependent shall be located at least 75 feet from a coastal dune.

Exception: Structures shall be permitted down to the 50-foot setback provided that the undisturbed buffer zone is enhanced by 1.5X the structural area between the 50' setback and 75' setback in a manner contiguous with the undisturbed buffer zone. Any constructed bioswale shall count against this area so long as it is contiguous with the original undisturbed buffer zone. All structures in existence at the enactment of this performance standard will only be required to meet this requirement upon any expansion of the structure based on the area of expansion.

- 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.
- 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.
- 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.
- 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.
- 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.
- 8) Any pedestrian or elevated walkway must be designed as determined by the Commission so as to minimize disturbances of 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 A²).
- 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.
- 11) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-9. Barrier beaches.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving barrier beaches are necessary and proper for the following reasons: Barrier beaches are composed of tidal flats, beaches, and dunes. As such, barrier beaches perform the same functions and are critical to the same interests as referenced in § 390-7 and § 390-8 of these regulations and therefore these provisions shall also apply to barrier beaches. Barrier beaches protect landward areas from flooding and erosion because they provide a buffer to storm waves and to sea levels elevated by storms. Barrier beaches protect from wave action such highly productive areas as dunes, tidal flats, salt marshes, estuaries, lagoons, harbors, salt ponds, and freshwater marshes and ponds, which are in turn important to fisheries, shellfish and wildlife habitat. Barrier beaches are maintained by the alongshore movement of beach sediment caused by wave action. The coastal dunes, beaches, and tidal flats of a barrier beach are made up of sediment supplied by wind action, storm wave overwash, and tidal inlet deposition. Barrier beaches in Massachusetts undergo a landward or alongshore migration caused by the landward and alongshore movement of sediment by wind, storm waves, and tidal current processes. The continuation of these processes maintains the volume of the landform which is necessary to carry out its storm and flood buffer functions. The ability of barrier beaches to respond to wave action, including storm overwash sediment transport, is critical to the protection of wetlands values of barrier beaches.
- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building upon a barrier beach, the Commission shall find that the barrier beach is significant to the protection of the following interests: flood control, erosion control,

resiliency, water pollution, storm damage prevention, fisheries, shellfish, wildlife habitat, recreation, and wetland scenic views. Barrier beaches shall be found significant to private water supply and groundwater if there are existing houses with wells on or near the barrier beach or if the barrier beach abuts, creates, or protects a swamp, freshwater marsh, or pond. These findings may be overcome only upon a clear showing that the barrier beach does not play a role in protecting any of these interests given above and only upon specific written determination to that effect by the Commission.

B. Performance standards. A barrier beach or land within 100 feet of a barrier beach shall be presumed significant to the interests protected by the Bylaw as referenced in Subsection A; therefore, the following regulations shall apply:

- 1) No coastal revetments or coastal engineering structures of any type shall be constructed, rebuilt, or repaired.
- 2) Fill may be used only if the Commission authorizes its use and only if such fill is to be used for beach or dune nourishment projects.
- 3) No septic system or buildings shall be constructed on a barrier beach. Buildings which pre-exist these regulations may be maintained and repaired. Existing septic systems may be maintained, repaired and upgraded to the best available measures. No expansion of septic systems shall be permitted. [Amended during codification]
- 4) Excavation of sand around existing houses may be permitted, but no new projects shall be permitted which will require periodic sand removal for maintenance. All disturbed areas (including blowouts) shall be stabilized through planting of vegetation. The evacuated sand must be retained in the area and be part of the barrier beach.
- 5) Vehicular access for existing houses or for recreational use shall be unpaved roads and shall be done in accordance with such procedures as the Commission determines will minimize any adverse effect on the barrier beach.
- 6) No excavation or disturbance of vegetation shall be permitted on a barrier beach unless the area is completely restored, replanted, and stabilized to its original form and volume.
- 7) 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 A³).
- 8) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-10. Coastal banks.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving coastal banks are necessary and proper for the following reasons: Coastal banks may serve as a source of sediment for other coastal landforms, including beaches, dunes, tidal flats, barrier beaches, and land under the ocean; act as a vertical buffer which protects upland areas from storm damage, erosion, and flooding; provide wildlife habitat to common as well as rare, endangered, and otherwise significant wildlife; and serve to provide important wetland scenic views. Coastal banks composed of unconsolidated sediment and exposed to wave action serve as a major source of sediment for other coastal landforms, including beaches, dunes, and barrier beaches. The supply of sediment is removed from banks by wave action. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes, and barrier beaches. These areas dissipate storm wave energy, thus protecting structures and coastal wetlands landward of them from storm damage, erosion, and flooding. Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage, erosion, and flooding. While erosion caused by wave action is an integral part of shoreline processes and furnishes important sediment to downdrift landforms, erosion of a coastal bank by wind and rain runoff, which plays a minor role in beach nourishment, should not be

increased unnecessarily. Disturbances to a coastal bank which reduce its natural resistance to wind and rain erosion cause cuts and gullies in the bank, and decrease its value as a buffer. As relative sea level continues to rise, and possibly accelerate, Coastal Banks' role in providing sediment to inter- and sub-tidal areas, and as a physical barrier to storm damage, flood control, and protection of wildlife habitat also increases. Vegetation tends to stabilize a coastal bank and reduce the rate of erosion due to wind and rain runoff. Vegetated banks are critical to reducing wind and rain erosion and for providing important habitat and biodiversity. A particular coastal bank may serve both as a sediment source and as a buffer or it may serve only one role. Coastal banks provide habitat for wildlife, particularly nesting birds. Characteristics of coastal banks which are critical to wildlife are bank steepness, height, stability, soil size and compaction, and vegetative cover and diversity. Characteristics of coastal banks that are critical to wetland scenic views are bank form, slope, elevation, proportion and scale in relationship to other landforms, vegetative characteristics and diversity, wildlife and habitat, and a sense of presence and solitude. All coastal banks are defined as primary coastal banks for the purposes of Town of Nantucket bylaws.

- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering, or building upon a coastal bank, the Commission shall find that the bank is significant to the protection of the following interests: flood control, erosion control, resiliency, storm damage prevention, wetland scenic views, and wildlife. These findings may be overcome only upon a clear showing that the coastal bank does not play a role in protecting any of the interests given above and only upon a specific written determination to that effect by the Commission.

B. Performance standards. Coastal banks or land within 100 feet of a coastal bank shall be presumed significant to the interests protected by the Bylaw as referenced in Subsection A; therefore, the following regulations shall apply:

- 1) No new bulkheads, coastal revetments, groins, or other coastal engineering structures shall be permitted to protect structures constructed, or substantially improved, after August 1978.. Bulkheads and groins may be rebuilt only if the Commission determines there is no environmentally better way to control an erosion problem. An alternatives analysis must examine living shorelines or in appropriate cases the moving of the threatened building or infrastructure. If either of these methods is feasible then the bulkhead or groin may not be rebuilt. Other coastal engineering structures may be permitted only upon a clear showing that no other alternative exists to protect a structure that has not been substantially improved or public infrastructure built prior to September 1978 from imminent danger. The mitigation provided for use of any structure to protect against erosion must have no adverse impact on adjoining coastal beach, coastal dune, barrier beach, or coastal banks.
- 2) Piers shall be constructed in compliance with Chapter 139, Zoning, of the Code of the Town of Nantucket using procedures determined by the Commission to be the best available measures to minimize adverse effects on interests protected by the Bylaw.
- 3) All projects shall be restricted to activity as determined by the Commission to have no adverse effect on bank height, bank stability, wildlife habitat, vegetation, wetland scenic view, or the use of a bank as a sediment source.
- 4) Elevated walkways designed not to affect bank vegetation shall be required for pedestrian passage over a bank.
- 5) Proposed projects which are not water dependent shall maintain a 25-foot undisturbed buffer zone with no greater than 50% of the area between the twenty-five-foot buffer zone and fifty-foot setback disturbed. All structures which are not water dependent shall be located at least 75 feet from a coastal bank.
Exception: Structures shall be permitted down to the 50-foot setback provided that the

undisturbed buffer zone is enhanced by 1.5X the structural area between the 50' setback and 75' setback in a manner contiguous with the undisturbed buffer zone. Any constructed bioswale shall count against this area so long as it is contiguous with the original undisturbed buffer zone. All structures in existence at the enactment of this performance standard will only be required to meet this requirement upon any expansion of the structure based on the area of expansion.

- 6) The septic leach facility of a septic system shall be constructed at least 100 feet from the top of the coastal bank and shall not be located within the face of the coastal bank.
- 7) In areas of an eroding coastal bank, the distance from all new structures to the coastal bank shall be at least 20 times the average annual erosion rate or 100 feet, whichever is lesser. The average annual erosion rate shall be determined by averaging the annual erosion over a one-hundred-fifty-year period ending with the date the NOI was filed or, if no NOI was filed, the date construction began. If erosion data are not available for the one-hundred-fifty-year period, the Commission shall determine the average annual erosion rate from such lesser time for which erosion data is available. A second annual average annual shoreline erosion rate shall be determined by averaging the annual erosion rate over a 10 year period ending the date the NOI was filed, or if no NOI was filed, the date construction began to determine if erosion has accelerated. If erosion has accelerated over the contemporary time period, the higher erosion rate shall be used to determine mitigation requirements for the application. In cases where documentation can be provided to show that the use of the one-hundred-fifty-year period is inappropriate to existing coastal shoreline characteristics and trends, alternate shoreline change rates may be used with the approval of the Commission.
- 8) All permits issued for the substantial improvement of an existing building or new construction of buildings under the Bylaw within 100 feet landward of the top of a coastal bank shall contain the specific condition that no coastal engineering structure of any kind shall be permitted on an eroding bank in the future to protect the project allowed by this permit, except those coastal engineering structures allowed by a waiver issued pursuant to § 390-3F of these regulations.
- 9) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

§ 390-11. Salt marshes.

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving salt marshes are necessary and proper for the following reasons: Salt marshes serve to support marine organisms, including finfish and shellfish; serve to provide critical wildlife habitat; serve to remove pollutants from surrounding waters; serve to aid in erosion control and storm damage prevention; and are important to fishing, shell fishing, recreation, and wetland scenic views. A salt marsh produces large amounts of organic matter. A significant portion of this material is exported as detritus and dissolved organics to estuarine and coastal waters, where it provides the basis for a large food web that supports many marine organisms, including finfish and shellfish. Salt marshes also provide spawning and nursery habitat for several important estuarine forage finfish. Salt marsh plants and substrate remove pollutants from surrounding waters. The network of salt marsh vegetation roots and rhizomes binds the sediments together. The sediments absorb chlorinated hydrocarbons and heavy metals such as lead, copper, and iron. The marsh also helps retain nitrogen and phosphorous compounds which can cause algal blooms and changes in ocean plankton and plant communities, particularly eelgrass. The underlying peat serves as a barrier between fresh groundwater landward of the marsh and the ocean, thus helping to maintain the level of the groundwater. Salt marsh cord grass and underlying peat are resistant to erosion and dissipate wave energy, thereby providing a buffer that reduces wave damage and coastal erosion. A saltmarsh is an important feeding and spawning area for many types of fish and aquatic and terrestrial wildlife. The marsh, including its creeks and open water, also provides important shelter for many aquatic and migratory birds. Marshes help absorb pollutants, but there is a

§ 390-16. Estimated habitat for rare/significant wildlife and rare/significant flora and fauna (for coastal wetlands).

A. Characteristics and protected interests.

- 1) The Commission finds that regulations applicable to activities involving estimated habitat for rare/significant wildlife and rare/significant flora and fauna for coastal wetlands are necessary and proper for the following reasons: Any coastal resource area identified in Chapter 136, Wetlands, § 136-3, of the Code of the Town of Nantucket within which is found any state rare species (plant or animal) officially listed by the Massachusetts Division of Fisheries and Wildlife, or in which is found any species (plant or animal) the Commission has recognized as significant under the Bylaw, or any coastal resource area falling within any of the most recent Estimated Habitat Maps of the Massachusetts Natural Heritage and Endangered Species Program, shall be considered rare/significant species habitat, as defined in § 390-2 of these regulations. Rare/Significant species habitat preservation is important in order to maintain healthy ecosystems, wetland resources and biodiversity, and is important for protecting recreational interests, and in protecting wetland scenic views.
- 2) In view of the foregoing, whenever a proposed project involves removing, filling, dredging, altering or building within areas of estimated habitat for rare/significant wildlife and rare/significant fauna for coastal wetlands, the Commission shall find that such land is significant to the protection of the following interests: fisheries, shellfish, wildlife, biodiversity, recreation, and wetland scenic views. These findings may be overcome only upon a clear showing that these estimated habitat areas do not play a role in protecting any of the interests given above and only upon a specific determination to that effect by the Commission.

B. Performance standards. Estimated habitat areas shall be presumed significant to the interests protected by the Bylaw as referenced in Subsection A; therefore, the following regulations shall apply:

- 1) No activity shall be permitted that alters existing vegetation within 25 feet of verified rare/significant species habitat.
- 2) No activity shall be permitted that results in the construction or enlargement of a structure within 50 feet of verified rare/significant species habitat.
- 3) No alteration of topography (filling or cutting) and/or drainage characteristics shall be permitted within 50 feet of verified rare/significant species habitat.
- 4) No new construction or enlargement of drainage facilities within 25 feet of verified rare/significant species habitat shall be permitted.
- 5) No part of any septic system shall be placed within 50 feet and no leaching facility shall be placed within 100 feet of a verified rare/significant species habitat.
- 6) The Commission may impose such additional requirements as are necessary to protect the interests protected by the Bylaw.

ABUTTER NOTIFICATION INFORMATION

TOWN OF NANTUCKET
CONSERVATION COMMISSION

LIST OF PARTIES IN INTEREST IN THE MATTER OF THE PETITION OF:

PROPERTY OWNER: Nantucket Islands Land Bank

MAILING ADDRESS: 22 Broad Street Nantucket, MA 02554

PROPERTY LOCATION: Smooth Hummocks (Cisco Beach)

ASSESSOR MAP/PARCEL: 82/30

SUBMITTED BY: Liz Phelps

SEE ATTACHED PAGES

I certify the foregoing is a list of persons who are owners of land directly abutting the property on which the proposed activity will occur (the locus), owners of land separated a distance of one hundred feet or less from the locus by a public or private street or way or stream and owners of land separated a distance of three hundred feet or less from the locus by a body of water, all as they appear on the most recent applicable tax list.

NOVEMBER 7, 2025

DATE

ASSESSOR'S OFFICE
TOWN OF NANTUCKET



Nantucket Conservation Commission Notice of Public Hearing

Dear Abutter:

In accordance with MGL Chapter 131, Section 40 and pursuant to 310 CMR 10.05, et seq., and Nantucket By-law Chapter 136, Section 4, you are hereby notified that a Public Hearing will be held during the Conservation Commission Meeting, which will be held in hybrid format starting at 5:00 PM. In-person participation will be located in the Trailer, Room A, 131 Pleasant Street, and remote participation is via Zoom and You Tube. Information on viewing the meeting can be found at: <https://www.nantucket-ma.gov/138/Boards-Commissions-Committees>

The purpose of the meeting is to open a Public Hearing for a Notice of Intent, the cover sheet of which is enclosed.

January 8, 2026

Date of Public Hearing

Smooth Hummocks
(Map 82, Parcel 30)

Street Address/Map & Parcel

Nantucket Islands Land Bank

Applicant Name

The Applicant proposes to relocate a portion of Falmouth Ave, which provides access to the Cisco Beach parking lot, due to erosion concerns.

Description of Proposed Work

For a digital copy of the filing please email Lisa Graves at lgraves@nantucket-ma.gov. Copies of the complete application are available for examination at the Conservation Commission/Natural Resources office at 131 Pleasant Street during normal business hours, or by appointment made by calling the Commission Office at (508) – 228 – 7230.