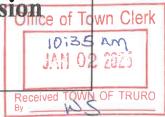


# Truro Conservation Commission of Town Clerk

Monday January 6, 2025 Hybrid Meeting start at 5:00 PM

Hybrid Meeting start at 5:00 PM Truro Town Hall, 24 Town Hall Rd



#### **PUBLIC MEETING AGENDA**

This will be a hybrid meeting. Citizens can view the meeting on Channel 8 in Truro and on the Town's website on the "Truro TV Channel 8" button under "Helpful Links" on the homepage. Once the meeting has started, click on the green "Watch" button in the upper right of the page. To provide comment during the meeting, you may call in or email.

To call-in toll-free dial 1-646-558-8656 and enter the following Meeting ID when prompted: 833 9225 6598

You can join this Zoom meeting from your computer, tablet or smartphone at <a href="https://us02web.zoom.us/j/83392256598">https://us02web.zoom.us/j/83392256598</a>

Please note that there may be a slight delay (15-30 seconds) between the meeting and the live stream (and television broadcast). If you are watching the meeting and calling in, please lower the volume on your computer or television during public comment so that you may be heard clearly. We ask that you identify yourself when calling in; citizens may also provide public comment for this meeting by emailing the Conservation Agent at <a href="mailto:ebeebe@truro-ma.gov">ebeebe@truro-ma.gov</a> with your comments.

**I. PUBLIC HEARINGS:** The Truro Conservation Commission holds these public hearings in accordance with the provisions of MGL Ch. 131, s. 40, MA Wetlands Protection Act and the Truro Conservation Bylaw, Chapter 8:

- 1. Request for Determination of Applicability: 2 Meetinghouse Road, Unit 3, Matthew Hooven: lift house & install new foundation; Riverfront Area. (Map 50, Parcel 4.3)
- 2. Request for Determination of Applicability: 6 Castle Road, Pamela Blair: after-the-fact filing for fencing; Riverfront Area & Coastal Bank. (Map 50, Parcel 146)
- 3. Notice of Intent: 20 Toms Hill Road, Joseph Fiorello (SE#075-): demolish and replace dwelling (this was a previously approved project with an expired OOC); Riverfront Area & Buffer Zone to a Coastal Bank. (Map 46, Parcel 342) (continued from 12/2/2024)
- 4. Notice of Intent: 17 Avocet Road, Jennifer & Michael Freitag (SE#075-1204): installation of sturdy sand drift fence, coir logs, and replacement of beach stairs; Coastal Beach; Land Subject to Coastal Storm Flowage (LSCSF) Coastal Bank. (Map 39, Parcel 217) (continued from 12/2/2024)
- 5. Notice of Intent: 5 Great Hills Lane, Kevin Wise (SE#75-1207): coir log array, sand drift fence, & nourishment; Coastal Dune, Coastal Beach, LSCSF. (Map 53, Parcel 1) (continued from 12/2/2024)
- 6. Notice of Intent: 544 Shore Road, Bay Beach Town Homes (SE#75-1208): coir log array, sand drift fence, & nourishment; Barrier Beach, LSCSF, Coastal Dune. (Map 7, Parcel 5) (continued from 12/2/2024)
- 7. Enforcement: 42 Great Hollow Road, Chapman: Retaining wall on Coastal Beach and LSCSF
- 8. Notice of Intent: 48 Castle Road, Anne Brandt/Myers Truro LLC (SE#75-): repair cracks in low seawall; Coastal Bank, Salt Marsh, LSCSF. (Map 50, Parcel 3)
- 9. Notice of Intent: 33 Knowles Heights Road, Janet London (SE#75-): install sand drift fence & coir log array; Coastal Beach, Coastal Bank, LSCSF. (Map 35, Parcel 9)
- 10. Notice of Intent: 522 Shore Road Unit 1, Wayside One Realty Trust (SE#75-): elevate above flood zone; Barrier Beach, Coastal Dune, LSCSF. (Map 7, Parcel 8.1)
- 11. Notice of Intent: 29 & 31 Knowles Heights Road, David Walsh (SE#75-): install sand drift fence & coir log array; Coastal Beach, Coastal Bank, LSCSF. (Map 35, Parcel 7 & 8)

- 12. <u>Administrative Review Applications</u>: 1.) 6 Bearberry Lane: nourishment & plantings. 2.) 630 Shore Road: hand-dig trench for new gas line, 3.) 1 Circuit Way: plantings
- 13. Minutes
- 14. Mitigation discussion

Site visits: Commissioners will meet at Town Hall on Monday, January 6, 2025 at 9:00 AM and proceed to: 5 Great Hills Rd, 6 Castle Rd, 2 Meetinghouse Rd U:3, 48 Castle Rd, 42 Great Hollow Rd (access from Great Hollow Beach), 33 Knowles Heights Rd, 29 & 31 Knowles Heights Rd, 522 Shore Rd U:1





# **Massachusetts Department of Environmental Protection**Bureau of Water Resources - Wetlands

# WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

	_	TOWARD Commission	T.	
	A.	General Information TOWN OF TRURO	••	
mportant:  Vhen filling out  orms on the  computer, use only  he tab key to move  our cursor - do not		Applicant: DEC 02 2024  CRECORY  First Name  11 ABBY LANS	MoRCiS Last Name	
se the return key.		Address	ma.	02666
Trebutti		Phone Number	Email Address	
	2.	Property Owner (if different from Applicant):  MATHEW  First Name  2721 McKinley Ave	HOOJEN Last Name	
		City/TamerKele 4	State	94703 Zip Code
		Phone Number	Email Address (if known)	
	3.	Representative (if anv)  First Name	Morn's Last Name	
		Company Name  11 Abby Ln  Address  Thurb  City/Town	MA- State	O2lob6 Zip Code
		Phone Number	Email Address (if known)	
	В.	Project Description		
low to find Latitude	1.	a. Project Location (use maps and plans to identify the Meeting Location) with the Street Address	location of the area sub	eject to this request):
nd Longitude		Latitude (Decimal Degrees Format with 5 digits after decimal e.g. XX.XXXXX)  MAP 50	Longitude (Decimal Degrees decimal e.gXX.XXXXX)	2
decimal degrees		Assessors' Map Number	Assessors' Lot/Parcel Numb	
		c. Plan and/or Map Reference(s): (use additional paper Site Plan	area and	bare sand Ler Cottage
		Title  Title		Date



# **Massachusetts Department of Environmental Protection**Bureau of Water Resources - Wetlands

# WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## **Project Description (cont.)**

	2. (	a. Activity/Work Description (use additional paper and/or provide plan(s) of Activity, if necessary):  Lift house and install full foundation.  Porch will be placed on a crawl space  Only portion of house is in jurisdiction  Gravity Sewer lines and manhole disconnected  and then reconnected to match Mishing grades  b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).
	3.	a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.
		☐ Single family house on a lot recorded on or before 8/1/96
Pr		☐ Single family house on a lot recorded after 8/1/96
		Expansion of an existing structure on a lot recorded after 8/1/96
		Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
		☐ New agriculture or aquaculture project
		☐ Public project where funds were appropriated prior to 8/7/96
		Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
		Residential subdivision; institutional, industrial, or commercial project
		☐ Municipal project
		☐ District, county, state, or federal government project
		Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.
		b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



## **Massachusetts Department of Environmental Protection**

Bureau of Water Resources - Wetlands

# WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C.		Determinations			
1. I request the Conservation Commission make the following determination(s). Check any that		ving determination(s). Check any that apply:			
	<ul> <li>a. whether the area depicted on plan(s) and/or map(s) referenced above is an area subject to jurisdiction of the Wetlands Protection Act.</li> </ul>				
		b. whether the <b>boundaries</b> of resource area(s) depic above are accurately delineated.	ted on plan(s) and/or map(s) referenced		
	A	c. whether the <b>Activities</b> depicted on plan(s) reference Protection Act and its regulations.	ed above is subject to the Wetlands		
	风	d. whether the area and/or Activities depicted on plan jurisdiction of any municipal wetlands' ordinance o	(s) referenced above is subject to the r bylaw of:		
		Name of Municipality			
		e. whether the following scope of alternatives is added depicted on referenced plan(s).	equate for Activities in the Riverfront Area as		
D.		Signatures and Submittal Requirem	ents		
and	I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.				
Offi	се и	er certify that the property owner, if different from the ap were sent a complete copy of this Request (including a aneously with the submittal of this Request to the Cons	Il appropriate documentation)		
		by the applicant to send copies in a timely manner manination of Applicability.	y result in dismissal of the Request for		
Sig	Signatures:				
I als	I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.				
	Signature of Applicant Date				
Signature of Representative (if any) Date			Date		
			* homeowner form.		
			3/9/20		

# TOWN OF TRURO CONSERVATION COMMISSION P.O. Box 2030 Truro MA 02666-0630

24	Request for Determination
	Project address: 2 meetinglesse & Unit 3 Map 50 Parcel 4
	• Is the project located in a resource area or buffer zone <b>Set</b>
	• Resource Area Type(s): RIVERFRONT & CR BUFFER
	If Buffer Zone what is the distance from Resource Area:
73	Description of project: (list all activities and describe methodology for construction or installation including
_ (	equipment type if applicable) Lift cottose as cottage is sitting on sand and blocks. Intelling
ro	equipment type if applicable) Lift cottoge as cottage is sitting on sand and blocks. Intelling under house. Crawl space under port examples and bobbat.
	Attached site plan titles/dates, and any other plan or narratives title/dates:
	Site Plan 11/3/2024
	Describe the best management practices/mitigation that will be used on the site: Evosion control over
	STOCKPILING MATL. CONTROLLED ACCESS
12	Special Conditions required by the Conservation Include:

The proposed project is approved subject to the conditions included herein.

The use of town property for beach access or staging of construction materials requires a permit issued by the Board of Selectmen. The owner and applicant/representative are responsible for obtaining this permit prior to work start.

The owner and applicant/representative shall, avoid and otherwise minimize any activities in the buffer zone or in resource areas by use of <u>best management practices</u> on the site, such as:

- Placement of an agreed upon work limit;
- Proper placement of construction materials in developed or already disturbed areas;
- Proper installation/maintenance of erosion control;
- Good housekeeping that includes at a minimum daily trash pickup; no dumping of paint, plaster or concrete on the site but rather, disposing of it properly.

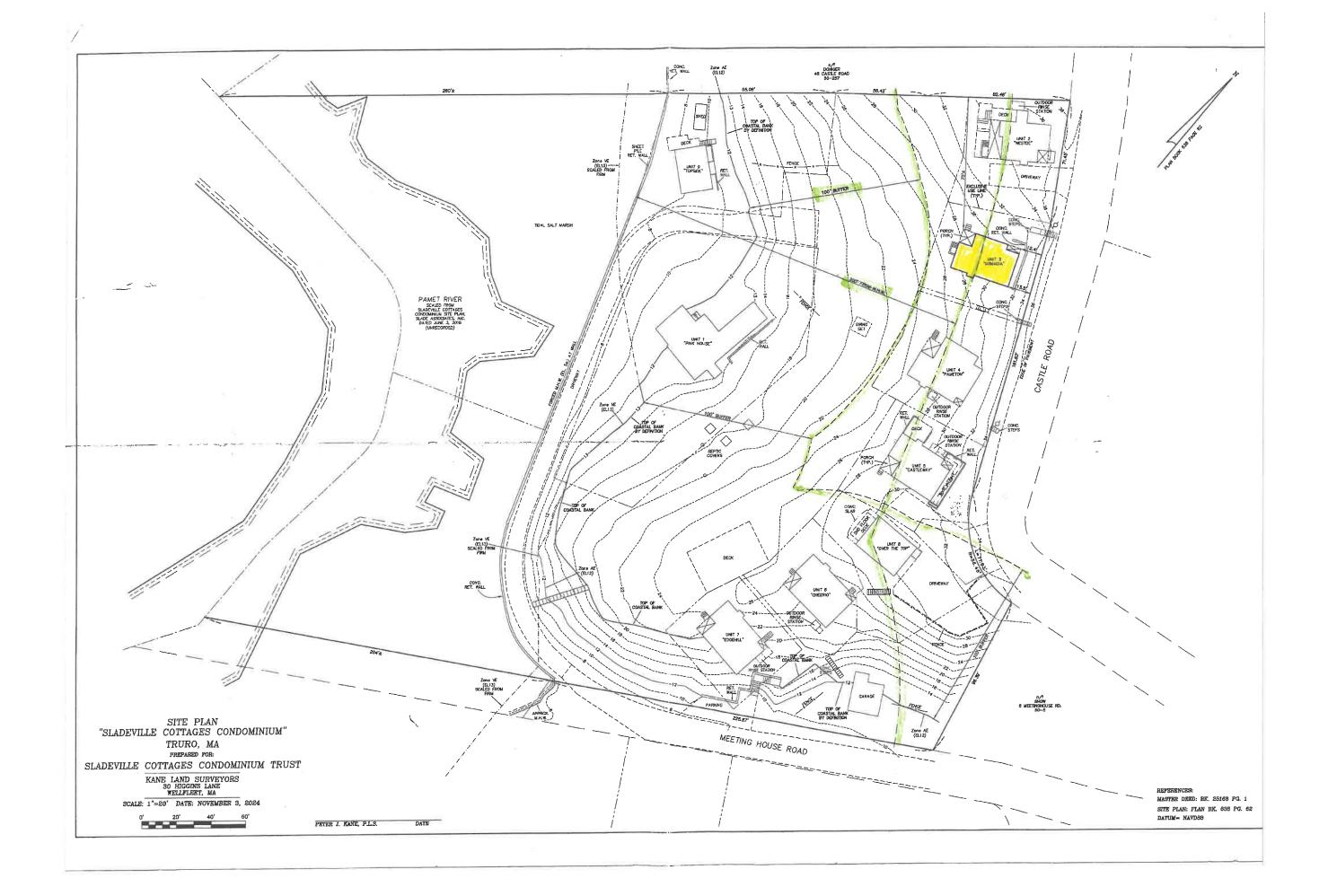
Approval of the project as described herein includes only the scope and specifications reviewed by the Conservation Commission; any changes to this project shall require additional review by the Conservation Commission prior to the work being done. Expansion of the scope of work may result in the applicant being required to file a full notice of intent. Any work done that exceeds the scope defined in the approved application shall be subject to issuance enforcement action; Violation of these conditions may result in issuance of an enforcement Order; non-criminal violation citations to the owner and/or applicant/representative accompanied by fines that accrue per offense and may accrue daily.

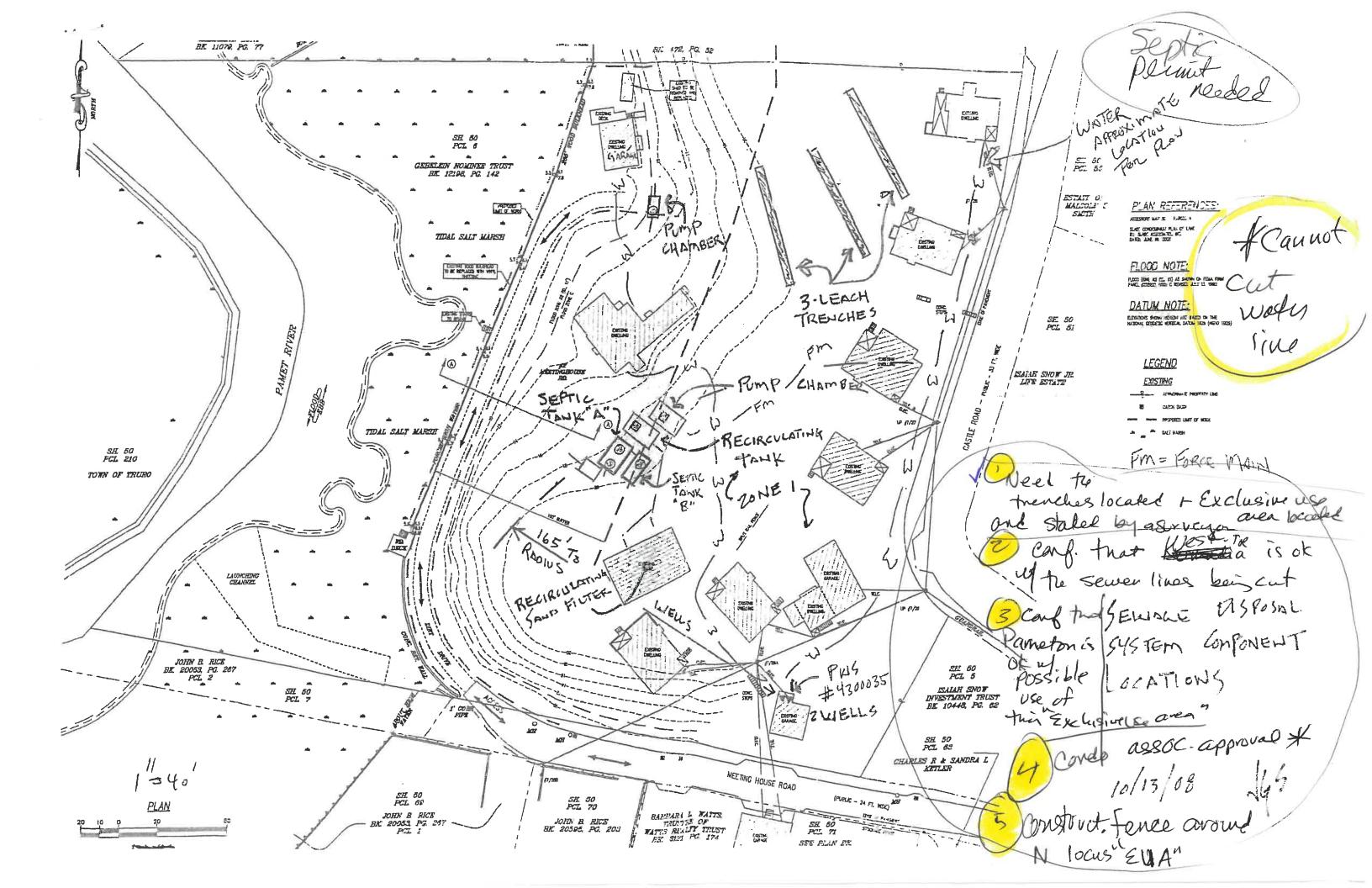
By reading and signing this letter of agreement the applicant acknowledges that they have read and understand the terms as stated herein; the scope of this approval is limited to the work described herein; and your signature on this conditional approval is acknowledgement that no work shall go forward until the RDA conditions have been issued by the Conservation Commission.

Applicant/Representative printed name and signature:

Owners printed name and signature:

carly Dennett







Benjamin Fairbank Principal Designer

16 Gages Way Brewster, MA 02631 (203) 415-2220 fairbank.b@gmail.com

#### **16 DECEMBER 2024**

Truro Conservation Commission

RE: Request for Determination of Applicability for Pamela Blair 6 Castle Road Truro, MA 02666

Dear Commission:

Thank you for considering RDA for fence repair and realignment at 6 Castle Road.

Attached are details and photographs, background and history of the previous fencing, and fence repair and mitigation proposal.

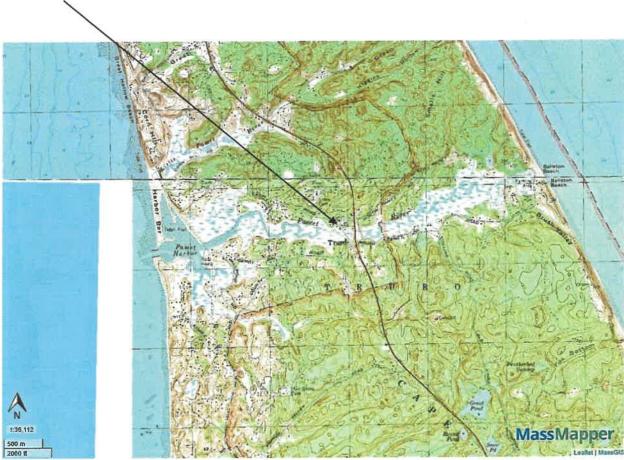
We look forward to our discussion.

Sincerely,

Benjamin Fairbank

after-The-fact

## LOCUS MAP 6 Castle Road



#### I. Background Considerations:

Fencing for the property was originally approved and installed in May of 1996 prior to the Riverfront Act, about 28 years ago. The goal was to safely protect and contain their young children, dogs and guests from access to the steep bank on the Blair's property or from cars on busy Castle Road. In addition, privacy fencing was desired due to the neighboring houses being closely situated and to safely limit access of any renters, dogs or children on the neighboring property. The 1996 sections of natural cedar privacy fencing were installed approximately 18 inches inside the property line on the Blair's property.

In 2014, additional natural cedar fencing panels were approved to be installed closer to the top of the very steep section of the bank. This was done for safety reasons due to an open area that was a result of permitted work to restore the entire bank with native species in 2012.

These 2014 panels were installed about six inches from the property line while the original panels remained at 18 inches from the property line. At that time, the Blairs anticipated that the older 1996 panels would need to be replaced at some point and that they would like to have the entirety of the privacy fencing to be in line within six inches of the property line in order to use the fullest extent of the

property. This preference was addressed with the neighbor at the time in conversation and with a follow-up letter.

In 2019, a few additional panels were approved and installed towards Castle Road to address privacy concerns from the newly created stone parking area on the Blair's property. These panels were installed 18 inches inside the property line to be in line with the 1996 fencing.

Storms from last winter damaged some of the 1996 fencing panels, creating a hazard between the two properties. The Blairs desired to proactively replace all of the 1996 panels with the intention to take this time to move the privacy fencing to be in line with the 2014 panels (six inches from the property line). This enables them to use the fullest extent of their property for native vegetation goals outined in their recently approved 2023 NOI.

While a proposal was obtained from a fencing company, and a deposit paid, onsite details were not shored up, and the company was told not to install the fencing until we had any necessary approvals to fix and move the privacy fencing. In error, the fencing company did the work prematurely, without the owners' knowledge or approval. The panels were installed further within the Blair's property and they were not securely tied into adjoining posts that remained, creating a point of potential failure. The fencing company has vowed to fix this mess.

#### II. Project Goals & Objectives:

- 1) Reinstall (1:1 replacement) approx. 140 linear feet of the currently existing 6' natural cedar privacy fencing by reusing and relocating the new panels the fencing company installed and the 2019 panels to within 6 inches of the property line, on the Blair's side, and to be in line with the remaining 2014 panels. This will involve hand digging for the posts (also see mitigation plan).
- 2) Assure that the fencing will be secure and provide safety between the neighboring properties, dogs, guests/renters, etc. along this line,
- 3) Maximize the space and use of the Blair's property particularly before proceeding to plant the full complement of native vegetation as outlined in the 2023 NOI,
- 4) Provide a little more space for safe entry in/out of vehicles parked in the Blair's parking area while aligning all fencing panels along the same line.
- 5) Better define the location of the property line for future successors of either property, even though the fencing will not be directly on the line.

#### III. Mitigation

The relocation of the privacy fencing by approximately 12-15 inches within the Blair's property will not significantly alter current conditions created by the privacy fending. However, we are proposing some mitigation to allow for increased small wildlife passage.

There may be some need to prune vegetation that has encroached over the property line onto the Blair's property, but this will be carried out only to improve the growth of native vegetation or control the spread of invasive species.

Nothing would be trimmed beyond the Blair's property line, which is proposed to be staked and marked by a licensed surveyor (note: there are currently 3 bounds along this line).

Half of the privacy fencing is outside the 100-foot buffer zone for the riverfront, as depicted on the plan.

It is desired to keep the privacy fencing at just above or at ground level as it is now, to match what was installed in 2014 which is intended to be left in place, so that all fencing won't need to be reinstalled (which will be the most cost effective).

We are sensitive to the impacts that fencing can impose on wildlife passage adjacent to resource areas and thus propose some mitigation. While the Blairs have not noticed this to ever be an issue, nor has any visible harm to wildlife occurred. They have observed small animals being able to pass under the privacy fencing as is and in areas where the ground is not level or beneath the existing gates close to the bank, and over the fencing. There are also many shrubs, cedar trees, and perennials that animals can take cover under if needed.

We are proposing to plant one or two more shrubs or cedar trees to supplement what is proposed in our 2023 NOI near the privacy fencing. We also propose to maintain or create spacing beneath select areas of fencing throughout the property (see plan). The current and additional passage areas have been identified as the most efficacious scenarios for the allowance of wildlife movement, considering where animals are inclined to go. To enhance these existing wildlife corridors, we propose to adjust a section of fencing near the freestanding garage for possible small wild animal movement, so that they are encouraged to exit down the bank where several red cedars have been planted vs. straight out across the parking area towards busy Castle Road (See Photos). This would be opposite the split rail fence in the picket fencing that runs from the garage towards the edge of the property (see photos). We would trim the bottom of several pickets up to the bottom rail to create one or two 6 - 12" wide openings that are at least somewhat protected by the red cedars nearby.

We will continue the efforts to manage the coastal bank and new plantings proposed by the existing fencing as approved in the 2023 Order of Conditions. We will continue these efforts as mitigation of the impacts of work to realign the fence. In support of these efforts, we have thus far submitted two monitoring reports dated December 2023 and December 2024 reporting our progress as requested by the Commission in 2023. The relocation and realignment of the fencing that we are requesting in this application will greatly support the interests of these management efforts. The property is not within an NHESP designated area.

### **IV. Pictures**

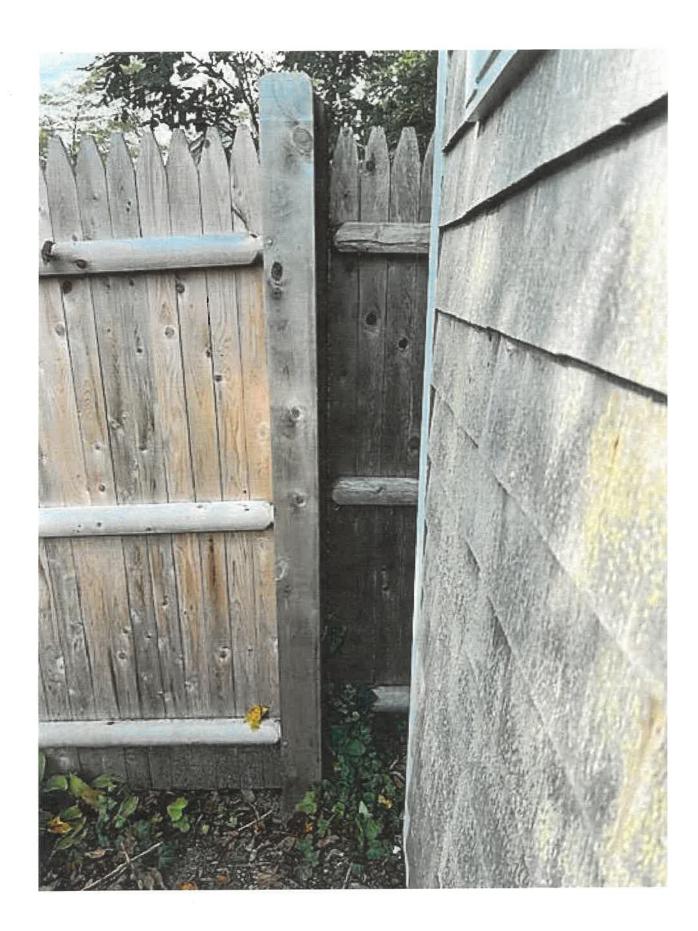






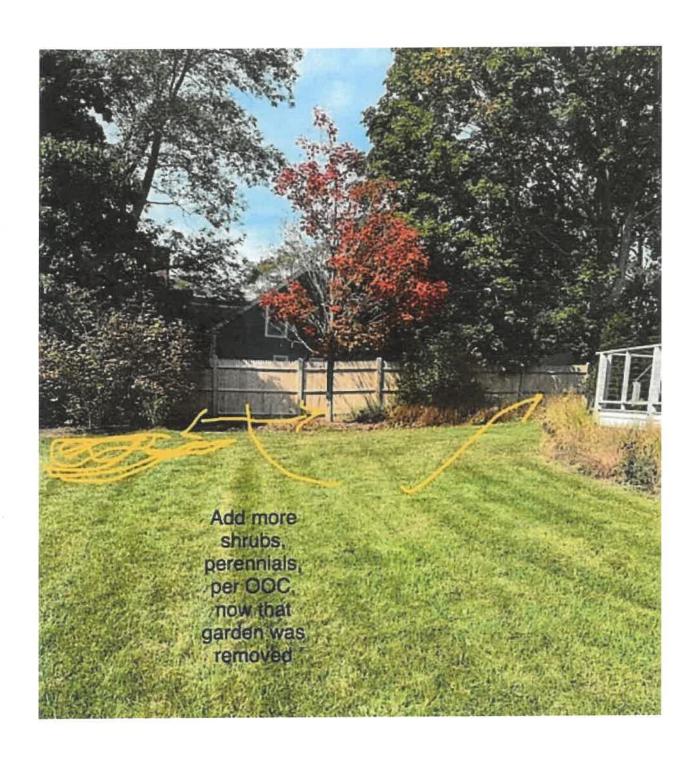














This is the location where the 2014 panels meet the new panels (the pole for the last panel closest to the outhouse will need to be repositioned to be within six inches because it was at an angle to meet the 1996 fencing).



This flagging marks the section by the side gate on the garage-side where we propose to cut the bottoms of the picket fencing to allow for wildlife passage. Note the existing six-inch gap.



# Massachusetts Department of Environmental Protection Bureau of Water Resources - Wetlands

**General Information** 

## WPA Form 1- Request for Determination of Applicability

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

Municipality

Important:		
When filling out		
forms on the		
computer, use only		
Ab - A-b leave to many		

A. 1.

the tab key to move your cursor - do not use the return key.



Applicant:	DEC 17 2021	
Pamela	Blair	
First Name	Last Name	
150 Kimball Road	the hand dark so response	
Address		
Carlisle	MA	01741
City/Town	State	Zip Code
Phone Number	Email Address	
Property Owner (if different from Applicant):		
Pamela A. Blair Trust - 2011		
First Name	Last Name	
150 Kimball Road		
Address		
Carlisle	MA	01741
City/Town	State	Zip Code
Phone Number	Email Address (if known)	
Representative (if any)		
Benjamin	Fairbank	
First Name	Last Name	
Fairbank Ecological Design		
Company Name		
16 Gages Way		
Address		
Brewster	MA	02631
City/Town	State	Zip Code
(203) 415-2220	fairbank.b@gmail.com	

**TOWN OF TRURO** 

#### **Project Description** В.

Phone Number

a. Project Location (use maps and plans to identify the location of the area subject to this request):

Email Address (if known)

6 Castle Road	Truro	
Street Address	City/Town -70.03077  Longitude (Decimal Degrees Format with 5 digits after decimal e.gXX.XXXXX)	
41.99419		
Latitude (Decimal Degrees Format with 5 digits after decimal e.g. XX.XXXXX)		
50	146	
Assessors' Map Number	Assessors' Lot/Parcel Number	
b. Area Description (use additional paper, if necess	sary):	
Fencing.		
c. Plan and/or Map Reference(s): (use additional p	paper if necessary)	
Fencing Repair & Mitigation Plan	12/16/2024	
Title	Date	

and how to convert

How to find Latitude and Longitude

Date

Title



## Massachusetts Department of Environmental Protection Bureau of Water Resources - Wetlands

## WPA Form 1- Request for Determination of Applicability

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

Municipality

## B. Project Description (cont.)

2. a. Activity/Work Description (use additional paper and/or provide plan(s) of Activity, if necessary): Fencing Repair & Mitigation Plan. See attached narrative.

	fror nec	Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant in having to file a Notice of Intent for all or part of the described work (use additional paper, if eessary).  I replacement and/or repair.
3.	a. Riv	If this application is a Request for Determination of Scope of Alternatives for work in the erfront Area, indicate the one classification below that best describes the project.
		Single family house on a lot recorded on or before 8/1/96
		Single family house on a lot recorded after 8/1/96
		Expansion of an existing structure on a lot recorded after 8/1/96
		Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
		New agriculture or aquaculture project
		Public project where funds were appropriated prior to 8/7/96
		Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
		Residential subdivision; institutional, industrial, or commercial project
		Municipal project
		District, county, state, or federal government project
		Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.
	b. abo	Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification ove (use additional paper and/or attach appropriate documents, if necessary.)



# Massachusetts Department of Environmental Protection Bureau of Water Resources - Wetlands WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Municipality

viassacifiasetts victiarias i roteotion,	(or ivi. c. E. c. 101, 310			
C. Determinations				
1. I request the Truro	make the following determination(s). Check any that apply:			
Conservation Commission	(a) and (a) many (a) referenced above is an area subject to			
<ul> <li>a. whether the area depicted on plan(s) and/or map(s) referenced above is an area subject to jurisdiction of the Wetlands Protection Act.</li> </ul>				
b. whether the <b>boundaries</b> of resour above are accurately delineated.	ce area(s) depicted on plan(s) and/or map(s) referenced			
c. whether the <b>Activities</b> depicted on Protection Act and its regulations.	plan(s) referenced above is subject to the Wetlands			
d. whether the area and/or Activities jurisdiction of any municipal wetlands	depicted on plan(s) referenced above is subject to the ds' ordinance or bylaw of:			
Name of Municipality				
<ul> <li>e. whether the following scope of all depicted on referenced plan(s).</li> </ul>	ternatives is adequate for Activities in the Riverfront Area as			
D. Signatures and Submitta	al Requirements			
hereby certify under the penalties of perjury and accompanying plans, documents, and su knowledge.	that the foregoing Request for Determination of Applicability apporting data are true and complete to the best of my			
further certify that the property owner, if diffe Office were sent a complete copy of this Requirimultaneously with the submittal of this Requir	erent from the applicant, and the appropriate DEP Regional uest (including all appropriate documentation) uest to the Conservation Commission.			
Failure by the applicant to send copies in a ti Determination of Applicability.	mely manner may result in dismissal of the Request for			
Signatures:				
also understand that notification of this Req n accordance with Section 10.05(3)(b)(1) of	uest will be placed in a local newspaper at my expense the Wetlands Protection Act regulations.			
Pamela Blair	12/16/2024			
Signature of Applicant	Date			
Benjamin Fairbank	12/16/2024			
Signature of Representative (if any)	Date			



Benjamin Fairbank *Principal Designer* 

16 Gages Way Brewster, MA 02631 (203) 415-2220 fairbank.b@gmail.com

#### **3 JANUARY 2025**

Truro Conservation Commission 24 Town Hall Road Truro, MA 02666

**RE:** Request for Determination of Applicability for Pamela Blair 6 Castle Road Truro, MA 02666

#### **MEMO**

**Dear Commission:** 

Regarding our hearing on January 6<sup>th</sup> for our RDA for fence repair, we would like to revise some information, as follows:

The driveway in the right-of-way is not a dirt drive nor are we proposing a dirt drive. This is outdated information.

Thank you. We look forward to our discussion.

Sincerely,

Benjamin Fairbank

LOCUS LEGEND (NO SCALE) 16 - CONTOUR LINE SEWAGE LEACH PIT WELL (APPROX.) SEPTIC TANK FENCE REPLACEMENT: We would like to relocate the fence within 6" of the property line. AREA 36,500± SF. (0.84± AC.) PCL. 152 Existing Baccharis halimifolia, High-Tide Bush (thicket)

Conservation Commission TOWN OF TRURO

DEC 17 2024

#### PLAN NOTES:

#### Proposal Objectives:

- 1) Reinstall approx. 140 linear feet of the currently existing 6' natural cedar privacy fencing by reusing and relocating the new panels the fencing company installed and the 2019 panels only from 18 inches to within 6 inches of the property line, on the Blair's side, and to be in line with the remaining 2014 panels. This will involve hand digging for the posts.
- 2) Assure that the fencing will be secure and provide safety between the neighboring properties along this line
- 3) MITIGATION: Continue with management of coastal bank as approved in the 2023 Order of Conditions SE # 075-1175. We also propose to create some additional wildlife passage through the fencing on the other side of the property as noted on this plan.

MITIGATION: We propose to cut out two 6"-12" wide gaps along the bottom of the wooden picket fence to allow for wildlife passage.

FENCING REPAIR & MITIGATION PLAN 16 DECEMBER 2024

Pam Blair

1" = 40' 6 Castle Road Truro, MA 02666







# COASTAL PROCESSES AND HAZARDS SPECIALIST REPORT CAPE COD COOPERATIVE EXTENSION WOODS HOLE OCEANOGRAPHIC INSTITUTION SEA GRANT bryan.mccormack@capecod.org | 508-375-6849 193 Oyster Pond Road, MS #2, Woods Hole, MA 02543-1525

04 December 2024

TO: Emily Beebe, Truro Health and Conservation

CC: Arozana Davis, Truro Health and Conservation; Courtney Warren, Truro Health and

Conservation

FROM: Bryan McCormack, Coastal Processes and Hazards Specialist (WHOISG & CCCE)

RE: 17 Avocet Road, Truro, MA



#### **Summary**

This report focuses on the property of, and land surrounding, 17 Avocet Road in Truro, MA. A Notice of Intent has been submitted to rebuild a fiber roll array, expanding to 11 vertically stacked fiber rolls, and install sturdy drift fencing. These erosion control methods could be permitted for the coastal bank at this location as they typically are not considered coastal engineering structures. The Commission should examine the top elevation necessary for protection of the toe of the bank. The buried section of the fiber roll array does not currently have a significant setback from the property line, which could refract wave energy onto neighboring properties if exposed. A setback could also keep any digging at the toe of the bank on the property of the applicant. If permitted, the sturdy drift fencing should be placed where it will only be subjected to waves during high-energy storm events.

#### **Site Details**

This report focuses on the property of, and land surrounding, 17 Avocet Road in Truro, MA (Figure 1). The Truro Conservation Commission has requested a 3<sup>rd</sup> party review of a proposal to rebuild a fiber roll array protecting a coastal bank. This report includes a description of the area, erosion rates, potential impacts, and relevant regulations of the installation. A site visit was conducted to collect data and observe the relevant site characteristics on 04 November 2024.



Figure 1: Map of 17 Avocet Road, Truro.

The property is located in Cape Cod Bay with a southwest facing shoreline. The historical direction of net sediment transport for this location is to the north. According to the Massachusetts Department of Environmental Protection (MassDEP) Wetlands and Wetlands Change Areas Map, the area surrounding the property includes coastal bank, coastal dune, coastal beach, tidal flats, and open water (Figure 2). Despite being listed on the MassDEP Wetlands Map, there was no functional dune present at the time of the site visit.

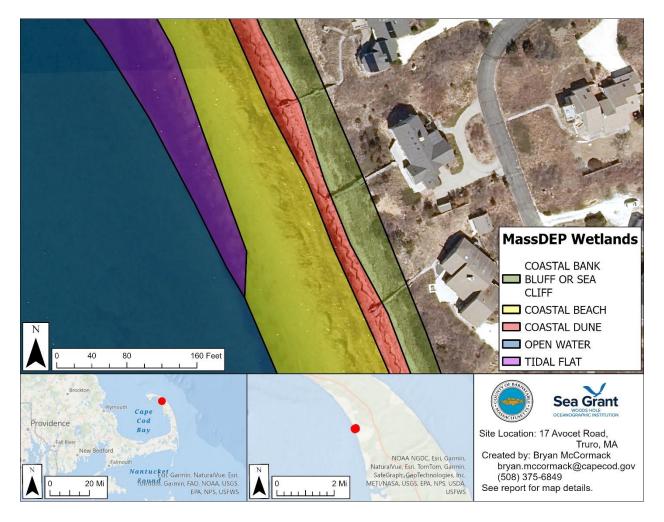


Figure 2: MassDEP Wetlands and Wetlands Change Areas Map delineations.

The property has an existing fiber roll array, which is beginning to show signs of failure. There is minor slumping, degradation of the jute netting, and some severed anchor cables. The severed anchor cables will likely allow for rapid degradation of the installation during a storm event. The current installation has plantings in the bank above. Some of these plantings appear to be Coastal Panic Grass (Panicum amarum var. amarulum) which is a non-native species, but is listed in the Massachusetts Office of Coastal Zone Management (CZM) Coastal Bank Plant List of approved plantings.

#### **Erosion Rates and Nourishment Calculations**

Erosion rates are typically found through cross-shore (perpendicular to the beach) profiles which show the change in elevation through time. CZM provides the Coastal Erosion Viewer through the <u>Shoreline Change Project</u> to quantify short-term (~50 year) and long-term (~175 year) rates. The short-term and long-term rates for profiles most relevant to this property are displayed in Table 1 and Table 2, respectively. These values are represented in feet per year, with positive rates indicating accretion and negative rates representing erosion.

Table 1: MA CZM Shoreline Change Project Short-term Rates

Profile	Short-term Rate	Short-term	Short-term Change
		Uncertainty	
TRU-0143	-2.5 ft/year	2.0 ft/year	Eroding
TRU-0144	-2.7 ft/year	1.9 ft/year	Eroding
TRU-0145	-2.5 ft/year	1.6 ft/year	Eroding
TRU-0146	-2.1 ft/year	1.0 ft/year	Eroding

Table 2: MA CZM Shoreline Change Project Long-term Rates

Profile	Long-term Rate	Long-term	Long-term Change
		Uncertainty	
TRU-0143	-0.2 ft/year	0.6 ft/year	No statistical change
TRU-0144	-0.4 ft/year	0.5 ft/year	No statistical change
TRU-0145	-0.3 ft/year	0.5 ft/year	No statistical change
TRU-0146	-0.3 ft/year	0.6 ft/year	No statistical change

Cross-shore profiles from recent lidar datasets were used for the purpose of this report (Figure 3). These profiles were spaced at about 130 feet apart and used to collect elevations from the relevant lidar datasets every 3 feet, up to 120 feet from the onshore origin of the line. These profiles show the change in elevation along the coastal dune and beach through time, allowing for a visualization of near-term erosion. Each of the three profiles, with extractions from the three lidar datasets, are presented below. It is important to note that these profiles represent a relatively short timeframe and could represent changes such as seasonal variability, episodic events, or nourishment, and are not necessarily representative of accurate long-term erosion rates for this location.



Figure 3: Locations of three profiles used for analysis at this site.

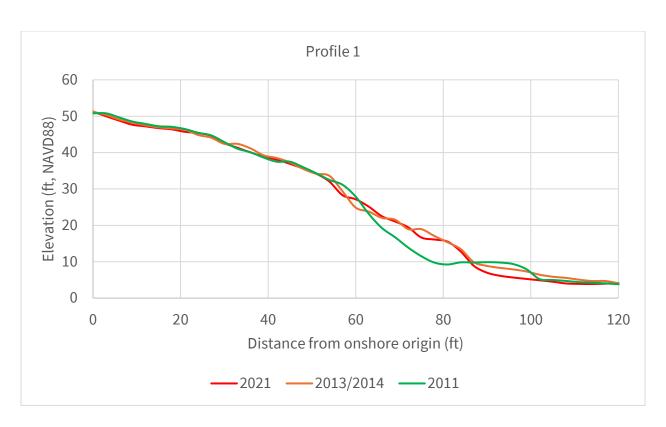


Figure 4: Lidar elevations across Profile 1 (northernmost)



Figure 5: Lidar elevations across Profile 2 (center).



Figure 6: Lidar elevations across Profile 3 (southernmost).

Nourishment volume for erosion control such as this is typically calculated as the erosion rate (in feet per year) by the total along-shore length of erosion control (in feet) by the height of the wetland feature (in feet). There is an average annual erosion rate of  $2.5 \pm 1.6$  feet per year and  $0.3 \pm 0.6$  feet per year from the CZM short-term and long-term erosion rates, respectively. The average CZM short-term erosion rate is used in the nourishment calculation presented below. The project spans the width of the property with a total length of about 145 feet. The average height of the bank was found to be about 40.7 feet based on the lidar elevations provided in this report. The resulting annual erosional volume was found to be about 14,753.8  $\pm$  9442.4 cubic feet, or 546.4  $\pm$  349.7 cubic yards, per year.

Erosion Rate 
$$\left(\frac{ft}{year}\right) \times CES$$
 Length  $(ft) \times$  Feature Height  $(ft) =$  Nourisment  $\left(\frac{ft^3}{year}\right)$ 

$$2.5 \left(\frac{ft}{year}\right) \times 145 (ft) \times 40.7 (ft) = 14,753.8 \left(\frac{ft^3}{year}\right) = 546.4 \left(\frac{yd^3}{year}\right)$$

#### **Design and Potential Impacts**

Fiber rolls are very likely to add significant stability to this coastal bank. There appears to be good stability shown in the lidar profiles between 2013/2014 and 2021, which is likely due in large part to the existing fiber roll installation. The additional vertical fiber rolls beyond the existing rolls could enhance this stability by protecting the bank from storm damage. Additional information can be found in the CZM <a href="StormSmart Properties Fact Sheet 4: Bioengineering - Coir Rolls on Coastal Banks">Coir Rolls on Coastal Banks</a>.

The top elevation of the proposed installation is 15 feet NAVD88. Being in a Federal Emergency Management Agency (FEMA) VE EL. 15 Zone, there is the potential for waves to reach this elevation during a 1% annual chance storm event. The CZM Coir Rolls Fact Sheet referenced above states, "If the dry beach is narrow, the beach elevation is relatively low, and/or the site is exposed to moderate wave energy, more than one row of coir rolls will likely be needed on the face of the bank, as well as at the base." There is no set number of fiber rolls explicitly mentioned. Depending on the severe weather seen by the site, these fiber rolls may degrade before they function as a buffer to waves. If a 1% annual chance storm event were to occur, these fiber rolls would likely be effective in preventing erosion of the bank up to that elevation. The Commission should discuss the function of the bank to determine if fiber rolls up to this elevation are necessary, or if an alternative such as additional plantings may be sufficient.

The plans state a maximum slope of 1:1 for the fiber rolls. Much of the bank exhibits a slope that is 1:1 or steeper based on the 2021 lidar survey. The CZM Coir Rolls Fact Sheet referenced above states, "Ideally, soil of a similar type to that on the bank or beach is brought in as fill and added to the lower part of the bank to create a slope that matches or is less steep than the upper slope." Since the installation is proposed to be less steep than the bank, this would indicate that a 1:1 slope would be appropriate for this installation.

Impacts from erosion control such as this typically include increased refraction of wave energy. This refraction of wave energy can lead to increased erosion at the ends of the installation. The proposed project is set to meet existing fiber roll installations on both adjacent properties for the 5 rolls at similar elevations. There are three rolls proposed both above and below these existing rolls. The additional rolls at the top of the installation are proposed with a 25-foot setback as to not increased wave refraction onto the neighboring property. The additional rolls at the bottom of the installation do not have the same 25-foot setback. If these rolls were to become exposed, they could increase the wave refraction onto the neighboring property and increase erosion below the existing fiber rolls.

The project calls for the full burial of three rolls below the existing elevation of the beach. These fully buried fiber rolls are unlikely to have a significant impact on erosion control so long as the beach elevation is maintained. If the beach elevation were to drop below the current level, these rolls could be effective at stabilizing the toe of the bank. Care should be taken during construction as trenching at the toe of the bank could cause oversteepening and destabilization. There is also the potential to temporarily reduce the compaction of the sediments, which could lead to increased erosion. Any changes to compaction at the current beach elevation would be mitigated by nourishment.

When possible, fiber rolls should be covered with sand and vegetation. The proposal addresses both of these concerns. Sand and vegetative covering will help to prolong the lifespan of the fiber rolls by reducing degradation from wave action and UV sunlight. Proposed plantings include American Beachgrass (*Ammophila breviligulata*), Bearberry (Arctostaphylos uva-ursi), and Northern Bayberry (Morella caroliniensis), which are all appropriate native vegetation and sited properly.

Nourishment is set to bring the beach elevation up to about 10 feet NAVD88. This nourishment is about 3 feet higher than the existing elevation. This nourishment should be tapered to meet the beach elevation on either side as to not induce additional wave refraction onto neighboring properties. All attempts should be made to maintain an equilibrium slope as this will help to ensure sediment stability under wave action. It is recommended to follow the <a href="MassDEP Beach Nourishment Guide">MassDEP Beach Nourishment Guide</a> for compatible grain size and maintenance of equilibrium slope.

The proposed sturdy drift fencing has a top elevation of about 6.5 feet NAVD88. Based on the existing profile, there would be 1-1.5 feet of exposed fencing. The proposed nourishment would cover the drift fencing. According to CZM's <u>StormSmart Properties Fact Sheet 6: Sand Fencing</u>, drift fencing can increase erosion due to scour around the posts, impede the natural flow of sediment, cause wind-driven blowouts on the landward side of the fence, interfere with shorebird and turtle nesting habitat, and increase the likelihood of persistent marine debris. The addition of nourishment can help alleviate the increased erosion, sediment flow impediment, and blowouts. Much of the existing drift fencing at the site is solely pilings, but these did not show signs of significant scour during the site visit.

According to the National Oceanic and Atmospheric Administration (NOAA) tide gauge in <u>Provincetown</u>, <u>MA (station ID: 8446121)</u>, the current Mean Higher High Water (MHHW) level is 0.46 feet above Mean High Water (MHW). Using the provided elevation of MHW (4.15 feet NAVD88), the elevation of MHHW can be calculated at 4.61 feet NAVD88. These elevations are mapped using the 2021 lidar elevations and overlain on 2023 Massachusetts Bureau of

Geographic Information (MassGIS) aerial imagery (Figure 7). The CZM publication referenced above suggests that to increase longevity and reduce potential impacts, "[Install] the fencing far enough landward so that it will not be reached by tides or typical storm waves (i.e., these projects will be affected by severe storms but should not be impacted by regularly occurring storms)..."

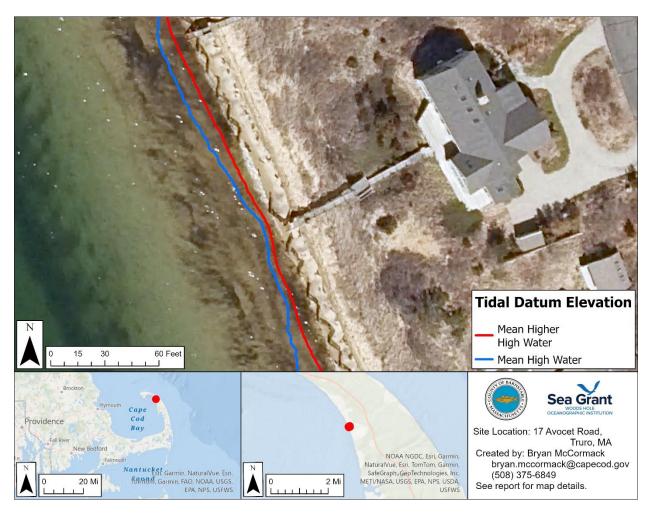


Figure 7: Location of MHW and MHHW based on 2021 lidar elevations.

#### **Wetlands Protection Act Regulations**

According to the Town of Truro Web Assessor's database, the house on this property was built in 1980, which would make it subject to regulation under the Massachusetts Wetlands Protection Act. The coastal wetland features present include coastal banks and coastal beaches. Fiber roll installations and drift fencing are typically not considered coastal engineering structures (CES) and could be permitted for use on coastal banks.

This coastal bank would serve both as a sediment source and vertical buffer, making it significant to storm damage prevention and flood control. The project as proposed would likely meet the performance standards set forth in 310 CMR 10.30 (3)(4)(5)(7) and (8). 310 CMR 10.30 (6) states...

"(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."

It is recommended that the Commission examine the proposed plans and determine if they are adequate for maintaining the stability of the coastal bank with respect to the burial of fiber rolls. It is possible that the bank can remain stable during the digging that would be required, but it would require consideration during the construction process. The primary concern would come from oversteepening of the bank directly at the toe. A shallower slope would help to maintain the stability of the bank and dissipate wave energy, but this may also require regrading of the existing bank slope.

The project is likely to meet the performance standards of coastal beaches set forth in 310 CMR 10.27: Coastal Beaches. With proper nourishment, the project is not likely to significantly impact the volume and form, the ability to respond to wave action, distribution of sediment grain size, water circulation, water quality, or relief and elevation of the beach.

### **Site Photos**

Photos of the property were taken during the site visit on 04 November 2024 and are displayed below with descriptions to add context to the proposal and insight given in this report. Image locations are shown on the map below and labeled in respective order.



Figure 8: Image locations for 17 Avocet Road.



Figure 9: Image looking north at the coastal bank on the property of 17 Avocet Road.



Figure 10: Image looking south at the coastal bank on the property of 17 Avocet Road. Photo extends to the adjacent property.



Figure 11: Image of the broken anchor cable for existing fiber rolls.



Figure 12: Image of the staircase at 17 Avocet Road. Degradation of the jute netting over the existing fiber rolls can be seen.

### **GIS Analysis Information**

A GIS analysis of the property was performed using publicly available data to help inform the relevant coastal processes. All maps provided use the NAD83 Horizontal datum and NAVD88 Vertical Datum in feet. The map projection is State Plane 1983 Massachusetts Mainland 2001. A GIS package of map data is available upon request. These datasets were accessed through MassGIS and the NOAA Data Access Viewer. Links to the metadata for each dataset are listed below. The aerial imagery data set used in this analysis in the main frame is 2023 MassGIS Aerial Imagery unless otherwise noted. Three lidar datasets were used in the GIS analysis of this property, including datasets from 2021, 2013/2014 and 2011.

### <u>Aerial Imagery Metadata</u>

2023, MassGIS: <a href="https://www.mass.gov/info-details/massgis-data-2023-aerial-imagery">https://www.mass.gov/info-details/massgis-data-2023-aerial-imagery</a>

#### <u>Lidar Dataset Metadata</u>

2021, U.S. Geological Survey: <a href="https://www.fisheries.noaa.gov/inport/item/69417">https://www.fisheries.noaa.gov/inport/item/69417</a>
2013/2014, U.S. Geological Survey: <a href="https://www.fisheries.noaa.gov/inport/item/49846">https://www.fisheries.noaa.gov/inport/item/49846</a>
2011, U.S. Geological Survey: <a href="https://www.fisheries.noaa.gov/inport/item/49844">https://www.fisheries.noaa.gov/inport/item/49844</a>

### **Background**

Since the inception of the coastal processes position established within WHOISG & CCCE, on-site and remote technical assistance on coastal processes has been and continues to be an on-going, effective technical information communication and dissemination tool. Technical assistance relating to coastal processes, shoreline change, erosion control alternatives, coastal landform delineation, potential effects of various human activities on coastal landforms, coastal floodplains, coastal hazards and hazard mitigation analyses, and dune restoration techniques provided in the field and remotely will continue to be provided on an as-needed basis. Site visits generally address site-specific coastal processes or coastal hazards related issues. Follow-up unbiased, written technical alternatives analyses are generally provided.



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MAIL 88 Route 6A, Unit 2B | Sandwich, MA 02563

December 18th, 2024

Truro Conservation Commission
Attn: Emily Beebe, Health & Conservation Agent
24 Town Hall Road
Truro, MA 02666

**Re: Notice of Intent Application** 

Project Location: 17 Avocet Road, Truro, MA

To the Members and Staff of the Truro Conservation Commission:

Attached is a revised plan for the proposed replacement of the sand drift fence, coir logs and beach stairs at 17 Avocet Road. This revised plan proposes a total of 9 rows of coir logs -- 5 that connect to the existing installations at 19 and 15 Avocet Road to provide stability and continuity across the coastal bank, 2 above the connecting rows to protect against wave overtopping and storm damage, and 2 below the connecting rows to protect the toe of the coastal bank. The rows above and below the connecting rows will be set back a minimum 25 feet from the property line to protect the abutting neighbors from any risk of wave refraction. The plan also provides for a sturdy drift fence at a standard elevation that will be set back a minimum 25 feet from the property line.

This project has approximately 30 percent fewer coir rolls than the original proposal. This plan reflects suggestions made by Commission members at previous hearings and adopts all recommendations in the Coastal Processes and Hazards Specialist Report submitted by Bryan McCormack of the Cape Cod Cooperative Extension (dated December 4, 2024). Importantly, in his report Mr. McCormack indicated that "the project is likely to meet the performance standards of coastal beaches set forth in 310 CMR 10.27: Coastal Beaches."

Key points about this revised plan are as follows:

- The top elevation of the proposed coir log array has been lowered to Elevation 14 +/-, and the total number of rows has been reduced from 11 to 9.
- Five rows of coir logs will be connected to the existing rows on the adjacent properties at 15 and 19 Avocet Road to provide continuous stability across the coastal bank. The connection will be made at the same elevation as the existing rows, top elevation at 11.4 +/- and bottom elevation at 5.7 +/-, respectively.
- Two rows will be installed above the connecting rows to provide protection against wave overtopping and potential storm damage. These rows will be set back a minimum 25 feet from the property line. If any part of the setback area becomes disturbed or is unvegetated, that area will be covered with 1000-gram coir matting and planted with American beach grass.
- Two rows will be installed below the connecting rows to protect the toe of the coastal bank.
   These two rows will be buried to a total depth of approximately 30 +/- inches below the existing



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bottom row, approximately 15 inches of depth per row. These rows also will be set back a minimum 25 feet from the property line.

- With the elimination of two rows and the introduction of 25 foot setbacks, this plan represents a decrease in coir logs of approximately 30% +/- from the initial proposal.
- The sturdy drift fence will be installed at an elevation of 3 +/- feet above the beach and one foot below the existing beach elevation, which was 5 at the time of survey. It will be set back 25 feet from the property line.
- This revised plan reflects adoption of all the recommendations made in the Coastal Processes and Hazards Specialist Report submitted by Bryan McCormack of the Cape Cod Cooperative Extension (dated December 4, 2024).
- Mr. McCormack has indicated that "the project is likely to meet the performance standards of coastal beaches set forth in 310 CMR 10.27: Coastal Beaches."

In his report, Mr. McCormack notes that the current coir array "is beginning to show signs of failure" and that there is a risk of "rapid degradation of the installation during a storm event." (Bold emphasis added.) His report states: "Fiber rolls are very likely to add significant stability to this coastal bank. There appears to be good stability shown in the lidar profiles between 2013/2014 and 2021, which is likely due in large part to the existing fiber roll installation. The additional vertical fiber rolls beyond the existing rolls could enhance this stability by protecting the bank from storm damage." The report concludes that the proposed erosion control measures "could be permitted for the coastal bank at this location as they typically are not considered coastal engineering structures."

In his summary, Mr. McCormack makes the following recommendations: "The Commission should examine the top elevation necessary for protection of the toe of the bank. The buried section of the fiber roll array does not currently have a significant setback from the property line, which could refract wave energy onto neighboring properties if exposed. A setback could also keep any digging at the toe of the bank on the property of the applicant. If permitted, the sturdy drift fencing should be placed where it will only be subjected to waves during high-energy storm events."

As noted above, the revised plan addresses all off these recommendations as follows:

- A reduction in the total height of the coir log array, up to elevation 14 +/- instead of the 100-vear-storm elevation of 15 feet.
- A reduction in the number of rows of coir logs to be buried in the beach from three to two.
  (Burying two rows of coir logs in the beach to protect the toe has been a standard practice in
  Truro in recent years, including projects approved by the Conservation Commission at 2 Heron, 4
  Heron, and 39 and 41 Bay View.) The McCormack report states: "If the beach elevation were to
  drop below the current level, these rolls could be effective at stabilizing the toe of the bank."
- The two rows installed above the connecting five will have a "significant setback" of at least 25 feet from the property line per McCormack's recommendation and in keeping with language in the previous Order of Conditions for this property. ("The envelopes shall be stepped and tapered to meet the coastal bank gradually 25' from abutters who do not have envelopes, unless they give



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explicit permission to construct the envelopes closer to the property boundary and the Commission concurs.")

- The two rows buried in the beach also will be set back at least 25 feet from the property line.
- Nourishment will be tapered as it approaches either property line and the coir rows will maintain an approximate 1:1 slope ratio.
- The sturdy drift fence will be located inland of the current Mean Higher High Water line, as proposed. The sturdy drift fence will be installed at an elevation approximately 3 feet above the existing beach elevation and 1 foot below, according to the elevations at the time of survey. The sturdy drift fence will be set back at least 25 feet from the property line on both sides.

There have been no additional revisions to the plan for the rinse station or the beach stairs, which will have a smaller footprint than the existing stairs and which, we believe, conforms with all applicable requirements.

We look forward to addressing any questions or concerns at the January 6 hearing.

Respectfully,

Jennifer Crawford, PLA, ASLA

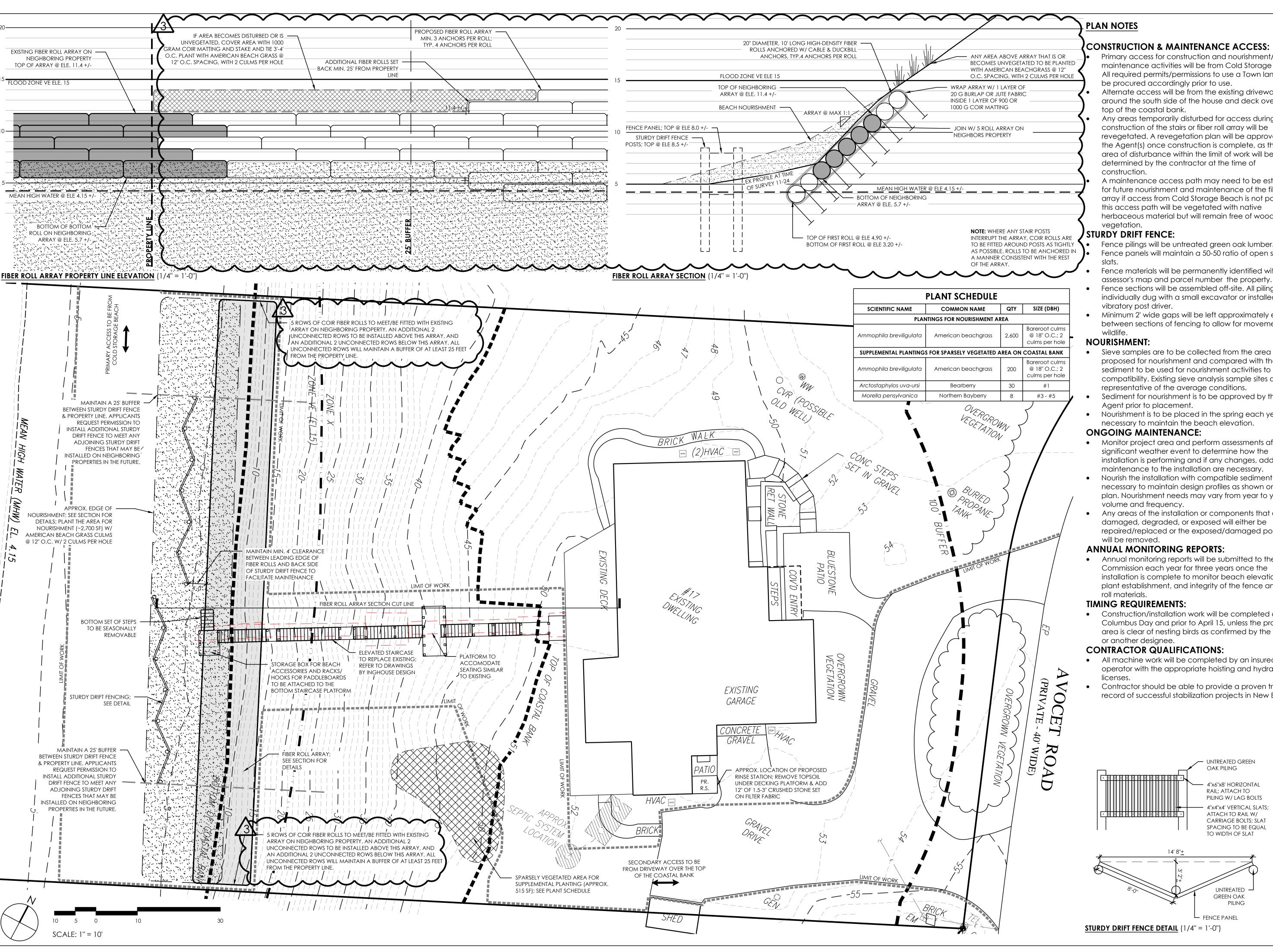
PRESIDENT, CRAWFORD LAND MANAGEMENT

CC: Michael & Jennifer Freitag, Applicant

CC: Tim Santos, Director of Operations, Merrill Engineers & Land Surveyors

CC: Tara Marden, Senior Coastal Geologist/Project Manager, Coastal Protection Engineering

CC: Lars Jensen, Professional Structural Engineer, Inghouse





### CONSTRUCTION & MAINTENANCE ACCESS:

Primary access for construction and nourishment/ maintenance activities will be from Cold Storage Beach. All required permits/permissions to use a Town landing will **CRAWFORD** 

Alternate access will be from the existing driveway around the south side of the house and deck over the

Any areas temporarily disturbed for access during construction of the stairs or fiber roll array will be revegetated. A revegetation plan will be approved by the Agent(s) once construction is complete, as the exact area of disturbance within the limit of work will be determined by the contractor at the time of

A maintenance access path may need to be established for future nourishment and maintenance of the fiber roll array if access from Cold Storage Beach is not possible; this access path will be vegetated with native herbaceous material but will remain free of woody

- Fence pilings will be untreated green oak lumber. Fence panels will maintain a 50-50 ratio of open space to
- Fence materials will be permanently identified with the
- Fence sections will be assembled off-site. All pilings will be individually dug with a small excavator or installed with a
- Minimum 2' wide gaps will be left approximately every 50' between sections of fencing to allow for movement of
- Sieve samples are to be collected from the area proposed for nourishment and compared with the sediment to be used for nourishment activities to confirm compatibility. Existing sieve analysis sample sites are to be representative of the average conditions.
- Sediment for nourishment is to be approved by the Agent prior to placement.
- Nourishment is to be placed in the spring each year as necessary to maintain the beach elevation.

### **ONGOING MAINTENANCE:**

- Monitor project area and perform assessments after a significant weather event to determine how the installation is performing and if any changes, additions, or maintenance to the installation are necessary.
- Nourish the installation with compatible sediment as necessary to maintain design profiles as shown on the plan. Nourishment needs may vary from year to year for volume and frequency.
- Any areas of the installation or components that are damaged, degraded, or exposed will either be repaired/replaced or the exposed/damaged portions

### **ANNUAL MONITORING REPORTS:**

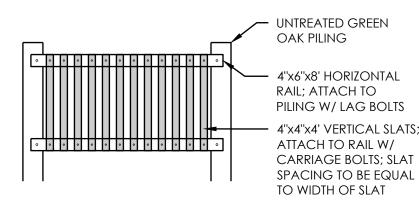
 Annual monitoring reports will be submitted to the Commission each year for three years once the installation is complete to monitor beach elevations, plant establishment, and integrity of the fence and fiber

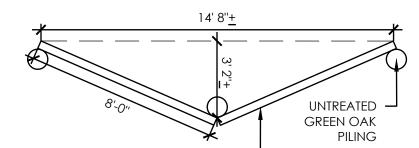
### **TIMING REQUIREMENTS:**

 Construction/installation work will be completed after Columbus Day and prior to April 15, unless the project area is clear of nesting birds as confirmed by the Agent

### **CONTRACTOR QUALIFICATIONS:**

- All machine work will be completed by an insured operator with the appropriate hoisting and hydraulics
- Contractor should be able to provide a proven track record of successful stabilization projects in New England.





FENCE PANEL



### LAND MANAGEMENT

88 Route 6A, Suite 2B | Sandwich, MA 02563 www.crawfordlm.com | 508.477.1346

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# **SURVEYOR/ENGINEER:**



Merrill Engineers and Land Surveyors (781) 887-3224

STRUCTURAL ENGINEER INGHOUSE, PC. 18 Steeple Street. Mashpee, MA 02649

508.221.2980

www.inghouse.net **NOT FOR CONSTRUCTION** (ISSUED FOR

PERMITTING/APPROVAL

CLM WILL NOT PROVIDE **OVERSIGHT OR CERTIFICATION** FOR ANY WORK COMPLETED BY OTHERS, NOR DOES CLM TAKE ANY RESPONSIBILITY FOR WORK

COMPLETED BY OTHERS.

17 AVO TRURO,

SCALE: 1" = 10' DATE: <del>09/17/24</del>

SHORELINE STABILIZATION PLAN



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December 30th, 2024

Truro Conservation Commission
Attn: Emily Beebe, Health & Conservation Agent
24 Town Hall Road
Truro, MA 02666

**Re: Notice of Intent Application** 

Project Location: 17 Avocet Road, Truro, MA

To the Members and Staff of the Truro Conservation Commission:

As noted in our December 18 submission, burying two rows of coir logs in the beach to protect the toe has been a standard and best management practice in Truro in recent years, including projects approved by the Conservation Commission at 2 Heron, 4 Heron, and 39 and 41 Bay View. In furtherance of that observation, we are attaching the following documents in support of our filing for the Commission's consideration of our application: the Order of Condition for 2 Heron Lane (dated 7/22/2024), the related site plan for 2 Heron Lane (as amended and submitted 5/31/2024), the Order of Condition for 4 Heron Lane (dated 10/20/2021), and the minutes for the Conservation Commission's hearing on March 1, 2021.

The two (2) Orders of Conditions each provide: "The first two rows of logs shall be buried at the bank toe and edge of the beach at the elevations shown on the plan in order to provide a stable foundation for the other coir logs."

In the March 2021 minutes, further, Stan Humphries of ECR is quoted as saying: "The most important part of the project is the installation of the bottom log; it needs to be deep enough to prevent being undercut as the beach erodes." Mr. Humphries also notes that two rows of the coir logs for the installations at 4 Heron and 39 and 41 Bay View would likely need to be buried to a depth of 40 inches below the beach.

We look forward to our meeting to present our revised plans

Regards,

Jennifer Crawford, PLA, ASLA

PRESIDENT, CRAWFORD LAND MANAGEMENT

Enclosure: Order of Conditions for 2 Heron Lane dated June 24, 2024 Enclosure: Order of Conditions for 4 Heron Lane dated July 30, 2021 Enclosure: Access Plan for 2 Heron Lane Coir Fiber Roll Project

Enclosure: Town of Truro Conservation Commission Meeting Minutes dated March 1, 2021



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CC: Michael & Jennifer Freitag, Applicant

CC: Tim Santos, Director of Operations, Merrill Engineers & Land Surveyors

CC: Tara Marden, Senior Coastal Geologist/Project Manager, Coastal Protection Engineering

CC: Lars Jensen, Professional Structural Engineer, Inghouse

CC: Richard Nylen. Partner, Lynch DeSimone Nylen LLP

### Doc:1,506,244 07-22-2024 BARNSTABLE LAND COURT REGISTRY

N O T	NOT
A N	A N
OFFICIAL	OFFICIAL
COPY	C O P Y
N O T	N O T
A N	A N
OFFICIAL	OFFICIAL
СОРУ	СОРУ



**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

Provided I	by MassDEP:
SE# 075	-1202
MassDEP	File #

eDEP Transaction #
Truro
City/Town

### A. General Information

c. Assessors Map/Plat Number

Latitude and Longitude, if known:

Please note: this form has been modified with added space to accommodate the Registry of Deeds Requirements

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



***			
1. From: Truro Conservation Com	mission	· · · · · · · · · · · · · · · · · · ·	
2. This issuance is for (check one):	a. 🛭 Order of Conditions	ь.   Amended Order o	of Conditions
3. To: Applicant:			
Hugh A Simons, Truste	ee	·	
a. First Name	b. Last	Name	
Hugh A Simons Living	Trust		-
c. Organization			
PO Box 1113		•	
d. Mailing Address			
North Truro	MA	02	2652
e. City/Town	f. Stat	e g.	Zip Code
4. Property Owner (if differe	ent from applicant):		
a. First Name	b. Last	Name	
c. Organization			
d. Mailing Address			
e. City/Town	f. Stat	e g	Zip Code
5. Project Location:			
2 Heron Lane	Truro		
a. Street Address	b. City/	Town	
39	221		

221

d

d. Latitude

d. Parcel/Lot Number

s

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e. Longitude

m



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Massachusietts Department of Environmental Protection Bureau of Resource Protection - Wetlands  $\,{\rm N}$ 

### WPA Form 5 - Order of Conditions L

Massachusetts Wetlands Protection Act M.C.L.E. ¥31, §40

Provi	ided by MassDEP:
SE#	075-1202
Mass	DEP File #

eDEP Transaction #

			Truro
_	N O T	NOT	City/Town
A.	General Information (cont.)	A N	
6.	Property recorded at the Registry of Deeds for one parcel):		L al information if more than
	Barnstable	222824	hor (if rogistered lend)
	a. County	b. Centricate Num	ber (if registered land)
	c. Book	d. Page	·
7.		3, 2024	
,.	a. Date Notice of Intent Filed b. Da	e Public Hearing Cl	
8.	Final Approved Plans and Other Documents (a as needed):  Coastal Stabilization Plan  a. Plan Title	ttach additional	plan or document reference
	<del></del>	Donald F Brac	kan Ir
	Bracken Engineering Inc b. Prepared By	c. Signed and Star	
	May 29, 2024	1"=20'	mpod by
	d. Final Revision Date	e. Scale	
	Access Plan for 2 Heron Lane Coir Fiber Roll F		May 30,2024
	f. Additional Plan or Document Title	10,000	g. Date
B.	Findings		<del>-</del>
1.	Findings pursuant to the Massachusetts Wetla	nds Protection A	Act:
	Following the review of the above-referenced of provided in this application and presented at the areas in which work is proposed is significated Protection Act (the Act). Check all that apply:	e public hearing	g, this Commission finds that
a.	☐ Public Water Supply b. ☐ Land Contain	ning Shellfish	c. 🛛 Prevention of Pollution
d.	☐ Private Water Supply e. ☐ Fisheries		f.  Protection of Wildlife Habitat
g.	☐ Groundwater Supply h. ☒ Storm Dama	age Prevention	i. 🛛 Flood Control
2.	This Commission hereby finds the project, as pro	posed, is: (checl	k one of the following boxes)
Аp	proved subject to:		
a.	M the following conditions which are necessary standards set forth in the wetlands regulations be performed in accordance with the Notice of General Conditions, and any other special conthat the following conditions modify or differ from proposals submitted with the Notice of Intent, to	This Commission Intent reference ditions attached m the plans, spe	on orders that all work shall ed above, the following to this Order. To the extent ecifications, or other



### WPA Form 5 4 Order of Conditions 1

N O T

Massachusetts Wetlands Protection Act M. G.L.Pc. 431, §40

N O T

Provided by MassDEP: SE# 075-1202 MassDEP File #

eDEP Transaction #
Truro
City/Town

В.	Finding	S (ð	oM	.)					Α	N						
	O F	-		-	A	L	O F	F	Ι	С	ΙA	L				
De	nied becaus	<b>E</b> 0	P	Y				С	0	Ρ	Y					
b.	in the wetla until a new protect the i	nd re Notic ntere	egula e of ests	atio f Ini of	ns. tent the	nnot be condit Therefore, we is submitted Act, and a fin ds which the	ork on which al Orde	this prov er o	pro vide f Co	ojec es n	et ma neasi litions	y not ( ures w s is iss	go forv hich a sued. /	ward are ac <b>A de</b> s	unless a dequate scriptio	and e to on of
c.	or the effect Therefore, v Intent is sub adequate to description	of the vork of the mitted protest of the contract of the contr	ne woon to de	ork his hic the pe	on pro h p Ac <b>cifi</b>	ted by the app the interests bject may not rovides suffici t's interests, a c information per 310 CMF	identifigo forwient info ient info and a fi n whic	ied vard orm nal <b>h is</b>	in ti i un atio Oro <b>i la</b>	he ' les on a ler cki	Wetland in and in of Co	ands F d until nclude anditio	Protect a revis s mea ns is i	tion A sed N asure issue	ict. Notice o s which d. <b>A</b>	f are
3.						Shortest distar ad resource ar							).02(1	)(a)	a. line	ear feet
Inla	and Resourc	e Ar	ea l	mp	act	t <b>s:</b> Check all t	hat ap	ply	bel	ow.	(For	Appro	vals (	Only)		-
Res	source Area					Proposed Alteration		erm tera				Propo eplace	sed ement		Permitte eplacen	
4.	Bank					a. linear feet	– <u>b</u> .	line	ar fe	et	_	c. linea	ır feet		d. linear	feet
5. 6.	☐ Borderir Vegetat ☐ Land Ur	ed V	/etla	and		a. square feet	<u>b.</u>	squ	are t	feet	_	c. squa	are feet	—	d. square	e feet
Ų.	Waterbo	dies	and	d		a. square feet	b.	squ	are 1	feet	_	c. squa	are feet		d. square	e feet
	_	·				e. c/y dredged	<u>f.</u>	c/y c	fred	ged		÷				
7.	Bordering Subject to Fl					a. square feet	<u>b.</u>	squ	are i	eet	_	c. squa	re feet	_	d. square	e feet
	Cubic Feet Fl	ood \$	Stora	age		e. cubic feet	<u>f.</u>	cubi	c fee	et	_	g. cubi	c feet	_	h. cubic t	feet
8.	☐ Isolated Subject to FI				-	a. square feet	b.	squ	are f	eet						
	Cubic Feet Fl	ood \$	Stora	age		c. cubic feet	<u>d.</u>	cub	ic fe	et	_	e. cubi	c feet		f. cubic fo	eet
9.	Riverfro	nt Ar	ea			a. total sq. feet	- b.	tota	l sq.	fee	t					
	Sq ft with	in 10	0 ft			c. square feet	d.	squ	are f	eet		e. squa	re feet		f. square	feet
	Sq ft beto 200 ft	veen	100	-		g. square feet	- <u>h.</u>	squ	are f	eet		i. squa	re feet		i. square	feet



# WPA Form 5 \(^{\text{P}}\) Order of Conditions \(^{\text{L}}\) Massachusetts Wetlands Protection Act M. \(^{\text{P}}\). \(^{\text{P}}\) 31, \(^{\text{Q}}\)

Provided by MassDEP:				
SE# 075-1202				
MassDEP File #				

eDEP Transaction # Truro City/Town

N O T		N O T	City/1	ity/Town		
B. Findings (&oNt.)		AN				
OFFICIA	L O	F F I C I	A L			
Coastal Resource Area Impa	acts: Check all th	natapply⊙be#ow⊻	(For Approvals (	Only)		
	Proposed	Permitted	Proposed	Permitted		
	Alteration	Alteration	Replacement	Replacement		
10. Designated Port	Indicate size u	ınder Land Unde	er the Ocean, belo	ow		
Areas						
11.  Land Under the Ocean	a. square feet	b. square feet	•			
	c. c/y dredged	d. c/y dredged				
12.   Barrier Beaches	Indicate size u below	ınder Coastal Be	eaches and/or Co	astal Dunes		
13. Coastal Beaches		<u> </u>	cu yd	cu yd		
<b>—</b> ** **	a. square feet	b. square feet	c. nourishment	d. nourishment		
14. Coastal Dunes	a. square feet	b. square feet	c. nourishment	d. nourishment		
- 57.0	~142 ft	~180 ft				
15. 🛛 Coastal Banks	a. linear feet	b. linear feet				
16. Rocky Intertidal						
Shores	a. square feet	b. square feet				
17. Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet		
18. 🔲 Land Under Salt		·				
Ponds	a. square feet	b. square feet				
	c. c/y dredged	d. c/y dredged				
19.   Land Containing	,	,				
Shellfish	a. square feet	b. square feet	c. square feet	d. square feet		
20. Tish Runs	Indicate size u	nder Coastal Ba	nks, Inland Bank	. Land Under		
_	the Ocean, an	d/or inland Land	Under Waterboo			
	Waterways, at	oove				
	a. c/y dredged	b. c/y dredged				
21.	~1450 sq ft a. square feet	~1450 sq ft b. square feet				
Flowage	a. square reet	D. Square reet				
· ·						
22. 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	i. square feet		



entered in Section B.5.c (BVW) or

B.17.c (Salt

please enter

the additional

### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands N

### WPA Form 5 4 Order of Conditions 1

Massachusetts Wetlands Protection Act M. G.L. Pc. 431, §40

Provided by MassDEP:	
SE# 075-1202	
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	В	Findings (cont.)	0	F	F		N C	I	A	L	
* #23. If the project is for the purpose of	23.	Restoration/Eithaticement *:			С	0	P	Y			
restoring or enhancing a wetland resource area in addition to the square	24.	a. square feet of BVW  Stream Crossing(s):		<u> </u>	b.	. squ	are	feet	ofs	alt man	sh
footage that		a. number of new stream crossings			b.	nur	nbei	of i	epla	cemen	t stream crossings
has been	$\overline{c}$	General Conditions Under Ma	2002	-h	16/	144	- 1/	lat	lar	de E	Protection Act

### C. General Conditions Under Massachusetts Wetlands Protection Act

#### The following conditions are only applicable to Approved projects.

- Marsh) above, 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.
- amount here. 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.
  - 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.
  - 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.
    - If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
  - 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. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
  - 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 June 24, 2027 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.



### WPA Form 5 - Order of Conditions L

Massachusetts Wetlands Protection Act M. G.L. Pc. 4131, §40

Provided by MassDEP: SE# 075-1202 MassDEP File #

eDEP Transaction #
Truro

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### C. General Conditions Under Massachusetts Wetlands Protection Act

OFFICIAL

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- 8. This Order is not final until all administrative appead perious from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
- 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.
- A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number

SE 075-1202 "

- 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.



### WPA Form 5 & Order of Conditions L

Massachusetts Wetlands Protection Act M. C.L. Pc. 431, §40

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SE# 075-1202
MassDEP File#
eDEP Transaction #
Truro
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Provided by MassDEP:

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

- OFFICIAL OFFICIAL

  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.
- 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.
- 19. The work associated with this Order (the "Project") is subject to the Massachusetts Stormwater Standards (2) 🔯 is NOT 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;



### WPA Form 5 A Order of Conditions L

Massachusetts Wetlands Protection Act M. G.L. Pc. 431, §40

Provided by MassDEP: SE# 075-1202 MassDEP File #

eDEP Transaction # Truro City/Town

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

OFFICIAL

OFFICIAL

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.

- 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 19(f) through 19(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 19(f) through 19(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.
- 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.

wpaform5.doc • rev 8/3/2023 Page 8 of 13



### WPA Form 5 - Order of Conditions L

Massachusetts Wetlands Protection Act M. G.L. Pc. Y131, §40

Provided by MassDEP: SE# 075-1202 MassDEP File #

eDEP Transaction #

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

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g) The responsible party shall:

COPY

- 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
- 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.
- 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):

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



see 10A - 10E

### Massachusetts Department of Environmenta Protection Bureau of Resource Protection - Wetlands N

### WPA Form 5 A Order of Conditions L

Massachusetts Wetlands Protection Act M. G.L. Pc. 431, §40

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SE# 075-1202
MassDEP File #
eDEP Transaction #
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Truro

Provided by MaccDEP:

NOT NOT City/Town D. Findings Under Municipal Wetlands Bylaw or Ordinance OFFICIAL OFFICIAL Is a municipal wetlands bylaw or ordinance applicable? X Yes □ No The Truro hereby finds (check one that applies): 2. Conservation Commission 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. that the following additional conditions are necessary to comply with a municipal ordinance or bylaw: Truro Conservation Bylaw Chapter 8 1. Municipal Ordinance or Bylaw 2. Citation 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):

#### **TOWN OF TRURO-ORDER OF CONDITIONS**

2 Heron Ln; Map 39, Parcel 221

**DEP file # SE 75-1202** 

DOCUMENTS OFFICIAL OFFICIAL

- 1. Notice of Intent application; Wetlands fee transmittal form locus map; notification to abutters; abutters list; project narrative; variance request and alternatives analysis.
- 2. DEP notice of file number T

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- 3. Coastal Stabilization Plan prepared by Bracken Engineering Ing, dated 4/17/2024.
- 4. Beach access statement from Mighael Bonner, Sum Go Eco-Contracting, Idated 5/30/2024 and revised Coastal Stabilization Plan prepared by Bracken Engineering Inc. dated 5/29/2024.

#### **PROJECT DESCRIPTION**

- The site is a ~1.06-acre lot with a single-family dwelling constructed in 1981 that is served by a
  private well and septic system.
- 2. The resource areas at the site are a Coastal Bank, Coastal Beach and Land Subject to Coastal Storm Flowage.
- The request was first heard on 5/6/2024 and continued until 6/3/2024 so that the applicant could clarify how access for construction/maintenance would be made, AND to explore extending the project to join projects on abutters property in order to prevent erosion at the ends of the array.
- 4. The proposed coir log array will be installed at the toe of a Coastal Bank and shall be annually nourished with compatible sands and planted with beach grass and monitored.
- The Commission determined that the coir log assembly installed to join arrays at 15 Avocet Rd and 4
  Heron Ln would not be a detriment to the resource area, therefore the requested variance was
  approved.

#### **FINDINGS**

- The Commission finds the site of the proposed shorefront protection to be on a Coastal Bank, and work will occur on the adjacent Coastal Beach above mean high water.
- 2. The areas subject to protection/regulation are Coastal Bank and Coastal Beach and their buffer zones, and Land Subject to Coastal Storm Flowage.
- 3. The Commission finds the Coastal Bank to exist in a dynamic coastal environment composed of mixed glacial till and outwash material.
- 4. The Commission finds that the Coastal Bank is significant to storm damage prevention and flood control and supplies sediment to down drift coastal resource areas.
- 5. The Commission finds the Coastal Bank composed of glacial outwash along the bay side of Truro is subject to dynamic and intense seasonal storms which can result in the high end of normal erosion rates and a significantly lower beach elevation due to wave action, overland stormwater, and wind/rain from these intense seasonal storms.
- 6. The address for this project is #2 Heron Lane.
- 7. The Applicant acknowledges that the project of Coastal Bank stabilization and protection with biodegradable (coir) measures is only temporary (estimated at 10-15 years); the goal is to protect: the Coastal Bank and its ability to perform the function of storm damage prevention, and the applicant's home atop the eroding bank.
- 8. The Applicant has agreed to conduct an engineering, legal and logistical analysis of alternatives to address the proximity of the house to the top of the Coastal Bank including relocation, reduction in size and removal of the existing house. This analysis may include alternatives which would protect the coastal bank and ensure that the functions of storm damage prevention and sediment supply to the beaches are preserved. The Applicant shall submit an alternatives report, and shall attend (or be represented) a meeting with the Commission to present and discuss said report prior to the issuance of a Certificate of Compliance for this project.

- 9. The Applicant acknowledges and understands that their property is located on an eroding coastline, that their home is post-1978 construction, and as such revetments and other coastal engineering structures cannot be permitted.
- 10. The Commission finds that the Coastal Beach resource area is not significant to state listed species since it is not located in Estimated Habitat of Rare Wildlife as mapped and published maps by NHESP.
- 11. The Commission finds that the Coastal Beach is significant to storm damage prevention, flood control and protection of wildlife habitat.  $N \quad O \quad T$
- 12. These Special Conditions and Additional General Conditions are being issued in accordance with the information submitted in the Notice of Intent, with accompanying attachments by ECR, LLC and dated April 2024, the PlarCofCRePort, "Coastal Stabilization Plano and Prevised 5-29-2024, and Supplemental information including but not limited to the project narrative, site photos, and access plan. In the event of any conflict between these referenced materials and this Order, this Order shall control.
- 13. This Order is issued pursuant to the Massachusetts Wetlands Protection Act and the Town of Truro's Conservation By-Law and Conservation regulations.
- 14. This Order of Conditions allows the following work: the placement and maintenance of an array of 20" diameter coir logs at the base of the coastal bank; placement and maintenance of compatible sand cover over the coir logs; placement of compatible beach/bank nourishment sands; the planting of the Coastal Bank face with American beach grass in double culms on an 12-14" matrix. The applicant has been informed through their representative that the Conservation Commission's preferred avenue for providing maintenance sand nourishment to keep the coir logs covered is to deliver that sand over the Coastal Bank.

The Commission determined that the project could be permitted subject to the following special conditions:

#### SPECIAL CONDITIONS

#### **Pre-construction**

- 1. Notice of a work start date shall be given to the Commission in writing at least 48 hours prior to the commencement of work. The applicant or contractor shall provide the name and contact information of the person responsible on site for compliance with this Order.
- 2. Prior to the commencement of work the following activities shall be completed:
  - The Order of Conditions shall be recorded at the Barnstable County registry of deeds and a stamped copy shall be submitted to the Conservation office.
  - A sign shall be conspicuously displayed at the site showing the DEP file number assigned to this
    project. The sign shall be 2-3 square feet in size, separately staked, and read <u>only</u>: <u>MA DEP file # SE</u>
    <u>75-1202.</u> Lettering/numbering shall be clearly and permanently printed, and at least 2" in height.
- 3. A pre-construction site visit shall be scheduled by the applicant's representative and include the project Contractor, and the Conservation Agent. During this site visit the Order of Conditions, construction protocols, work limit, access plans and site plan details shall be reviewed.
- 4. Members of the Commission, its Agent or the Department of Environmental Protection (DEP) reserve the right to enter and inspect the property at all reasonable times, until a Certificate of Compliance is issued, to evaluate compliance with this Order of Conditions, the Act, 310 CMR 10.00 and Town regulations, and may acquire any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation.
- 5. The Applicant is responsible for providing notification to all abutting property owners for any proposed beach access routes for the project; in this regard, the contractor must obtain an access and staging permit from the Town with respect to utilizing any public landing.
- 6. The construction notes on the plan are specifically incorporated into this order.

#### **Construction Conditions**

1. Coir logs:

- a) The stabilization design uses coconut fiber (coir) logs in an array of 5 rows of logs installed along the toe of the Coastal Bank for the entire 140 linear feet and will include connections to the existing arrays to the north and south of the applicants property.
- b) The major component of the array is a dense 20-inch diameter coir log that is stacked in rows on a 1.5 to 1 slope. No plastics or metals (other than the duckbill anchors) shall be utilized in the construction or securing of the coir logs. The logs will extend behind the existing stair.

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- c) The first 2 rows of logs shall the bilined at the bank toe and edge of the beach at the elevations shown on the plan in order to provide a stable foundation for the other coir logs. Nothing else may be placed completely within the beach. The coir logs shall be stepped against the bank to reflect the slope of the bank.
- e) Duck bill anchors shall be placed as noted on the current site plan. If the Duck bill anchors become uncovered and are protruding from the bank or coir logs, the applicant will be required to reinstall them immediately.

#### 2. Nourishment:

- a) Nourishment sands will be clean and free from debris and cobbles.
- b) The proposed slope of the nourished bank shall be no steeper than the angle of repose (i.e. 34°).
- c) The initial minimum coverage of all coir logs with sand shall be at least 18-inches.
- d) The applicant shall be required to perform annual renourishment of the bottom of the bank to at least one foot above the top of the coir logs to ensure the stability and function of the bank and adjacent beach. A minimum depth of 18-inches of cover sand shall be restored and in place prior to Thanksgiving of each year.
- e) Prior to any beach re-nourishment practices, the applicant's representative/consultant shall determine the quantity of sand needed for the site and submit a written notice of this activity and the depth of cover and total estimated volume of sand proposed; any disagreement about the adequacy of this nourishment shall be decided by the Commission. In addition, any access needed for equipment and materials shall be approved by the Commission and appropriate parties.
- f) Bi-monthly monitoring reports shall be submitted to the Conservation Department to include a file copy with photos and measurements of sand coverage at 5' from the ends and every 50' along the coir logs. One hard copy along with an electronic copy shall also be sent to the Conservation Department. Monitoring locations shall be identified by GPS and by relative elevation. A minimum coverage of 12" of sand will be maintained at all times. A record of the number of times that the coir logs need to be re-covered and the amount of sand deposited in each renourishment shall be documented and submitted to the Conservation Department in an annual report by December 1 of each year. The report shall include the volume of sand placed at the site and dates for nourishment.

#### 3. Plantings:

Beach grass shall be planted ANNUALLY, 12-14-inches on center with double culms per plant, 9-inches deep.

- a) In the event that the plantings do not survive, they shall be replaced at the next seasonal opportunity. Failed plantings shall be replaced no later than April 15 annually.
- b) Plantings shall be monitored in reports to include photographs and information on how much material was planted and shall be submitted to the Conservation Department by December 1 of each year.

#### 4. Damage, Repair and Removal of Coir logs:

- a) The coir logs shall be maintained and repaired to ensure proper function and to prevent any debris. If the coir logs are damaged beyond repair, they shall be promptly removed and properly disposed of.
- b) The Applicant shall be responsible for retrieving any and all materials stored, dislodged or washed off-site (excluding sand) for the life of the project.
- c) The Applicant shall notify the Conservation Agent concerning the extent of repairs and maintenance necessary prior to proceeding with any repair and maintenance.
- d) If the Commission has a basis to believe the coir logs are causing scour or erosion on abutting properties, or are adversely impacting offshore deposition processes, or otherwise creating negative or unintended

consequences, it may issue an Order to Show Cause why the coir logs should not be removed. The Commission will conduct a hearing to evaluate the evidence and will issue a decision on removal.

- e) Prior to the commencement of construction, the Applicant shall establish an escrow account in the amount of \$5,000, which may be used by the Commission to remove and dispose of debris, or damaged or end-of-useful life coir logs if the applicant does not perform such work in a reasonable period of time after the Commission orders the performance of such work.
- 5. No construction work may eause destabilization of the Coastal Bank If the installation of anchors, application of sand from the top or bottom of the Coastal Bank or any other related work for this project cause any slumping of the bank, work finust stop and be evaluated by the Commission. A L

COPY COPY

- **6. No work on the beach**, including access over the beach, shall occur between April 15<sup>th</sup> and Columbus Day. Work shall not commence prior to 8 a.m. and must end by 6:00 p.m.
- **7.** All work shall be done in accordance with the project narrative provided in the NOI, Supplemental Information and final plans as described herein. In the event of any conflict between the materials submitted or the final plan and this Order, this Order shall control.
- **8.** All post-construction Monitoring and Maintenance Program/Protocols shall be done in compliance with the NOI and Supplemental Information dated May 2024 except as modified by this Order.
- a) After each significant (named) storm event, the applicant's representative will inspect the project -area and prepare a field report of site conditions and possible impacts to the Coastal Bank and the coir log array.
- b) After each significant storm event and before, during and after any repairs or renourishment, the Conservation Agent <u>may</u> inspect the project area at the Applicant's expense. Inspection time will billed at the then current rate for such inspections as established by the Truro Conservation Commission. Invoices with dates of on-site inspections will be submitted to the Applicant on a quarterly basis. Payment is due within 30 days of receipt.
- 9. Prior to issuance of a Certificate of Compliance, the Applicant shall conduct an engineering, legal and logistical analysis of alternatives to address the proximity of the house to the top of the coastal bank, including relocation options and options for reduction in size and removal of the existing house. This analysis may include alternatives which would protect the Coastal Bank, and ensure that its functions of storm damage prevention and sediment supply to the beaches are preserved. The alternatives report shall contain a narrative analysis, feasibility evaluation, cost estimates, permitting requirements, and conceptual layouts. The report shall be submitted to the Commission when requesting a Certificate of Compliance for the project. No Certificate of Compliance shall issue until this analysis has been filed with the Commission and is deemed by the Commission to be complete, nor until the applicant (or then current owner) and their consultant has met with the Commission to discuss this alternatives analysis.
- 10. Sand Nourishment shall be provided to cover the array from the top of the bank, or other approved method to keep the coir logs covered with sand..
- 11 Special Condition Nos. 1, 2, 3, 4, 5, 8 and 10 shall be continuing conditions which survive a Certificate of Compliance, unless the Commission agrees by written order after notice to abutters to modify the conditions. Any modifications shall be based upon the monitoring reports and written recommendations by a coastal geologist.

In addition to the SPECIAL CONDITIONS # 1-11, the Commission has determined that it is necessary to include the following Additional General Conditions.

ADDITIONAL GENERAL CONDITIONS

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1. This Order shall apply to any successor in control or successor in interest of the property described in the Notice of Intent and accompanying plans. These obligations shall be incorporated and referenced in covenants in all deeds to succeeding owners of all or any part of the property.

- 2. The form provided at the end of this Order shall be completed and stamped at the appropriate Registry of Deeds, after the expiration of the 10-business day appear period and if no request for appeal has been filed with the Department of Environmental Protection under the Wetlands Protection Act and the DEP Wetland Protection Regolations (310 CMR #0.00), or under the local Conservation By-Law.
- 3. This Order shall be included in all construction contracts, subcent acts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. It is the responsibility of the Applicant, Owner, and/or successor(s) to ensure compliance with all Conditions of this Order. A copy of this Order shall be available at the work site, or posted, during normal work hours, until the work is complete.
- 4. The Applicant shall give written notice to the Commission 48-hours in advance of commencement of work. Members of the Commission or its Agent, or the DEP reserve the right to enter and inspect the property at all reasonable times, until a Certificate of Compliance is issued, to evaluate compliance with this Order of Conditions, the Wetlands Protection Act, the DEP Wetland Protection Regulations, and the Bylaw, and may require any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation.
- 5. Prior to commencement of work, a series of color photos shall be taken of the bank and submitted to the Commission. In addition, a series of color photos shall be taken at the end of construction and submitted to the Commission. All photographs shall include the Assessor's Map and Parcel and date the picture was taken.
- 6. Prior to the commencement of work, a sign shall be displayed at the site showing the DEP file number assigned to this project. Such sign shall be separately staked.
- 7. Work shall be halted on the site if the Commission, Conservation Agent or DEP determines that any of the work is not in compliance with this Order. Work shall not resume until the Commission is satisfied that the work will comply with this Order and has so notified the Applicant in writing.
- 8. Any changes in the work described in the Notice of Intent or in the plans and specifications shall be submitted to the Commission in writing for a determination of whether the change is significant enough to the interests of the Act and the Bylaw to require a new Notice of Intent. No changes shall be made or implemented in the field prior to the Commission's determination. Should issuance of additional permits result in a change in the project, the Applicant shall promptly submit such changes to the Commission for evaluation under this provision.
- 9. Upon completion of this project, the Applicant or Owner shall submit a request to the Conservation Commission for issuance of a Certificate of Compliance and the report required by Special Condition No. 9. The Applicant or Owner shall certify in writing that the work was completed in substantial compliance with the plans and documents referenced above. At the request of the Commission, the Applicant or Owner may be required to submit (a) a written statement from a registered professional engineer in the Commonwealth of Massachusetts certifying that the work was completed in substantial compliance with the plan(s) and documents referenced above and as conditioned by the Commission. The Certificate of Compliance shall specify any ongoing conditions.



### WPA Form 5 ~ Order of €onditions L

MassacRusette Wetlands Protection Act M. G.LPc. 431, §40

Provided by MassDEP: SE # 075-1202 MassDEP File #

June 24, 2024

eDEP Transaction #
Truro
City/Town

E. Signatures N

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

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

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

2. Number of Signers

1. Date of Issuance

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 delive

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.

Signature I MASS	Printed Name of M. White
Signature (10 CC) Signature Signature	Printed Name  Chut Westaw  Printed Name — Myssinger  Printed Name — Myssinger  Printed Name — Nons Ross
Signature Signature	Printed Name  Printed Name
Signature	Printed Name
Signature	Printed Name
☐ by hand delivery on	by certified mail, return receipt requested, on
Date	7022 2410 0003 5232 1134
	1004 2410 0000 0000 1101

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### WPA Ferm 5 → Order of Condition's L

Massachusetts Wetlands Protection Act M. G.L. C. Y131, §40

Provided by MassDEP: SE# 075-1202 MassDEP File #

eDEP Transaction #

Truro City/Town

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### F. Appeals A N

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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 for 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.



### WPA Form 5 → Order of €ondifions L

Massachusetts Wetlands Protection Act M. G.L. Pc. Y131, §40

Provided by MassDEP: SE# 075-1202 MassDEP File #

eDEP Transaction	1#
Truro	
City/Town	

G. Recording Information

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OFFICIAL

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Prior to commedic@meth off work, this Order of Conditions thus to 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 Commission.	the Registry of Deeds and s	
To:		
Truro Conservation Commission		
Please be advised that the Order of Co.	nditions for the Project at:	
2 Heron Ln	SE# 075-1202	
Project Location	MassDEP File Nun	nber
Has been recorded at the Registry of D	eeds of:	
Barnstable		
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 Condition	ons issued on:	
June 24, 2024		
Date		
If recorded land, the instrument number	identifying this transaction i	s:
Instrument Number		
If registered land, the document number	ridentifying this transaction	is:
Document Number		
Signature of Applicant		

BARNSTABLE REGISTRY OF DEEDS John F. Meade, Register

N O T	BARNSTABLE LAND COURT REGISTRY
A N	A N
OFFICIAL	OFFICIAL
C O P Y	C O P Y
N O T	N O T
A N	A N
OFFICIAL	OFFICIAL
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### WPA Form 5 - Order of Conditions

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

Provided by MassDEP: SE# 075-1114 MassDEP File #

eDEP Transaction # Truro City/Town

Latitude and Longitude, if known:

Please note: this form has been modified with added space to accommodate the Registry of Deeds Requirements

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



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From: Truro		
Conservation Co	mmission	
. This issuance is for (check one):	a. 🛛 Order of Conditions 🔻 t	b. Amended Order of Conditions
. To: Applicant:		
Matthew R	Gottesdie	ener
a. First Name	b. Last Nar	
c. Organization		
97 Montvale Rd		
d. Mailing Address		
Newton	MA	02459
e. City/Town	f. State	g. Zip Code
a. First Name	b. Last Nan	ne
c. Organization		
d. Mailing Address		
e. City/Town	f. State	g. Zip Code
Project Location:		
4.11 1	Truro	
4 Heron Ln	Itulo	
a. Street Address	b. City/Tow	n
	b. City/Tow 220	n

42d01m28.86s

d. Latitude

d. Parcel/Lot Number

5.

70d05m20.30s

e. Longitude



# Massachusetts Department of Environmental Protection Bureau of Resource Protection Wetlands C I A L WPA Formy5 - Order of Conditions

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

Provided by MassDEP:
SE# 075-1114
MassDEP File #
eDEP Transaction #
Truro
City/Town

A. General Information (cont.) OFFICIAL

6.	Property recorded at the Registry of Deeds for	(attachPadditional information if more than			
	one parcel):	000500			
	Barnstable a. County	220562			
	•	b. Certificate Number (if registered land)			
	Lot 20, Plan 34915-C	4.0			
		d. Page			
7.		tte Public Hearing Closed c. Date of Issuance			
8.	Final Approved Plans and Other Documents (a	<del>-</del>			
0.	as needed):	attach additional plan of document references			
	Preliminary Site Plan				
	a. Plan Title				
	FELCO, Inc.	n/a			
	b. Prepared By	c. Signed and Stamped by			
	1/10/2021	1" = 30'			
	d. Final Revision Date	e. Scale			
	f. Additional Plan or Document Title	g. Date			
B.	Findings				
1.	Findings pursuant to the Massachusetts Wetla	ands Protection Act:			
	Following the review of the above-referenced provided in this application and presented at the areas in which work is proposed is significally Protection Act (the Act). Check all that apply:	ne public hearing, this Commission finds that			
a.	☐ Public Water Supply b. ☐ Land Conta	ining Shellfish c. Prevention of Pollution			
d.	☐ Private Water Supply e. ☐ Fisheries	f.			
g.	☐ Groundwater Supply h. ☐ Storm Dam	age Prevention i. 🛛 Flood Control			
2.	This Commission hereby finds the project, as pro	oposed, is: (check one of the following boxes)			
Аp	proved subject to:				
a.	the following conditions which are necessary	ary in accordance with the performance			

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 N

WPA Form 5 - Order of Conditions L

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

Provided by MassDEP:				
SE# 075-1114				
MassDEP File #				
eDEP Transaction #				
Truro				
City/Town				

	Massachusetts Wetland	ds Protection A	ct M.G.L. c. 1	31, §40	eDEP Transaction #
	NOT		NOT		Truro
	. Findings (cont.) OFFICIA enled because: OPY	L O	F F I C I	I A L	
		t	ad to most the r	orformance	standards set forth
b.	the proposed work can in the wetland regulations. until a new Notice of Intent protect the interests of the the performance standard Order.	Therefore, work is submitted whi Act, and a final 0	on this project r ich provides me Order of Conditio	nay not go f asures whic ons is issue	orward unless and h are adequate to d. <b>A description of</b>
C.	the information submitt or the effect of the work on Therefore, work on this pro Intent is submitted which pradequate to protect the Act description of the specificattached to this Order as	the interests ide ject may not go rovides sufficien 's interests, and c information w per 310 CMR 1	entified in the Wo forward unless a t information an a final Order of which is lacking 0.05(6)(c).	etlands Prot and until a r d includes n Conditions and why it	ection Act. evised Notice of neasures which are is issued. A
3.	Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a)  a. linear feet				
In	land Resource Area Impact	ts: Check all tha	t apply below. (I	For Approva	ils Only)
Re	esource Area	Proposed Alteration	Permitted Alteration	Propose Replacem	
4.	☐ Bank	a. linear feet	b. linear feet	c. linear fe	d. linear feet
5.	<ul><li>☐ Bordering</li><li>Vegetated Wetland</li><li>☐ Land Under</li></ul>	a. square feet	b. square feet	c. square	feet d. square feet
6.	Waterbodies and	a. square feet	b. square feet	c. square	feet d. square feet
	Waterways	e. c/y dredged	f. c/y dredged		
7.	<ul><li>☐ Bordering Land</li><li>Subject to Flooding</li></ul>	a. square feet	b. square feet	c. square	feet d. square feet
	Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic fe	h. cubic feet
8.	<ul><li>Isolated Land</li><li>Subject to Flooding</li></ul>	a. square feet	b. square feet		
	Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic fe	eet f. cubic feet
9.	☐ 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 WPACFORM, 5 - Order of Conditions Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP: SE# 075-1114

MassDEP File #

eDEP Transaction #
Truro
City/Town

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B. Findings (cont.) ICIAL OFF Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only) Proposed Permitted Proposed Permitted Alteration Alteration 8 4 1 Replacement Replacement 10. Designated Port Indicate size under Land Under the Ocean, below Areas 11. 

Land Under the Ocean a. square feet b. square feet c. c/y dredged d. c/y dredged Indicate size under Coastal Beaches and/or Coastal Dunes 12. A Barrier Beaches below 238 238 cu yd cu yd a. square feet b. square feet c. nourishment d. nourishment ☐ Coastal Dunes cu yd cu yd a. square feet b. square feet c. nourishment d. nourishment 119 119 15. X Coastal Banks a. linear feet b. linear feet ☐ Rocky Intertidal **Shores** a. square feet b. square feet 17. Salt Marshes a. square feet b. square feet c. square feet d. square feet ■ Land Under Sait **Ponds** a. square feet b. square feet c. c/y dredged d. c/y dredged Land Containing Shellfish a. square feet b. square feet c. square feet d. square feet 20. Tish 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. \(\Bigcirc\) Land Subject to 714 714 Coastal Storm a. square feet b. square feet Flowage 22. 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



please enter

the additional

# Massachusetts Pepartment of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 5 - Order of Conditions Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP: SE# 075-1114 MassDEP File #

NOT NOT eDEP Transaction # Truro City/Town

B. Findings (cont.) OFFICIAL COPY 23. Restoration/Enhancement \*: \* #23. If the project is for the purpose of restoring or b. square feet of salt marsh a. square feet of BVW enhancing a resource area 24. Stream Crossing(s): in addition to the square b, number of replacement stream crossings a, number of new stream crossings footage that has been entered in Section B.5.c (BVW) or The following conditions are only applicable to Approved projects. B.17.c (Salt Marsh) above, 1

## C. General Conditions Under Massachusetts Wetlands Protection Act

- 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.
- The Order does not grant any property rights or any exclusive privileges; it does not amount here. 2. authorize any injury to private property or invasion of private rights.
  - 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
    - 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.
    - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
  - 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. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
  - 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 1/20 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.



# Massachusetts Department of Environmental Protection Bureau of Resource Protection Wetlands I A L WPA Formy 5 - Order of Conditions

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

Provided by MassDEP: SE# 075-1114 MassDEP File #

eDEP Transaction #

Truro City/Town

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# C. General Conditions Under Massachusetts Wetlands Protection Act

- 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.
- 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.
- A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number

SE# 075-

1114

- 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.
- 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.



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

WPA Form 5 A Order of Conditions L

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

Provided by MassDEP: SE# 075-1114 MassDEP File #

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

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  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.
- 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.
- 19. The work associated with this Order (the "Project")
  (1) ☐ is subject to the Massachusetts Stormwater Standards
  (2) ☒ is NOT 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;

wpaform5.doc • rev 5/18/2020 Page 7 of 13



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WFAFFOrm 5 - Order of Conditions

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

Provided by MassDEP: SE# 075-1114 MassDEP File #

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

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.
- 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.



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

WPA Form 5 - Order of Conditions L

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

Provided by MassDEP: SE# 075-1114 MassDEP File #

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Truro
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# C. General Conditions Under Massachusetts Wellands Protection Act (cont.)

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g) The responsible party shall:

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- 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
- 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.
- 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):

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



# Massachusetts Department of Environmental Protection Bureau of Resource Protection Wetlands I A L WPACFORM 5 — Order of Conditions

Provided by MassDEP: SE# 075-1114 MassDEP File #

	Massachusetts Wetlands Pro	otection Act M.G.L. c. 131, §40	eDEP Transaction #		
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	-,	-,	City/Town		
D.	Findings Under Munici	ipal Wetlands Bylaw or	Ordinance		
1.	Is a municipal wetlands bylaw or o	ordinance applicable? X Yes	□ No		
2.	The Truro Conservation Commission		neck one that applies):		
	<ul> <li>a. Li that the proposed work can municipal ordinance or bylaw,</li> </ul>	nnot be conditioned to meet the standary; , specifically:	andards set forth in a		
	1. Municipal Ordinance or Bylaw	#2	2. Citation		
	Therefore, work on this project Intent is submitted which prov standards, and a final Order o	ot may not go forward unless and u rides measures which are adequat of Conditions is issued.	intil a revised Notice of e to meet these		
	<ul> <li>b.  that the following additional ordinance or bylaw:</li> </ul>	al conditions are necessary to com	ply with a municipal		
	Truro Conservation Bylaw  1. Municipal Ordinance or Bylaw		Chapter 8		
_	•		2. Citation		
3. The Commission orders that all work shall be performed in accordance with the forced conditions and with the Notice of Intent referenced above. To the extent that the forced conditions modify or differ from the plans, specifications, or other proposals submittee Notice of Intent, the conditions shall control.					
	The special conditions relating to a more space for additional condition	municipal ordinance or bylaw are a ns, attach a text document):	as follows (if you need		
	See Page 10-A and 10-				

#### TOWN OF TRURO-ORDER OF CONDITIONS

4 Heron Lane; Map 39, Parcel 220

DEP file # SE 75-1114 N O

DEP file # SE 75-1114 NOT APPLICANT/OWNER: The 4 Heron Lane Trust, Trs. Matthew R. Gottesdiener,

O FC/P Northland Investment Corporation I C I A I

#### **DOCUMENTS**

1. Notice of Intent application; Addendum to Notice of Intent; wetland fee transmittal form; abutter notification, abutters list, locus map, 21-day walver, project narrative with site photos dated January 2021 prepared by ECR, LLC

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2. DEP notice of file flumber; I A L OFFICIAL

3. <u>"Site Plan"</u> by FELCO, and, disted 1/10/2021; C O P Y

#### PROJECT DESCRIPTION

- 1. The project is proposed at a residential site fronting on Cape Cod Bay,
- 2. The project includes installing a coir log array at the toe of the Coastal Bank which shall be nourished with compatible sands and planted with beach grass annually and monitored.
- 3. The resource areas at the site are a Coastal Bank, Coastal Beach and Land Subject to Coastal Storm Flowage.

#### **FINDINGS**

- 1. The Commission finds the site of the proposed shorefront protection to be on a Coastal Bank, and work will occur on the adjacent Coastal Beach above mean high water.
- 2. The areas subject to protection/regulation are Coastal Bank and Coastal Beach and their buffer zones, and Land Subject to Coastal Storm Flowage.
- 3. The Commission finds the Coastal Bank to exist in a dynamic coastal environment and composed of mixed glacial till and outwash material.
- 4. The Commission finds that the Coastal Bank is significant to storm damage prevention and flood control and supplies sediment to down drift coastal resource areas.
- 5. The Commission finds the Coastal Bank composed of glacial outwash along the bay side of Truro is subject to dynamic and intense seasonal storms which can result in the high end of normal erosion rates and a significantly lower beach elevation due to wave action, overland stormwater, and wind/rain from these intense seasonal storms.
- 6. The address for this project is #4 Heron Lane.
- 7. The Applicant acknowledges that the project of Coastal Bank stabilization and protection with biodegradable (coir) measures is only temporary (estimated at 10-15 years); the goal is to protect: the Coastal Bank and its ability to perform the function of storm damage prevention, and the applicant's home atop the eroding bank.
- 8. The Applicant has agreed to conduct an engineering, legal and logistical analysis of alternatives to address the proximity of the house to the top of the Coastal Bank including relocation, reduction in size and removal of the existing house. This analysis may include alternatives which would protect the coastal bank, and ensure that the functions of storm damage prevention and sediment supply to the beaches are preserved. The Applicant shall submit an alternatives report, and shall attend a meeting with the Commission to present and discuss said report prior to the issuance of a Certificate of Compliance for this project.
  - 5. The Applicant acknowledges and understands that their property is located on an eroding coastline, that their home is post-1978 construction, and as such revetments and other coastal engineering structures cannot be permitted.
  - 6. The Commission finds that the Coastal Beach resource area is not significant to state listed

species since it is not located in Estimated Habitat of Rare Wildlife as mapped by NHESP and published maps on August 1, 2017.

7. The Commission finds that the Coastal Beach is significant to storm damage prevention, flood

control and protection of wildlife habitat.

- 8. These Special Conditions and Additional General Conditions are being issued in accordance with the information shomitted in the Notice of Intent, with accompanying attachments by ECR, LLC and dated January 2021, the Plan of Record (describe 4 a N"preliminary") dated 1-10-2021, and Supplemental information including but not Climited to the project narrative, site photos and maps. In the event of any conflict between these referenced materials and this Order, this Order shall control.
- 9. This Order is issued pursuant to the Massachusetts Wetlands Protection Act and the Town of Truro's Conservation By-Law and Conservation regulations.
- 10. This Order of Conditions allows the following work: the placement and maintenance of an array of 20" diameter coir logs at the base of the coastal bank; placement and maintenance of compatible sand cover over the coir logs; placement of compatible beach/bank nourishment sands; the planting of the Coastal Bank face with American beach grass in double culms on an 12-14" matrix.

The Commission determined that the project could be permitted subject to the following special conditions:

#### SPECIAL CONDITIONS

#### Pre-construction

- 1. Notice of a work start date shall be given to the Commission in writing at least 48 hours prior to the commencement of work. The applicant or contractor shall provide the name and contact information of the person responsible on site for compliance with this Order.
- 2. Prior to the commencement of work the following activities shall be completed:
  - The Order of Conditions shall be recorded at the Barnstable County registry of deeds and a stamped copy shall be submitted to the Conservation office.
  - A sign shall be conspicuously displayed at the site showing the DEP file number assigned to this project. The sign shall be 2-3 square feet in size, separately staked and read only: MA DEP file # SE 75-1114. Lettering/numbering shall be clearly and permanently printed, and at least 2" in height and posted at the street and the top of the Coastal Bank.
  - A pre-construction site visit shall be scheduled by the applicant's representative and include the project Contractor and the Conservation Agent. During this site visit the Order of Conditions, construction protocols, work limits, access plans, schedule and site plan details shall be reviewed.
- 3. Members of the Commission, its Agent or the Department of Environmental Protection (DEP) reserve the right to enter and inspect the property at all reasonable times, until a Certificate of Compliance is issued, to evaluate compliance with this Order of Conditions, the Act, 310 CMR 10.00 and Town regulations, and may acquire any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation.
- 4. The construction notes on the plan are specifically incorporated into this order.
- 5. The Applicant is responsible for obtaining approvals from all abutting property owners to any proposed beach access routes for the project; in this regard, the contractor must obtain an access and staging permit from the Town with respect to utilizing any public landing.

- a) The stabilization design uses Pa 4' high coconut fiber (coin) log erray consisting of 4-5 rows of logs installed along the toe of the Coastal Bank for 145 linear feet.
- b) The major component of the artay is a dense 20-inch diameter coir log that is stacked in rows on a 1.5 to 1 slope. No plastics or metal to the than the duckbill anchors shall be utilized in the construction or securing of the coir logs. F I C I A L O F F I C I A L
- c) The first 2 rows of logs@hat be buried at the bank toe and@dge of the beach at the elevations shown on the plan in order to provide a stable foundation for the other coir logs. Nothing else may be placed completely within the beach. The coir logs shall be stepped against the bank to reflect the slope of the bank.
- d) The coir logs shall run to the property line as the abutting parcels are owned in common.
- e) Duck bill anchors shall be placed as noted on the current site plan. If the Duck bill anchors become uncovered and are protruding from the bank or coir logs, the applicant will be required to reinstall them immediately.

#### 2. Nourishment:

- a) Nourishment sands will be compatible with existing bank and beach sand materials. The size and angularity of the grain size from the proposed source must be confirmed at the Applicant's expense and the analysis provided to the Conservation Agent prior to placement. All nourishment materials shall consist of clean sand determined to be compatible with existing bank and beach sands at and proximate to the project site according to the sediment grain size information provided to the Conservation Department prior to placement.
- b) The proposed slope of the nourished bank shall be no steeper than the angle of repose (i.e. 34°).
- c) The initial minimum coverage of all coir logs with sand shall be at least 18-inches.
- d) The applicant shall be required to perform annual renourishment of the bottom of the bank to at least one foot above the top of the coir logs to ensure the stability and function of the bank and adjacent beach. A minimum depth of 18-inches of cover sand shall be restored and in place prior to Thanksgiving of each year.
- e) Prior to any beach re-nourishment practices, the applicant's representative/consultant shall determine the quantity of sand needed for the site and submit a written notice of this activity and the depth of cover and total estimated volume of sand proposed; any disagreement about the adequacy of this nourishment shall be decided by the Commission. In addition, any access needed for equipment and materials shall be approved by the Commission and appropriate parties.
- f) Bi-monthly monitoring reports shall be submitted to the Conservation Department to include a file copy with photos and measurements of sand coverage at 5' from the ends and every 50' along the coir logs. One hard copy along with an electronic copy shall also be sent to the Conservation Department. Monitoring locations shall be identified by GPS and by relative elevation. A minimum coverage of 12" of sand will be maintained at all times. A record of the number of times that the coir logs need to be recovered and the amount of sand deposited in each renourishment shall be documented and submitted to the Conservation Department in an annual report by December 1 of each year. The report shall include the volume of sand placed at the site and dates for nourishment.

#### 3. Plantings:

Beach grass shall be planted 12-14-inches on center with double culms per plant, 9-inches deep.

a) In the event that the plantings do not survive, they shall be replaced at the next seasonal opportunity. Failed plantings shall be replaced no later than April 15 annually.

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- b) Plantings shall be monitored in reports to include photographs and information on how much material was planted and shall be submitted to the Conservation Department by December 1 of each year.
- 4. Damage, Repair and Remova of Coir logs:
- a) The coir logs shall be mathtalined and repaired to ensure proper function and to prevent any debris. If the coir logs are damaged beyond repair they shall be promptly removed and be properly disposed of.
- b) The Applicant shall be responsible for retrieving any and all materials stored, dislodged or washed offsite (excluding sand) for the life of the project.
- c) The Applicant shall notify the Conservation Agent concerning the extent of repairs and maintenance necessary prior to proceeding with any repair and maintenance.
- d) If the Commission has a basis to believe the coir logs are causing scour or erosion on abutting properties, or are adversely impacting offshore deposition processes, or otherwise creating negative or unintended consequences, it may issue an Order to Show Cause why the coir logs should not be removed. The Commission will conduct a hearing to evaluate the evidence and will issue a decision on removal.
- e) Prior to the commencement of construction, the Applicant shall establish an escrow account in the amount of \$5,000, which may be used by the Commission to remove and dispose of debris, or damaged or end-of-useful life coir logs if the applicant does not perform such work in a reasonable period of time after the Commission orders the performance of such work.
- **6. No construction work** may cause destabilization of the Coastal Bank If the installation of anchors, application of sand from the top or bottom of the Coastal Bank or any other related work for this project cause any slumping of the bank, work must stop and be evaluated by the Commission.
- 7. No work on the beach, including access over the beach, shall occur between April 15<sup>th</sup> and Columbus Day. Work shall not commence prior to 8 a.m. and must end by 6:00 p.m.
- **8.** All work shall be done in accordance with the project narrative provided in the NOI, Supplemental Information and final plans as described herein. In the event of any conflict between the materials submitted or the final plan and this Order, this Order shall control.
- 9. All post-construction Monitoring and Maintenance Program/Protocols shall be done in compliance with the NOI and Supplemental Information dated January 2021 except as modified by this Order.
- a) After each significant (named) storm event, the applicant's representative will inspect the project area and prepare a field report of site conditions and possible impacts to the Coastal Bank and the coir log array.
- b) After each significant storm event and before, during and after any repairs or renourishment, the Conservation Agent <u>may</u> inspect the project area at the Applicant's expense. Inspection time will billed at the then current rate for such inspections as established by the Truro Conservation Commission. Invoices with dates of on-site inspections will be submitted to the Applicant on a quarterly basis. Payment is due within 30 days of receipt.
- 10. Prior to issuance of a Certificate of Compliance, the Applicant shall conduct an engineering, legal and logistical analysis of alternatives to address the proximity of the house to the top of the coastal bank, including relocation options and options for reduction in size and removal of the existing house. This analysis may include alternatives which would protect the Coastal Bank, and ensure that its

functions of storm damage prevention and sediment supply to the beaches are preserved. The alternatives report shall contain a narrative analysis, feasibility evaluation, cost estimates, permitting requirements, and conceptual layouts. The report shall be submitted to the Commission when requesting a Certificate of Compliance for the project. No Certificate of Compliance shall issue until this analysis has been filed with the Commission and is deemed by the Commission to be complete, nor until the applicant (or then current owner) and their consultant has head with the Commission to discuss this alternatives analysis.

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- 11. Sand Nourishment shall be provided to cover the array from the top of the bank, or other approved method.
- 12. Special Condition Nos. 1, 2, 3, 4, 5, 9 and 11 shall be continuing conditions which survive a Certificate of Compliance, unless the Commission agrees by written order after notice to abutters to modify the conditions. Any modifications shall be based upon the monitoring reports and written recommendations by a coastal geologist.

In addition to the SPECIAL CONDITIONS Nos. 1-12, the Commission has determined that it is necessary to include the following Additional General Conditions.

#### **ADDITIONAL GENERAL CONDITIONS**

- This Order shall apply to any successor in control or successor in interest of the property described in the Notice of Intent and accompanying plans. These obligations shall be incorporated and referenced in covenants in all deeds to succeeding owners of all or any part of the property.
- 2. The form provided at the end of this Order shall be completed and stamped at the appropriate Registry of Deeds, after the expiration of the 10-business day appeal period and if no request for appeal has been filed with the Department of Environmental Protection under the Wetlands Protection Act and the DEP Wetland Protection Regulations (310 CMR 10.00), or under the local Conservation By-Law.
- 3. This Order shall be included in all construction contracts, subcontracts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. It is the responsibility of the Applicant, Owner, and/or successor(s) to ensure compliance with all Conditions of this Order. A copy of this Order shall be available at the work site, or posted, during normal work hours, until the work is complete.
- 4. The Applicant shall give written notice to the Commission 48-hours in advance of commencement of work. Members of the Commission or its Agent, or the DEP reserve the right to enter and inspect the property at all reasonable times, until a Certificate of Compliance is issued, to evaluate compliance with this Order of Conditions, the Wetlands Protection Act, the DEP Wetland Protection Regulations, and the Bylaw, and may require any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation.
- 5. Prior to commencement of work, a series of color photos shall be taken of the bank and submitted to the Commission. In addition, a series of color photos shall be taken at the end of construction and submitted to the Commission. All photographs shall include the Assessor's Map and Parcel and date the picture was taken.
- 6. Prior to the commencement of work, a sign shall be displayed at the site showing the DEP file number assigned to this project. Such sign shall be separately staked.

- 7. Work shall be halted on the site if the Commission, Consequation Agent or DEP determines that any of the work is not in compliance with this Order. Work shall not resume until the Commission is satisfied that the work will comply with this Order and has so notified the Applicant in writing.
- 8. Any changes in the work described in the Notice of Intent or in the plans and specifications shall be submitted to the Commission in writing for a determination of whether the change is significant enough to the interests of the Act and the Bylaw to require a new Notice of Intent. No changes shall be made or implemented in the field prior to the Commission's determination. Should issuance of additional permits result in a change if the project, the Applicant shall promptly submit such changes to the Commission for evaluation under this provision.
- 9. Upon completion of this project, the Applicant or Owner shall submit a request to the Conservation Commission for issuance of a Certificate of Compliance and the report required by Special Condition No. 9. The Applicant or Owner shall certify in writing that the work was completed in substantial compliance with the plans and documents referenced above. At the request of the Commission, the Applicant or Owner may be required to submit (a) a written statement from a registered professional engineer in the Commonwealth of Massachusetts certifying that the work was completed in substantial compliance with the plan(s) and documents referenced above and as conditioned by the Commission. The Certificate of Compliance shall specify an ongoing conditions.



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

WPA Form 5 - Order of Conditions L

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Provided by MassDEP: SE# 075-1114 MassDEP File # eDEP Transaction # Truro

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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.

Signatura Lum Lum	Printed Name .  DIANE MOSSIPATE
signature Juliano	Printed Names M. White
Signature Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
by hand delivery on	by certified mail, return receipt requested, on
Date	Date



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, 840

Provided by MassDEP: SE# 075-1114

MassDEP File#

eDEP Transaction #

Truro City/Town

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F. Appeals A N I C I A I

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The applicant, the owner any person aggrieved by this OPdeY, 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 for 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.



# Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands C I A L WPA Form 5 - Order of Conditions Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP: SE# 075-1114 MassDEP File #

eDEP Transaction #

Truro City/Town

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G. Recording Information OFFICIAL

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 Regis Commission.	•	
То:		
Truro Conservation Commission		· · · · · · · · · · · · · · · · · · ·
Please be advised that the Order of Conditions for	or the Project at:	
4 Heron Ln	SE# 075-1114	
Project Location	MassDEP File Nu	mber
Has been recorded at the Registry of Deeds of:		
Barnstable		
County	Book	Page
for: Matthew R. Gottesdiener		
Property Owner		
and has been noted in the chain of title of the affe	ected property in:	
Book	Page	
In accordance with the Order of Conditions issue	d on:	
Date		
If recorded land, the instrument number identifying	g this transaction	is:
Instrument Number		
If registered land, the document number identifying	ng this transaction	ı is:
Document Number		
Signature of Applicant		



# RESTORE • CREATE • ENHANCE

















5-30-24

**Truro Conservation Commission** 

Conservation Commission TOWN OF TRURO

MAY 31 2024

Re: Access Plan for 2 Heron Lane Coir Fiber Roll Project

We have revised our access plan for the work at 2 Heron Lane. Due to there being no equipment access or level ground to safely stage a crane at the top of the applicant's coastal bank, we will use a neighboring property within the Shearwater association for access.

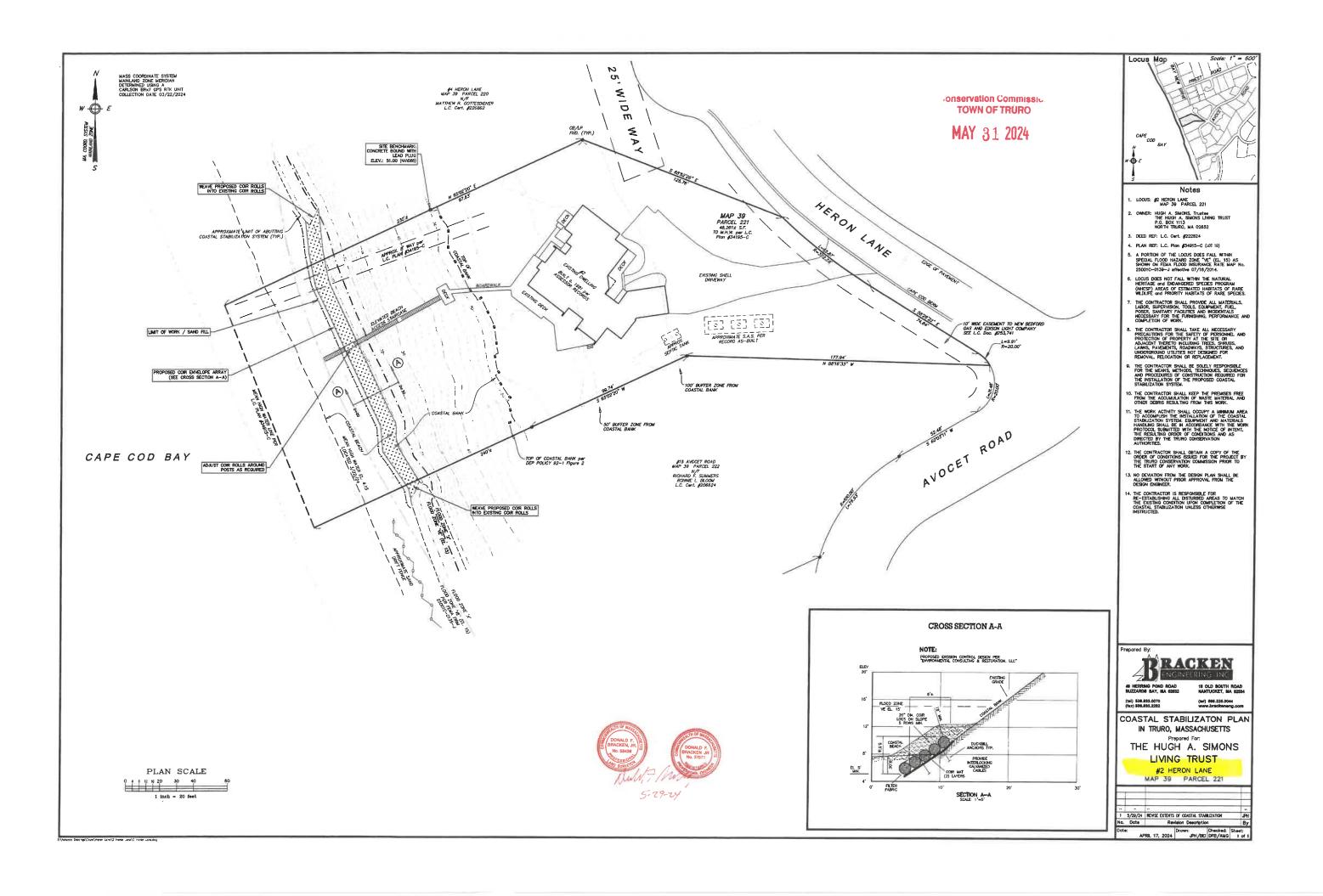
Hugh Simon, the owner of 2 Heron Lane has contacted The Wolfer's at 7 Kestrel Lane to request access through their property. The Wolfer's agreed to the plan if we restore their property to the same condition that we started with. Restoring their property will involve roughly 20 yards of sand nourishment and re-planting of some beach grass around the area of access.

We have used The Wolfer's property for access to service the Shearwater properties in the past. We us a crane to lift a mini-excavator and a skid-steer down to the beach from the driveway of 7 Kestrel. We will then deliver materials and sand for the job through a temporary chute that will run directly down the coastal bank. After the project is complete, the equipment and any debris will be craned off the beach. The temporary chute will be removed from the site

If anyone has any additional questions about the access plan, please feel free to reach out to me directly.

Thank you,

Michael Bonner SumCo Eco-Contracting





# TOWN OF TRURO CONSERVATION COMMISSION

P.O. Box 2030 Truro MA 02666-0630

# Conservation Commission Meeting Minutes: March 1, 2021

<u>Commissioners Present</u>: Chair Jack McMahon, Commissioners Larry Lown, Bob White, Carol Girard-Irwin, & Linda Noons-Rose **Absent**: Commissioners Deborah McCutcheon & Diane Messinger **Others Present**: Emily Beebe, Conservation Agent;

The Chair called the meeting and public hearings to order at 5:02 and provided virtual instructions.

#### Minutes:

#### May 4, 2020

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Commissioner White. Vote: 4-0-0 (At this time, Commissioner Lown experienced internet issues and left the meeting)

#### June 1, 2020

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0.

#### August 3, 2020

**September 14, 2020** 

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0

#### October 5, 2020

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0

#### November 2, 2020

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0

1|Page: Truro Conservation Commission Minutes - March 1, 2021

#### December 7, 2020

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0

January 4, 2021

Motion: Commissioner Girard-Irwin moved to approve as amended with any grammatical corrections Commissioner Lown may have.

Seconded by Chair McMahon. Vote: 4-0-0

# Request for Determination of Applicability: 18 Phat's Valley Rd, Peter Fields

(continued from 2/1/2021): Peter Fields, homeowner, was not present.

Motion: Chair McMahon moved to push the hearing to a later point on the agenda to give the Applicant time to arrive.

Seconded by Commissioner White. Vote: 4-0-0

### Notice of Intent: 4 Rolling Hills Rd, Mark & Laura Shlomchik, SE#75-1117:

David Lyttle of Ryder & Wilcox, informed the Commission that he had received a DEP number. Commissioner McMahon gave a brief overview of the project from the February 1, 2021 meeting; (*Commissioner Lown rejoined the meeting*) the following conditions were proposed: 1.) all concrete overpour shall be removed from the site; 2.) temporary irrigation is required; and 3.) construction protocol and the notes on the plan are specifically incorporated into the Order.

<u>Motion</u>: Commissioner Girard-Irwin moved to approve to application as conditioned. **Second** by the Chair **Vote: 5-0-0** 

Notices of Intent: 39 Bay View Rd, 41 Bay View Rd and 4 Heron Lane; Lawrence Gottesdiener, SE# 75-1115, 1116, 1114: Commissioner McMahon noted that all three properties were owned by the same entity and that the Commission would discuss all three at once and vote on them separately. Stan Humphries of ECR represents the owners and described the current proposal to install 4-5 coir fiber logs placed at the toe of the Coastal Bank along the three referenced properties. The most important part of the project is the installation of the bottom log; it needs to be deep enough to prevent being undercut as the beach erodes. He was asked to compare this proposal with a project for coir envelopes approved in 2010 for properties on Kestrel Lane and Avocet Road (Shearwater); he stated that the logs were smaller than the ones used on the Shearwater properties and that duckbill anchors are now proposed instead of helical anchors. The number of logs used will depend on the elevation of the beach and the proposal does not include planting the logs after their installation because the lower 2-3' of the logs will experience wave action and vegetation will not last. Commissioner Noons-Rose questioned if the plan included the repair of the existing sand drift fence at #41 Bay View Road. Mr. Humphries stated that it did not but that he was open to it as a condition. Commissioner McMahon stated that according to local regulations, the property owner is responsible for repairing the fence or taking it out. Commissioner Girard- Irwin questioned the depth of the first log and the number of logs proposed. Mr. Humphries stated that the logs are 20" in diameter and therefore would need to be about 40" down, but the depth would depend on beach elevations at the time of construction and that he felt 5 rows would be sufficient. If that changes, then he said he would come back to the

2 | Page: Truro Conservation Commission Minutes - March 1, 2021

Commission. Discussion ensued regarding the possible reconstruction of beach stair to accommodate the construction. The Chair felt that it could be addressed via a condition; he also questioned if the logs would be replenished or covered with sand annually. Mr. Humphries replied in the affirmative. There was a question about access to the site; no access site had been chosen at this time. Commissioner Lown questioned how much sand has been used for replenishment for the logs within Shearwater. Mr. Humphries reply was "thousands of cubic yards". Discussion ensued regarding sediment type and compatibility. Mr. Humphries proposed to submit bi-monthly reports. Commissioner Lown asked if any of the houses were built pre-1978. Mr. Humphries replied that one house was. The Agent asked if the goal was to keep the logs covered at all times with sacrificial sand. Mr. Humphries replied in the affirmative and added that there may be a need to renourish and re-vegetate above the logs. The Agent noted that access from the Corn Hill landing would be the closest entrance point and that the Applicant must notify abutters prior to proposed travel; further, the Agent reminded him that re-nourishment of the bank toe to cover the logs must be delivered from the private property under Truro Conservation regulations -rather than over-sand access. It was suggested that the hearing be continued to allow development of a rough draft of conditions.

Motion: Commissioner Lown moved to continue the hearing to April 5, 2021.

Second by the Chair; Vote: 5-0-0

Notice of Intent: 2 Noah's Way, William Hilldreth & Ryan Cooke, No SE# at the time of the meeting: David Lyttle, of Ryder and Wilcox, represented the project and described the history of the property which included the original development of the site, which occurred in 1825. The proposed project includes renovations and additions to the existing dwelling, construction of a garage, removal of invasive vegetation and site restoration (they offer a 4:1 ratio of disturbed area to mitigation/restoration). All proposed activities would occur within 100'-200' of Riverfront except for site restoration. The work proposed within the buffer zone to the Coastal Bank included the construction of a deck and timber steps. Theresa Sprague of Blue Flax design prepared a plan showing the proposed mitigation developed as a land management plan. She stated that the applicants wished to remove the hot tub as proposed, and possibly relocate it on a deck in the future. She described the land management which included 9,450 sq. ft. of restoration within the Commission's jurisdiction with additional restoration outside of jurisdiction. The Chair asked about re-grading after the garage is constructed. Peter Coneen, architect, stated that the east side of the new building will align with the existing grade to the north, and grading would create a ramp to allow access to the backyard; the garage will be constructed on a slab at elevation 24 ft. Commissioner McMahon asked about the screen porch on top of the proposed deck; Mr. Lyttle and Mr. Coneen replied that the porch would be on the north side of the deck and extend over to the east side. When asked, Ms. Sprague added that the applicant would be willing to move their outdoor shower to another location. The Agent asked about the elevation of the addition foundation; Mr. Lyttle replied that it was at elevation 19 feet. Commissioner White inquired about the use of the second (half-story) in the garage. Mr. Coneen stated that it would not be a bedroom but would be usable living space. Mr. Lyttle added that there is no plumbing proposed for the garage. Commissioner Noons-Rose questioned the management of stormwater runoff, especially in front of the proposed garage. Mr. Lyttle agreed that they could install a trench drain to a drywell to address runoff from the

driveway. There was discussion about the additions in the buffer and resource areas that required a variance and they asked for a letter from Mr. Lyttle requesting one. The Commissioners agreed that, based upon the vast site restoration, conditions could be developed. Mr. Lyttle had not received a DEP file# at this time and requested that the meeting be continued.

<u>Motion</u>: Commissioner Girard-Irwin moved to continue the hearing to April 5, 2021. **Seconded** by Commissioner Noons-Rose. **Vote: 5-0-0** 

Notice of Intent: 542 Shore Rd, Marie Belding & Patricia Callinan, SE# 75-1118: Stan Humphries of ECR presented the project proposing the installation of 50 feet of "sturdy"-serpentine fence; it is designed with a 5-foot removable middle section for seasonal access to the beach by way of a "Moby" mat. Mr. Humphries stated that they did not yet receive an approval from Natural Heritage Endangered Species Program. The Agent expressed concern about the end of the fence being at the property lines and asked about: possible impacts to neighboring properties; any plans for restoration of the coastal dune; and for more information about the 5'-foot removable opening. Mr. Humphries stated that the purpose of the fence is to collect sand and that he has not seen any scour action on other serpentine fences that he has worked with. He stated that there wasn't much area between the beach and the building to rebuild a functioning dune and that the homeowners preferred the proposed location of the 5' removable section of fencing. The Chair questioned the current slope of the replenishment sand and the use of the Moby mat. Marie Belding, homeowner, explained that once the winter months have passed, they will grade the dumped sand into a slope and place the Moby mat down toward the water from there. Commissioners Noons-Rose & White expressed their concern about serpentine fences in general but acknowledged that this homeowner's options were limited. The Chair asked Mr. Humphries to respond in writing about potential impacts from the fence on neighboring properties and how it would be handled, he also asked for a restoration plan for the coastal dune and a plan for monitoring of the site. Comments were made by Mike Flannery a direct abutter concerned about potential scouring on his property and what remedy would be in place to address it. Commissioner McMahon said the topic would be addressed at the April meeting.

Motion: Commissioner Lown moved to continue the hearing to the April 5, 2021 meeting. Second by Commissioner McMahon. Vote: 5-0-0

Request for an Amended Order of Conditions: 263 Shore Rd, Unit 2, Mark & I-Ching Katie Scott, SE# 75-1094: David Lajoie, of FELCO, Inc., represented the amendment for a proposed landing, deck, and stairs for access to the house. Commissioner McMahon asked about mitigation. Mark Scott, homeowner, stated that their plan includes planting beach grass from the new deck to the fence line on what is now bare sand. The Chair reminded Mr. Lajoie that the request required a variance for expansion in the resource area, and Mr. Lajoie suggested that a variance request was a part of the original Notice of Intent and read the request into the record. The Agent suggested the following condition: replanting of the site shall be considered mitigation. Motion: Commissioner Lown moved to approve the amendment as conditioned. Second by Commissioner Noons-Rose. Vote: 5-0-0

Request for Determination of Applicability: 2 Bay View Path, Garrett Sharpless:

Mr. Sharpless, homeowner, described the project which included the replacement of the treads and rails on the existing set of beach stairs. All work will be done from the stairs themselves. The Chair asked if the bottom section was retractable; Mr. Sharpless replied in the affirmative.

<u>Motion</u>: Commissioner Noons-Rose moved to approve the application as a negative 3. **Second** by Commissioner Girard-Irwin. **Vote: 5-0-0** 

Request for Determination of Applicability: 45 Ryder Beach Road, Paula Elaine

**Kay:** Jason Ellis, of J.C. Ellis Design, presented the project for replacement of an existing deck and possibly some footings. The decking will be removed, placed in a dumpster and taken off-site; the main access and work area will be staged from the existing driveway. The Applicant also proposed to add a roll-out walkway to the beach stairs. Commissioner McMahon asked if the applicant could replenish sand in the area of scouring and plant it with beach grass, OR reduce the deck size at the southwest corner. Commissioner White suggested using some snow fencing on the north side to help build up the area. Commissioner Noons-Rose suggested adding plantings. Mr. Ellis said that he would submit some details on the fencing, sand, and plantings to the Agent.

Motion: Commissioner White moved to approve the application as a negative three with the following conditions: snow fencing, sand replenishment, and plantings shall be done

Second by Commissioner Girard-Irwin. Vote: 5-0-0

#### **Certificates of Compliance:**

on-site to address the scoured area.

# 417 Shore Road, SE# 75-1051 (continued from 2/1/2021)

<u>Motion</u>: Commissioner White moved to approve the Certificate with the suggested remediation from Coastal Engineering. **Second** by Commissioner McMahon. Vote: 4-0-1 with Commissioner Noons-Rose abstaining.

### 17 Long Dune Lane, SE# 75-1081

<u>Motion</u>: Commissioner Girard-Irwin moved to approve the Certificate. **Second** by Commissioner McMahon. **Vote:** 5-0-0.

### 17 Long Dune Lane, SE# 75-1008

**Motion**: Commissioner McMahon moved to approve the Certificate. **Second** by Commissioner White. **Vote:** 5-0-0

## 6 Ocean Bluff Lane, SE# 75-1046

<u>Motion</u>: Commissioner McMahon moved to approve the Certificate. **Second** by Commissioner Girard-Irwin. Vote: 5-0-0

#### **Administrative Reviews**

1.) 276 Shore Road, Unit 16: rinse station

<u>Motion</u>: Commissioner McMahon moved to approve the application. **Second** by Commissioner White. **Vote: 5-0-0** 

2.) 608 Shore Road: dbox replacement

Motion: Commissioner McMahon moved to approve the application.

#### Second by Commissioner White. Vote: 5-0-0

3.) <u>2 Heron Lane</u>: replenishment, plantings: Gordon Peabody, of Safe Harbor, informed the Commission that he notified abutters regarding access and traversing along the beach. <u>Motion</u>: Commissioner Lown moved to approve the application.

Second by Commissioner McMahon. Vote: 5-0-0

## Request for Determination of Applicability: 18 Phat's Valley Road, Peter Fields

(continued from above): Peter Fields, homeowner, did not attend the meeting.

Motion: Commissioner Lown moved to continue the hearing to the April 5, 2021 meeting. Second by Commissioner Girard-Irwin. Vote: 5-0-0

Commissioner White moved to close the meeting. Second by Commissioner Girard-Irwin. **Vote: 5-0-0** Meeting adjourned.

Approved 4-5-2021, Vote: 4-0-0

Respectfully Submitted,

Arozana Davis

#### **Site Visit minutes:**

On 3/1/2021 at 10 AM Commissioners McMahon, White, Noons-Rose, Girard-Irwin, Lown and Messinger met at the Cobb, and proceeded to the following sites: 45 Ryder Beach Road, where they met Chris from JC Ellis who provided an overview of the project; at 2 Noah's Way they viewed the project stakes; 39 Bay View Road where they viewed all 3 properties owned by Mr. Gottesdiener; 2 Bay View Path; and 542 Shore Road. Site visits concluded at 12:15.

Office of Town Clerk Treasurer – Tax Collector MAY – 5 2021 Received TOWN/OF TRURO By



#### PROJECT NARRATIVE

Introduction

This Notice of Intent (NOI) application has been submitted to permit the proposed shoreline stabilization project located at 5 Great Hills Lane in Truro (the site). The Town of Truro Assessors Department references the site as Parcel #53-1. The proposed project includes the installation of a sand drift fence (also called a "serpentine fence") with a coir log array located along the landward side of the proposed fence at the boundary of a Coastal Beach and Coastal Dune and within Land Subject to Coastal Storm Flowage. This application is being submitted in accordance with the Massachusetts Wetlands Protection Act and the Town of Truro Wetlands Protection Bylaw.

Site Description

The site is located at the west end of Great Hills Lane backing on Cape Cod Bay. There are no developed properties that are immediately adjacent to this property. There are several other developed properties located more landward to the east. The site consists of a single-family dwelling, driveway with pervious pavers, a wrap-around deck on the north, west and south sides of the dwelling and beachgrass covering the undeveloped area with the exception of a stone patio and short walkway running towards the beach. There are remnants of a pre-existing sand drift fence posts but no panels with slats (see Photos). The entire site is located within a Coastal Dune and within Land Subject to Coastal Storm Flowage. A Coastal Beach extends from mean low water up to a Coastal Dune and is located approximately 60 feet west of the dwelling, having eroded over 20-25 feet in the last two years. Environmental Consulting & Restoration, LLC (ECR) completed a site review on July 11, 2024 to review the existing conditions. Based on ECR's site visits and review of available environmental databases, ECR can confirm that the site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- Coastal Dune:
- Coastal Beach:
- 100-Foot Buffer Zone; and,
- Land Subject to Coastal Storm Flowage (FEMA flood zone VE).

#### Notes:

- 1. The site is located within an area mapped as Priority Habitat & Estimated Habitat for Rare Species according to the Massachusetts Natural Heritage & Endangered Species Program (MaNHESP).
- 2. The site does not contain or is near a Certified Vernal Pool according to the MaNHESP.
- The site is not located within an Area of Critical Environmental Concern (ACEC).
   The site is not located near a USGS mapped stream.

#### **Proposed Activities**

The purpose of this application is to authorize the installation of a sturdy sand drift fence and coir log array to protect the existing structure onsite. The site has suffered significant erosion historically. The intent of the proposed coir log array is to provide protection to the existing structures onsite and mitigate the chances of a catastrophic loss. The sand drift fence is a maintenance effort with an improved design intended to build up the eroding Coastal Dune by collecting windblown sand, as the previous fence had done. The proposed project will involve the following activities:

- Staking of Existing Utilities Prior to the start of work, all existing underground utilities shall be staked in the field.
- Removal of the Existing Fence Posts The existing sand drift fence posts and other decayed members located within the Coastal Beach shall be removed. Some of the fence posts may be satisfactory to reuse. All other fencing materials shall be disposed of offsite.
- Installation of Coir Logs The proposed coir log array includes a five-tier on-slope configuration of 20-inch diameter coir logs that will span across the site (north to south) approximately 150 linear

feet. A combination of mechanical excavation utilizing a small excavator and hand digging will occur to trench in two rows below grade. The three rows above grade will be placed and backfilled with the excavated sand. The coir logs will be secured in place using interlocking galvanized cables with 4-foot duckbill anchors. The logs will then be covered with 18 inches of clean, compatible sand and planted with American Beachgrass. The bare root beachgrass shall be hand planted from the toe of the array up to the top and spaced 18-inches on center with two culms per hole. For more information, please refer to the Coastal Stabilization Plan.

- Installation of the Sturdy Sand Drift Fence Drift fencing shall be installed in accordance with the Truro Conservation Regulations, specifically Section 7.05. Drift fencing shall consist of ten-foot timber posts dug six feet into the sand at grade at the time of installation, connected by 6-foot spans of fencing comprised of 4x4 spans and slats. Space between slats is a minimum of 4" to achieve 50% openings. Fence posts are installed alternating 2' on either side of a center line so that a "zigzag" or serpentine structure results. The fencing will be left open at the access point to allow for beach access following the stabilization activities. Following the requirements of the special conditions outlined in the Truro wetland regulations the wood shall not include any CCA treated lumber.
- Stabilization Activities The sand path to the beach will be modified for construction access and all
  disturbed areas associated with the proposed installation will be restored and stabilized. Any areas
  of disturbed vegetation will be restored with bare root American Beachgrass plantings, spaced 12inches on center with two culms per hole. Additional beachgrass could be interplanted on the
  landward side of the fence and array to fill in areas of the unvegetated Coastal Dune as necessary.
- Maintenance Activities Cover sand on exposed sections of the coir log array will be replaced annually (6-8" depth minimum) after the storm season and replanted with beachgrass prior to April 15th.

#### 4. Regulatory Compliance

Compliance with Massachusetts Wetlands Protection Regulations (310 CMR 10.00)

The following sections analyze the proposed project against the relevant performance standards for Coastal Beach and Coastal Dune. For Coastal Beach, standards (3) and (7) applies to the fencing activity. Standard (4) applies to solid fill structures like groins and jetties, standard (5) applies to beach nourishment, and standard (6) refers to activities in Tidal Flats upon which nothing is being proposed. For Coastal Dune, standards (3), (5) and (6) apply to the coir log array activity. Standard (4) would not apply since it addresses accessory projects related to existing buildings. There are no performance standards for Land Subject to Coastal Storm Flowage. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards, directly following not italicized.

310 CMR 10.27 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.

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.

Installation of the sand drift fence will involve some excavation along the beach/dune boundary but the sand will be reused to cover the logs and beachgrass will be handplanted on top of the array to provide additional stabilization and improve sand collection. This construction process will not decrease the volume or change the form of the beach.

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

The site is mapped in the 2021 version and NHESP will be consulted on the project.

310 CMR 10.28 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:
  - (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.

Waves will have the ability to remove sand from the covered logs at any time. The coir installation will only temporarily disturb the existing vegetative cover, but not permanently destabilize the dune since replanting beachgrass in disturbed areas is proposed. While the logs are designed to stabilize the beach/dune boundary and protect the underground utilities and onsite structures, overwash and wind transport of sand will continue to occur and, thus, will not interfere with the landward or lateral movement of the dune. All sand altered by the log installation will remain in the dune or beach. There is no sand to be artificially removed.

- (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.

Subsections (b) and (c) specifically apply to this project. The buried or covered logs are designed to allow for overwash and windblown sand that will increase dune development. Excessively high tides and storms have eroded the seaward face of the dunes minimizing the ability for the dune to trap and hold sand. This project may be permitted, provided that they adhere to the provisions of 310 CMR 10.28(3), as discussed above.

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

The site is mapped in the 2021 version and NHESP will be consulted on the project.

Compliance with Truro Conservation Regulations (Section II, Chapters 1.0 - 7.0)

The following sections analyze the proposed project against the relevant performance standards for Land Subject to Coastal Storm Flowage (LSCSF). For LSCSF, standards in Chapter 2.05 (c) apply to the

proposed activity. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards, directly following not italicized.

Chapter 2.05 (c) Land Subject to Coastal Storm Flowage in the definition states LSCSF: the abbreviation for land subject to coastal storm flowage. Also described as "Land subject to flooding" and the "flood plain". LSCSF is a resource area without a buffer zone and correlates with the mapped flood plain defined by FEMA mapping... Flood zones are geographic areas that FEMA has defined according to levels of flood risk...VE is where the flood elevation includes wave heights equal to or greater than 3 feet...

**Presumption of Significance:** Where a proposed activity involves work within LSCSF, the Conservation Commission shall presume that such an area is significant to the interests and values of the Bylaw...

Any activity subject to jurisdiction and proposed on LSCSF shall not:

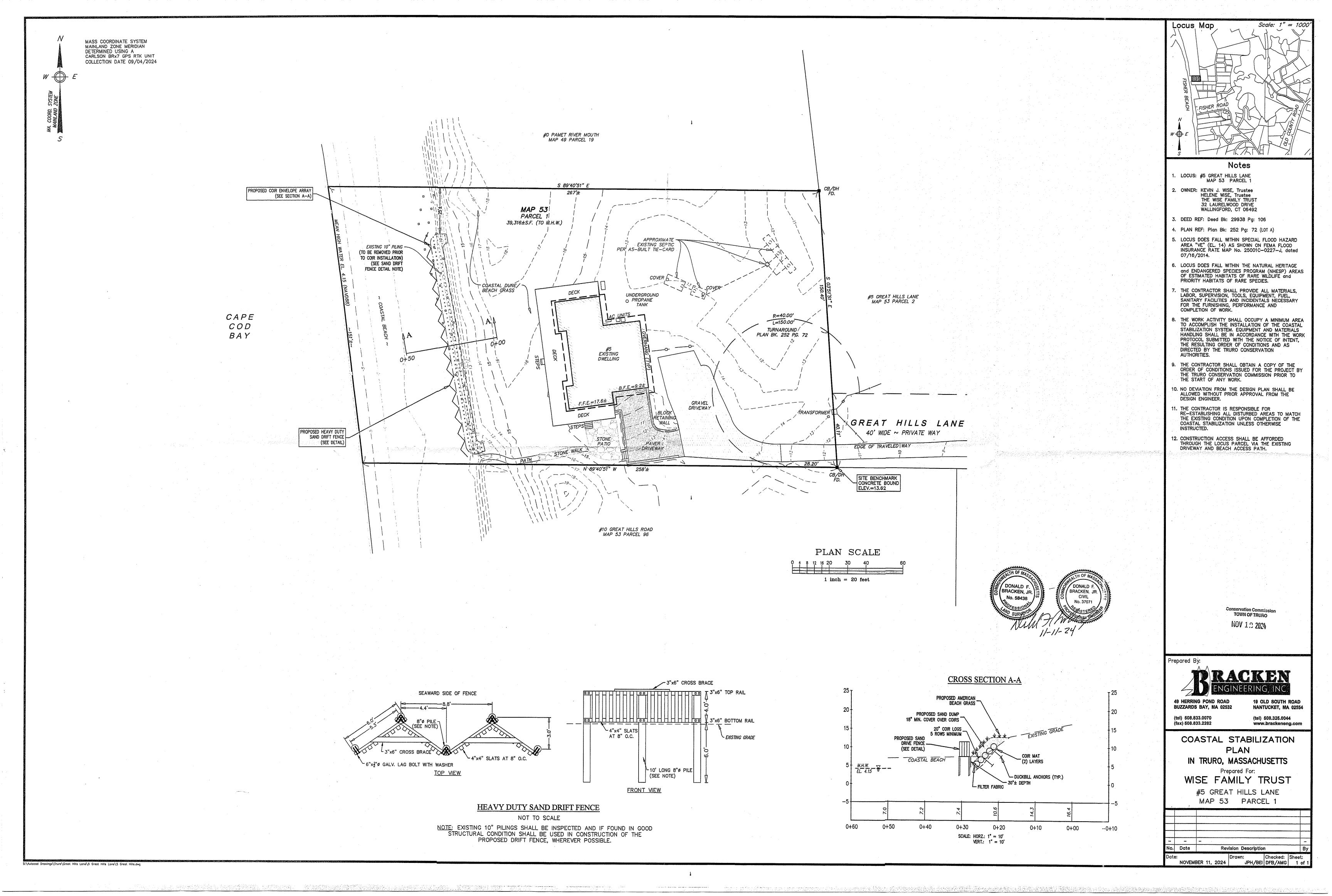
- i. Reduce the ability of the resource to absorb and contain flood waters;
- ii. Reduce the ability of the resource to buffer more inland areas from flooding and wave damage;
- iii. Displace or divert flood waters to other areas;
- iv. Cause or create the likelihood of damage by debris to other structures on land within the flood plain (collateral damage); built structures such as stairs or walkways shall be seasonally removable.
- v. Cause ground or surface pollution triggered by coastal storm flowage; and
- vi. Reduce the ability of the resource to serve as a wildlife habitat and migration corridor through activities such as, but not limited to the removal of vegetative cover and/or installation of fencing and other similar structures;
- vii. Any activity proposed in the floodplain may require mitigation to enhance or restore natural functions of the floodplain.

The buried and covered coir logs will allow flood waters to pass over them and, therefore will not reduce the ability of the Coastal Beach (beach) and Coastal Dune (dune) to absorb contain such waters. The beach and dune will continue to buffer more inland areas from flooding and wave damage because of the low height of the logs. The more sand that the dune can trap will actually increase the buffer capacity of the dune. The biodegradable logs will not act like a solid fill structure which may displace or divert flood waters to other areas. Flood waters in this Zone VE (el. 14) will continue to move landward. The proposed anchoring system with the coir log array will be durable and long lasting so that the likelihood for collateral damage is not caused or created by the project. No pollutants are proposed with the activity. No vegetative cover will be permanently removed since beachgrass will be planted to restore disturbed areas.

To comply with Section 7.05(11) of the By-Law regulations, the project will include dune nourishment consisting of clean, medium to coarse sand obtained from an inland source. For the initial construction, 100 cubic yards is estimated for placement over the coir log array. For the following years, the amount of nourishment provided will be a function of the cover amount removed during storms.

#### 5. Summary

The proposed shoreline protection project includes the installation of a sturdy sand drift fence and five rows of 20-inch diameter coir logs to provide protection to the existing structures on site. The intent of the project is to mitigate the chances of a future catastrophic failure of the existing structures from coastal erosion. Once installed, all disturbed areas will be restored and stabilized upon the completion of work. Stockpiling of materials will be located beyond as far landward as practically possible within an area void of vegetation. Access to the work area shall utilize the existing pervious driveway and existing pathway leading to the beach. Upon completion of work, the applicant shall submit a request for a Certificate of Compliance to the Truro Conservation Commission to close out the anticipated Order of Conditions.



# **Management Plan**

Bay Beach Townhomes Condominium Trust/Association 544 Shore Road, Truro, MA

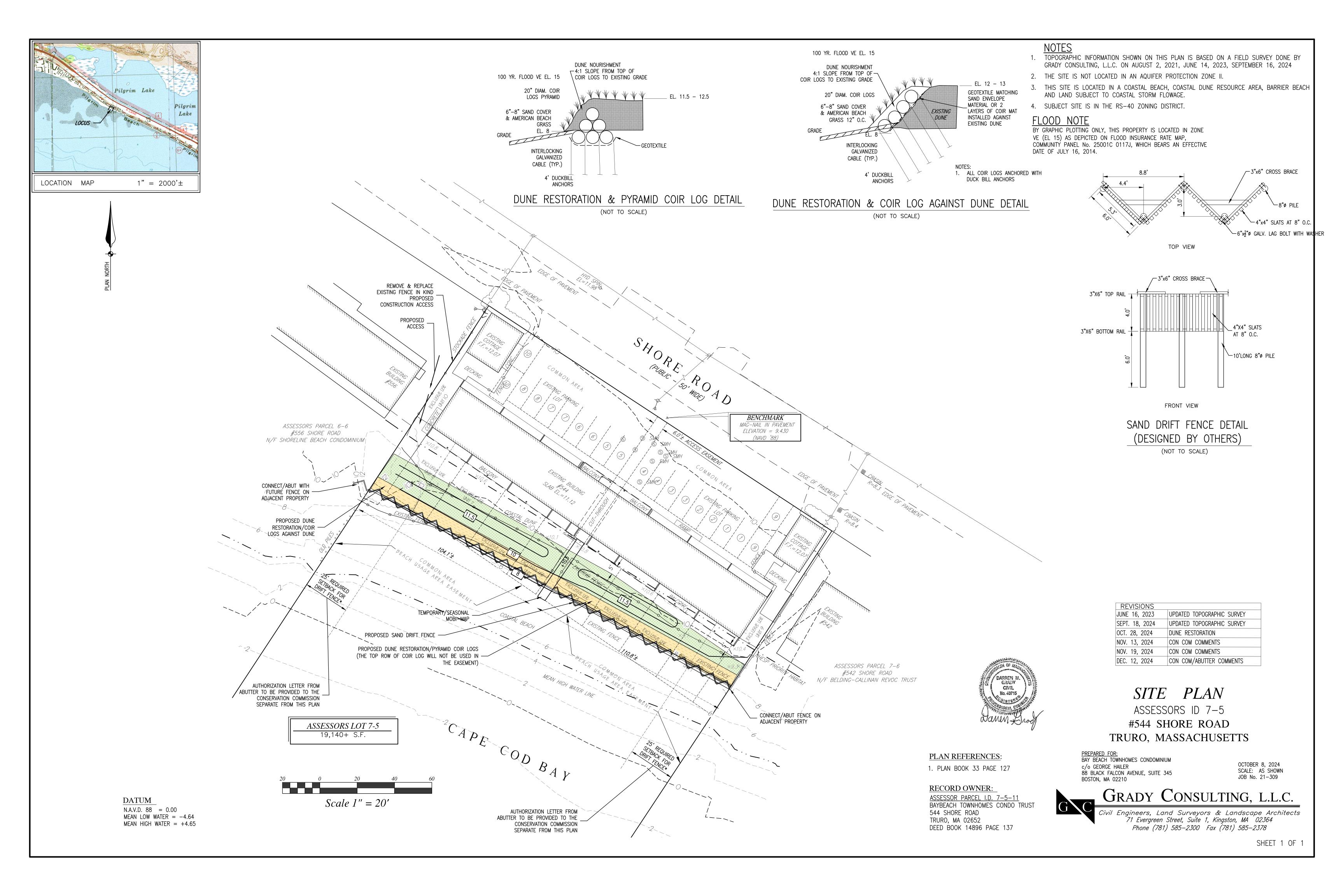
*Purpose*: The Management Plan is intended to provide long-term protection of Coastal Resource Areas (Coastal Dune and Coastal Beach on a Barrier Beach and within Land Subject to Coastal Storm Flowage) at the Bay Beach Townhomes Condominiums, 544 Shore Road in Truro, MA, associated with the proposed conditions depicted on the *Site Plan*, prepared by Grading Consulting, LLC, dated 12/12/24.

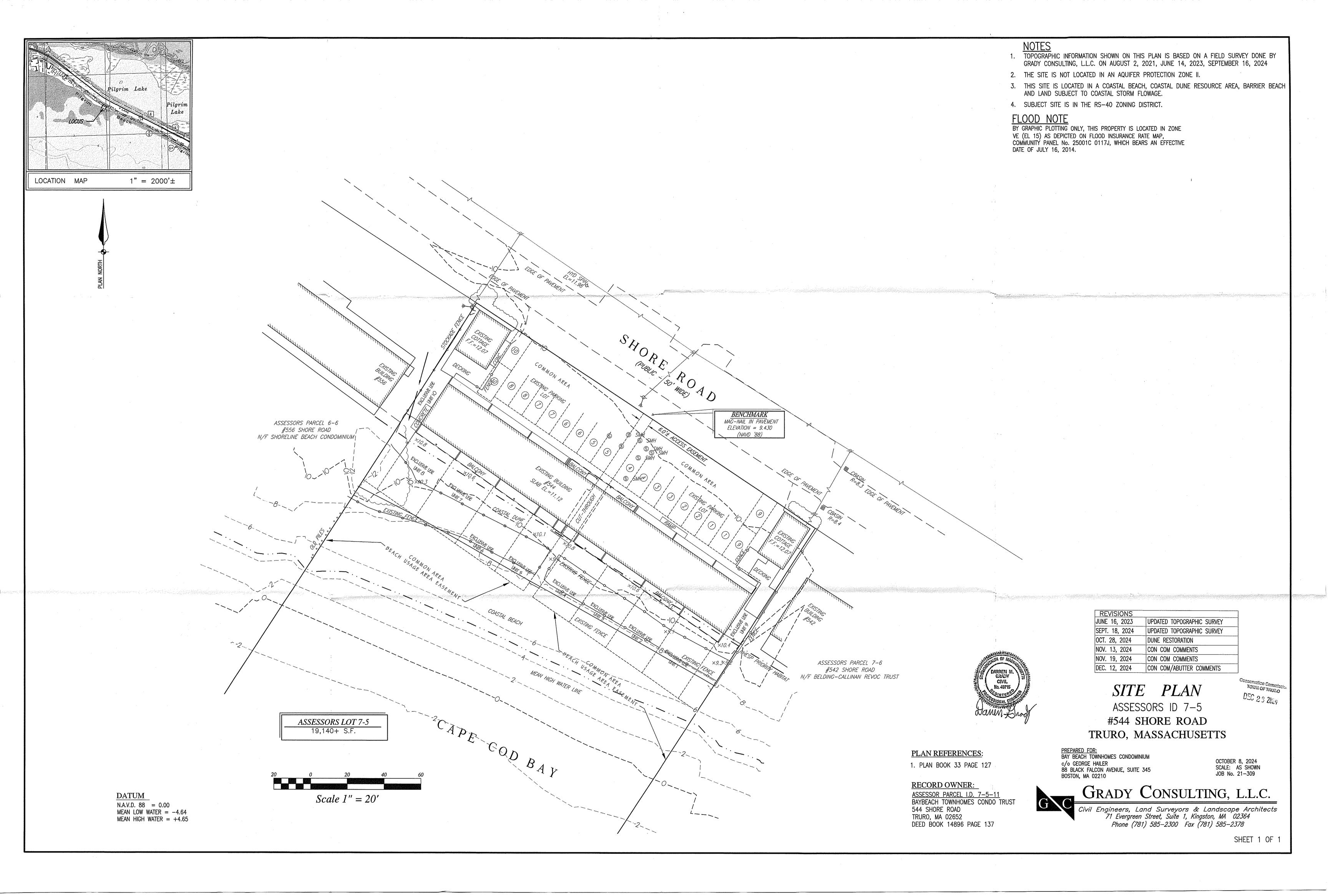
The following reviews management goals/objectives:

- The coir envelopes and logs shall be covered with 6" 8" of compatible sand cover. Approximately 170± cubic yards of initial sand nourishment have been estimated to provide cover over the coir logs.
- 2) The sand nourishment area and any unvegetated areas within the interior of the fencing, excluding the 6-foot-wide beach access easement, shall be planted with American beachgrass. Existing native vegetation outside of the coir logs shall remain undisturbed to the greatest extent feasible.
  - Beach grass shall be planted 6" on center with three to six culms per plant, 8" deep. Rooted beach grass may be planted between April 15 and Memorial Day. If such rooted grass is utilized, planting shall be 12" on center. Dormant or rooted beach grass may be planted between Columbus Day and April 15.
- 3) Following sand nourishment and American beachgrass planting, the landward snow fencing will be replaced in kind with 4x4 wood posts every 4-6 feet apart and angled cross-bars. The fencing shall remain undisturbed to facilitate the protection of the vegetated dune.
- 4) A Mobi-Mat (or Conservation-approved similar) shall be installed from the building "cut through" (breezeway) within the six-foot wide access easement, providing access to the beach. Should grades become problematic for access, the Mobi-mat will be replaced with wooden beach stairs, pending approval of the Conservation Commission.
- The six-foot wide access easement shall be exclusively utilized for beach access. All beach access shall be made through the breezeway. No walking between units shall be allowed. Rope fencing and signage shall be installed to protect the dune and prevent walking through the exclusive use areas to/from the beach. Barriers shall not be installed to allow for emergency egress only.
- 6) No furniture, umbrellas, decking/platforms, or storage of any materials shall be allowed on the dune.
- 7) All small water vessels such as canoes or kayaks shall be stored on the parking lot side of the building and accessed through the breezeway and six-foot wide access easement.
- 8) The Condo Trust/Association is responsible to replenish the sand cover and maintain the coir system and fencing. All nourishment and maintenance must avoid the shorebird nesting period (April 1-August 31), unless otherwise approved in writing by NHESP.

- 9) The Mobi-Mat (Conservation-approved similar seasonal walkway) shall be removed by the end of October and safely stored within existing developed portions of the site or off-site.
- 10) The Condo Trust/Association shall take reasonable steps to ensure the protection of the dune.
- 11) Management measures are intended to be adaptive to changing shoreline conditions.

  Modifications to the Management Plan shall require Conservation staff review and approval.





# Wes Chapman

Home: 42 Great Hollow Road, Truro, MA 02667 Mailing: PO Box 1860, Wellfleet, MA 02667

Email:	1	Phone:	

December 18, 2024
Town of Truro
Department of Health and Conservation
24 Town Hall Road
Truro, MA 02666

Conservation Commissior. TOWN OF TRURO

DEC 19 2024

Dear Department of Health and Conservation, We are in receipt of your letter dated November 22, 2024.

Your letter indicates "Conservation staff observed (previously noted: construction of a retaining wall and repairs to beach access steps) the violation on 11/12/2024 and no permit application has been filed for these alterations" and "the Conservation Commission must preview any work or activity with wetland resource areas subject to protection that may alter any land...regardless of whether a building permit is required."

You are charging us with a violation and yet have not provided any documentation or evidence. Please provide the name(s) of the conservation staff who made this observation along with supporting photographs and notes documenting the purported violation.

The work done was to maintain, not construct or alter. Maintenance is what homeowners do to take care of their property. The existing retaining wall and the existing stairs had deteriorated from weather over time. To keep the stairs safe, the existing deteriorating stairs and existing deteriorating retaining wall were replaced with new wood.

The beach area has been organized into an Association, named Sunset Acres Beach Association. The notice of election of trustees is recorded in BCRD Book 34022/Pages 346 and 347. The association has a legal easement over this part of our property and the trustees of the association are responsible for maintenance of this area.

Recently we experienced a very unfortunate situation that involves the Truro Conservation Commission and results in our lack of confidence in their concern,

judgment, and/or neutrality in overseeing conservation in Truro. Over the years, the department issued permits for heavy machinery to travel over our private beach. We were only aware of this as of spring of 2024 although it has been ongoing. This has, very likely, made a significant contribution to sand erosion. This permitting was done last winter by Emily Beebe as Director of Conservation. The excuse offered to us was that permitting was allowed for Greg Morris and other companies to "stage" at Corn Hill Beach and route heavy machinery (see attached photos) across our beach (and others) to replenish sand at Shearwater and other beaches north of Great Hollow. The companies were supposed to notify property owners of their desire to use the beach for transport. The companies never notified us and per Ms. Beebe, the town is "not responsible" for the companies lack of communication. Our belief is that anyone concerned with conservation would be extremely exercised at 40 ton loaded trucks traveling over a beach hour after hour for days. Please see the photos provided.

I hope this information is helpful as you pursue conservation concerns in Truro.

Sincerely,
Wes and Susan Chapman

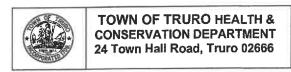
cc: Darin Tangeman, Truro Town Manager Ausan Manager











November 22, 2024

CERTIFIED MAIL: 7022 2410 0003 5233 2154 AND BY FIRST CLASS MAIL

AVP Realty Trust Wesley & Susan Chapman PO Box 1860 Wellfeet, MA 02667

RE: 42 Great Hollow Road, (Map 42, Parcel 309) - Notice of Violation

Dear Mr. & Mrs. Chapman:

This letter is sent to advise you that recent activity conducted on your property that included the construction of a retaining wall and repairs to beach access steps was done in violation of the Truro Conservation Bylaw and the Massachusetts Wetlands Protection Act regulations and you must immediately cease & desist.

Conservation staff observed the violation on 11/12/2024 and no permit application has been filed for these alterations.

This property is located in wetland resource areas identified as: <u>Coastal Dune, Coastal Beach, and Land Subject to Coastal Storm Flowage (aka FEMA Flood Zone).</u>

Under both State laws and our local Truro Bylaws and regulations, the Conservation Commission must preview any work or activity within wetland resource areas subject to protection that may alter any land in wetland resource areas regardless of whether a building permit is required.

We have scheduled an enforcement discussion with the Conservation Commission at their public meeting on January 6, 2025 at 5pm. These meetings are held in a hybrid format so you may attend either in person at Town Hall (24 Town Hall Rd) or by Zoom. The agenda with the link will be posted on the town website and will be emailed to you by January 2, 2025.

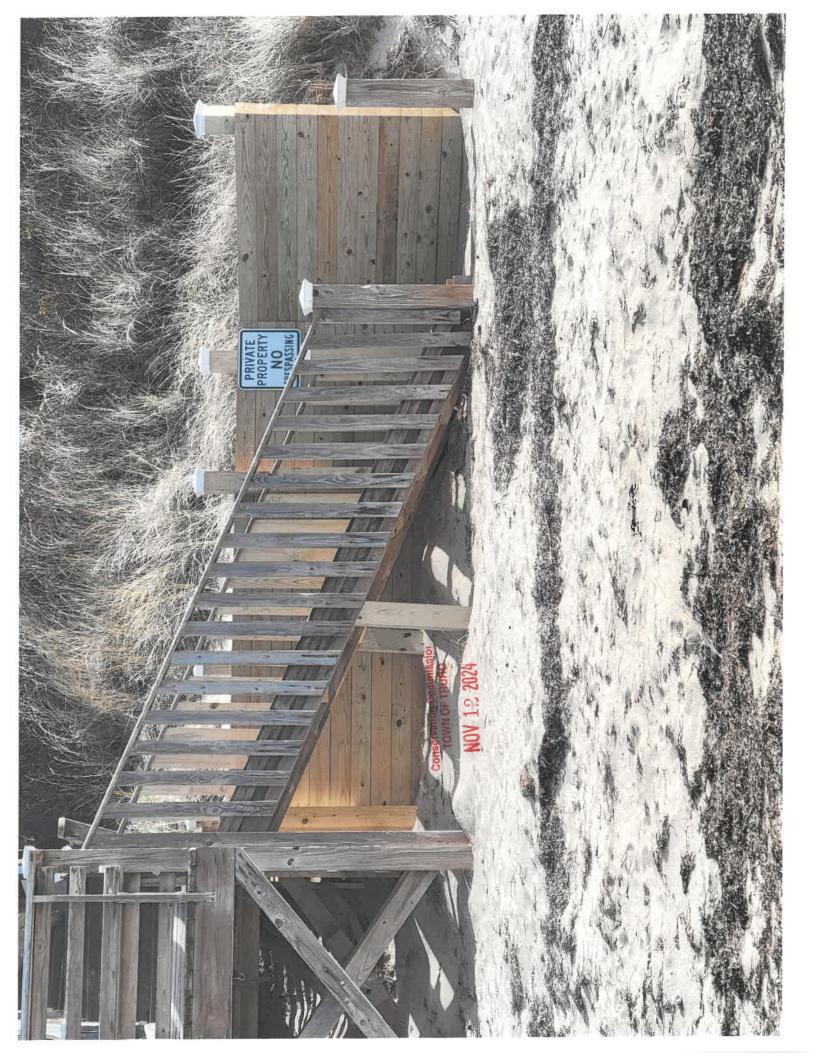
Please be advised that the actions available to the Commission to address the restoration of this unpermitted work may include issuance of an Enforcement Order, issuance of an Order to remove the work, and/or fines.

Please contact our office with any questions you may have at 774-383-3393 or email cwarren@truro-ma.gov.

Sincerely.

Courtney Warren
Assistant Conservation Agent

cc: Conservation Commission



Agent's Historical Photos from the file and NearMap Imaging









# SAFE HARBOR ENVIRONMENTAL MANAGEMENT



Date: December 17, 2024

From: Gordon Peabody, Safe Harbor Environmental Office: 95 Commercial St. Room 211, Wellfleet, MA, 02667

Mail: P.O. Box 880, Wellfleet, MA, 02667

HABITAT RESTORATION

Contact: Phone:508-237-3724; email <a href="mailto:gordonpeabody@gmail.com">gordonpeabody@gmail.com</a>

Re: Notice of Intent 48 Castle Road, Map 50 Parcel 3 - Limited Seawall Repairs

vegetation



The property owners would like to repair some cracks in their low, existing seawall. The activity area is in a Flood Zone; Riverfront Buffer Zone; Salt marsh Buffer Zone; Coastal Bank Buffer Zone.

An innovative, staple-cement repair system would minimize impact, using a small, moveable workstation, hung from the wall and slid along to each repair location. A small tarp on the workstation would prevent migration of indigenous debris into the resource area. Workstation access would be streetside of the existing wall, which is heavily grassed. Materials and mixing activity would use driveway. An extra course of block would be added to mitigate for SLR and more intense storms because the wall is only a few feet high. No Change in Footprint; no activity directly in the resource area. 1,500 stems of Spartina patens would be planted to restore bare marsh pedestrian areas as mitigation. These minimal repairs significantly reduce the impacts a remove & rebuild alternative would cause.





## NOTICE OF INTENT ENVIRONMENTAL MANAGEMENT PLAN 48 CASTLE ROAD

Date: December 17, 2024

To: Town of Truro Conservation Commission

Attn: Emily Beebe, Conservation Commission Agent

Cc: Arozana Davis, Courtney Warren

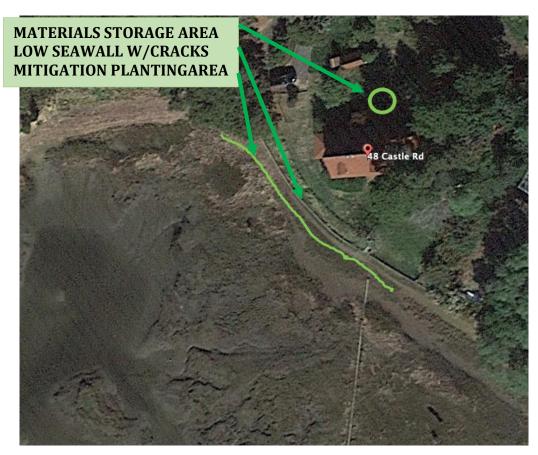
HABITAT RESTORATION

From: Gordon Peabody, Safe Harbor Environmental Office: 95 Commercial St. Room 211, Wellfleet, MA, 02667

Mail: P.O. Box 880, Wellfleet, MA, 02667

Contact: email gordonpeabody@gmail.com Phone: 508-237-3724

RE: 48 Castle Rd, Notice of Intent for limited, low elevation seawall repairs



<u>Synopsis</u>: The owners want to repair this low seawall, using innovative metal staples and cement. A hanging work platform has been designed to slide between repair areas without contacting the Marsh surface. 1,500 plantings of Spartina patens will be made to restore pedestrian impacted areas. A single course of block will be added to the wall to address SLR. There will be no change in footprint. No contact with Marsh surface.

# SITE IMAGES SHOWING WALL, ACCESS AREA AND HEIGHT



A SINGLE COURSE WOULD BE ADDED ON TOP OF EXISTING WALL



ACCESS WOULD BE FROM ABOVE WALL, ONTO HANGING WORK PLATFORM (SEE COVER FOR DETAIL OF PLATFORM)

JURISDICTION: This is a tidal river system. River width at high tide is approx. 1,300 ft and at low tide, approx. 100 ft. The activity area is in jurisdiction of MA DEP Wetlands Protection Act, Truro Wetlands Bylaw and MA Riverfront Act. Resource areas are Flood Zone; Riverfront Buffer Zone; Salt Marsh Buffer Zone; Coastal Bank Buffer Zone.

## RIVER FRONT REQUIRED ALTERNATIVE ANALYSES:

- I. No action: May experience more frequent flooding events with more intense storms and SLR. Continuation of cracking in wall, eventual failure and collapse of wall with land erosion and property damages. No planting of marsh grass.
- II. Demolish and rebuild: This is a sensitive area for excavation. The activity required to replace this seawall has impacts to resource area that cannot be effectively mitigated.
- III. Demolish and rebuild higher for SLR. This is a sensitive area for excavation. The activity required to replace this seawall has impacts to resource area that cannot be effectively mitigated.
- IV. Use innovative low impact metal/concrete staple repair system for cracks and use hanging platform to keep activity above Marsh. May experience more frequent property damages from flooding events with more intense storms and SLR. 1,500 stems of Spartina patens planted.
- V. Use innovative low impact metal/concrete staple repair system for cracks, using hanging platform to keep activity above Marsh. To mitigate SLR and more intense storms, add a single course of blocks on top of existing wall, working from grassed area above wall. 1,500 stems of Spartina patens planted.

<u>Preferred alternative</u>: # V. Management Plan meets Performance Standards for no impacts to resource area. Property gains future protection and additional sustainable protection from high volume Marsh grass planting.

### NARRATIVE AND ENVIRONMENTAL MANAGEMENT PLAN:

- **1. Goal:** To maintain Performance Standards using Mitigations and Strategies which effectively protect Public Interests.
- **2. Site Characteristics:** Heavily grassed yard, gently sloping to back of low, existing seawall. Marsh side of wall has Spartina patens and Glasswort (Salicornea). Pedestrian traffic has impacted vegetation.
- **3.** The DEP # shall be prominently posted at the road.
- **4.** Erosion control systems shall be installed along driveway work area shown on site plan per protocols in <u>"EROSION CONTROL GUIDELINES"</u> Safe Harbor, 2020, 7 pgs. Or per OOC.
- **5.** The OOC shall be recorded at the Registry of Deeds and proof of said recording shall be provided to all parties.
- **6.** Pre construction site meeting shall be scheduled by Safe Harbor and held, to address the order of conditions (OOC), limit of work (LOW), and any other issues.
- 7. No mechanized equipment shall be used, all work performed by hand.
- **8.** End of day visual inspections shall prevent unintentional migration on non-indigenous materials into the resource area.

- **9.** All Concrete work shall be managed per "<u>CONCRETE MANAGEMENT GUIDELINES"</u> Safe Harbor, 2020, 5 pages.
- **10.** Work on the seawall will begin and should be short term.
- **11.** Safe Harbor shall make regular inspections to maintain performance standards.
- 12. Revegetation work shall begin, by trained Safe Harbor workers, to plant high Marsh grass.
- **13.** Safe Harbor Planting Plan protocol has new plantings made from existing pedestrian path.
- **14.** Revegetation work shall be completed.
- **15.** No fertilizers, herbicides or pesticides will be used on this site.
- **16.** Within three years, following project completion, with stabilized, performing vegetation, Safe Harbor shall request Certificate of Compliance.

# TORQUE LOCK CONCRETE STAPLE REPAIR SYSTEM <a href="https://torque-lock.com/about-torque-lock/">https://torque-lock.com/about-torque-lock/</a>

In 2004, frustrated with traditional *crack repair* methods, including epoxy injection, re-bar, etc., **Torque Lock** founder and inventor **Darren Merlob** developed a revolutionary technique for repairing structural cracks – the **Torque Lock Staple**. Built stronger, made easier to use and guaranteed to deliver a controlled compression that stays – **Darren**'s **Staple** and its method of application earned a **Patent** and has since been used world wide. That's 7 Continents, hundreds of countries and in thousands upon thousands of applications. it is the only post-tension controlled compression device on the market for solid concrete repair and it's the proven solution to structural cracking!

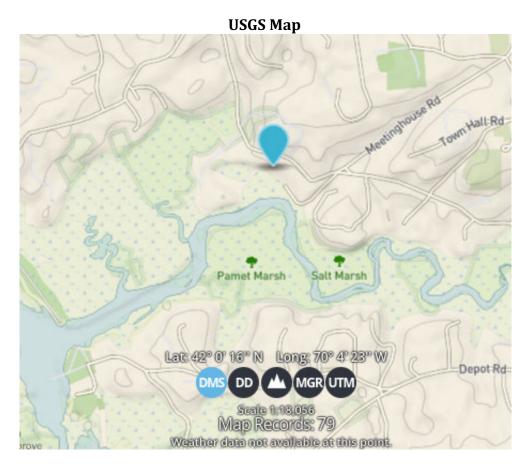
All **Torque Lock Staples** are made in-house. This is how we guarantee consistency and quality control for all of our products. Because the **Torque-Lock <sup>TM</sup> Staple** is used to repair and stabilize cracks in virtually any structure composed of cement, Gunite, concrete, poured block and more, we insist that production is kept in-house to ensure customers of only the highest quality of their build.

Torque Lock Staple and Repair applications include swimming pools, spas, fountains, concrete foundations, garages, and basement floors. To stabilize cracks properly and to stop their spreading, shifting, and widening: if it's concrete and it cracks, Torque Lock is the only solution that works.

Using its patented **Cam Lock™** technique, **Torque lock Staples** stabilize cracking by creating up to **5000 lbs** of compression torque for each staple installed. When applied in the recommended **stitching method**, also patented, the end result is durability, strength and support.

**Locus Map** 





# **Letter of Authorization**

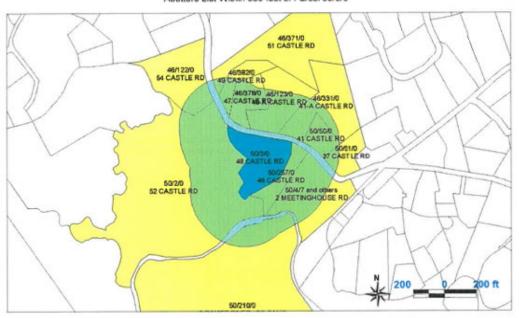
To: Truro Conservation Commission	
Town Hall, Truro, MA 02666	
Re: 48 Castle Rd, Truro, MAP . PARCEL	
To Whom It May Concern:	
. ANNE BRANDT	er(s) of the
abovementioned property, hereby authorize Safe Harbor	
Services to act as the Representative of Record before the Conservation Commission.	
ooiser varion commissions	
If you have any questions, please call me at	
Sincerely  ANNE M. BRANDT	
Sincerely authoraudt ANNE M. BRANDT	
Sincerely  ANNE M. BRANDT  c: Safe Harbor Environmental	
Sincerely authoraudt ANNE M. BRANDT	

# **Abutter List and Map**

48 Castle Road Map 50 Parcel 3 Conservation Commission

TOWN OF TRURO, MA BOARD OF ASSESSORS P.O. BOX 2012, TRURO MA 02666

#### Abutters List Within 300 feet of Parcel 50/3/0



Key	Parcel ID	Owner	Location	Mailing Street	Mailing City	ST	ZipCd/Country
2347	46-122-0-€	TRURO CONSERVATION TRUST TRS: BETSEY BROWN ET AL	54 CASTLE RD	PO BOX 327	NO TRURO	MA	02652-0027
2348	46-123-0-R	49 CASTLE ROAD REALTY TRUST TRS: LAMPARIELLO DAVID ET AL	49-A CASTLE RD	PO BOX 717	TRURO	MA	02666
2536	46-331-0-R	BARTLETT H SMITH 2017 LIV TRST & ELLEN A SMITH 2017 LIV TRST	41-A CASTLE RD	PO BOX 385	TRURO	MA	02666
5561	46-371-0-R	FREDIN RALPH 8 & MIRIAM R	51 CASTLE RD	25 CHANNEL CENTER UNIT 1102	BOSTON	MA	02210
5748	46-376-0-E	TRURO CONSERVATION TRUST TRS: BETSEY BROWN ET AL.	47 CASTLE RD	PO BOX 327	NO TRURO	MA	02652-0327
5904	46-382-0-R	FREIDIN MIRIAM R & RALPH B	49 CASTLE RD	25 CHANNEL CENTER UNIT 1102	BOSTON	MA	02210
2791	50-2-0-R	YOUNG JOHN CORSTORPHINE ET AL	52 CASTLE RD	17 OAKDALE ST	JAMAICA PLAIN	MA	02130-2276
2792	50-3-O-R	MYERS TRURO LLC MGR: ANNE MYERS BRANDT	48 CASTLE RD	22 FRANCIS AVE	CAMBRIDGE	MA	02138
6701	50-4-1-R	SOVEK MARGARET G K	2 MEETINGHOUSE RD	PO BOX 638	TRURO	MA	02666-0638
6702	50-4-2-R	WIENEYER CHARLES & MALONE MAURINE	2 MEETINGHOUSE RD	558 COLES MEADOW RD	NORTHAMPTON	MA	01060
6703	50-4-3-R	HOOVEN DENNETT FAM TRST 2022 TRS: CH DENNETT & MB HOOVEN	2 MEETINGHOUSE RD	2421 MCKINLEY AVE	BERKLEY	GA	94703
6704	50-4-4-R	BOUSKA DAVID E & ALICIA G.W.	2 MEETINGHOUSE RD	2614 SPRINGWOOD DR	GREENSBORO	NC	27403-2032
6705	50-4-5-R	LODI-GRUBER FAMILY TRUST LODI R JR & GRUBER E TRS	2 MEETINGHOUSE RD	15 DUNCKLEE ST	NEWTON	MA	02461
6706	50-4-6-R	RICH HENRY MOYNAHAN & RICH BECKWAN	2 MEETINGHOUSE RD	PO BOX 490	ACCORD	NY	12404
6707	50-4-7-R	DELACOUR EDMUND P 8. LUSTGARTEN NANCY	2 MEETINGHOUSE RD	16 WARD AVE	NORTHAMPTON	MA	01060-2621

# 46 11/20/24

11/20/2024 Page 1

Key	Parcel ID	Owner	Location	Mailing Street	Mailing City	ST	ZipCd/Country
6708	50-4-8-R	SOVEK MARGARET G K	2 MEETINGHOUSE RD	PO BOX 638	TRURO	MA	02666
6709	50-4-9-R	SOVEK MARGARET G K	2 MEETINGHOUSE RD	PO BOX 638	TRURO	MA	02666-0638
6967	50-4-10-E	SLADEVILLE COTTAGES CONDO TR	2 MEETINGHOUSE RD	2 MEETINGHOUSE RD	TRURO	MA	02666
2835	50-50-0-R	LITVIN RICHARD D & KAPLANSKY LUCILLE M	41 CASTLE RD	60 EAST 8TH ST, UNIT 14K	NEW YORK	NY	10003
2836	50-51-0-R	SNOW FAMILY TRURO TRUST TRS: SNOW GREGG A & DEBORAH M	37 CASTLE RD	PO BOX 1022	TRURO	MA	02666
2979	50-210-0-E	TOWN OF TRURO	0 PAMET RIVER -SO BANK	PO BOX 2030	TRURO	MA	02666-2030
3021	50-257-0-R	DONIGER ANTHONY M & LUNT ELIZABETH	46 CASTLE RD	222 MARLBOROUGH ST APT 61	BOSTON	MA	02116

# Abutter Letter NOTIFICATION TO ABUTTERS

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<sup>\*\*</sup>You may contact the Truro Conservation Commission or the Massachusetts Department of Environmental Protection, Wetlands Division about this application or the Wetlands Protection Act. Truro Conservation Commission: (508) 340-7004 x 131or DEP So.east region: (508) 946-2800.

#### Affidavit of Service



December 17, 2024

AFFIDAVIT OF SERVICE

**Under the Massachusetts Wetlands Protection Act:** 

I, Jaimie Binder, hereby certify under the pains and penalties of perjury that on December 17, 2024, I gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, in connection with the following matter:

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act by Anne Brandt, Myers Truro LLC, with the Truro Conservation Commission on December 17, 2024, for property located at 48 Castle Road, Truro, MA 02666, Map 50, Parcel 30. The property owners would like to repair cracks in their low, existing seawall. Marsh grass would be planted to restore bare marsh pedestrian areas as mitigation. This project will be controlled with an Environmental Management Plan. Compliance Monitoring will be photo documented by Safe Harbor. This work falls within an Area Subject to Protection under the Wetlands Protection Act (M.G.L. c. 131, s. 40).

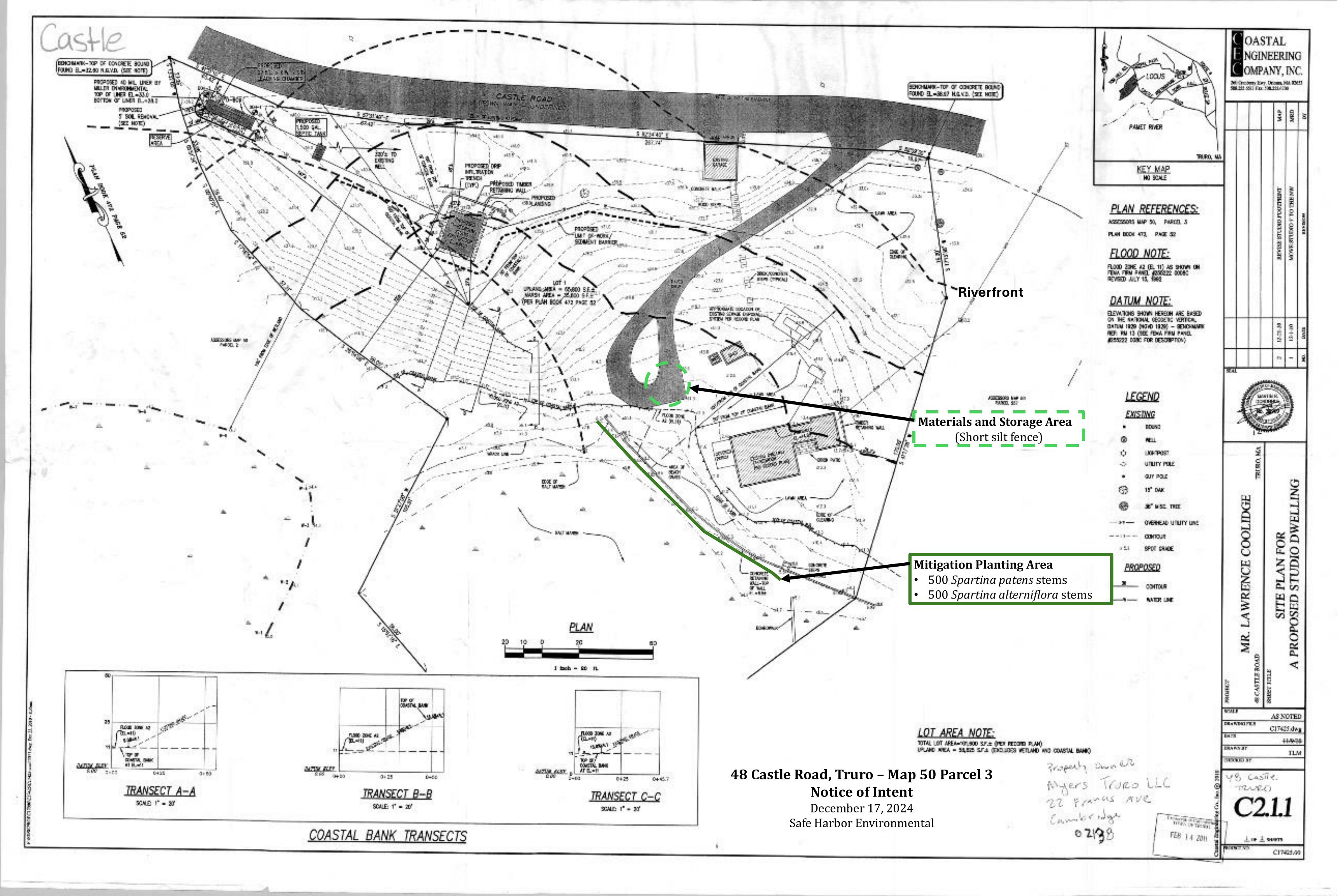
The form of the notification and a list of the abutters to whom it was given and their addresses are attached to this Affidavit of Service.

Jaimie Binder

Permitting Coordinator, Safe Harbor Environmental Services 95 Commercial Street, Room 211

Wellfleet, MA 02667 508-237-3724

jaimiesafeharbor@gmail.com



#### PROJECT NARRATIVE

#### 1. Introduction

This Notice of Intent (NOI) application has been submitted to permit the proposed shoreline stabilization project located at 33 Knowles Heights Road in Truro (the site). The Town of Truro Assessors Department references the site as Parcel #35-9. The proposed project includes the installation of a sand drift fence (also called a "serpentine fence") with a coir log array located along the landward side of the proposed fence at the boundary of a Coastal Beach and Coastal Bank and within Land Subject to Coastal Storm Flowage. This application is being submitted in accordance with the Massachusetts Wetlands Protection Act and the Town of Truro Wetlands Protection Bylaw.

#### 2. Site Description

The site is located to the west of Knowles Heights Road backing on Cape Cod Bay. There are developed properties located immediately to the north, south and east of this property. The site consists of one single-family dwelling, a shell driveway, a deck, a stairway to the beach and natural vegetation surrounding the dwelling. The dwelling is less than 15 feet landward of the Top of Coastal Bank due to recent erosion at the top. The long-term rate of erosion along this stretch of shoreline has been less than 0.3 ft./yr., but the short-term rate has more than doubled to be as much as 0.8 ft./yr. Environmental Consulting & Restoration, LLC (ECR) reviewed available environmental databases and can confirm that the site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- Coastal Beach:
- Coastal Bank;
- 100-Foot Buffer Zone to Coastal Bank; and,
- Land Subject to Coastal Storm Flowage (FEMA flood zone VE el. 14).

#### Notes:

- The site is not located within an area mapped as Priority Habitat & Estimated Habitat for Rare Species according to the Massachusetts Natural Heritage & Endangered Species Program (MaNHESP).
- 2. The site does not contain or is near a Certified Vernal Pool according to the MaNHESP.
- 3. The site is not located within an Area of Critical Environmental Concern (ACEC).
- 4. The site is not located near a USGS mapped stream.

## 3. Proposed Activities

The purpose of this application is to authorize the installation of a sturdy sand drift fence and coir log array to protect the existing structure onsite. The site has also suffered significant erosion at the bottom and top of the bank. The intent of the proposed coir log array is to provide protection to the existing structure onsite and mitigate the chances of a catastrophic loss in the future. The combination of a sand drift fence, coir log array, nourishment (at the top and bottom) and plantings is an effort to stabilize the Coastal Bank with biodegradable materials along with maintenance provisions. Construction access will be located at Stotts Crossing in Beach Point. The proposed project will involve the following activities:

• Installation of Coir Logs – The proposed coir log array includes a five-tier on-slope configuration of 20-inch diameter coir logs that will span across the site (north to south) approximately 80 linear feet. A combination of mechanical excavation utilizing a small excavator and hand digging will occur to trench in two rows below grade. The three rows above grade will be placed and backfilled with the excavated sand. The coir logs will be secured in place using interlocking galvanized cables with 4-foot duckbill anchors. The logs will then be covered with 18 inches of clean, compatible sand and planted with American Beachgrass. The bare root beachgrass shall be hand planted from the toe of the array up to the top and spaced 18-inches on center with two culms per hole. For more information, please refer to the Proposed Conditions Plan.

- Installation of the Sturdy Sand Drift Fence Drift fencing shall be installed in accordance with the Truro Conservation Regulations, specifically Section 7.05. Drift fencing shall consist of ten-foot timber posts dug six feet into the sand at grade at the time of installation, connected by 6-foot spans of fencing comprising 4x4 spans and slats. Space between slats is a minimum of 4" to achieve 50% openings. Fence posts are installed alternating 2' on either side of a center line so that a "zig-zag" or serpentine structure results. The fencing will be left open at the two stairway access points to allow for beach access following the stabilization activities. Following the requirements of the special conditions outlined in the Truro wetland regulations the wood shall not include any CCA treated lumber.
- Stabilization Activities Any areas of disturbed vegetation will be restored with bare root American Beachgrass plantings, spaced 12-inches on center with two culms per hole. Additional beachgrass could be interplanted on the landward side of the fence and array to fill in unvegetated areas as necessary.
- Maintenance Activities Cover sand on exposed sections of the coir log array will be replaced annually (6-8" depth minimum) after the storm season and replanted with beachgrass prior to April 15th.

#### 4. Regulatory Compliance

## Compliance with Massachusetts Wetlands Protection Regulations (310 CMR 10.00)

The following sections analyze the proposed project against the relevant performance standards for Coastal Beach and Coastal Beach. For Coastal Beach, Standard (3) applies to the fencing activity. The following Standards do not apply: Standard (4) applies to solid fill structures like groins and jetties, standard (5) applies to beach nourishment, and standard (6) refers to activities in Tidal Flats upon which nothing is being proposed. And Standard (7) does not apply since there are no rare and endangered species habitats mapped by NHESP.

For Coastal Bank, standards (4) and (6) apply to the coir log array activity. Standard (5) does not apply since it addresses new, post 1978 buildings. Standard (7) does not apply since it addresses coastal engineering structures. And Standard (8) does not apply since there are no rare and endangered species habitats mapped by NHESP. There are no performance standards for Land Subject to Coastal Storm Flowage. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards, directly following not italicized.

### 310 CMR 10.27 Coastal Beach

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.

Installation of the sand drift fence will involve some excavation along the beach/bank boundary but the sand will be reused to cover the logs and beachgrass will be handplanted on top of the array to provide additional stabilization and improve sand collection. This construction process will not decrease the volume or change the form of the beach.

#### 310 CMR 10.30 Coastal Banks

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:

(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.

The cover material used to protect the coir logs will also serve as a sediment supply for the beach. In the spring, after winter storm season, additional sand will be applied to those eroded areas and exposed logs to a depth of 18 inches. The ongoing annual maintenance of the cover material will avoid the potential adverse effects due to wave action on the movement of sediment from the coastal bank to coastal beaches.

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:

(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.

The proposed project will improve the stability of the bank by reducing the undercutting of storm waves that lead to gravitational slides and bank failure above.

#### Compliance with Truro Conservation Regulations (Section II, Chapters 1.0 – 7.0)

The following sections analyze the proposed project against the relevant performance standards for Land Subject to Coastal Storm Flowage (LSCSF). For LSCSF, standards in Chapter 2.05 (c) apply to the proposed activity. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards, directly following not italicized.

Chapter 2.05 (c) Land Subject to Coastal Storm Flowage in the definition states LSCSF: the abbreviation for land subject to coastal storm flowage. Also described as "Land subject to flooding" and the "flood plain". LSCSF is a resource area without a buffer zone and correlates with the mapped flood plain defined by FEMA mapping... Flood zones are geographic areas that FEMA has defined according to levels of flood risk...VE is where the flood elevation includes wave heights equal to or greater than 3 feet...

**Presumption of Significance:** Where a proposed activity involves work within LSCSF, the Conservation Commission shall presume that such an area is significant to the interests and values of the Bylaw...

Any activity subject to jurisdiction and proposed on LSCSF shall not:

- i. Reduce the ability of the resource to absorb and contain flood waters;
- ii. Reduce the ability of the resource to buffer more inland areas from flooding and wave damage:
- iii. Displace or divert flood waters to other areas;
- iv. Cause or create the likelihood of damage by debris to other structures on land within the flood plain (collateral damage); built structures such as stairs or walkways shall be seasonally removable;
- v. Cause ground or surface pollution triggered by coastal storm flowage; and
- vi. Reduce the ability of the resource to serve as a wildlife habitat and migration corridor through activities such as, but not limited to the removal of vegetative cover and/or installation of fencing and other similar structures;
- vii. Any activity proposed in the floodplain may require mitigation to enhance or restore natural functions of the floodplain.

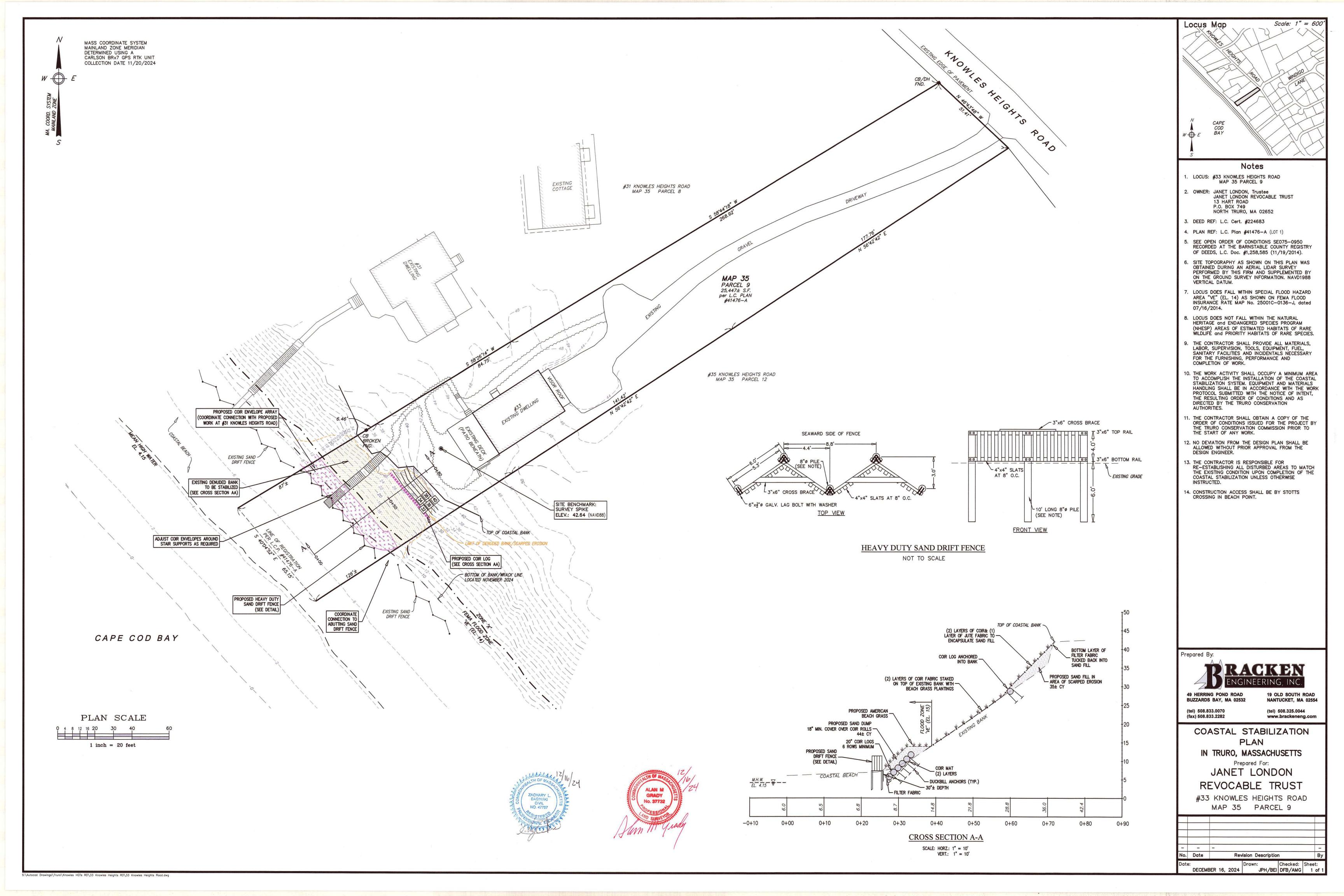
The buried and covered coir logs will allow flood waters to pass over them and, therefore will not reduce the ability of the Coastal Beach (beach) and Coastal Bank (bank) to absorb contain such waters. The beach and bank will continue to buffer more inland areas from flooding and wave damage because of the low height of the logs. The biodegradable logs will not act like a solid fill structure which may displace or divert flood waters to other areas. Flood waters in this Zone VE (el. 14) will continue to move landward. The proposed anchoring system with the coir log array will be durable and long lasting so that the likelihood for collateral

damage is not caused or created by the project. No pollutants are proposed with the activity. No vegetative cover will be permanently removed since beachgrass will be planted to restore disturbed areas.

To comply with Section 7.05(11) of the By-Law regulations, the project will include nourishment consisting of clean, medium to coarse sand obtained from an inland source. For the initial construction, 200 cubic yards is estimated for placement over the coir log array. For the following years, the amount of nourishment provided will be a function of the cover amount removed during storms.

#### 5. Summary

The proposed shoreline protection project includes the installation of a sturdy sand drift fence and five rows of 20-inch diameter coir logs to provide protection to the existing structures on site. The intent of the project is to mitigate the chances of a future catastrophic failure of the existing structure from coastal erosion. Once installed, all disturbed areas will be restored and stabilized upon the completion of work. Stockpiling of materials will be located beyond as far landward as practically possible within an area void of vegetation. Construction access will be located at Stotts Crossing in Beach Point Upon completion of work, the applicant shall submit a request for a Certificate of Compliance to the Truro Conservation Commission to close out the anticipated Order of Conditions.



#### PROJECT NARRATIVE

#### 1. Introduction

This Notice of Intent (NOI) application has been submitted to permit the proposal to elevate the existing condominium located at 522 Shore Road, Unit #1 in Truro (the site). The Town of Truro Assessors Department references the site as Parcel ID: 7-8-1. The proposed project is located within a Barrier Beach/Coastal Dune and within Land Subject to Coastal Storm Flowage (FEMA Flood Zones VE el. 15 and AE el. 13). Prior to the start of work, erosion controls will be installed to protect wetland resource areas. This application is being submitted in accordance with the Massachusetts Wetlands Protection Act and the Town of Truro Wetlands Protection Bylaw.

#### 2. Site Description

The site is located to the south of Shore Road and consists of a condominium unit with an associated pervious driveway, at-grade wooden deck and front porch. The dwelling is located behind or landward of Unit #2 and approximately 65' from an existing timber bulkhead. The existing dwelling has a first floor (el. 9.77') with solid wood/plaster walls and occupies approximately 590 s.f. on an unvegetated Coastal Dune within the AE Zone el. 13 (see Photos and Existing Site Plan). The existing at-grade deck was approved by the Commission as an Administrative Review, recorded in the Minutes dated September 8, 2014. As a result of the review of available environmental databases, ECR is able to confirm that the site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- Land Subject to Coastal Storm Flowage
- Coastal Dune on a Barrier Beach
- 100-Foot Buffer Zone to a Coastal Beach

#### Notes:

- 1. The site <u>is not located</u> within an area mapped as Priority Habitat & Estimated Habitat for Rare Species according to the Massachusetts Natural Heritage & Endangered Species Program (MaNHESP).
- 2. The site does not contain or is near a Certified Vernal Pool according to the MaNHESP.
- 3. The site is not located within an Area of Critical Environmental Concern (ACEC).
- 4. The site is not located in an area of Chapter 91 jurisdiction.

## 3. Proposed Activities

The purpose of this application is to authorize the elevating of the existing condominium, Unit #1, to comply with the flood Zone AE el. 13 requirements (see Structural Alterations Plan and Architectural Plans). The proposed project will involve the following activities:

- Installation of Erosion Controls Prior to the start of work, an erosion control line will be installed along
  the proposed limit of work to protect the downgradient coastal resource areas.
- Raising of the Existing Condominium Raising of the existing condominium is proposed to have an elevation of 14' NAVD for the lowest horizontal structural floor member, or 1 foot above the 13' elevation that is mapped in this area. While located in the AE Zone, an open pile foundation is proposed which exceeds FEMA requirements. The proposed foundation is a concrete pile structure supported by below grade poured concrete walls placed perpendicular to the beach. Sixteen concrete piers extend up from the grade beams to support the superstructure. An Alternatives Analysis, dated November 19, 2024, was prepared by Tighe & Bond and is attached to this NOI. The foundation strategy is appropriate for tight construction sites where a new foundation needs to be constructed beneath an existing structure and machinery is limited. Driven wooden piles are not an appropriate foundation type for this project site as they require a high vertical clearance and large machinery. There isn't room on the site to temporarily relocate the structure to install new timber piles.

 Property Stabilization & Restoration – Following the completion of the building work, all disturbed areas shall be restored and stabilized to their pre-existing condition. In the event of any disturbance to vegetation within the Barrier Beach/Coastal Dune, the disturbed areas shall be restored with American Beachgrass. Dormant beachgrass culms shall be planted with 2 culms per hole, spaced 12 – 18 inches on center, to stabilize and restore any areas of disturbance.

#### 4. Compliance with Wetland Protection Regulations

The proposed project is located within a Coastal Dune and Land Subject to Coastal Storm Flowage. No work is proposed on the Coastal Beach. The activities are subject to the *Massachusetts Wetlands Protection Act*, the associated *Wetland Regulations (310 CMR 10.00)*, the *Truro Conservation Bylaw*, and the associated *Truro Conservation Regulations*. Specifically, the proposed project is subject to the state performance standards under 310 CMR 10.28(3) and (5) for Coastal Dune and to the Bylaw Regulations under Section II, Chapter 2.00, Subsection 2.05 for Land Subject to Coastal Storm Flowage. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards directly below.

#### 310 CMR 10.28 Coastal Dunes

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.

The proposed concrete pile and subsurface walls will allow for sand removal as well as sand deposition by waves. There is no vegetative cover to disturb. Construction will not modify the dune form and the piles will decrease, not increase, the potential for storm or flood damage in the future. The piles and walls will not interfere with the landward or lateral movement of the dune. No removal of sand is proposed.

- (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.

Planting of beachgrass 12-18" oc is being proposed within the unshaded areas around and, to a limited extent, beneath the elevated dwelling if successful growth can occur.

#### 2.05: Land Subject to Coastal Storm Flowage

Any activity subject to jurisdiction, and proposed on LSCSF shall not:

- i. Reduce the ability of the resource to absorb and contain flood waters;
- ii. Reduce the ability of the resource to buffer more inland areas from flooding and wave damage;
- iii. Displace or divert flood waters to other areas;
- iv. Cause or create the likelihood of damage by debris to other structures on land within the flood plain (collateral damage); built structures such as stairs or walkways shall be seasonally removable,
- v. Cause ground or surface pollution triggered by coastal storm flowage; and vi. Reduce the ability of the resource to serve as a wildlife habitat and migration corridor through activities such as, but not limited to the removal of vegetative cover and/or installation of fencing and other similar structures.
- vii. Any activity proposed in the floodplain may require mitigation to enhance or restore natural functions of the floodplain.

By elevating the dwelling, the ability of the resource to absorb and contain flood waters, as well as the ability of the resource to buffer more inland areas from flooding and wave damage will be increased, not reduced. The open pile foundation will not displace or divert flood waters to other areas and no collateral damage is expected due to the structural connections of the dwelling to the piles and all stairs to the dwelling. Finally, no ground or surface pollution, or wildlife habitat impacts will occur with this floodplain compliance project.

#### 5. Summary

The purpose of this application is to authorize the elevating of the existing condominium Unit #1 in order to comply with the flood Zone VE el. 13 requirements. An open-pile foundation with subsurface walls design will allow the passage of flood waters and the lateral movement of the nourished dune. Erosion and sediment control measures will be implemented and maintained throughout the duration of the construction process to prevent the conveyance of sedimentation into environmentally sensitive areas. Disturbed areas will be stabilized upon the completion of work and, in the event that intense rainfall is expected, reinforcing control measures will be installed as needed to protect all wetland resource areas. Stockpiling of soils, if any, and materials shall be located on the property and surrounded by the erosion controls, as necessary. Erosion control measures shall remain in place and be maintained until such time that a Certificate of Compliance has been issued by the Truro Conservation Commission, stating that the project has been constructed in accordance with the conditions set forth in the Order of Conditions.



2750890189 November 19, 2024

Warren Agin 1 Devonshire Place Apt 2913 Boston, MA

Re: **522 Shore Road, Unit 1, Truro, Massachusetts Alternatives Analysis** 

Dear Mr. Agin:

Pursuant to your request, please see the summary of alternatives considered for your project. This letter is intended to be included within a Notice of Intent application with the Truro Conservation Commission.

# **Project Understanding**

The existing property at 522 Shore Road, Truro is a waterfront condominium association called Sutton Place. The parcel includes approximately fourteen residential structures on the south side of route 6A along Pilgrim Beach in Truro, Massachusetts. This project only includes Unit 1, a two-story single-family wood-framed gable structure at the eastern side of the property.

The project site is within a flood zone. The project consists of elevating the existing dwelling to be compliant with the current flood code design criteria.

# **Alternatives Analysis**

## 1.1 Recommended Solution: Concrete Pier Foundation

A concrete pier foundation generally consists of an open foundation with vertical concrete piers extending above grade from buried concrete footings. Perpendicular to the beach, low foundation walls would be installed just below the existing beach grade to brace the piles in the direction of anticipated prevailing winds and flooding. The work would generally be performed within the footprint of the existing structure, plus a 2-3 feet over-dig around the perimeter to achieve footing depths necessary to resist scour and erosion. The building is and will remain sited within a FEMA AE 13 flood zone, and this proposed foundation type meets and exceeds foundation requirements for the flood zone. The open pier foundation with perpendicular to beach foundation walls will limit: (a) adverse impacts to the Coastal Dune and Barrier Beach's ability to remove sand, (b) disturbance of vegetation caused by work outside of the current footprint, (c) modification to the dune, and (d) interference with landward or lateral movement of the dune. This would be a major improvement to the existing structure's foundation which is a solid perimeter foundation wall. Due to limiting site constraints, environmental impact, and building code requirements, **this is the preferred alternative**.



# 1.2 Alternative 1: Concrete Pier Foundation with Helical Piles

Similar to the concrete pier foundation option, this alternative consists of vertical concrete piers extending from below grade concrete footings with perpendicular to beach foundation walls just below the existing beach grade. In addition, helical piles which consist of 2-3" diameter steel shafts driven to a depth below grade would be installed and embedded within the concrete footings below grade. The helicals would resist effects of scour and allow for the concrete footings to be raised, reducing the over-dig of the recommended solution. However, this would reduce the benefit of having deeper footings to prevent adverse affects to the Coastal Dune's movement, while reducing over-dig will have minimal environmental benefit because most of the over-dig will occur in locations currently covered by shell or walkway and can be easily remediated. **This is not the preferred alternative.** 

## 1.3 Alternative 2: Timber Piles

A timber pile foundation would consist of driving 10" to 12" diameter pressure treated timber piles to a depth commensurate to the loads being applied and possible scour depth, or approximately 15 feet. The piles would be spaced in a grid to limit adverse impacts on the Coastal Dune and Barrier Beach's ability to remove sand, modify the dune, or interfere with landward or lateral movement of the dune. To install timber piles, the existing structure would need to be temporarily relocated to perform pile driving operations. Due to lot line and exclusive use area constraints, it is not reasonably feasible to relocate the structure. Additionally, if able, the structure would need to be relocated within an existing vegetated area and supported on cribbing, temporarily adversely impacting the vegetation and performance of the Coastal Dune and Barrier Beach. **This is not the preferred alternative.** 

# **Summary**

In conclusion, we recommend proceeding with Alternative 1: Concrete Pier Foundation. Please let us know if you have any questions regarding this analysis.

Sincerely,

TIGHE & BOND, INC.

Nicholas (Cole) Bateman, PE

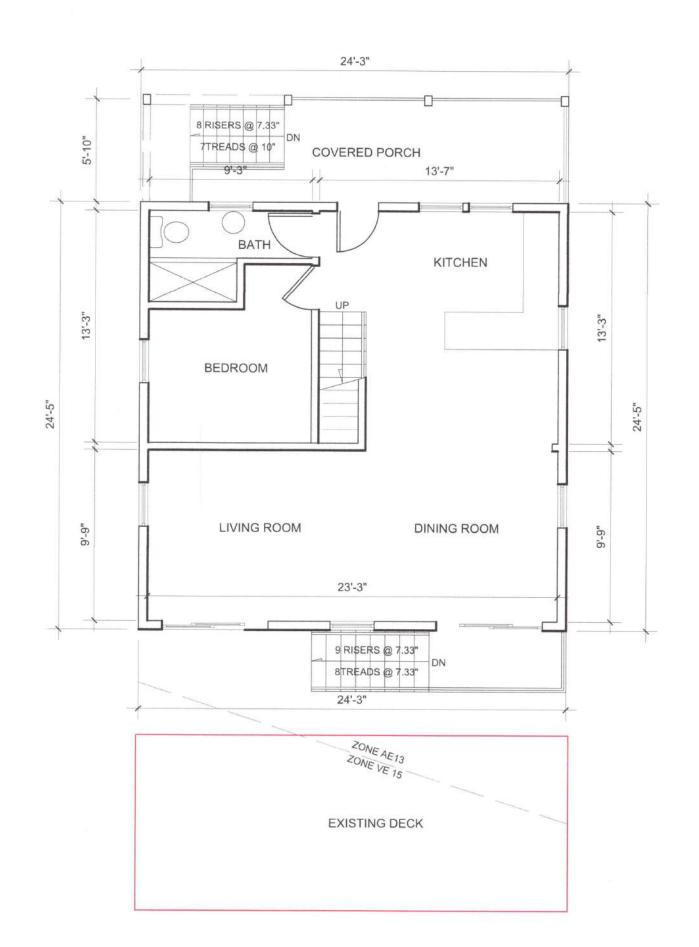
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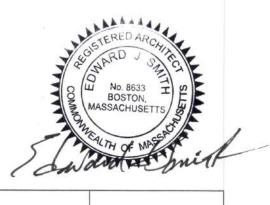
Project Manager

Email: nbateman@tighebond.com

Phone: 508.255.6511

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TED SMITH

Architect, LLC TEDSMITHARCHITECT@GMAIL.COM

12 Dartmouth Place . Boston . Massachusetts . 02116 422 Commercial Street . Provincetown . Massachusetts . 02657 617 . 247 . 0023

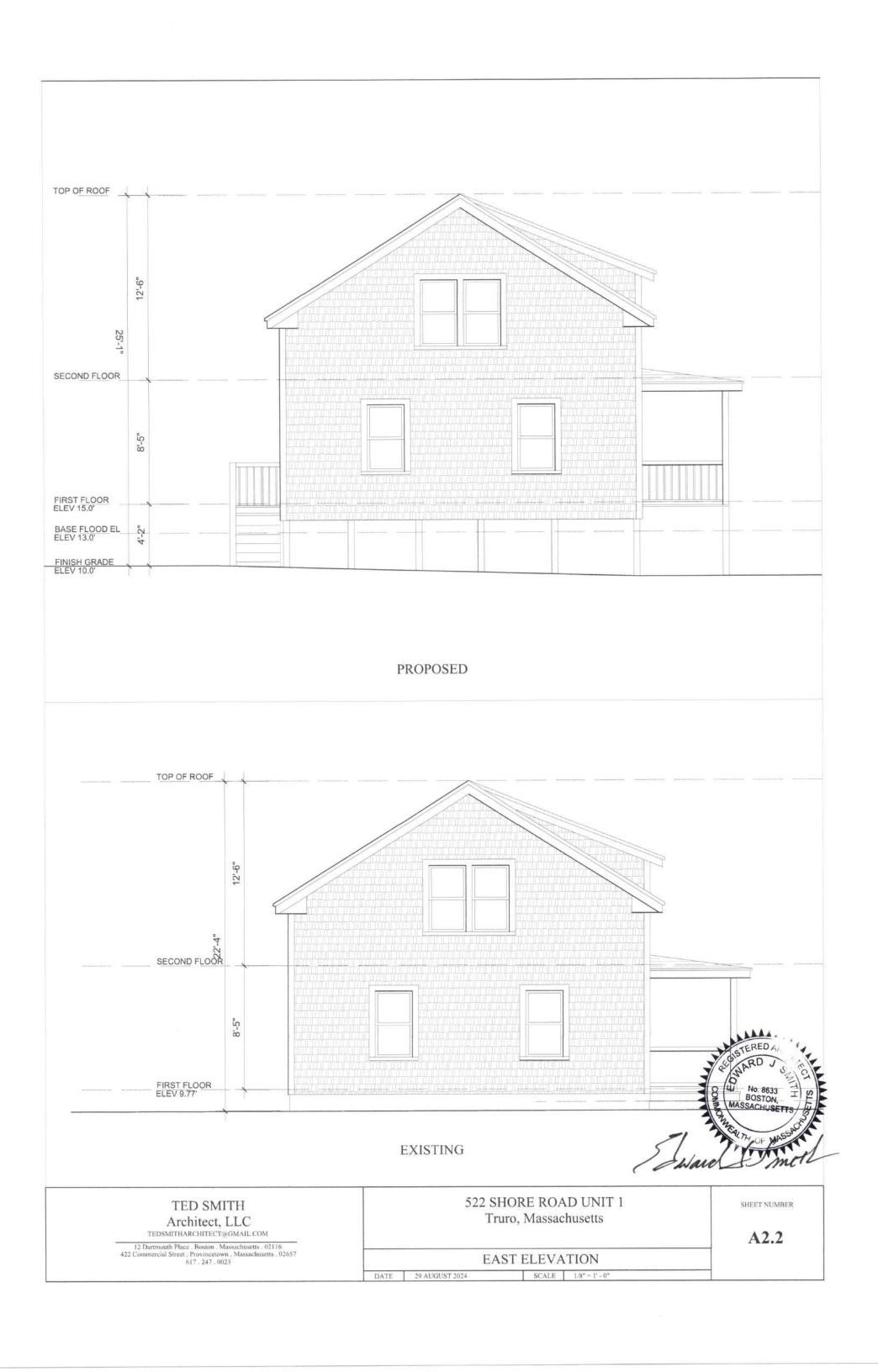
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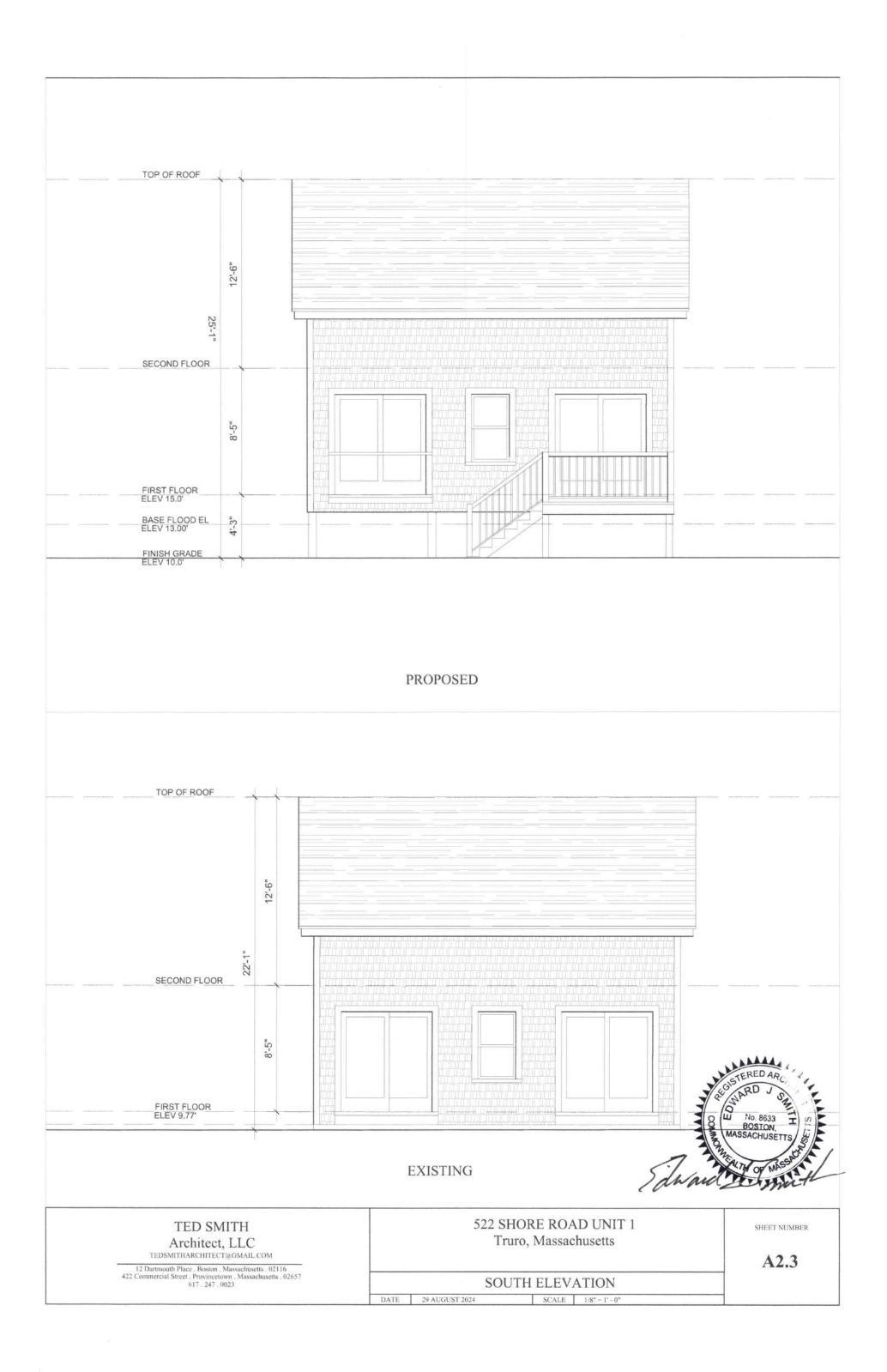
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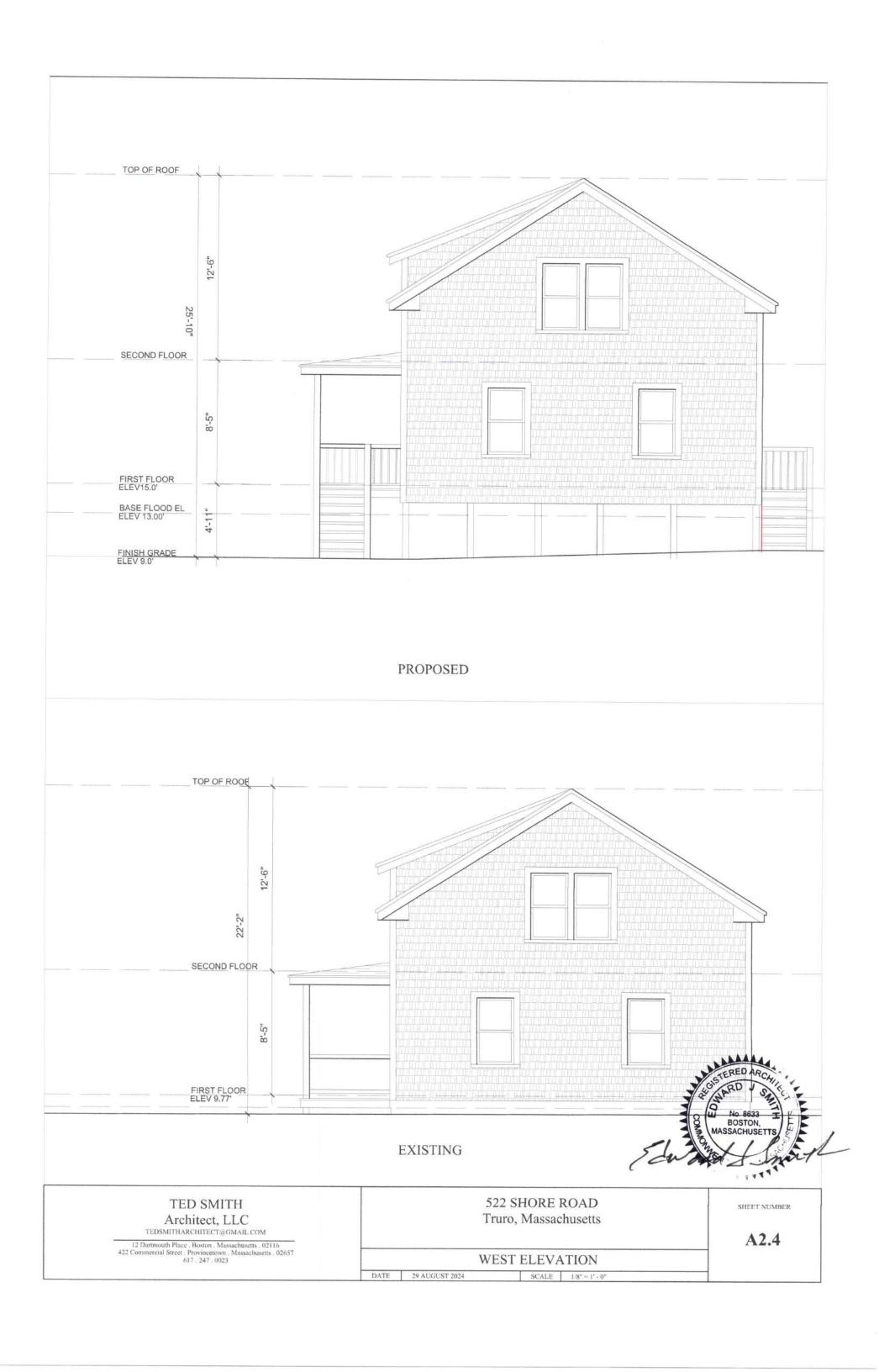
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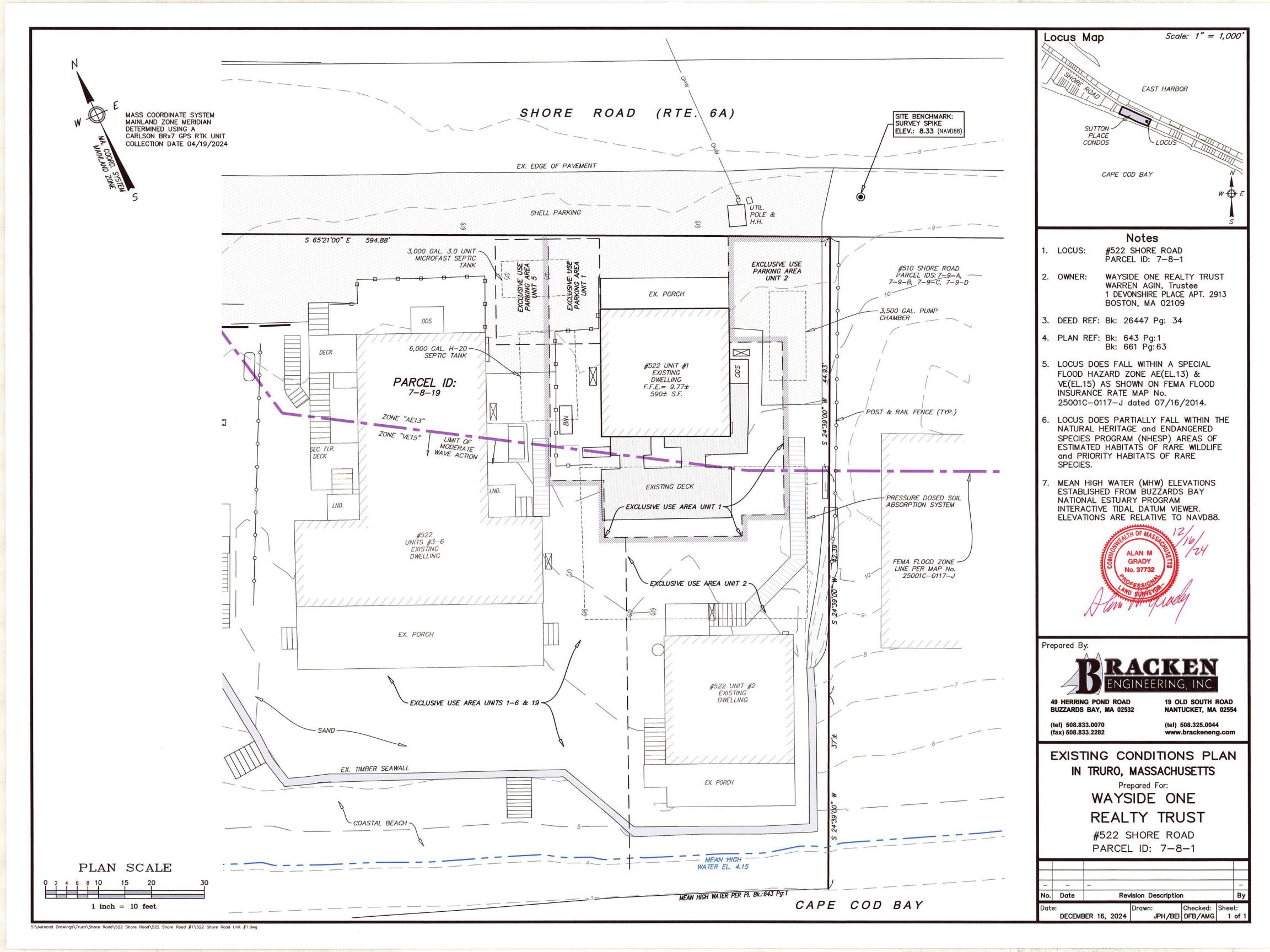
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#### PROJECT NARRATIVE

### 1. Introduction

This Notice of Intent (NOI) application has been submitted to permit the proposed shoreline stabilization project located at 29 & 31 Knowles Heights Road in Truro (the site). The Town of Truro Assessors Department references the site as Parcels #35-6 & 8. The proposed project includes the installation of a sand drift fence (also called a "serpentine fence") with a coir log array located along the landward side of the proposed fence at the boundary of a Coastal Beach and Coastal Bank and within Land Subject to Coastal Storm Flowage. This application is being submitted in accordance with the Massachusetts Wetlands Protection Act and the Town of Truro Wetlands Protection Bylaw.

#### 2. Site Description

The site is located to the west of Knowles Heights Road backing on Cape Cod Bay. There are developed properties located immediately to the north, south and east of this property. The site consists of two single-family dwellings on #31 and a newly constructed dwelling on #29, shell driveways, decks, two stairways to the beach and natural vegetation surrounding the three dwellings with the exception of a small lawn area behind the dwelling closest to the road at #31. The two more seaward dwellings are 40-55 feet landward of the Top of Coastal Bank. The long-term rate of erosion along this stretch of shoreline has been less than 0.3 ft./yr., but the short-term rate has more than doubled to be as much as 0.8 ft./yr. There are remnants of a pre-existing sand drift fence at #31 indicating the past attempt to build up a dune that no longer exists. Environmental Consulting & Restoration, LLC (ECR) reviewed available environmental databases and can confirm that the site contains the following wetland resource areas and areas of Conservation Commission jurisdiction:

- Coastal Beach;
- Coastal Bank;
- 100-Foot Buffer Zone to Coastal Bank; and,
- Land Subject to Coastal Storm Flowage (FEMA flood zone VE el. 14).

#### Notes:

- The site <u>is not located</u> within an area mapped as Priority Habitat & Estimated Habitat for Rare Species according to the Massachusetts Natural Heritage & Endangered Species Program (MaNHESP).
- 2. The site does not contain or is near a Certified Vernal Pool according to the MaNHESP.
- 3. The site is not located within an Area of Critical Environmental Concern (ACEC).
- 4. The site is not located near a USGS mapped stream.

#### 3. Proposed Activities

The purpose of this application is to authorize the installation of a sturdy sand drift fence and coir log array to protect the existing structures onsite. The site has suffered significant erosion recently. The intent of the proposed coir log array is to provide protection to the existing structures onsite and mitigate the chances of a catastrophic loss in the future. The combination of a sand drift fence, coir log array, nourishment and plantings is an effort to stabilize the Coastal Bank with biodegradable materials along with maintenance provisions. Construction access is proposed to be located at Stotts Crossing in Beach Point. The proposed project will involve the following activities:

- Removal of the Existing Fence Posts The existing sand drift fence posts and other decayed members located within the Coastal Beach shall be removed. Some of the fence posts may be satisfactory to reuse. All other fencing materials shall be disposed of offsite.
- Installation of Coir Logs The proposed coir log array includes a five-tier on-slope configuration of 20-inch diameter coir logs that will span across the site (north to south) approximately 200 linear feet. A combination of mechanical excavation utilizing a small excavator and hand digging will occur to trench in two rows below grade. The three rows above grade will be placed and backfilled with the

excavated sand. The coir logs will be secured in place using interlocking galvanized cables with 4-foot duckbill anchors. The logs will then be covered with 18 inches of clean, compatible sand and planted with American Beachgrass. The bare root beachgrass shall be hand planted from the toe of the array up to the top and spaced 18-inches on center with two culms per hole. For more information, please refer to the Proposed Conditions Plan.

- Installation of the Sturdy Sand Drift Fence Drift fencing shall be installed in accordance with the Truro Conservation Regulations, specifically Section 7.05. Drift fencing shall consist of ten-foot timber posts dug six feet into the sand at grade at the time of installation, connected by 6-foot spans of fencing comprising 4x4 spans and slats. Space between slats is a minimum of 4" to achieve 50% openings. Fence posts are installed alternating 2' on either side of a center line so that a "zig-zag" or serpentine structure results. The fencing will be left open at the two stairway access points to allow for beach access following the stabilization activities. Following the requirements of the special conditions outlined in the Truro wetland regulations the wood shall not include any CCA treated lumber.
- Stabilization Activities Any areas of disturbed vegetation will be restored with bare root American Beachgrass plantings, spaced 12-inches on center with two culms per hole. Additional beachgrass could be interplanted on the landward side of the fence and array to fill in unvegetated areas as necessary.
- Maintenance Activities Cover sand on exposed sections of the coir log array will be replaced annually (6-8" depth minimum) after the storm season and replanted with beachgrass prior to April 15th.

#### 4. Regulatory Compliance

## Compliance with Massachusetts Wetlands Protection Regulations (310 CMR 10.00)

The following sections analyze the proposed project against the relevant performance standards for Coastal Beach and Coastal Beach. For Coastal Beach, Standard (3) applies to the fencing activity. The following Standards do not apply: Standard (4) applies to solid fill structures like groins and jetties, standard (5) applies to beach nourishment, and standard (6) refers to activities in Tidal Flats upon which nothing is being proposed. And Standard (7) does not apply since there are no rare and endangered species habitats mapped by NHESP.

For Coastal Bank, standards (4) and (6) apply to the coir log array activity. Standard (5) does not apply since it addresses new, post 1978 buildings. Standard (7) does not apply since it addresses coastal engineering structures. And Standard (8) does not apply since there are no rare and endangered species habitats mapped by NHESP. There are no performance standards for Land Subject to Coastal Storm Flowage. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards, directly following not italicized.

## 310 CMR 10.27 Coastal Beach

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.

Installation of the sand drift fence will involve some excavation along the beach/bank boundary but the sand will be reused to cover the logs and beachgrass will be handplanted on top of the array to provide additional stabilization and improve sand collection. This construction process will not decrease the volume or change the form of the beach.

#### 310 CMR 10.30 Coastal Banks

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:

(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.

The cover material used to protect the coir logs will also serve as a sediment supply for the beach. In the spring, after winter storm season, additional sand will be applied to those eroded areas and exposed logs to a depth of 18 inches. The ongoing annual maintenance of the cover material will avoid the potential adverse effects due to wave action on the movement of sediment from the coastal bank to coastal beaches.

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:

(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.

The proposed project will improve the stability of the bank by reducing the undercutting of storm waves that lead to gravitational slides and bank failure above.

#### Compliance with Truro Conservation Regulations (Section II, Chapters 1.0 – 7.0)

The following sections analyze the proposed project against the relevant performance standards for Land Subject to Coastal Storm Flowage (LSCSF). For LSCSF, standards in Chapter 2.05 (c) apply to the proposed activity. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards, directly following not italicized.

Chapter 2.05 (c) Land Subject to Coastal Storm Flowage in the definition states LSCSF: the abbreviation for land subject to coastal storm flowage. Also described as "Land subject to flooding" and the "flood plain". LSCSF is a resource area without a buffer zone and correlates with the mapped flood plain defined by FEMA mapping... Flood zones are geographic areas that FEMA has defined according to levels of flood risk...VE is where the flood elevation includes wave heights equal to or greater than 3 feet...

**Presumption of Significance:** Where a proposed activity involves work within LSCSF, the Conservation Commission shall presume that such an area is significant to the interests and values of the Bylaw...

Any activity subject to jurisdiction and proposed on LSCSF shall not:

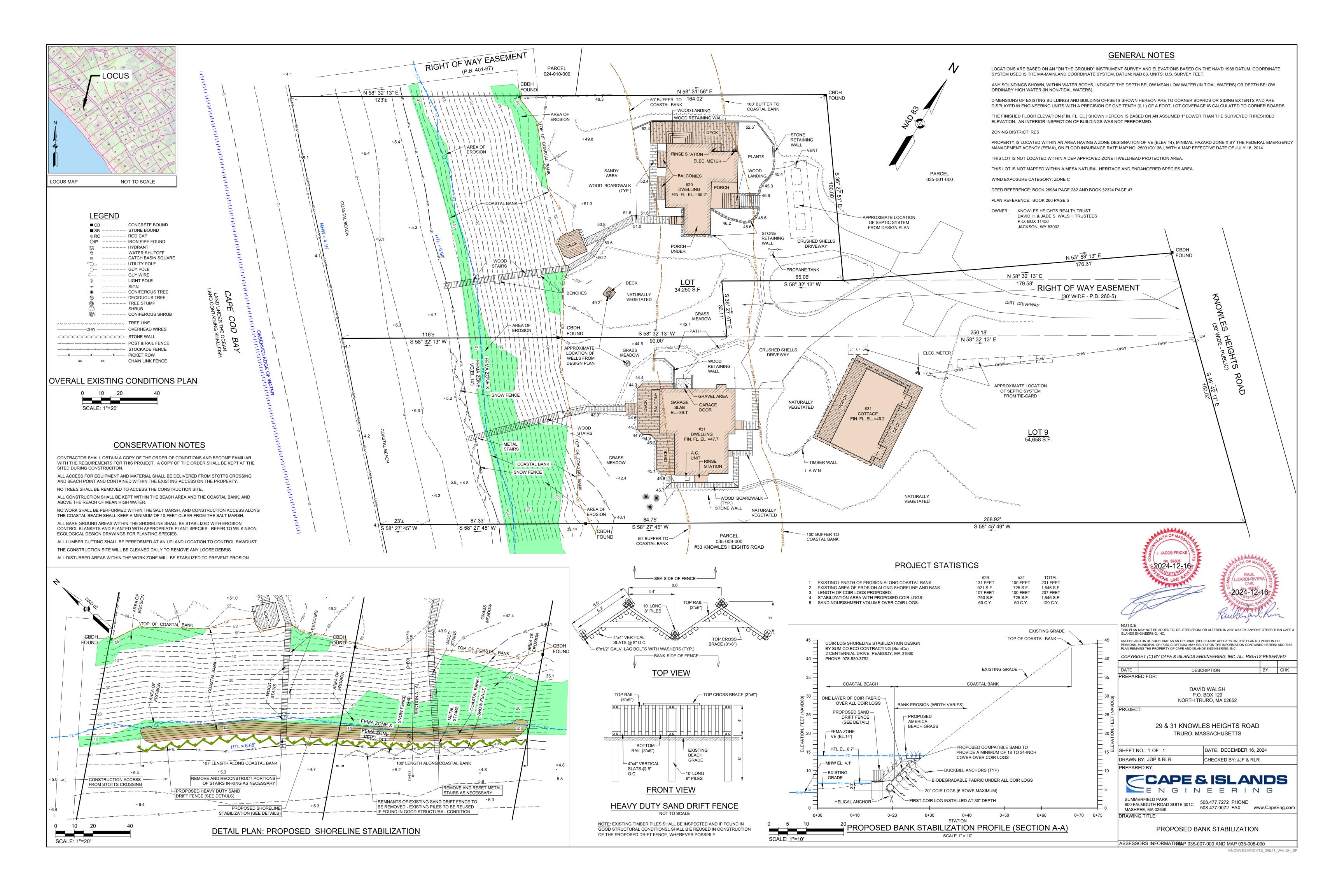
- i. Reduce the ability of the resource to absorb and contain flood waters;
- ii. Reduce the ability of the resource to buffer more inland areas from flooding and wave damage;
- iii. Displace or divert flood waters to other areas:
- iv. Cause or create the likelihood of damage by debris to other structures on land within the flood plain (collateral damage); built structures such as stairs or walkways shall be seasonally removable;
- v. Cause ground or surface pollution triggered by coastal storm flowage; and
- vi. Reduce the ability of the resource to serve as a wildlife habitat and migration corridor through activities such as, but not limited to the removal of vegetative cover and/or installation of fencing and other similar structures;
- vii. Any activity proposed in the floodplain may require mitigation to enhance or restore natural functions of the floodplain.

The buried and covered coir logs will allow flood waters to pass over them and, therefore will not reduce the ability of the Coastal Beach (beach) and Coastal Bank (bank) to absorb contain such waters. The beach and bank will continue to buffer more inland areas from flooding and wave damage because of the low height of the logs. The biodegradable logs will not act like a solid fill structure which may displace or divert flood waters to other areas. Flood waters in this Zone VE (el. 14) will continue to move landward. The proposed anchoring system with the coir log array will be durable and long lasting so that the likelihood for collateral damage is not caused or created by the project. No pollutants are proposed with the activity. No vegetative cover will be permanently removed since beachgrass will be planted to restore disturbed areas.

To comply with Section 7.05(11) of the By-Law regulations, the project will include nourishment consisting of clean, medium to coarse sand obtained from an inland source. For the initial construction, 80 cubic yards is estimated for placement over the coir log array. For the following years, the amount of nourishment provided will be a function of the cover amount removed during storms.

#### 5. Summary

The proposed shoreline protection project includes the installation of a sturdy sand drift fence and five rows of 20-inch diameter coir logs to provide protection to the existing structures on site. The intent of the project is to mitigate the chances of a future catastrophic failure of the existing structure from coastal erosion. Once installed, all disturbed areas will be restored and stabilized upon the completion of work. Stockpiling of materials will be located beyond as far landward as practically possible within an area void of vegetation. Access to the work area shall utilize Stotts Crossing in Beach Point. Upon completion of work, the applicant shall submit a request for a Certificate of Compliance to the Truro Conservation Commission to close out the anticipated Order of Conditions.



DEC 11 2024

PERMIT # 2024-53



# **TOWN OF TRURO**

## **Conservation Commission**

24 Town Hall Road P.O. Box 2030, Truro MA 02666

## APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

PERMIT FEE \$20

Applicant Name: Gordon Peabody, Safe Harbor	Telephone: (508) 237-3724
Email address: gordonpeabody@gmail.com	
Owner Name: Paula Grandberg	Telephone:
(If the applicant is not the owner of the property, written cons Application.)  Address of subject property: 6 Bearberry Ln.	Map: 42 Parcel: 290
Description of proposed work: adding sand to eroded area	a below steps, planting 4 bundles of Beach
Grass	

## CRITERIA FOR ADMINISTRATIVE REVIEW (AR) PERMITS

## **Vegetation Projects:**

- No removal of vegetation within any inland or coastal wetland resource.
- No uprooting of vegetation.
- No mowing to the ground or clear cutting.
- Any proposed tree removal is demonstrated to be necessary, e.g., to protect existing structures, public safety, traffic visibility, etc.
- Mitigation may be required, i.e., an area to be planted with native species of trees
  or shrubs.
- Trees for removal must be tagged for inspection.
- No excavation by machinery is required or proposed.

## Sheds and Other Construction Projects:

- No construction within any wetland resource except for minimal projects with the consent of the Conservation Agent.
- Any proposed new construction is more than 50' from the edge of resource area.
- No excavation by machinery is required or proposed.
- Foundation for structure shall be concrete blocks, sono tubes, diamond piers
- Repairs or replacement of existing structures remain within the same footprint.
- New structures must be less than 160 square feet.
- Only minimal projects such as biomimicry, sand nourishment, beach grass and planting of native species shall be allowed under this permit

#### Procedure:

- The fee shall be submitted with the Administrative Review Application.
- The Agent shall conduct a site visit, at which time the proposed project must be clearly defined in the field with stakes. Trees shall be flagged.

- If the Agent determines that all of the conditions of this Policy are met, the Agent may approve the Application. If the conditions of this policy are not met; the application is incomplete; or the field ID is inadequate the application is denied.
- If the Agent approves the application, such approval must be ratified by the Truro Conservation Commission prior to the issuance of this permit and prior to the commencement of any work.
- Any Property Owner, contractor or other agent of the owner performing any work pursuant to an Administrative Review permit shall have a copy of the permit available at the site at all times during the period that the work is being performed.
- Upon approval and ratification by the Commission, an Administrative Permit shall issue.
- The applicant shall notify the Commission prior to the start of the work, and must complete the work within thirty (30) days of issuance of the permit, unless otherwise permitted by the Commission.
- The Conservation Agent shall inspect the property to verify that the work completed is within the scope of the Approved Application.
- Any work beyond the scope of the approved Administrative Review shall be subject to enforcement action.
- NOTE: Use of town property for beach access or staging of construction materials requires a permit issued by the Board of Selectmen.

## SAFE HARBOR

Environmental Management Habitat Restoration



Date: December 9, 2024

# Administrative Review: 6 Bearberry Lane HAND DELIVERED SAND & BEACH GRASS UNDER STEPS

To: Town of Truro Conservation Commission

Attn: Emily Beebe, Conservation Agent Cc: Arozana Davis

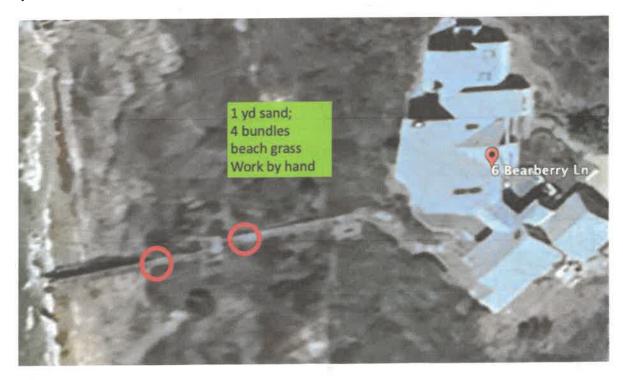
From: Gordon Peabody, Safe Harbor Environmental

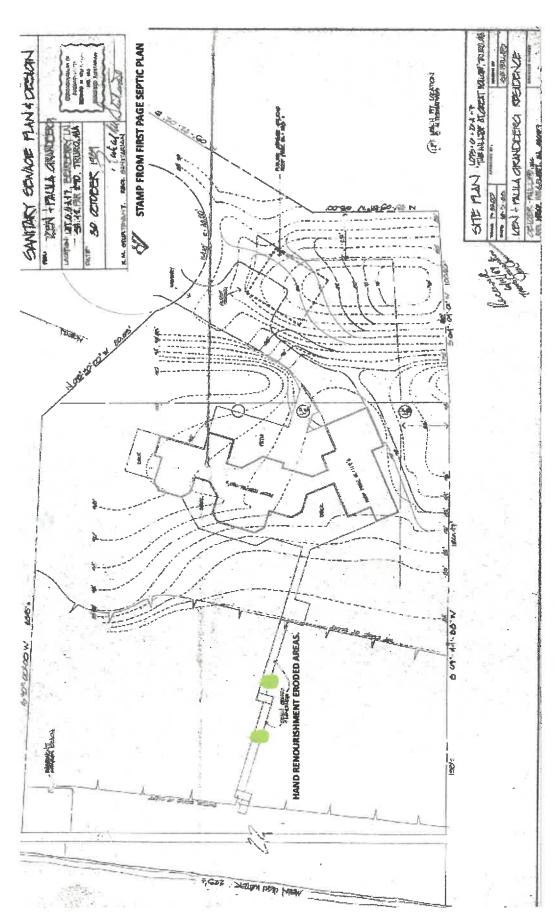
Office: 95 Commercial St. Room 211, Wellfleet, MA, 02667

Mail: P.O. Box 880, Wellfleet, MA, 02667

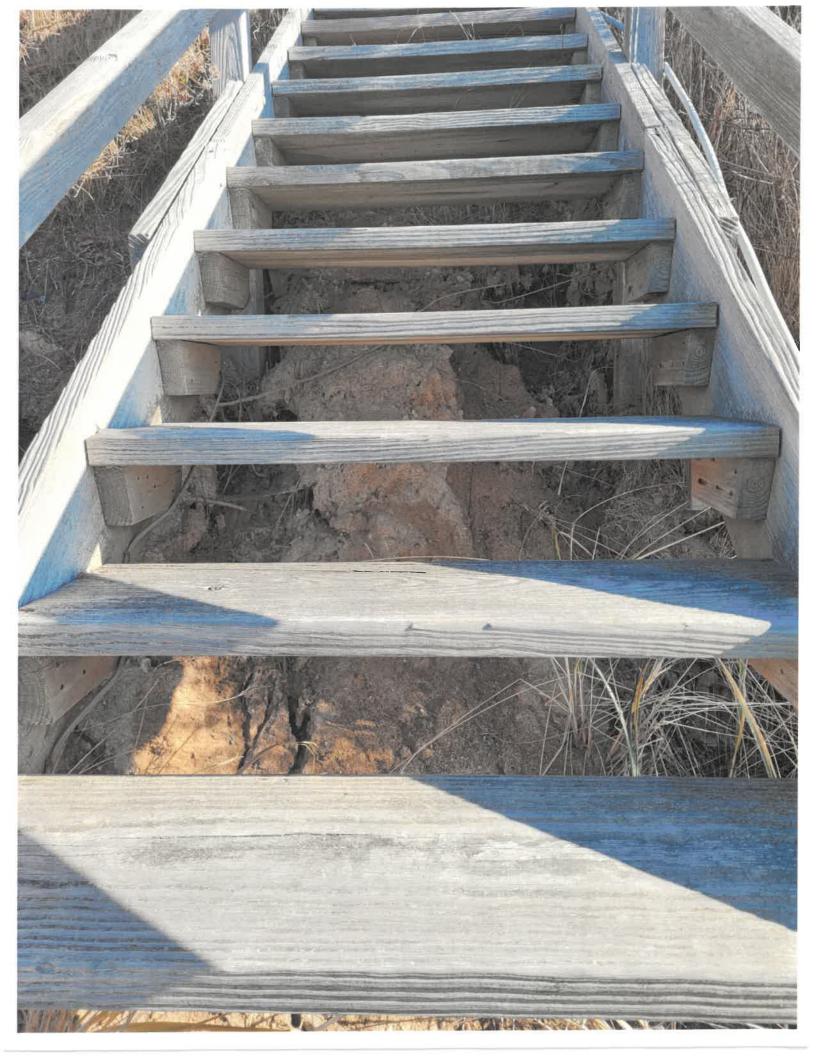
Contact: email gordonpeabody@gmail.com Phone: 508-237-3724 Re: Paula Grandberg - 6 Bearberry Lane - Map 42 Parcel 290

A limited amount of erosion, in two areas under beach steps would be mitigated by hand delivered sand (approx. 1 yd) and planting of Beach Grass (4 bundles). All work performed by hand.





REQUESTED HAND RENOURISHMENT ERODED AREAS. COMPATIBLE SAND NOURISHMENT 1 YD. **6 BEARBERRY BEACH ACCESS STEPS AMERICAN BEACH GRASS PLANTINGS 590 STEMS** SAFE HARBOR 12/9/24





PERMIT FEE \$20

# **TOWN OF TRURO**

Conservation Commission TOWN OF TRURO

DFC 19 2024

## **Conservation Commission**

24 Town Hall Road P.O. Box 2030, Truro MA 02666



## APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

Applicant Name: Gan (1) Margar	Telephone:
Email address:	
Owner Name: Gan W Margala	Telephone: _
(If the applicant is not the owner of the property, written co	nsent to the work MUST be attached to this
Application.)	N. C
Address of subject property: 630 Shore Rd	Map: 3 Parcel: 9
Description of proposed work: DIG 18"	DEED HER TIZENCH
25 4/- FOIL NEW GAS	CING ALL WBER
Proximity to Resource Areas: LSCSF; barrier beach	WILL BE DONS BY HARNED

## CRITERIA FOR ADMINISTRATIVE REVIEW (AR) PERMITS

## **Vegetation Projects:**

- No removal of vegetation within any inland or coastal wetland resource.
- No uprooting of vegetation.
- No mowing to the ground or clear cutting.
- Any proposed tree removal is demonstrated to be necessary, e.g., to protect existing structures, public safety, traffic visibility, etc.
- Mitigation may be required, i.e., an area to be planted with native species of trees or shrubs.
- Trees for removal must be tagged for inspection.
- No excavation by machinery is required or proposed.

## Sheds and Other Construction Projects:

- No construction *within* any wetland resource except for minimal projects with the consent of the Conservation Agent.
- Any proposed new construction is more than 50' from the edge of resource area.
- No excavation by machinery is required or proposed.
- Foundation for structure shall be concrete blocks, sono tubes, diamond piers
- Repairs or replacement of existing structures remain within the same footprint.
- New structures must be less than 160 square feet.
- Only minimal projects such as biomimicry, sand nourishment, beach grass and planting of native species shall be allowed under this permit

## Procedure:

- The fee shall be submitted with the Administrative Review Application.
- The Agent shall conduct a site visit, at which time the proposed project must be clearly defined in the field with stakes. Trees shall be flagged.

- If the Agent determines that all of the conditions of this Policy are met, the Agent may approve the Application. If the conditions of this policy are not met; the application is incomplete; or the field ID is inadequate the application is denied.
  - If the Agent approves the application, such approval must be ratified by the Truro Conservation Commission prior to the issuance of this permit and prior to the commencement of any work.
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  pursuant to an Administrative Review permit shall have a copy of the permit
  available at the site at all times during the period that the work is being
  performed.
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- The applicant shall notify the Commission prior to the start of the work, and must complete the work within thirty (30) days of issuance of the permit, unless otherwise permitted by the Commission.
- The Conservation Agent shall inspect the property to verify that the work completed is within the scope of the Approved Application.
- Any work beyond the scope of the approved Administrative Review shall be subject to enforcement action.
- NOTE: Use of town property for beach access or staging of construction materials requires a permit issued by the Board of Selectmen.

12:29





## December 11 11:39 AM





Conservation Commission TOWN OF TRURO

DEC 23 2024



12:29





# Home December 11 12:08 PM





Conservation Commission TOWN OF TRURO

DEC 23 2024





PERMIT FEE \$20

# TOWN OF TRURO ONSERVATION COMMISSION

## **Conservation Commission**

DEC 17 2024

24 Town Hall Road P.O. Box 2030, Truro MA 02666

APPLICATION FOR	AD	MINISTI	SATTI	VE REV	VIEW	<b>PERMIT</b>
DEDMIT FEE \$20	1	838				

Telephone: 508-237-3724 Applicant Name: Gordon Peabody Email address: gordonpeabody@gmail.com Owner Name: Michael Grossman Telephone (If the applicant is not the owner of the property, written consent to the work MUS Application.) Address of subject property: 1 Circuit Way Map: 68 Parcel: 14 Description of proposed work: Plant 5-6 bundles American Beach Grass as shown on site plan Proximity to Resource Areas: coastal bank

## CRITERIA FOR ADMINISTRATIVE REVIEW (AR) PERMITS

#### **Vegetation Projects:**

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- New structures must be less than 160 square feet.
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## Procedure:

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- If the Agent determines that all of the conditions of this Policy are met, the Agent may approve the Application. If the conditions of this policy are not met; the application is incomplete; or the field ID is inadequate the application is denied.
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- The Conservation Agent shall inspect the property to verify that the work completed is within the scope of the Approved Application.
- Any work beyond the scope of the approved Administrative Review shall be subject to enforcement action.
- NOTE: Use of town property for beach access or staging of construction materials requires a permit issued by the Board of Selectmen.

By signing this permit application, you are acknowledging that you have read and understand the terms as stated herein. You are also aware that no work shall go forward until the permit has been issued by the Conservation Commission.

(Signature of Applicant) (Date)

FOR OFFICE USE ONLY:
Agent's Comments // Solated Date was to be planted

Site Inspection Date: // Solated Date: Permit Approved: Yes No Conditions:

Signature of Commission Review: Meeting Date: Date:





## Request For Admin Review: limited American Beach Grass Planting

Date: December 16, 2024

To: Town of Truro Conservation Commission

Attn: Emily Beebe, Conservation Agent Cc: Arozana Davis; Courtney Warren

From: Gordon Peabody, Safe Harbor Environmental

Office: 95 Commercial St. Room 211, Wellfleet, MA, 02667

Mail: P.O. Box 880, Wellfleet, MA, 02667

Contact: email gordonpeabody@gmail.com Phone: 508-237-3724

RE: 1 Circuit Road, Mr. Grossman (additional Beach Grass request)

Map: 58 Parcel 14

<u>Narrative:</u> The property owner wishes to request an Admin Review to eliminate some isolated, bare ground areas with stabilizing native plantings of American Beach Grass, providing linkage to scale. All work would be done by hand, using trained Safe Harbor workers.

Approximately 5 bundles of American Beach Grass to be planted. (green dots). 2-3 culms per planting.

No Fertilizers, pesticides or herbicides will be used.

