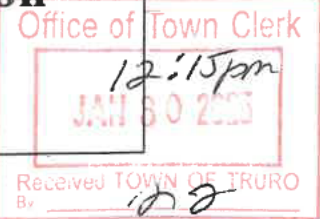




Truro Conservation Commission

Monday February 3, 2025

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



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

<https://us02web.zoom.us/j/83392256598>

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 ebecbe@truro-ma.gov 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. **Notice of Intent: 6 Corn Hill Road, Linda Anderson (SE#75-1213):** construction of two additions and a larger deck onto existing dwelling; Coastal Bank & Buffer Zone to Coastal Bank. (Map 46, Parcel 60)
2. **Request for Amended Order of Conditions: 6 River View Road, Liz & Rob Morrison (SE#75-1154):** amend a previously approved Order of Conditions to include vista corridors; Riverfront Area and Buffer Zone to a Coastal Bank. (Map 50, Parcel 267) *(continued from 12/2/2024)*
3. **Notice of Intent: 10 Thornley Meadow Road, Roland & Lucia Letendre (SE#075-1198):** after-the-fact filing for beach stair replacement and beach grass trimming; Coastal Bank & Coastal Dune. (Map 53, Parcel 87) *(continued from 12/2/2024)*
4. **Request for Determination of Applicability: 6 Castle Road, Pamela Blair:** after-the-fact filing for fencing; Riverfront Area & Coastal Bank. (Map 50, Parcel 146) *(continued from 1/6/2025)*
5. **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)
6. **Field Change:** 82 South Pamet Road, SE# 75-1121
7. **Field Change:** 2 Ryder Hollow Road, SE# 75-1192
8. **Field Change:** 39 and 41 Bayview Road, SE# 75-1115, SE# 75-1116; 2 and 4 Heron Lane SE# 75-1202. SE# 1114; 15 and 19 Avocet Road SE# 75-858, SE# 75-859; 7 and 8 Kestrel Lane SE# 75-828, SE# 75-829; and 8 Falcon Lane, SE# 75-855
9. **Administrative Review Applications:** 1.) **640 Shore Road:** remove and replace deck boards and railing, along with deck boards on porch of Unit 1. 2.) **2 Bay View Path:** reinstall drift fence sections that were taken down for sand nourishment; **17 Bay View Road:** reinstall drift fence sections that were taken down for sand nourishment; 4.) **19 Bay View Road:** reinstall drift fence sections that were taken down for sand nourishment; 5.) **31 Knowles Heights Road:** repair post on beach stairs and refasten cross-members; 6.) **24 Cliff Road:** remove cesspool from bank

10. Certificate of Compliance: 47 Fisher Rd SE# 75-1183

11. Minutes

12. Review Planning Board Draft Lot Clearing By-law

13. Mitigation discussion

Site visits: Commissioners will meet at Town Hall on Monday, February 3, 2025 at 9:00 AM and proceed to:

1.) 6 River View Road; 2.) 82 South Pamet Road; 3) 6 Corn Hill Road



SCHOFIELD BROTHERS OF CAPE COD
Land Surveying and Environmental Permitting
161 Cranberry Highway
P.O. Box 101
Orleans, MA 02653-0101
508-255-2098 - 508-240-1215 (fax)
E-mail: schobro@capecod.net

**Narrative to Accompany a Notice of Intent
6 Corn Hill Road
in Truro, Massachusetts**

Site and Project Description

The 44,431 +/- square foot site is located at 6 Corn Hill Road in Truro, Massachusetts. (Please refer to the Locus Maps within this filing) The subject property abuts Corn Hill Road to the north. A single family dwelling built in 1981 currently exists on the site with associated utilities, driveway, septic system and private well. The project is the construction of two additions and a larger deck onto the existing dwelling.

Wetland Resource Areas

Riverfront Area – Little Pamet River

The northwest property corner of the locus parcel is overlapped by the Riverfront Area to the Little Pamet River. The edge of the Little Pamet River is delineated by the edge of the channel, which winds through a freshwater marsh system.

Freshwater Marsh/Bordering Vegetated Wetland

There is a freshwater marsh across Corn Hill Road to the north of the subject property. The marsh is associated with the Little Pamet River. The edge of the marsh has a fringe of bordering vegetated wetland consisting of mixed woody vegetation along Corn Hill Road.

Land Subject to Coastal Storm Flowage

The coastal flood zone or Land Subject to Coastal Storm Flowage in this vicinity is delineated by Zone AE, elevation 11 according to FEMA Flood Insurance Rate Map 25001C0139J dated 7/16/2014.

Coastal Bank

There is a coastal bank associated with the Land Subject to Coastal Storm Flowage located on the subject parcel. The coastal bank acts as a vertical storm buffer, protecting adjacent upland areas from storm damage and flooding. The top of the coastal bank has been delineated according to Wetlands Program Policy #92-1 issued by DEP. Please refer to the profiles of the coastal bank within the filing for more detail.

The coastal bank is the most landward of the coastal wetland resource areas affecting the subject parcel pursuant to the Massachusetts Wetlands Protection Act and the Truro Conservation Regulations. The 50 foot and 100-foot protective buffer zones from the top of the coastal bank overlap the parcel and are shown on the attached site plan.

Project Description / Construction Protocol

Installation of Erosion Control

Prior to any disturbance on the site, erosion control, in the form of a straw wattle/ silt fence barrier will be installed. The silt fence barrier shall remain in place until all disturbed areas have been stabilized upon completion of the project or returned to their original condition. The silt fence barrier is also intended to act as a work limit / limit of disturbance. Details and location of the erosion control barrier are shown on the site plan.

Construction Access and Staging

The existing driveway will be utilized for construction access and staging of the project. Construction debris shall be properly disposed of, and good housekeeping measures shall be observed on site during construction.

Proposed Additions and Deck

The project is the construction of two additions onto the existing dwelling and the enlargement of an existing deck. A new entry is proposed. The new entry is a one-story 8 foot by 8 foot addition that will be pile supported by a sonotube at the corner of the addition. The new entry addition is located partially under an existing building overhang and partially within an existing deck.

The second addition is on the easterly side of the existing structure and will provide additional habitable space within the existing kitchen and a bedroom on the second floor. This addition is approximately 204 square feet and is located entirely within the footprint of an existing deck and partially within an existing building overhang. This addition will be supported on a frost wall foundation.

The existing deck on the easterly side of the dwelling will be extended by a width of ten feet for the length of the deck. The existing landscaped stairs will be relocated to the side of the extended deck to provide access around the structure.

Please refer to the enclosed building plans for further detail.

The buffer zone overlaps the entire existing dwelling and so it is not possible to avoid siting the additions or the deck outside of the buffer zone. The additions have been designed to fall within the existing footprint of development.

The existing versus proposed amount of alteration within the 0-50 and 50-100 foot buffer zone is tabulated on the attached site plan.

Alternatives Analysis

The proposed project reflects the consideration of alternatives performed during the planning process of the project:

- The buffer zone to the coastal bank extends over most of the property so relocating the dwelling entirely outside of the buffer zone is not possible. Additionally, locating the dwelling further away from the wetland resource areas would require large amounts of clearing of natural vegetation and would push the structure farther up the slope on the property, increasing opportunities for erosion.
- The location of the addition(s) was chosen to keep the construction within the footprint of the existing development to minimize site disturbance.

Roof Runoff/Drywell

Roof runoff from the addition will be collected with gutters and downspouts and directed into a drywell or gravel filled trench under the roof line.

Septic System

The addition will provide additional habitable space but will not increase the design flow of the existing septic system; therefore, no changes to the septic system are proposed. The septic system was inspected during the planning stages of the project. A passing inspection report is pending the removal of the existing garbage disposal, which will happen in conjunction with the addition project. A distribution box was installed during the septic system inspection process.

Proposed Native Plantings

Native plantings of low bush blueberry and viburnum are proposed to provide mitigation for the project. The amount of mitigation offered is 875 sq feet; approximately twice the amount of the increase of new building and deck proposed. The mitigation area is adjacent to existing woodland and within the 50 foot buffer zone. Please refer to the plan for their proposed location, numbers and size of plantings.

MA Wetlands Protection Act Performance Standards

Coastal Bank

The coastal bank at the subject property acts as a vertical buffer protecting adjacent upland areas from flooding and storm damage. As a vertical buffer to storm waters, the stability of the coastal bank is critical to its ability to provide for protection from storm damage prevention and/or flooding. 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 building project is located in the outer buffer zone to the coastal bank within an existing footprint of development. Construction access is from the existing driveway. There is minimal site disruption proposed with the project. The silt fence barrier is intended to act as a limit of work to protect the coastal bank. The project as proposed shall have no adverse effect on the stability of the coastal bank.

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

No coastal engineering structures are proposed on the coastal bank in conjunction with this project, therefore this standard does not apply.

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

The project site is not within any specified habitat of rare vertebrate or invertebrate species; therefore, this performance standard is met.

Town of Truro Conservation Regulations Performance Standards

There is no work proposed within any of the wetland resource areas. The performance standards pertaining to the coastal bank were discussed in the prior section of this narrative.

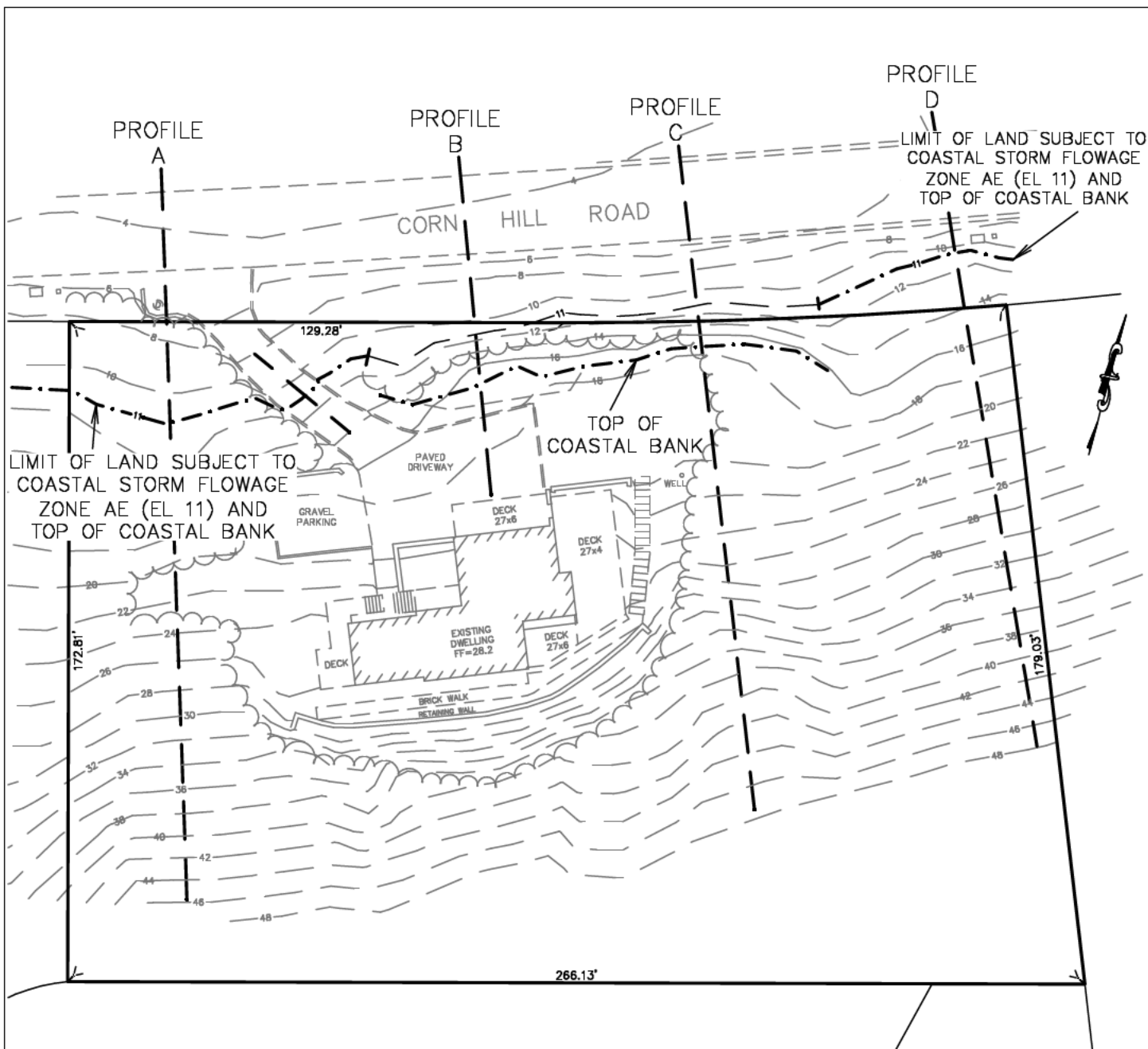
With respect to the Truro Wetland Conservation Regulations 2.00 *Additional Regulations for Wetland Resource Areas*, 2.01: *Buffer Zone*, d. *General Performance Standards*:

The project has been designed to locate the additions as far as possible from the resource areas and to keep the proposed work within the existing developed portions of the buffer zone. The addition will not be closer to the resource areas than existing conditions. A variance from the 5,000-square foot threshold for allowable disturbance within the Buffer Zone is requested; as this property is pre-existing non-confirming with respect to the 5,000 square foot threshold of disturbance. Proposed disturbance is within the existing footprint of alteration. The roof runoff from the addition will be directed into a drywell or gravel filled trenches under the roof drip line in compliance with the local conservation regulations. The

SCHOFIELD BROTHERS OF CAPE COD
Land Surveying and Environmental Permitting

proposed mitigation area is twice the size of the proposed additions and new deck and is located within the 50 foot buffer zone.

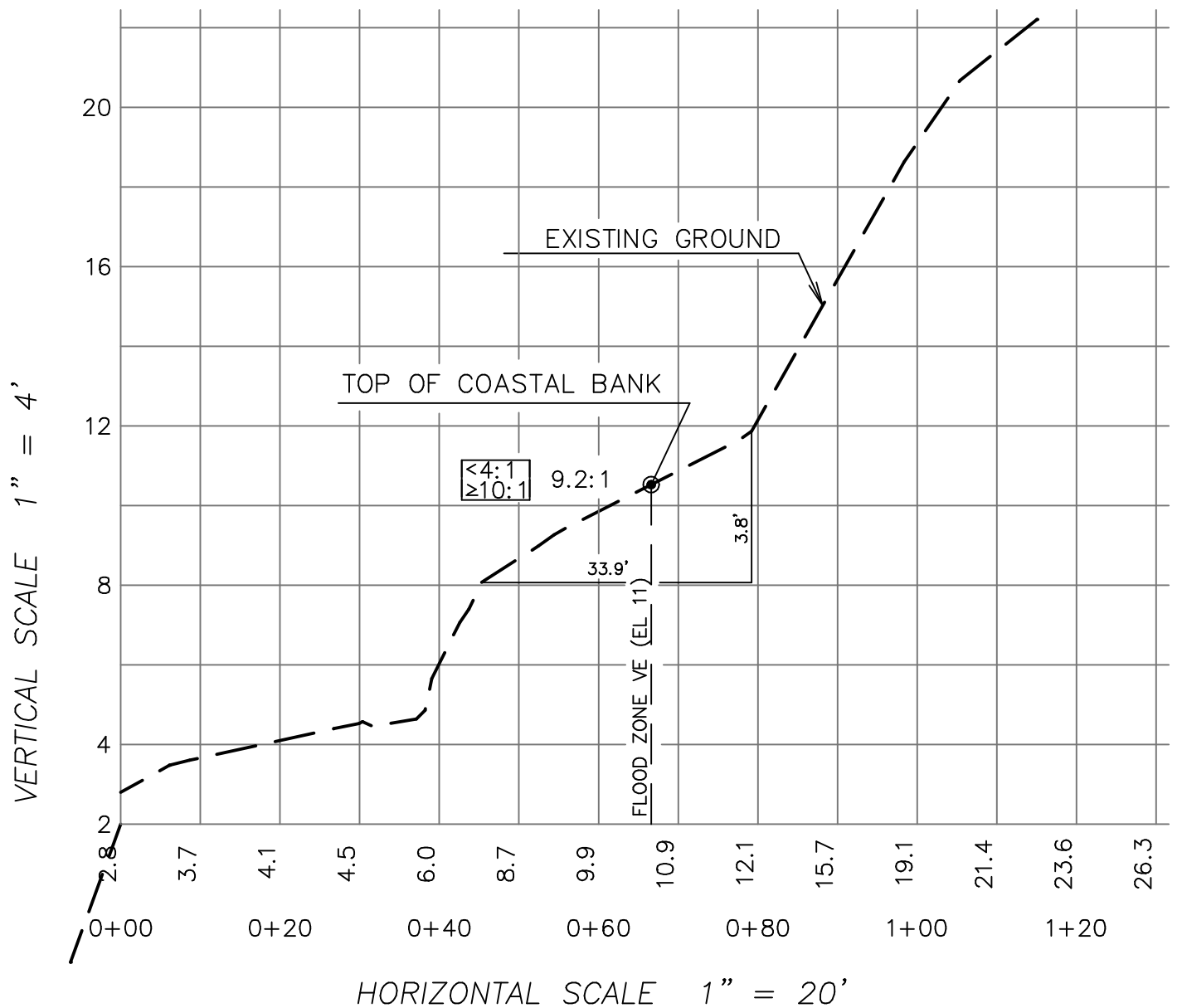
Pursuant to the Town of Truro Conservation Regulations the project should not have an adverse impact, immediate or cumulative, upon the public interest and values identified in the Truro Conservation Regulations; erosion and sedimentation controls are proposed during construction and upon completion of the project in terms of a drywell to handle the roof runoff. Proposed plantings of low bush blueberry and viburnum shrubs will add a component of wildlife benefit to the project as well as increase the amount of naturally vegetated buffer in between the developed portions of the site and the wetland resource areas.



ELEVATION PROFILES
 6 CORN HILL ROAD
 TRURO, MA
 PREPARED FOR:
 WILLIAM AND LINDA ANDERSON

SCALE: 1in. = 40ft. JANUARY 13, 2025

SCHOFIELD BROTHERS OF CAPE COD
 LAND SURVEYING AND ENVIRONMENTAL PERMITTING
 161 CRANBERRY HIGHWAY - P.O. BOX 101
 ORLEANS, MASS. 02653
 (508) 255-2098
 0-12716

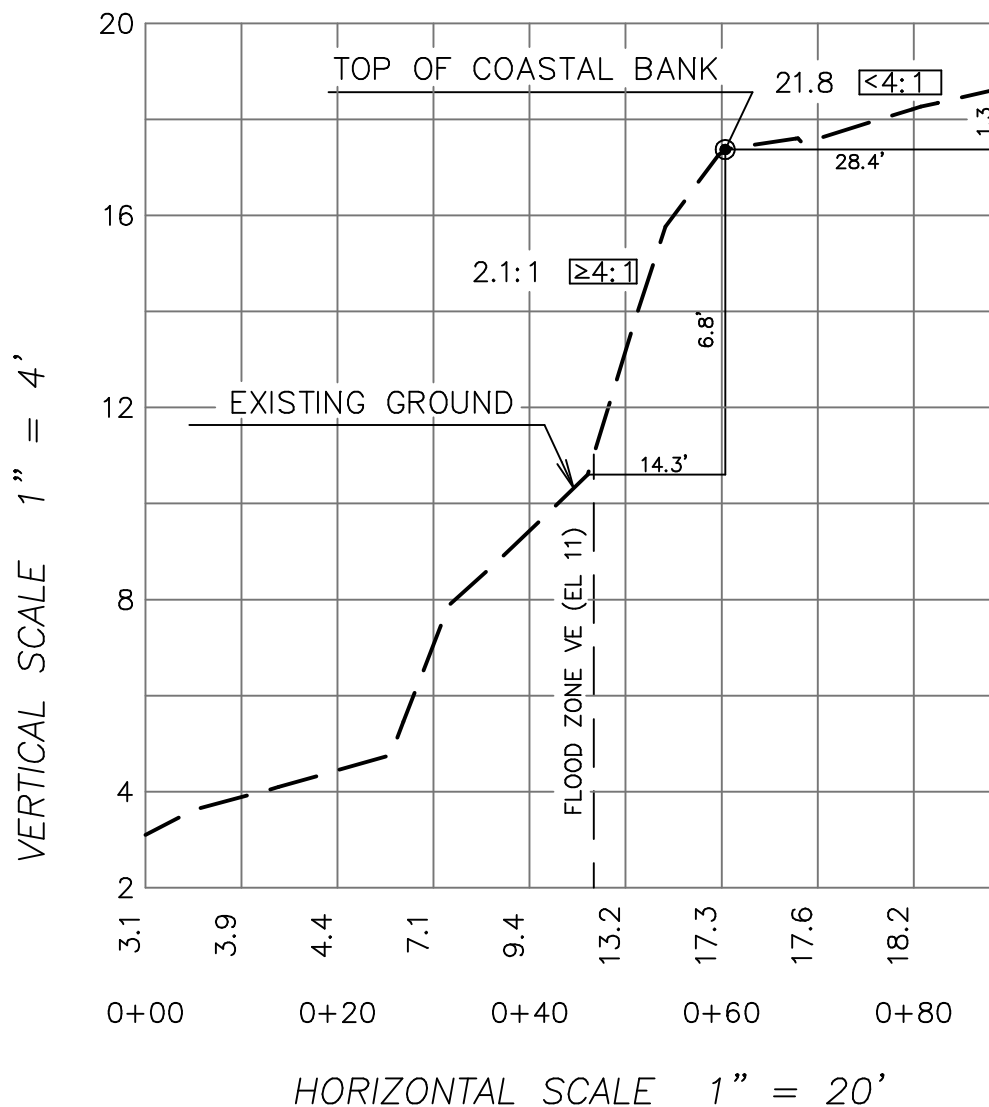


COASTAL BANK DETERMINATION:
MASSACHUSETTS DEP WETLANDS
PROGRAM POLICY 92-1
- FIGURE 3

ELEVATION PROFILE "A"
6 CORN HILL ROAD
TRURO, MA
PREPARED FOR:
WILLIAM AND LINDA ANDERSON

SCALE: 1in. = 20ft. JANUARY 13, 2025

SCHOFIELD BROTHERS OF CAPE COD
LAND SURVEYING AND ENVIRONMENTAL PERMITTING
161 CRANBERRY HIGHWAY - P.O. BOX 101
ORLEANS, MASS. 02653
(508) 255-2098
0-12716



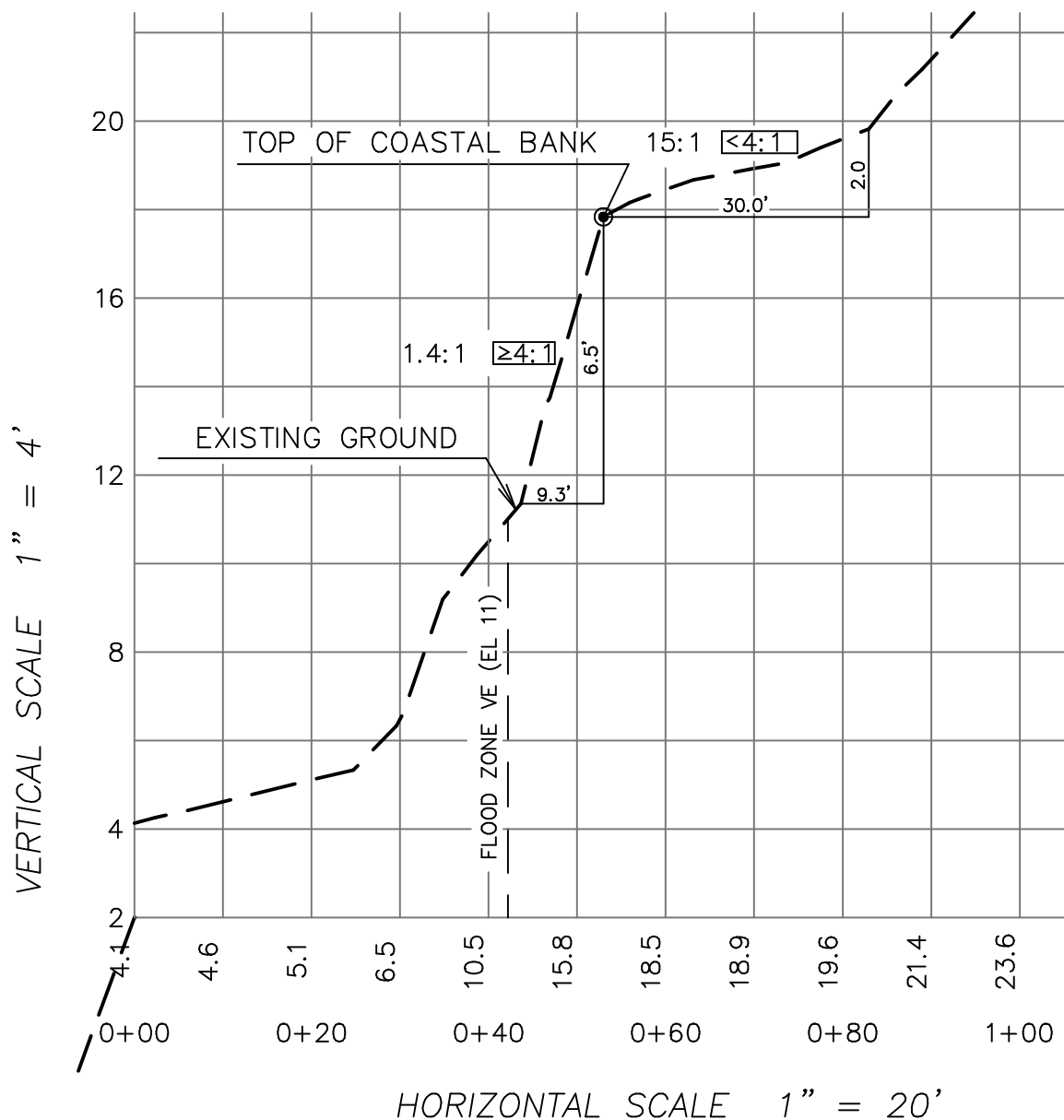
COASTAL BANK DETERMINATION:
 MASSACHUSETTS DEP WETLANDS
 PROGRAM POLICY 92-1
 - FIGURE 2

ELEVATION PROFILE "B"
 6 CORN HILL ROAD
 TRURO, MA
 PREPARED FOR:
 WILLIAM AND LINDA ANDERSON

SCALE: 1in. = 20ft. JANUARY 13, 2025

SCHOFIELD BROTHERS OF CAPE COD
 LAND SURVEYING AND ENVIRONMENTAL PERMITTING
 161 CRANBERRY HIGHWAY - P.O. BOX 101
 ORLEANS, MASS. 02653
 (508) 255-2098

0-12716

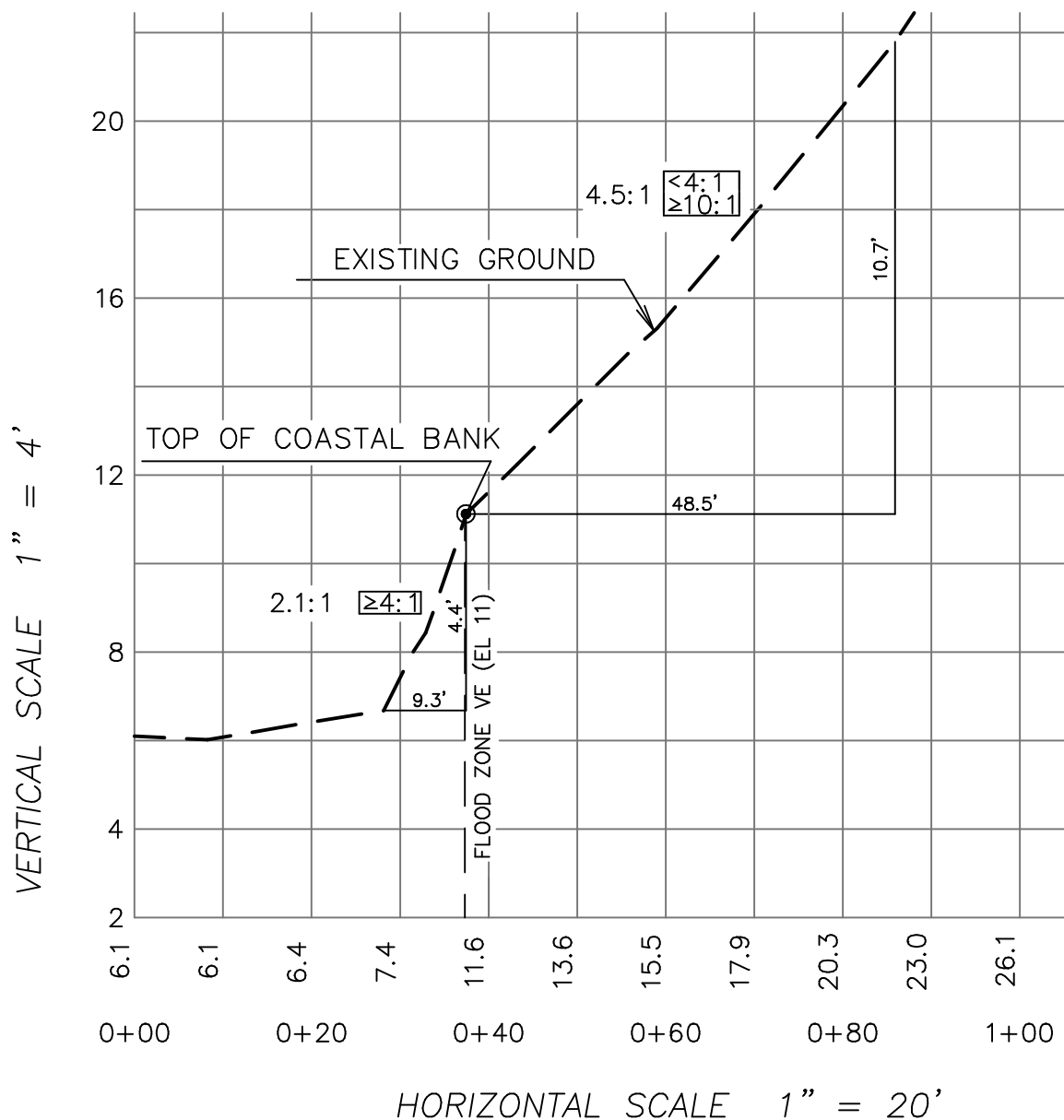


COASTAL BANK DETERMINATION:
MASSACHUSETTS DEP WETLANDS
PROGRAM POLICY 92-1
- FIGURE 2

ELEVATION PROFILE "C"
6 CORN HILL ROAD
TRURO, MA
PREPARED FOR:
WILLIAM AND LINDA ANDERSON

SCALE: 1in. = 20ft. JANUARY 13, 2025

SCHOFIELD BROTHERS OF CAPE COD
LAND SURVEYING AND ENVIRONMENTAL PERMITTING
161 CRANBERRY HIGHWAY - P.O. BOX 101
ORLEANS, MASS. 02653
(508) 255-2098
0-12716



COASTAL BANK DETERMINATION:
 MASSACHUSETTS DEP WETLANDS
 PROGRAM POLICY 92-1
 - FIGURE 2

ELEVATION PROFILE "D"
 6 CORN HILL ROAD
 TRURO, MA
 PREPARED FOR:
 WILLIAM AND LINDA ANDERSON

SCALE: 1in. = 20ft. JANUARY 13, 2025

SCHOFIELD BROTHERS OF CAPE COD
 LAND SURVEYING AND ENVIRONMENTAL PERMITTING
 161 CRANBERRY HIGHWAY - P.O. BOX 101
 ORLEANS, MASS. 02653
 (508) 255-2098

0-12716



Lowbush Blueberry

Vaccinium angustifolium

Growing Information

- Plant Type: Shrub
- Sunlight: Full sun, part shade
- Soils: Dry to moist, Average
- Bloom Time: White flowers in May, June
- Size: 1-2ft in height; 1-3ft spread

Grow lowbush blueberry in a rock garden or woodland setting. Blueberries are edible and the foliage is attractive and especially vibrant in fall. Thrives in moist, highly organic, well-drained, acidic soil, but can also grow in shady, dry soils that are barren of other plants.

Garden Companions

Mountain Laurel (*Kalmia latifolia*), Teaberry (*Gaultheria procumbens*), Christmas Fern (*Polystichum acrostichoides*), Intermediate Fern (*Dryopteris intermedia*)

Nature Benefits

- Host plant for the Brown Elfin butterfly.
- Pollen and nectar source for a variety of bees and other insects.
- Offers fruit for mammals and birds.

Natural Habitat

Occurs in forest understory, upland bogs, pastures.



Arrowwood

Viburnum dentatum

Growing Information

- Plant Type: Shrub
- Sunlight: Sun, part shade
- Soils: Acidic moist, well-drained, average
- Bloom Time: White flowers in May, June
- Size: 6-10ft in height; 5-10ft spread

Upright growing shrub that turns shades of yellow, orange, and red in the fall. It can be used for borders, hedges or screens, or as mass plantings and groupings, foundation plantings, or as a backdrop to a pollinator or wildlife garden. Fruits are dark blue. If you must prune, do so immediately after flowering since flower buds form in the summer for the following year.

Garden Companions

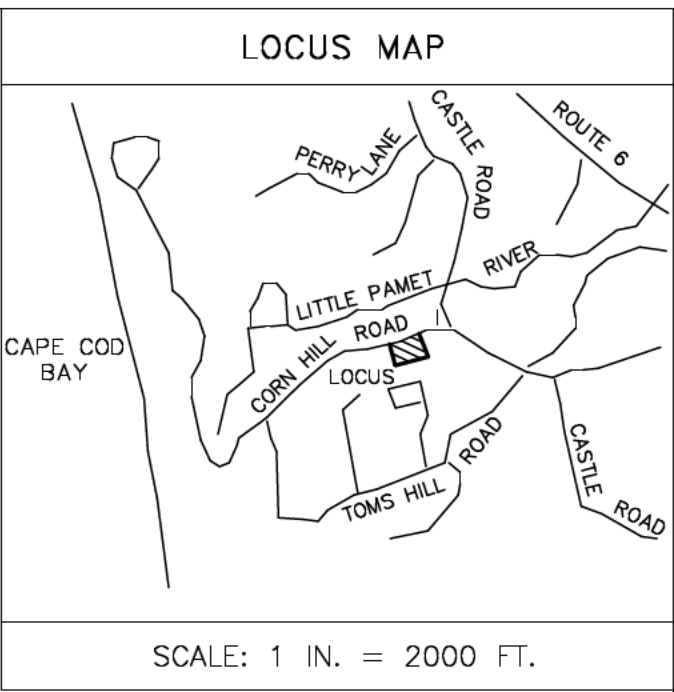
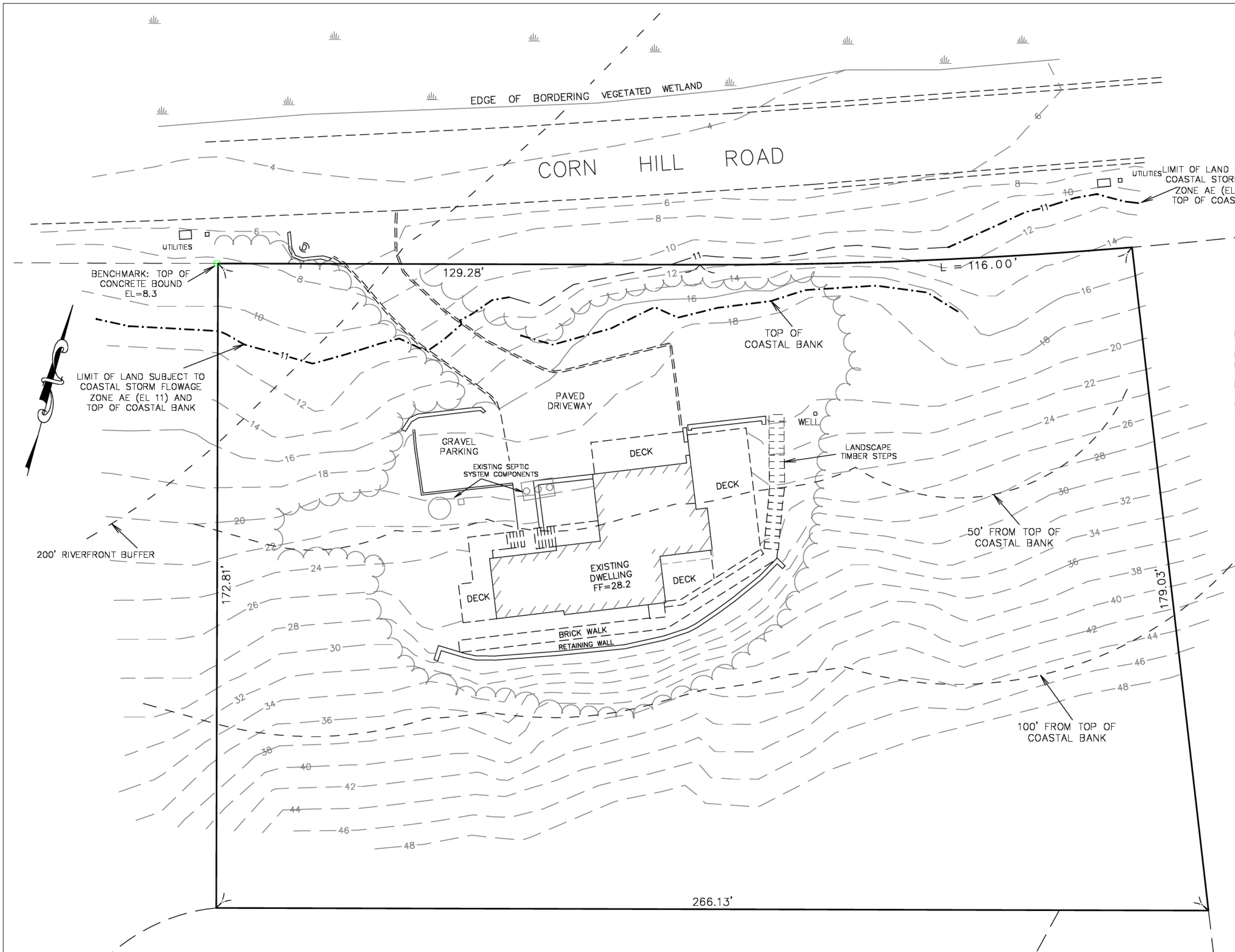
Eastern Wood Fern (*Dryopteris marginalis*), Lady Fern (*Athyrium filix-femina*), White Turtlehead (*Chelone glabra*), Golden Groundsel (*Packera aurea*)

Nature Benefits

- Attracts Red Admiral, Eastern Comma and Question Mark butterflies
- Host plant providing food for the caterpillar stage of Spring Azure Butterfly and Hummingbird Moth.
- Fruit is food for a variety of songbirds.

Natural Habitat

Occurs in forest edges, shady upland woods, and wetland edges.

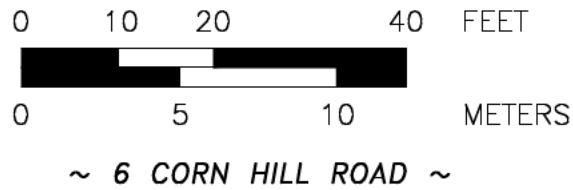


EXISTING ALTERATION CALCULATIONS				
	TOTAL AREA	W/IN 50' BUFFER	W/IN 100' BUFFER	W/IN 200' RIVERFRONT
BUILDING	1380	318	1380	0
DECKS, STEPS	1247	528	1247	0
WALKWAYS	527	80	527	0
DRIVEWAY	2407	2407	2407	40
WALLS	195	81	195	0
CLEARED AREAS	6291	3685	6490	0
TOTAL	12047	7099	12051	40



- PROJECT DATA
- ASSESSOR'S MAP 46 - PARCEL 60
 - OWNER OF RECORD:
ANDERSON REALTY TRUST
55 UPPER GORE ROAD
WEBSTER, MA 01570
 - REFERENCE:
DEED BOOK 30747, PAGE 19
PLAN BOOK 288, PAGE 19
 - ZONING CLASSIFICATION:
RESIDENTIAL
 - LOT AREA = 44,420 SQ.FT.±
 - ELEVATIONS REFER TO NAVD88 DATUM. SEE BENCHMARK ON PLAN
 - UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

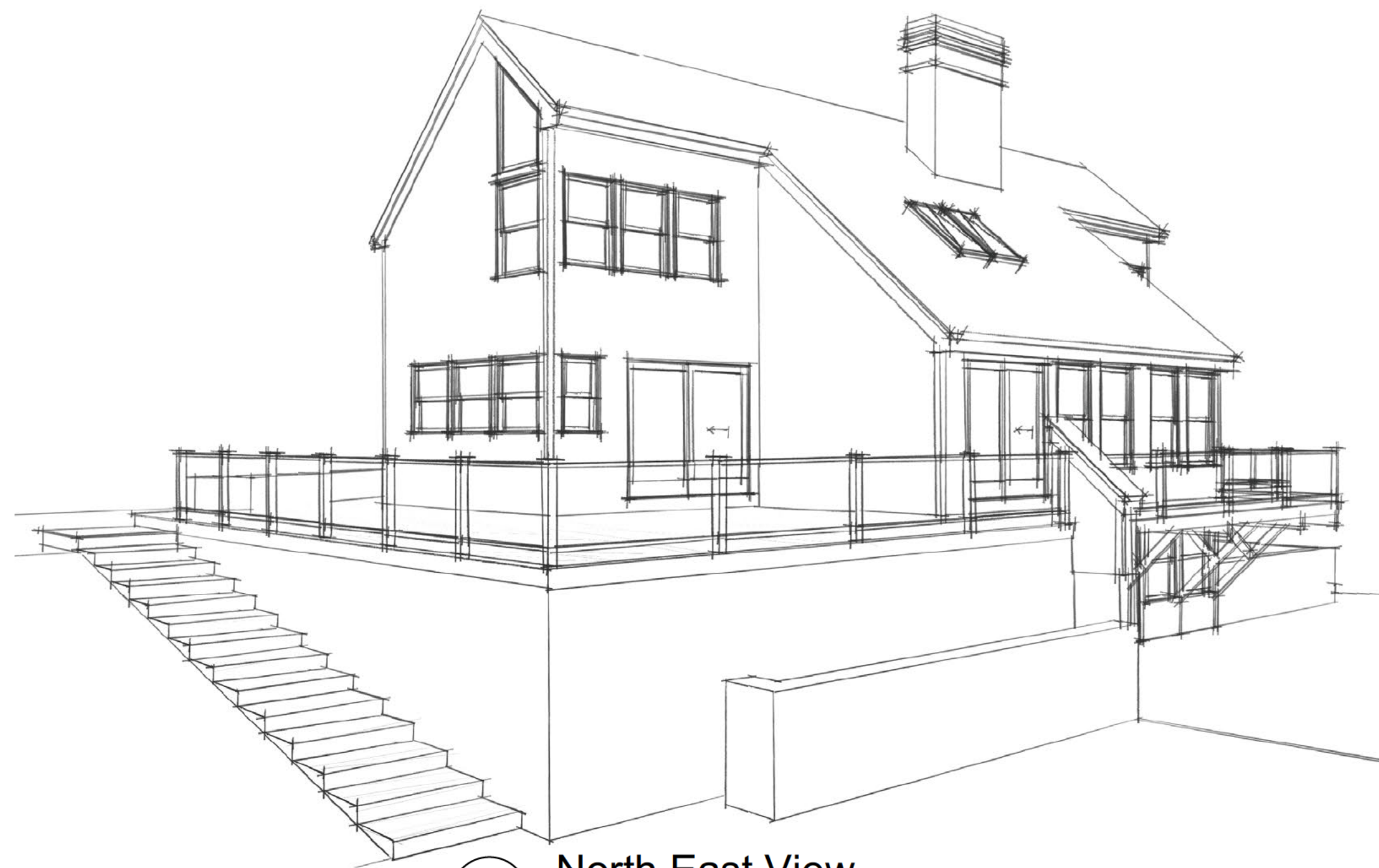
LEGEND	
	PROPERTY LINE
	OVERHEAD WIRES
	UNDERGROUND UTILITIES
	EXISTING SPOT GRADE
	EXISTING CONTOUR
	LIMIT OF CLEARING



EXISTING CONDITIONS PLAN IN
TRURO, MA

PREPARED FOR:
LINDA ANDERSON
55 UPPER GORE ROAD
WEBSTER, MA 01570

SCALE: 1" = 20' DATE: JANUARY 13, 2025
SCHOFIELD BROTHERS OF CAPE COD
LAND SURVEYING AND ENVIRONMENTAL PERMITTING
P.O. BOX 101, 161 CRANBERRY HIGHWAY, ORLEANS, MA 02653
TEL. NO. 508-255-2098 FAX NO. 508-240-1215



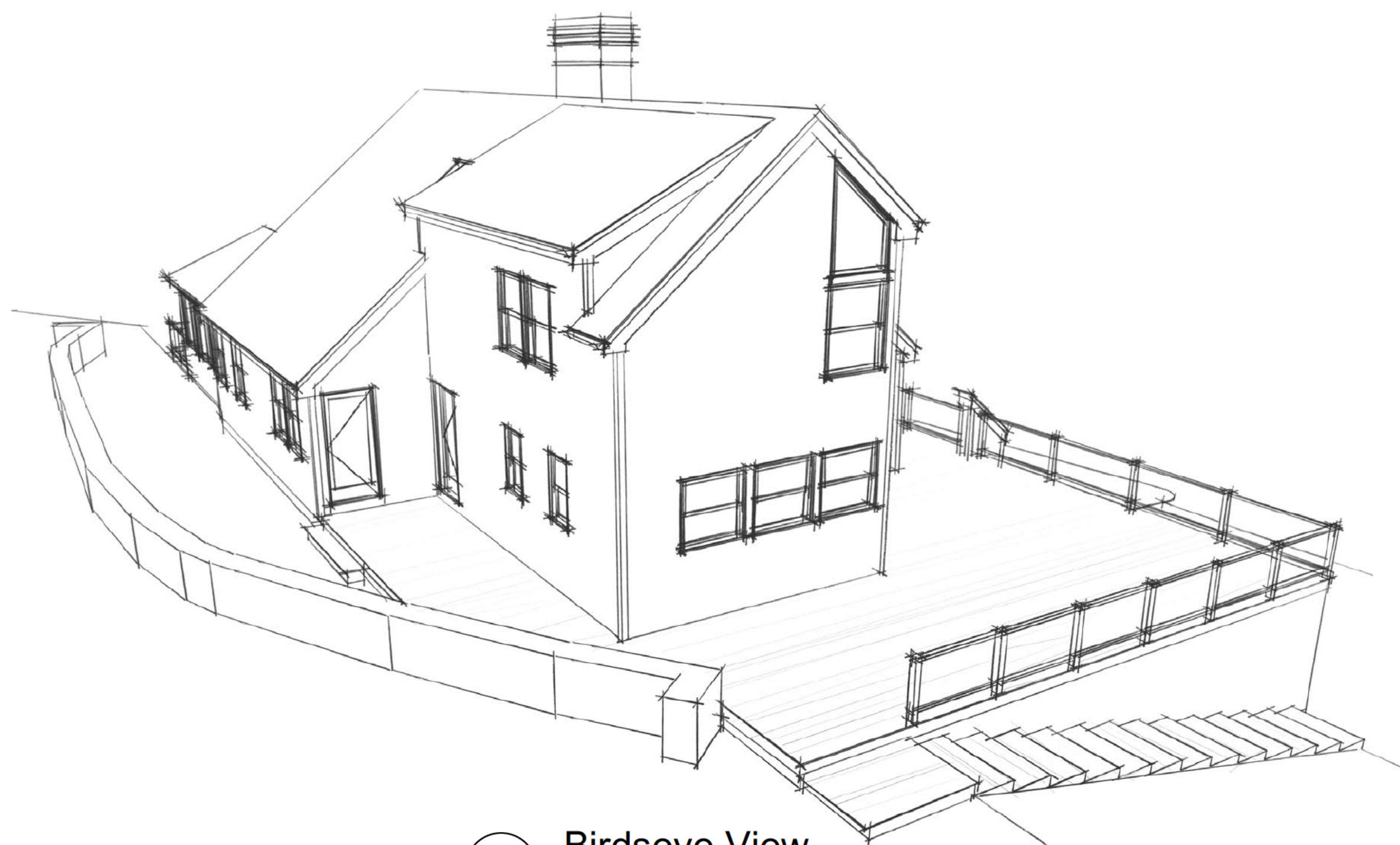
3 North East View



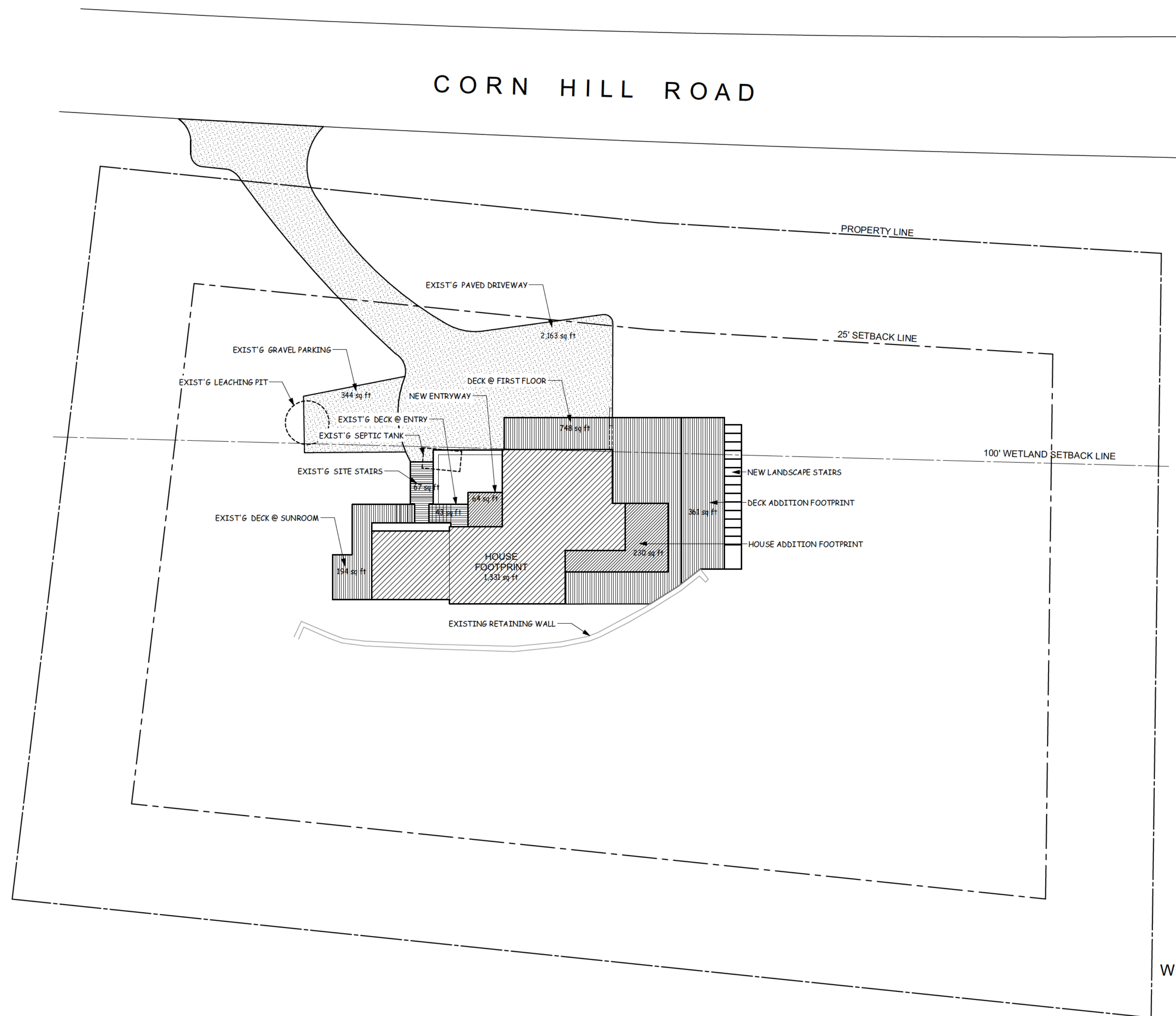
2 View from Driveway



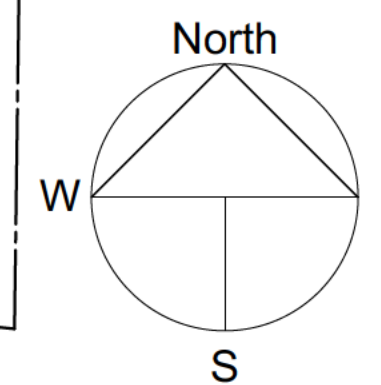
4 South East View

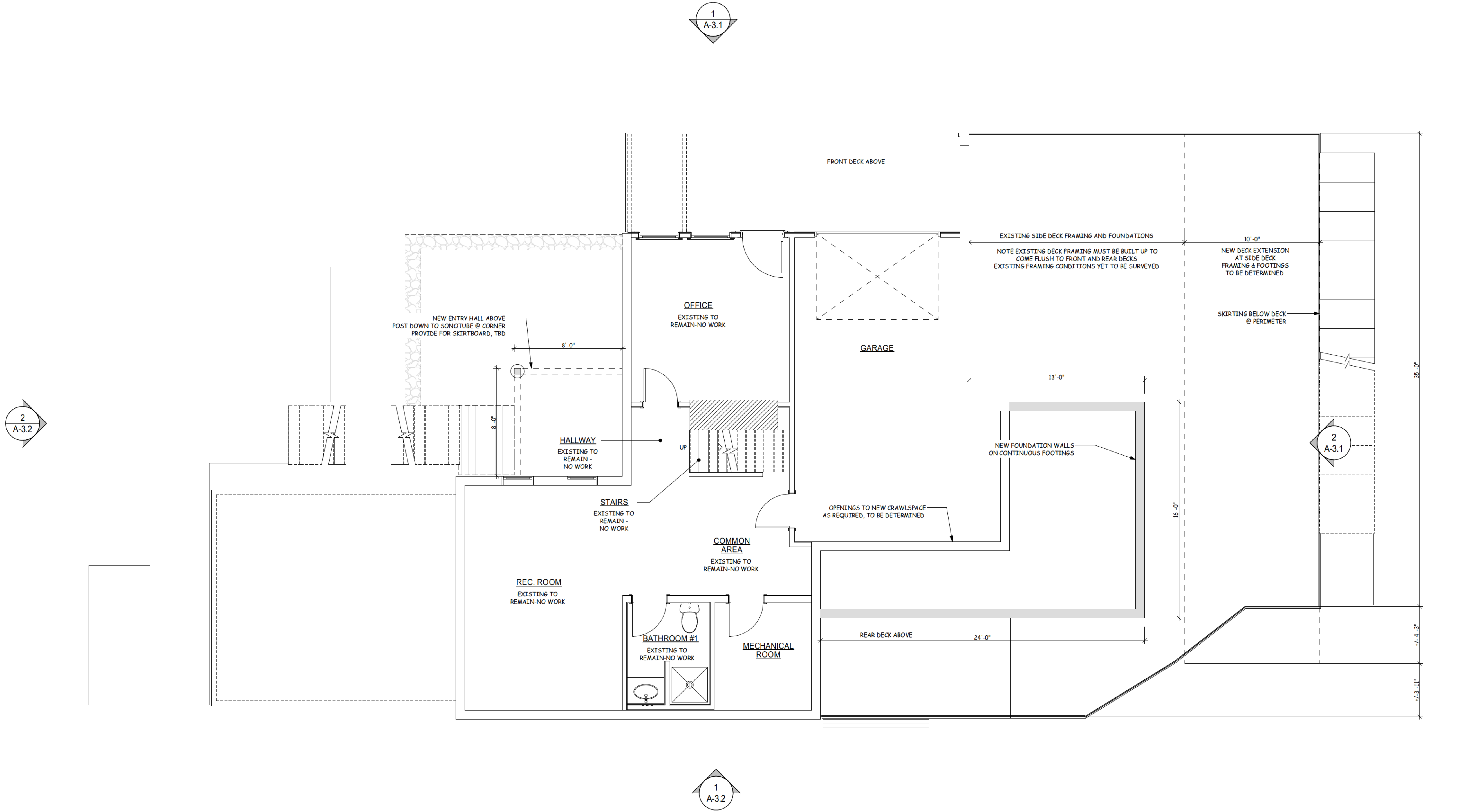


5 Birdseye View

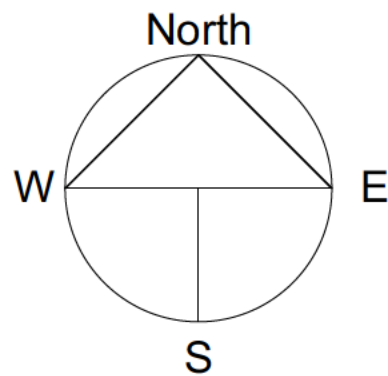


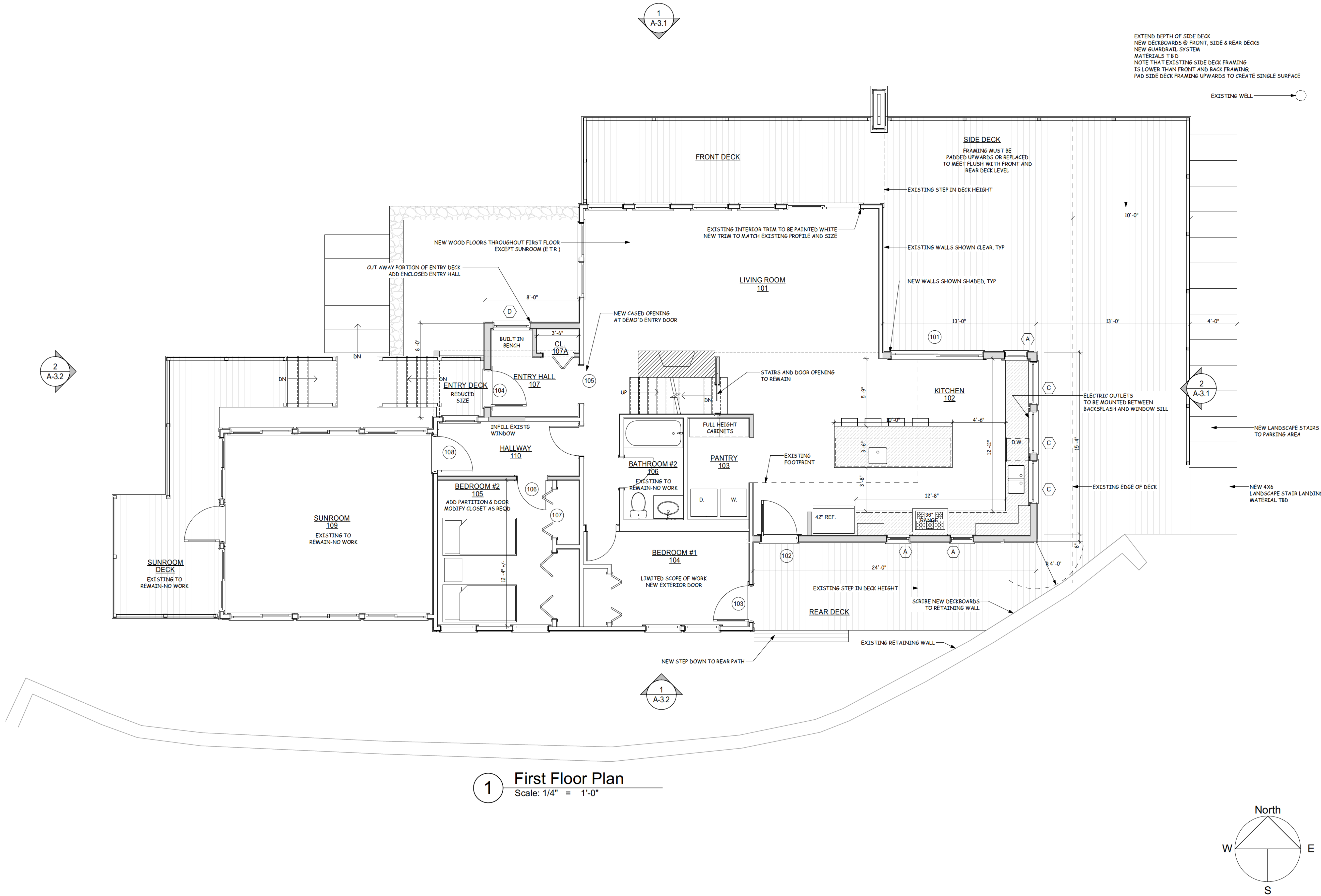
1 Proposed Site Plan Massing & Boundaries
Scale: 1/16" = 1'-0"





1 Basement
Scale: 1/4" = 1'-0"





WINDOWS GENERAL NOTES:

- 1
- G.C SHALL SUPPLY ARCHITECT AND OWNER SHOP DRAWINGS FOR REVIEW FOR ALL DOORS AND WINDOWS BEFORE PLACING ORDER.
- 2
- ALL WINDOWS TO BE ANDERSEN A SERIES; DARK BRONZE EXTERIOR, BIRCH BARK WHITE INTERIOR; 3/4" TH. MUNTINS W/ SPACER BARS; DOUBLE HUNG WINDOWS TO HAVE FULL SCREENS.
- 3
- SEE ELEVATIONS FOR MUNTIN PATTERNS.
- 4
- ROUGH OPENING SIZES ARE PER MANUFACTURER'S RECCOMENDATIONS AND SHOULD BE REVIEWED BY THE GENERAL CONTRACTOR FOR DESIGN CONDITIONS.
- 5
- SEE PLANS FOR LOCATIONS REQUIRING TEMPERED OR SMART SUN GLASS.
- 6
- ALL SCREENS TO BE MANUFACTURER'S STANDARD MATERIAL.

Window Schedule

Unit ID	Nominal W x H Size	TYPE	Remarks
A	1'-11 1/4"x3'-7 1/4"	Double Hung	
B	2'-9 1/4"x4'-3 1/4"	Double Hung	
C	3'-7 1/4"x3'-7 1/4"	Double Hung	
D	3'-1 1/4"x4'-5 1/4"	Double Hung	
E	3'-7 1/4"x4'-7 1/4"	Double Hung	
F	3'-6 3/4"x5'-6 5/8"	Fixed	Trapezoid shaped window

EXTERIOR DOORS GENERAL NOTES

- 1
- G.C SHALL SUPPLY ARCHITECT AND OWNER SHOP DRAWINGS FOR REVIEW FOR ALL DOORS AND WINDOWS BEFORE PLACING ORDER.
- 2
- ALL FRENCH DOORS AND PATIO DOORS TO BE ANDERSEN A SERIES & CARRY SAME FINISH SPECIFICATION AS WINDOWS.
- 3
- SEE ELEVATIONS FOR MUNTIN PATTERNS AND ACTIVE PANELS.

Exterior Door Schedule

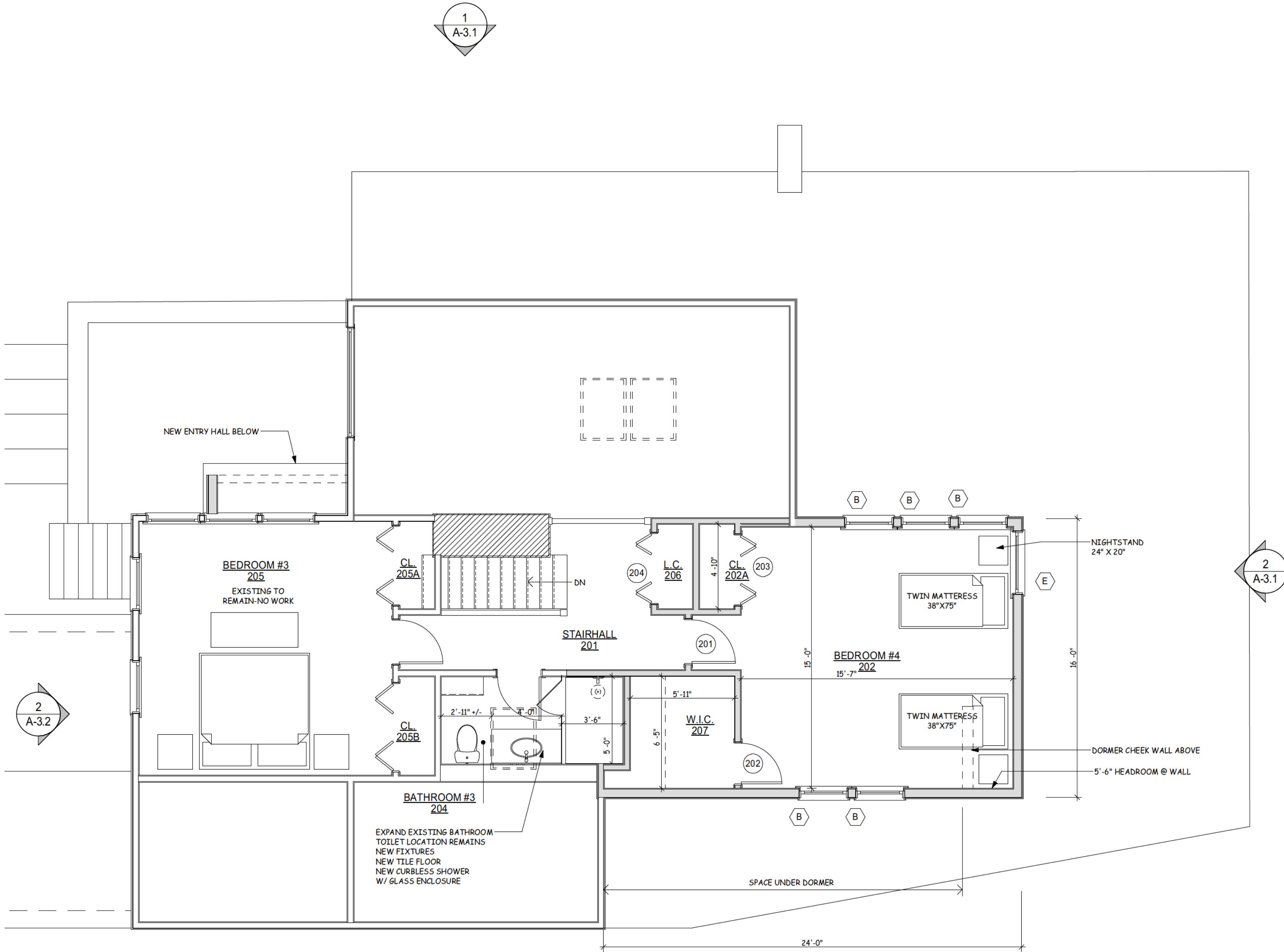
Unit ID	Unit Size W x H	Type	Remarks
101	7'-11 1/4"x6'-10 3/8"	Gliding Patio Door	
102	3'-0"x6'-10 3/8"	Hinged Patio Door	
103	3'-0"x6'-10 3/8"	Hinged Patio Door	
104	3'-0"x6'-8"	Entry Door	
108	3'-0"x6'-8"	Hinged Patio Door	

INTERIOR DOORS GENERAL NOTES:

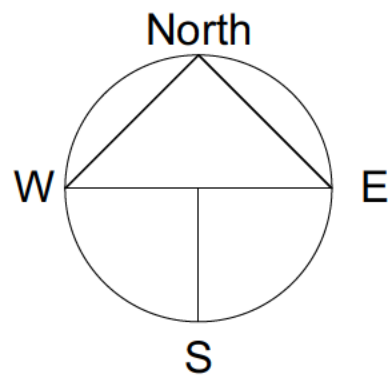
- 1
- G.C SHALL SUPPLY ARCHITECT AND OWNER SHOP DRAWINGS FOR REVIEW FOR ALL DOORS AND WINDOWS BEFORE PLACING ORDER.
- 2
- TYPICAL DOOR SLAB @ FIRST & SECOND FLOORS: MDF 1 / 38" THICK SLABS TO MATCH EXISTING PANEL DESIGN. pAINT FINISH
- 4
- TYPICAL HARDWARE: STANDARD BORE, OIL RUBBED BRONZE HARDWARE SQUARE HINGES. FINAL SCHEDULE BY GENERAL CONTRACTOR.

Interior Door Schedule

Unit ID	Unit Size W x H	Type	Remarks
105	3'-2"x6'-8"		
106	2'-6"x6'-8"		
107	4'-0"x6'-8"		
201	2'-6"x6'-8"		
202	2'-4"x6'-8"		
203	4'-0"x6'-8"		
204	4'-0"x6'-8"		



1 Second Floor Plan
Scale: 1/4" = 1'-0"





1 North Elevation
Scale: 1/4" = 1'-0"



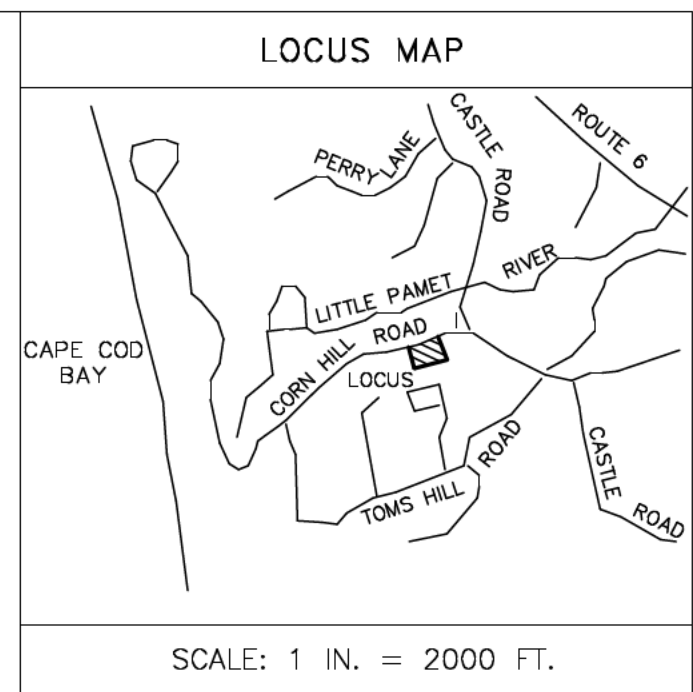
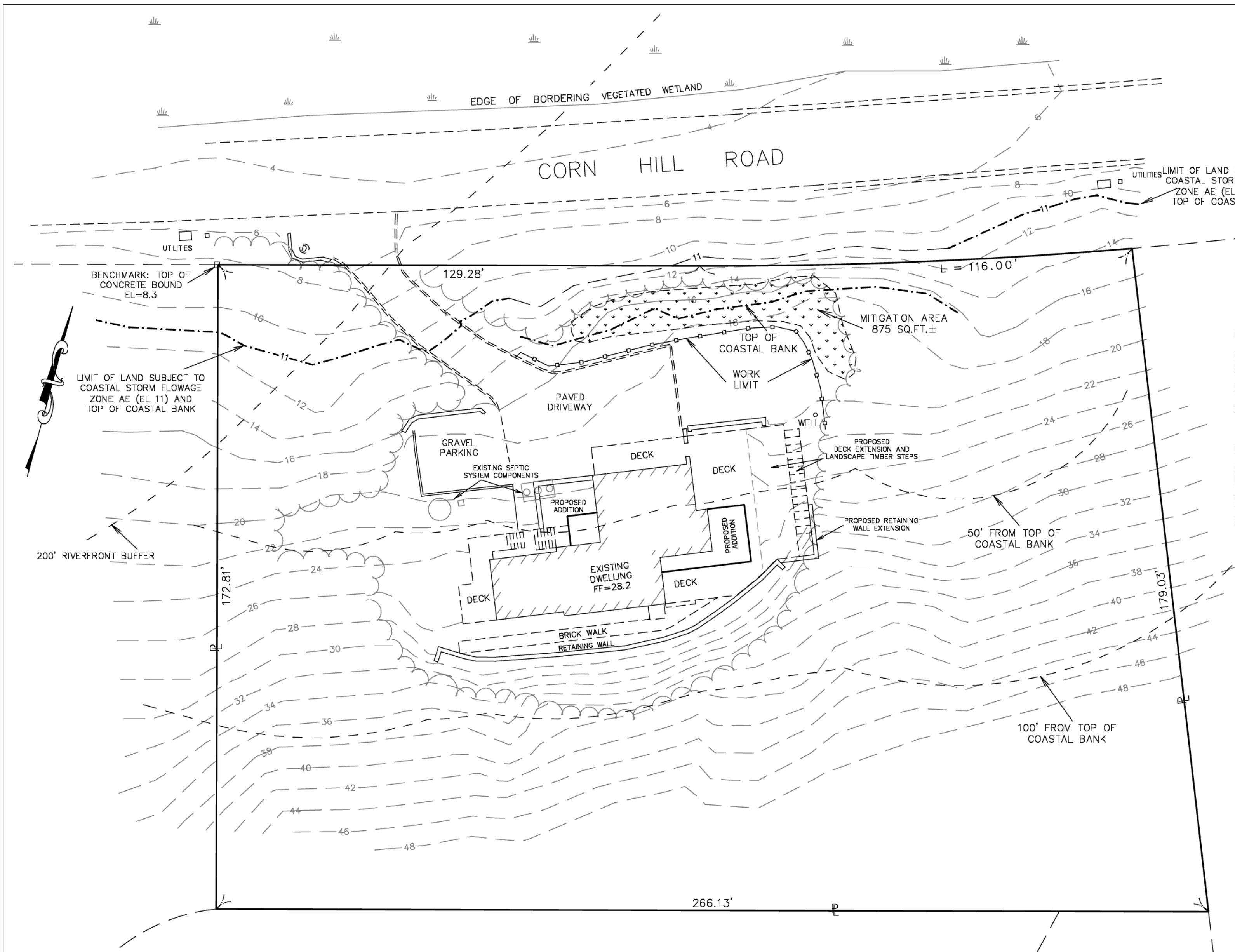
2 East Elevation
Scale: 1/4" = 1'-0"



1 South Elevation
Scale: 1/4" = 1'-0"



2 West Elevation
Scale: 1/4" = 1'-0"

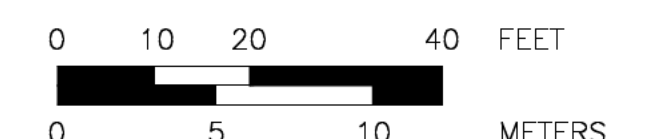


EXISTING ALTERATION CALCULATIONS				
	TOTAL AREA	W/IN 50' BUFFER	W/IN 100' BUFFER	W/IN 200' RIVERFRONT
BUILDING	1380	318	1380	0
DECKS, STEPS	1247	528	1247	0
WALKWAYS	527	80	527	0
DRIVEWAY	2407	2407	2407	40
WALLS	195	81	195	0
CLEARED AREAS	6291	3685	6490	0
TOTAL	12047	7099	12051	40

PROPOSED ALTERATION CALCULATIONS				
BUILDING	1654	351	1654	0
DECKS, STEPS	1391	700	1391	0
WALKWAYS	457	133	457	0
DRIVEWAY	2407	2407	2407	40
WALLS	200	81	200	0
CLEARED AREA	5063	2552	5063	0
TOTAL	11172	6224	11172	40

THE MITIGATION AREA (875 SQ.FT.) SHALL BE PLANTED MINIMALLY AS FOLLOWS:

SPECIES	MINIMUM NUMBER PROPOSED	MINIMUM SIZE
VACCINIUM ANGUSTIFOLIUM (LOWBUSH BLUEBERRY)	30	1 GALLON
VIBURNUM DENTATUM (ARROWWOOD)	8	3 GALLON



~ 6 CORN HILL ROAD ~

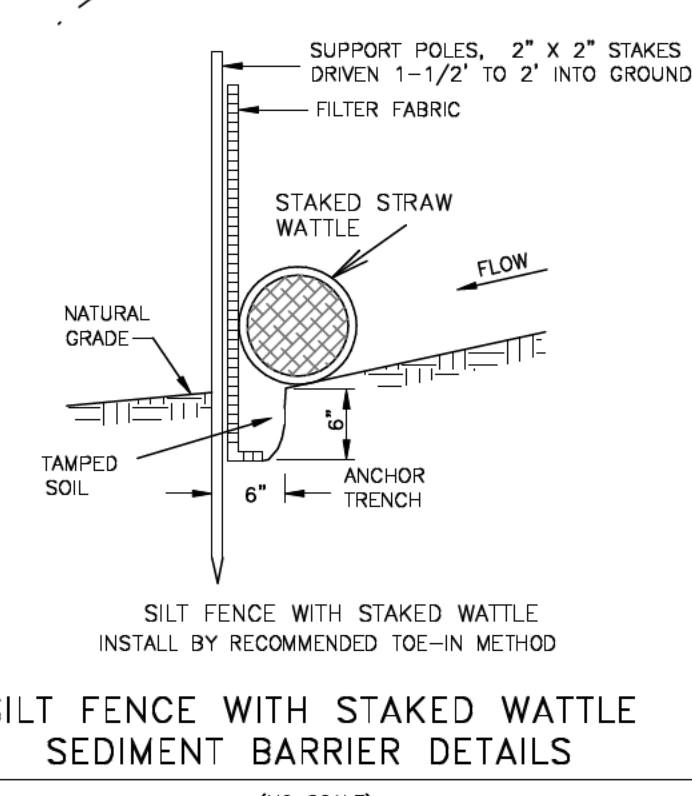
PROPOSED SITE PLAN IN TRURO, MA

PREPARED FOR:
LINDA ANDERSON
55 UPPER GORE ROAD
WEBSTER, MA 01570
SCALE: 1" = 20' DATE: JANUARY 13, 2025
SCHOFIELD BROTHERS OF CAPE COD
LAND SURVEYING AND ENVIRONMENTAL PERMITTING
P.O. BOX 101, 161 CRANBERRY HIGHWAY, ORLEANS, MA 02653
TEL. NO. 508-255-2098 FAX NO. 508-240-1215

- EROSION CONTROL AND CONSTRUCTION NOTES:
- THE FOLLOWING ARE GENERAL EROSION CONTROL SPECIFICATIONS TO BE EMPLOYED WHEN CONSTRUCTION WORK IS TO TAKE PLACE ON SITE:
1. PRIOR TO ANY DISTURBANCE OR ALTERATIONS OF ANY AREA ON THE SITE A STAKED SILT FENCE OR SILT FENCE WITH STAKED STRAW WATTLE SEDIMENT BARRIER SHALL BE INSTALLED AT THE LOCATION SHOWN.
 2. ONCE INSTALLED, THE SEDIMENT BARRIER SHALL BE MAINTAINED IN PLACE UNTIL ALL AREAS UPGRADIENT FROM THE BARRIER HAVE BEEN STABILIZED AS SPECIFIED HEREIN.
 3. ALL DISTURBED AREAS NOT OTHERWISE DEVELOPED OR WHERE SPECIAL STABILIZATION MEASURES OR LANDSCAPE PLANTINGS ARE NOT PROPOSED SHALL BE LOAMED AND SEEDED WITH A RYE/FESCUE MIX. FOUR INCHES OF TOPSOIL (LOAM) SHALL BE APPLIED UNLESS OTHERWISE SPECIFIED.
 4. ALL AREAS OUTSIDE OF THE LIMIT OF WORK ARE TO BE LEFT UNDISTURBED. DURING THE SITE WORK ALL PERSONS AND EQUIPMENT SHALL STAY OUT OF THESE AREAS AND PRESERVE THE EXISTING VEGETATION.
 5. DEMOLITION AND CONSTRUCTION DEBRIS IS TO BE PLACED IN A DUMPSTER AND REMOVED TO A LICENSED DISPOSAL SITE.

- PROJECT DATA
- 1: ASSESSOR'S MAP 46 - PARCEL 60
 - 2: OWNER OF RECORD:
ANDERSON REALTY TRUST
55 UPPER GORE ROAD
WEBSTER, MA 01570
 - 3: REFERENCE:
DEED BOOK 30747, PAGE 19
PLAN BOOK 288, PAGE 19
 - 4: ZONING CLASSIFICATION:
RESIDENTIAL
 - 5: LOT AREA = 44,420 SQ.FT.±
 - 6: ELEVATIONS REFER TO NAVD88 DATUM. SEE BENCHMARK ON PLAN
 - 7: UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

LEGEND	
— P —	PROPERTY LINE
— UG —	UNDERGROUND UTILITIES
x 14.4	EXISTING SPOT GRADE
— 102 —	EXISTING CONTOUR
~~~~~	LIMIT OF CLEARING




SILT FENCE WITH STAKED WATTLE SEDIMENT BARRIER DETAILS  
(NO SCALE)











PLAN NOTES

- Site plan provided by Ryder Wilcox Inc.
- The property located at 6 River View Road is currently undeveloped. The entire lot is heavily vegetated with a Maritime Forest/Woodland plant community, with oak (*Quercus spp.*) and pitch pine (*Pinus rigida*) being the dominant species on site. Black huckleberry (*Gaylussacia baccata*), lowbush blueberry (*Vaccinium angustifolium*), bayberry (*Myrica pensylvanica*), bearberry (*Arctostaphylos uva-ursi*), Pennsylvania sedge (*Carex pensylvanica*), crinkle hairgrass (*Deschampsia flexuosa*), and poison ivy (*Toxicodendron radicans*) comprise most of the understory and ground cover vegetation.
- This plan proposes to restore native vegetation in areas disturbed by the proposed construction of patio and walkway within the 100' buffer zone to the coastal bank and 200' outer riparian.
- Disturbed vegetation within the work limit in jurisdictional areas will be restored with native vegetation found in abutting naturalized areas, include bearberry, lowbush blueberry, bayberry, and oak. This vegetation will be allowed to naturalize to blend in seamlessly with surrounding vegetated areas.
- A 4' wide footpath will allow property owners access to a small seating area (approximately 256 square feet) located at the top of the coastal bank. No trees will be removed for either the footpath or the seating area. Black huckleberry within the proposed seating area will be flush cut and removed, and the seating area will be planted with Pennsylvania sedge to provide soil cover and stability while allowing for safe and comfortable access.
- **REVISED 10/21/2024: VISTA MANAGEMENT PLAN**
- This plan identifies two filtered vista corridors at the 6 Riverview Road property. These two corridors are proposed to provide filtered views of the marsh and bay for the homeowners from their second floor deck and living spaces.
- No Vista Management Plan was proposed at the time of permitting in order to find the most appropriate views after the house construction.
- The cutting, pruning, lifting of canopy, limbing, and any other management of above ground vegetation will be limited. All trees proposed for removal or pruning have been tagged in the field. Regenerative pruning of the existing native pitch pine and oak tree community will be performed where necessary to enhance the health of the trees and increase safety and structure of the canopy and understory vegetation during weather events and other natural causes.
- The area that has been disturbed for the installation of the well will be restored with 409 native shrubs, including lowbush blueberry, bayberry, and bearberry. Crinkle hair grass and Pennsylvania sedge will also be planted throughout this area. This native plant community reflects the diverse matrix of plants seen throughout the property. The proposed plantings for this restoration area where construction disturbance occurred outside the Limit of Work exceeds the Truro Commission's requirement of replacing trees of 6" or less dbh with 2:1 native shrubs.
- Additionally, the approximately 300 square feet of existing black huckleberry that will be removed to accommodate a seating area shall be transplanted in the restoration area. This is an excellent opportunity to relocate existing native vegetation within the same property and encourage it to regenerate and spread over time.

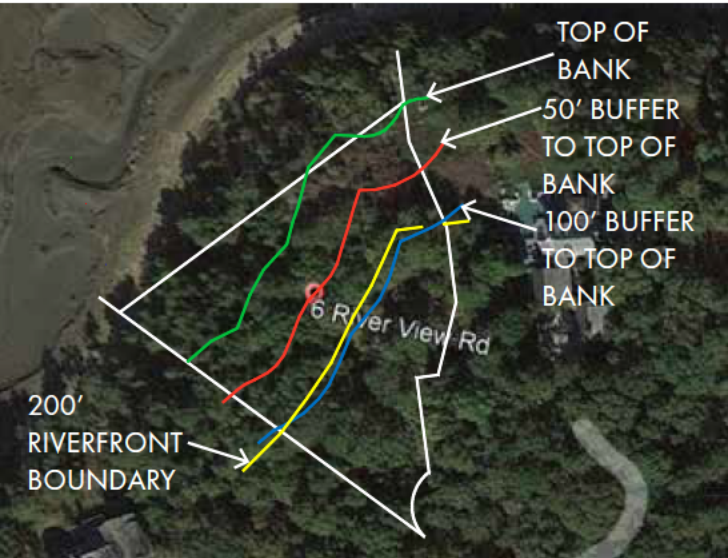
PLANT SCHEDULE WELL RESTORATION			
SYMBOL	COMMON / BOTANICAL NAME	CONT	QTY
NATIVE SHRUBS			
	Northern Bayberry / Myrica pensylvanica	3 gal	9

CONCEPT PLANT SCHEDULE WELL RESTORATION

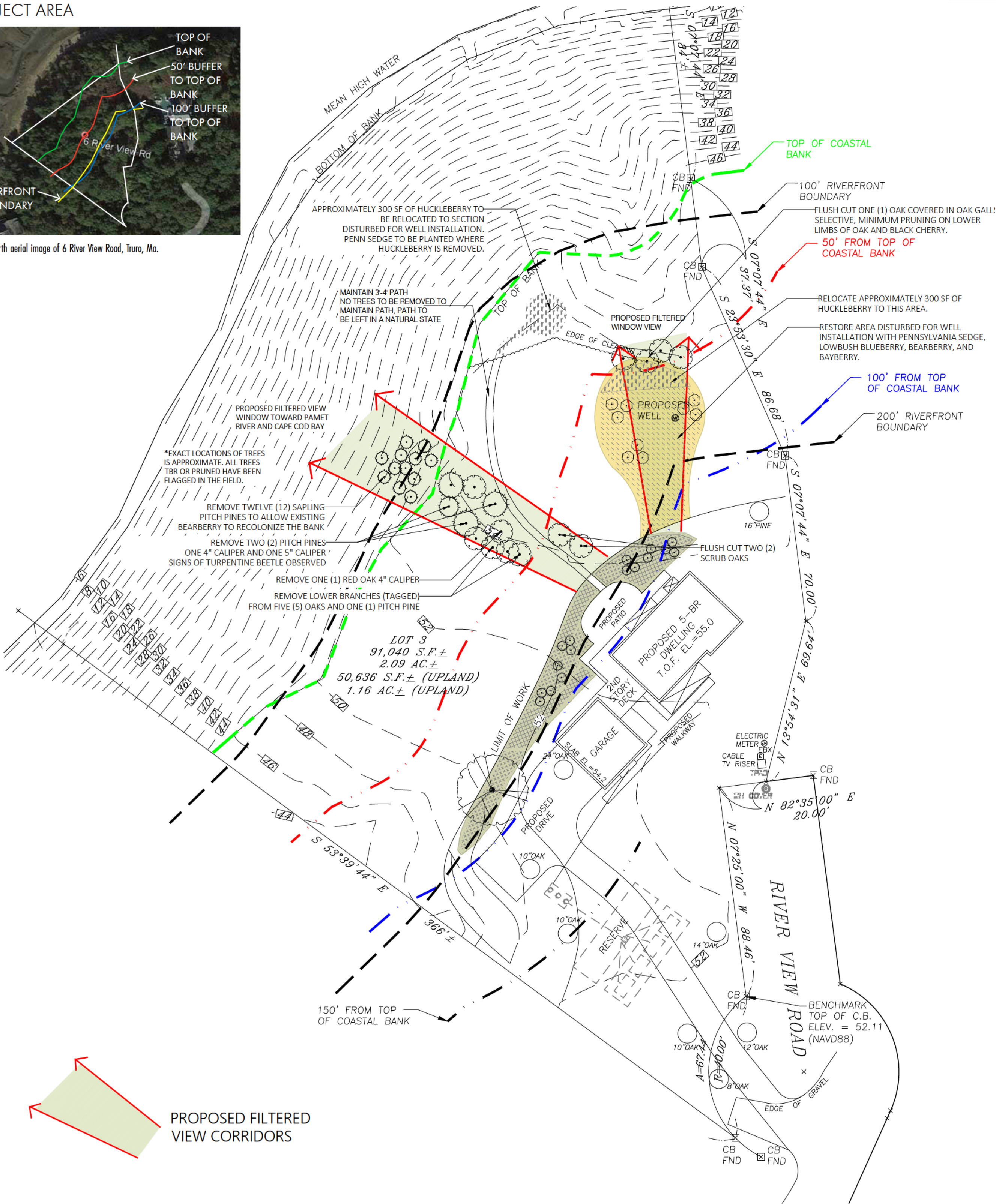
SHADE GROUNDCOVER			
	Arctostaphylos uva-ursi / Kinnikinnick	211	1 gal
	Carex pensylvanica / Pennsylvania Sedge	211	2" plug
	Deschampsia flexuosa / Crinkled Hair Grass	211	2" plug
	Vaccinium angustifolium / Lowbush Blueberry	211	1 gal

PLANT SCHEDULE PREVIOUS MITIGATION PLAN			
SYMBOL	COMMON / BOTANICAL NAME	CONT	QTY
TREES			
	Swamp White Oak / Quercus bicolor	2/3" cal	1
SHRUBS			
	Northern Bayberry / Morella pensylvanica	3 gal	16
GROUND COVERS			
	Bearberry / Arctostaphylos uva-ursi	1 gal	112
	Lowbush Blueberry / Vaccinium angustifolium	1 gal	78

PROJECT AREA



Google Earth aerial image of 6 River View Road, Truro, Ma.

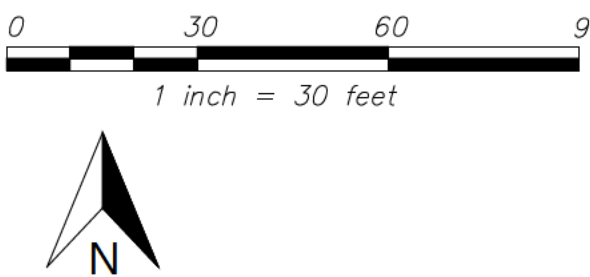


PO 391 HARWICH PORT, MA  
774-408-7718 | www.blueflaxdesign.com

VISTA MANAGEMENT PLAN

08/19/22 RSVD 01/04/23  
RSVD 10/21/24 for Vista Management

MORRISON RESIDENCE  
6 RIVERVIEW ROAD  
TRURO, MA



DATE	REVISION	INITIALS
01/04/23	Revise plantings base on Architectural's	TBH
10/21/24	Add Vista Management Plan	CC



## TOWN OF TRURO—ORDER OF CONDITIONS

544 Shore Road; Map 7, Parcel 5

DEP file # SE 75-1208

APPLICANT: Bay Beach Townhomes Condominium

**THIS IS A DRAFT ORDER AND WILL BE EDITED BASED ON THE 1/27/2025 HEARING**

### DOCUMENTS

1. Notice of Intent application; wetland fee transmittal form; Project narrative with photos; USGS Topographic map; Aerial Orthophoto Map; USGS FEMA map; NHESP map; 21-day waiver; abutter notification; abutters list; locus map
2. Letter from NHESP dated 11/27/2024
3. Management plan dated 1/7/2025
4. Site Plan by Grady Consulting LLC, dated 6/16/2023 and **revised 12/12/2024.**
5. Existing Conditions Plan by Grady Consulting LLC, dated 6/16/2023 and **revised 12/12/2024.**
6. Email from both abutting properties giving permission to extend work to property line.
7. Emails from easement holder, Rick Bashian, detailing easement specifics.
8. Letter from property owner's attorney George Hailer regarding easement rights

### PROJECT DESCRIPTION

1. The site is a ~39,552 square foot lot on Cape Cod Bay. The developed area includes a multi-unit, two story building built in 1963 with a paved parking lot on the landward side.
2. The resource areas include Land Subject to Coastal Storm Flowage, Barrier Beach, Coastal Dune, and Coastal Beach.
3. The approved project includes the installation of Sturdy drift fencing and a coir log array with sand nourishment to restore the dune. Other approved activity includes installation of snow fence, jute netting, and American beach grass as required.
4. The application was first heard on December 2, 2024, and continued to January 7, 2025, and again to January 27, 2025 so that the plan could be revised to shift the installation landward in better alignment with abutting properties as well as to update the management plan.

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

### FINDINGS

1. The Commission finds the site of the proposed project is in a Coastal Dune, and work will occur on the adjacent Coastal Beach above mean high water.
2. The areas subject to protection/regulation are Coastal Dune and Coastal Beach and their buffer zones, and Land Subject to Coastal Storm Flowage.
3. The Commission finds the Coastal Dune to exist in a dynamic coastal environment composed of windblown sand.
4. The Commission finds that the Coastal Dune is significant to storm damage prevention and flood control.
5. **The address for this project is #544 Shore Road.**
6. The Applicant acknowledges that the project to support the Coastal Dune with biodegradable (coir) measures is temporary (estimated at 10 years); the goal is to protect the Coastal Dune and its ability to perform the function of storm damage prevention.
7. The Applicant has agreed to conduct an engineering, legal and logistical analysis of alternatives to address the location of the structure in the Coastal Dune including possible elevation of the structure, reduction in size, relocation or removal of the structure. This analysis may include alternatives which would protect the coastal dune and ensure that the functions of storm damage prevention 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.
8. The Commission finds that the Coastal Beach resource area is significant to state listed species since it is located in Estimated Habitat of Rare Wildlife as mapped and published maps by NHESP.
  9. The Commission finds that the Coastal Beach is significant to storm damage prevention, flood control and protection of wildlife habitat.
  10. 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 LEC and dated December 2024, the Plan of Record, "Site Plan" by Grady Consulting LLC, dated 6/16/2023 and revised 12/12/2024, and Supplemental information including but not limited to the project narrative and site photos. In the event of any conflict between these referenced materials and this Order, this Order shall control.
  11. This Order is issued pursuant to the Massachusetts Wetlands Protection Act and the Town of Truro's Conservation By-Law and Conservation regulations.
  12. This Order of Conditions allows the following work: the placement and maintenance of an array of 20" diameter coir logs on the seaward face of the existing dune; the construction and maintenance of a sturdy drift fence; placement and maintenance of compatible sand cover over the coir logs; placement of compatible beach/bank nourishment sands; the planting of the Coastal Dune with American beach grass in double culms on a 12-14" matrix.

## **CONDITIONS**

### **A. 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 75-1208. 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. 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.

### **B. Construction & Revegetation**

1. The conditions set forth by NHESP and listed in the letter dated 11/27/2024 are specifically incorporated into this Order and shall be on-going conditions.
2. Shore bird nesting season commences April 1 and ends by August 15. The approved construction and future maintenance activities may not occur within this period without a previously approved protocol agreed upon by the Truro Conservation Department and NHESP.
3. The items outlined in the Management Plan dated 1/7/2025 are specifically incorporated in this order as on-going conditions.

4. Construction access for larger equipment shall be from the existing gravel parking lot at Shoreline Condominiums. An existing fence shall be removed and then replaced following installation. Access for smaller equipment shall be through the central breezeway of the applicant's structure. Any disturbed areas shall be restored and planted with American Beach grass.
5. The coir log installation shall be covered with medium-to-coarse clean sand with less than 10% clay and/or silt. This cover layer shall be maintained and a four-month window for maintenance following any storm damage may be allowed. This shall be an on-going condition.
6. Maintenance is required and shall include adding sand nourishment (as required and at least annually) with compatible material, adding jute, and planting American beach grass. This shall be an on-going condition.
7. Photographs of the project site shall be submitted quarterly. In addition, photographs shall also be submitted after any significant storm event that result in a substantial loss of sand. Quarterly reports can transition to (semi)-annual reports at the discretion of the Conservation Department.
8. Sand nourishment must be added to keep the coir covered and to replace the sand volume lost during storm events. Sand nourishment volumes shall be reported to the conservation office after each time it is placed. This is the responsibility of the **property owner** and shall also be included in the quarterly reports.
9. Some of these conditions may be on-going after the Certificate of Compliance has been issued and recorded.

**C. General Conditions**

1. Prior to the commencement of work or pre-construction site meeting, the form provided at the end of this Order (part G. "Recording Information") shall be completed and stamped at the appropriate Registry of Deeds, after the expiration of the 10-day appeal period and if no request for appeal has been filed with the Department of Environmental Protection.
2. This document 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, General Contractor and/or successor(s) to ensure that all Conditions of this Order of Conditions are complied with. A copy of this Order shall be available at the work site, during normal work hours, or posted, until the work is complete.
3. 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 of Conditions. Work shall not resume until the Commission is satisfied that the work will comply and has so notified the applicant in writing.
4. **Any changes** in the work described in the Notice of Intent or in the plans and specifications submitted to the Commission shall be submitted to the Commission in writing for a determination of whether the change is significant enough to the interests of the Act 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.
5. 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 expressed in covenants in all deeds to succeeding owners of portions of the property.
6. **Upon completion of this project the applicant shall submit a request to the Conservation Commission to receive a Certificate of Compliance.** The Applicant or Owner shall certify in writing that the work was completed as shown on the plans and documents referenced above. The applicant is required to submit an as-built plan from a registered professional Engineer, Land surveyor or Sanitarian certifying that the work has been conducted as shown on the plan(s) and documents referenced above and as conditioned by the Commission for the public record.

January 23, 2025

Truro Conservation Commission  
Property: 82 South Pamet Road, Truro  
Revised Mitigation Plan of May 15, 2021

Conservation Commission  
TOWN OF TRURO

JAN 24 2025

To Commissioners,

Thank you for your consideration of these most recent proposed changes to the property located at 82 South Pamet Road. We believe proposed changes show a much improved impact on the property as compared to the previously proposed plan of May 18, 2021.

Attached:

- Approved Mitigation Plan from 5/18/21 and DETAIL of the Approved plan
- Proposed Mitigation Plan and DETAIL of Proposed plan for consideration at your February 3rd, 2025 meeting.

Proposed Changes of Note:

- Additional mitigation areas, specifically native shrubs, along either side of driveway.
- Locations and quantities of native trees, many planted on footprint of existing right-side driveway. Designed to block view of home from South Pamet Rd.
- Detailed location of proposed driveway, including re-use of a portion of the existing driveway as it meets South Pamet Road.
- Removal of asphalt on reused portion of driveway, replaced by permeable gravel and grass strip.
- Move much of driveway outside of 100' setback. Flip parking area to be outside of the 100' setback.
- Detail of grass mixes surrounding house, as well as hardscape at front and side of house (dry-laid tumbled bluestone).

As per Emily's suggestion, I will be available onsite for a walkthrough and to field any questions about layout, and joined by Adrian Punch, who can answer questions about materials, installation, grading - and plantings including grasses, shrubs, and trees.

Thank you for your consideration of these proposed enhancements to the property.



Chris Nagle  
Designer





# PROPOSED MITIGATION PLAN










82 South Pamet Road, Truro

May 18, 2021

Environmental Consulting & Restoration, LLC

## NOTES:

- 1.) THE PROPOSED MITIGATION PLAN HAS BEEN DESIGNED TO MITIGATE THE IMPACTS TO THE 100-FOOT BUFFER ZONE FROM THE RAZE AND REBUILD PROJECT. THE PROPOSED RAZE AND REBUILD INCLUDES AN INCREASE OF APPROXIMATELY 876 SQUARE FEET IN STRUCTURAL FOOTPRINT (HOUSE, GARAGE & SHED) LOCATED WITHIN THE 100-FOOT BUFFER ZONE. PLEASE NOTE, THE PROPOSED PROJECT ALSO INCLUDES REMOVING ALL STRUCTURES FROM THE 50-FOOT BUFFER ZONE.
- 2.) THE PROPOSED MITIGATION INCLUDES APPROXIMATELY 3,144 SQUARE FEET OF NATIVE PLANTINGS TO RESTORE A PORTION OF THE 50-FOOT VEGETATED BUFFER ALONG THE COASTAL BANK WITHIN THE WESTERN PORTION OF THE SITE. MITIGATION HAS BEEN DESIGNED AT A GREATER THAN 3:1 RATIO COMPARED TO THE PROPOSED INCREASE IN STRUCTURAL FOOTPRINT WITHIN THE 100-FOOT BUFFER ZONE.
- 3.) THE MITIGATION AREA IS LOCATED WITHIN AND NEAR THE EXISTING FOOTPRINT OF THE STRUCTURES PROPOSED TO BE RAZED. THE PROPOSED MITIGATION AREA CURRENTLY INCLUDES STRUCTURES, MAINTAINED LAWN, A DILAPIDATED GARDEN, ETC.
- 4.) PRIOR TO ANY WORK IN OR NEAR THE PROPOSED MITIGATION AREA, EROSION CONTROLS SHALL BE ESTABLISHED ALONG THE EXISTING TREE LINE, BETWEEN THE MITIGATION AREA AND THE COASTAL BANK. EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL PLANTING HAS BEEN COMPLETED AND THE MITIGATION AREA HAS BEEN STABILIZED.
- 5.) PRIOR TO PLANTING, ALL WORK ASSOCIATED WITH RAZING THE EXISTING STRUCTURES SHOULD BE COMPLETED AND THE MITIGATION AREA "TURFED-OFF" TO EXPOSE THE NATIVE TOP SOILS. A LAYER OF CLEAN LOAM (2-3 INCHES) SHALL BE SPREAD ACROSS THE MITIGATION AREA AS NECESSARY TO INCREASE ORGANIC CONTENT AND PROMOTE BETTER "SEED-TO-SOIL" CONTACT.
- 6.) THE PROPOSED MITIGATION AREA SHALL BE HAND PLANTED WITH NATIVE SHRUBS AND SAPPLINGS. PLANT SPACING SHALL BE IN ACCORDANCE WITH D.E.P. GUIDANCE AT 10 FEET ON CENTER FOR SHRUBS AND 15 FEET ON CENTER FOR SAPPLINGS TO INCLUDE A TOTAL OF 36 NATIVE SHRUBS AND 16 NATIVE SAPPLINGS TO VEGETATE THE 3,144 SQUARE FOOT MITIGATION AREA. PLEASE NOTE, THE PROPOSED PLANTS HAVE ALL BEEN SELECTED FROM THE TOWN OF TRURO APPROVED PLANT LIST.
- 7.) AT THE COMPLETION OF PLANTING, THE ROOT ZONES OF EACH PLANT SHALL BE COVER WITH A NATURAL MULCH OR WOOD CHIP.
- 8.) THE REMAINING MITIGATION AREA SHALL BE HAND SEEDING WITH A NATIVE SEED MIX SUITABLE FOR THE BUFFER ZONE ENVIRONMENT AT THE RATE SPECIFIED BY THE SUPPLIER. PLEASE SEE THE INCLUDED SEED MIX FOR MORE INFORMATION.
- 9.) AN IRRIGATION SCHEDULE SHALL BE ESTABLISHED BY THE APPLICANT/CONTRACTOR.

Plant Legend				
Symbol	Qty	Common	Botanical	Size
	7	Common Raspberry	Rubus occidentalis	1-2 ft.
	7	Lowbush Blueberry	Vaccinium angustifolium	1-2 ft.
	8	Bayberry	Myrica pensylvanica	2-3 ft.
	7	Black Chokeberry	Aronia melanocarpa	2-3 ft.
	7	Virginia Rose	Rosa virginiana	2-3 ft.
	4	American Holly	Ilex opaca	4-5 ft.
	4	Black Cherry	Prunus serotina	5-6 ft.
	3	Black Oak	Quercus velutina	5-6 ft.
	5	Flowering Dogwood	Cornus florida	5-6 ft.

## Native Upland Wildlife Forage & Cover Meadow Mix

### Mix Composition

- 34.9% *Andropogon gerardii*, 'Niagara' (Big Bluestem, 'Niagara')
- 27.0% *Panicum virgatum*, 'Cave-In-Rock' (Switchgrass, 'Cave-In-Rock')
- 21.0% *Elymus virginicus*, PA Ecotype (Virginia Wildrye, PA Ecotype)
- 9.0% *Sorghastrum nutans*, NY4 Ecotype (Indiangrass, NY4 Ecotype)
- 3.0% *Rudbeckia hirta*, Coastal Plain NC Ecotype (Blackeyed Susan, Coastal Plain NC Ecotype)
- 2.0% *Chamaecrista fasciculata*, PA Ecotype (Partridge Pea, PA Ecotype)
- 1.5% *Helopsis helianthoides*, PA Ecotype (Oxeye Sunflower, PA Ecotype)
- 1.0% *Coreopsis tinctoria* (Plains Coreopsis)
- 0.4% *Desmodium canadense*, PA Ecotype (Showy Ticktrefoil, PA Ecotype)
- 0.1% *Monarda fistulosa*, Fort Indiantown Gap-PA Ecotype (Wild Bergamot, Fort Indiantown Gap-PA Ecotype)

FOR MORE INFORMATION PLEASE REFER TO THE PROJECT DESCRIPTION.



PHOTO 1: EXAMPLE OF DEBRIS/RUBBLE PROPOSED TO BE REMOVED FROM THE COASTAL BANK/BUFFER ZONE.

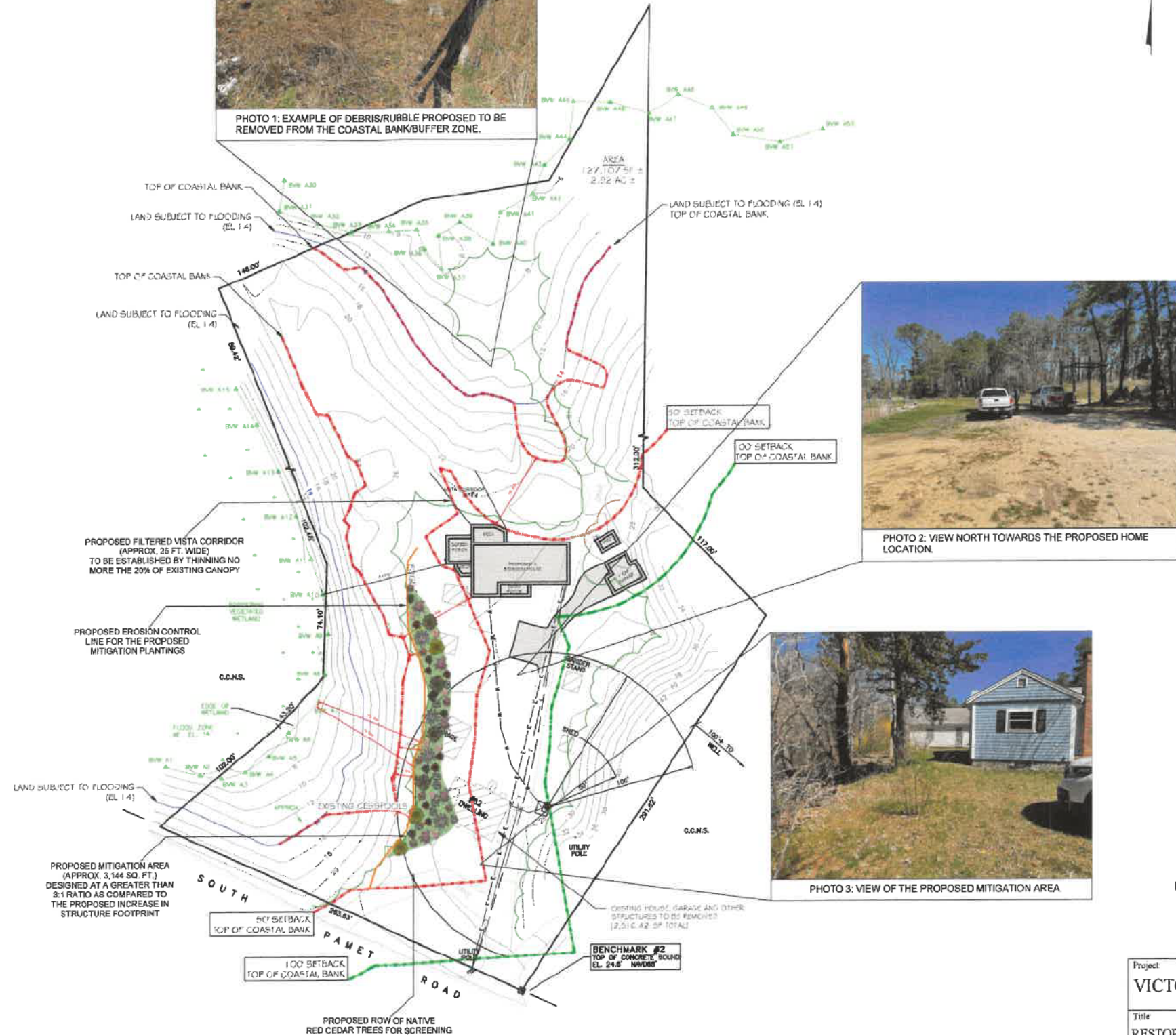
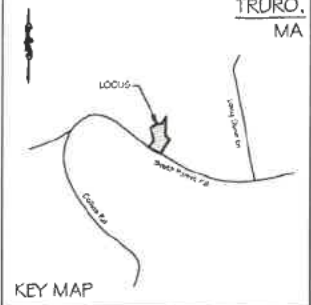


PHOTO 2: VIEW NORTH TOWARDS THE PROPOSED HOME LOCATION.



PHOTO 3: VIEW OF THE PROPOSED MITIGATION AREA.

APPROVED  
5/18/21



LEGEND	
	EXISTING SPOT GRADE
	PROPOSED SPOT GRADE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	WATER SERVICE LINE
	OVERHEAD UTILITY LINES
	UNDERGROUND UTILITY LINES
	GAS SERVICE LINE
	EDGE OF CLEARING
	EROSION CONTROL FENCE
	TEST HOLE LOCATION
	SEPTIC TANK
	DISTRIBUTION BOX
	SOIL ABSORPTION SYSTEM

## REFERENCE

- PLAN TITLED "SKETCH OF LAND IN TRURO", PREPARED BY SLADE ASSOCIATES, INC., DATED JAN. 1990 (PROPERTY BOUNDARIES)
- TRURO ASSESSORS MAP 51 PARCEL 57 (BUILDING SIZES)

Conservation Commission  
TOWN OF TRURO

JAN 24 2021



SURVEYED BY:  
DEMAREST LAND SURVEYING  
338 MAYFAIR ROAD  
SOUTH DENNIS, MA 02660  
508-364-9049

SHEET 2 OF 2

Project	VICTOR RIVERA & LAURA BERGAN 15 LAKEVIEW STREET - ARLINGTON, MA 02496			
Title	RESTORATIVE PLANTING AND MITIGATION PLAN NOTICE OF INTENT APPLICATION 82 SOUTH PAMET ROAD - TRURO, MA			
BENNETT ENVIRONMENTAL ASSOCIATES, LLC. A NATURAL SYSTEMS UTILITIES COMPANY LICENSED SITE PROFESSIONALS, ENVIRONMENTAL SCIENTISTS, GEOLOGISTS, ENGINEERS 1573 MAIN STREET - BREWSTER, MA 02631 PHONE: (508) 896-1706 FAX: (508) 896-1199 www.bennett-ea.com				
DATE	SCALE	BY	CHECK	JOB NUMBER
5/7/21	As Noted	SRF	DCB	K11357D.A.N.EV.901

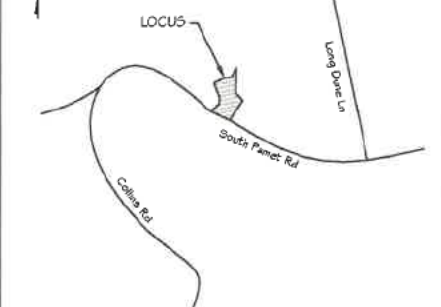




LEGEND

- 24x5
- 24
- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EDGE OF CLEARING
- LIMIT OF WORK
- PREV. APPROVED MITIGATION AREA
- MIXED NATIVE SHRUB BORDER
- NORTH EAST MEADOW MIX
- LOW GROW NATIVE MIX

KEY MAP



REFERENCE

- PLAN TITLED "ZONING/PLANNING - SITE PLAN", PREPARED BY BENNETT ENVIRONMENTAL ASSOCIATES, LLC, DATED 12/15/21
- TRURO ASSESSORS MAP 51 PARCEL 57
- FLOOD ZONE A3 EL 14.0 FIRM PANEL 25001C0232J (EFFECTIVE 7/16/2014)
- THIS PROPERTY IS NOT IN A ZONE II OF A PUBLIC WATER SUPPLY AREA SERVICES BY PRIVATE WELLS
- DEED BOOK 34393 AND PAGE 200

NOTES:

- 1.) FOUNDATION PLANTINGS TO BE A MIX OF 80% NATIVE SHRUBS AND 20% MIXED NATIVE ANNUALS AND PERENNIALS FROM THE APPROVED PLANTING LIST.
- 2.) ALL LAWN AREAS WILL BE CONSERVATION APPROVED MIXED GRASS SEED.
- 3.) SPECIAL PERMIT RELIEF AS FOLLOWS:  
DOES NOT EXCEED 3600 S.F. FOR 3 ACRES  
SUBTRACT 200 S.F. FOR EACH CONTIGUOUS ACRE < 3 ACRES  
3 ACRES REQUIRED  
2.92 ACRES PROVIDED  
= 3 ACRES - 2.92 ACRES = .08 ACRES X 200 S.F. = 16 S.F.  
DWELLING SHALL BE 3600 S.F. - 16 S.F. = 3584 S.F. ALLOWED < 3657 S.F. PROVIDED  
RELIEF OF 273 S.F. REQUESTED
- 4.) LIMIT OF WORK PER APPROVED ORDER OF CONDITIONS.

Conservation Commission  
TOWN OF TRURO

JAN 24 2025

SURVEY BY:

DEMAREST LAND SURVEYING  
338 MAYFAIR ROAD  
SOUTH DENNIS, MA 02660  
508-364-9049

PLANT SPECIFICATIONS

- (23) Evergreen / Deciduous Trees 8/10' - 10/12'
- (85) Evergreen / Woody Shrub 3/5 gal.

Native Tree Species

- Eastern Red Cedar
- Eastern White Pine
- American Holly
- Red Maple
- Birch
- Tupelo
- Sweet Bay Magnolia
- White Spruce
- Dogwood

Native Evergreen Woody Shrubs

- Sweet Pepper Bush
- Arrowwood Viburnum
- Oak Leaf Hydrangea
- Winterberry
- Red Chokeberry
- Black Chokeberry
- Beach Plum
- Inkberry
- Rhododendron
- Coastal Leucothoe

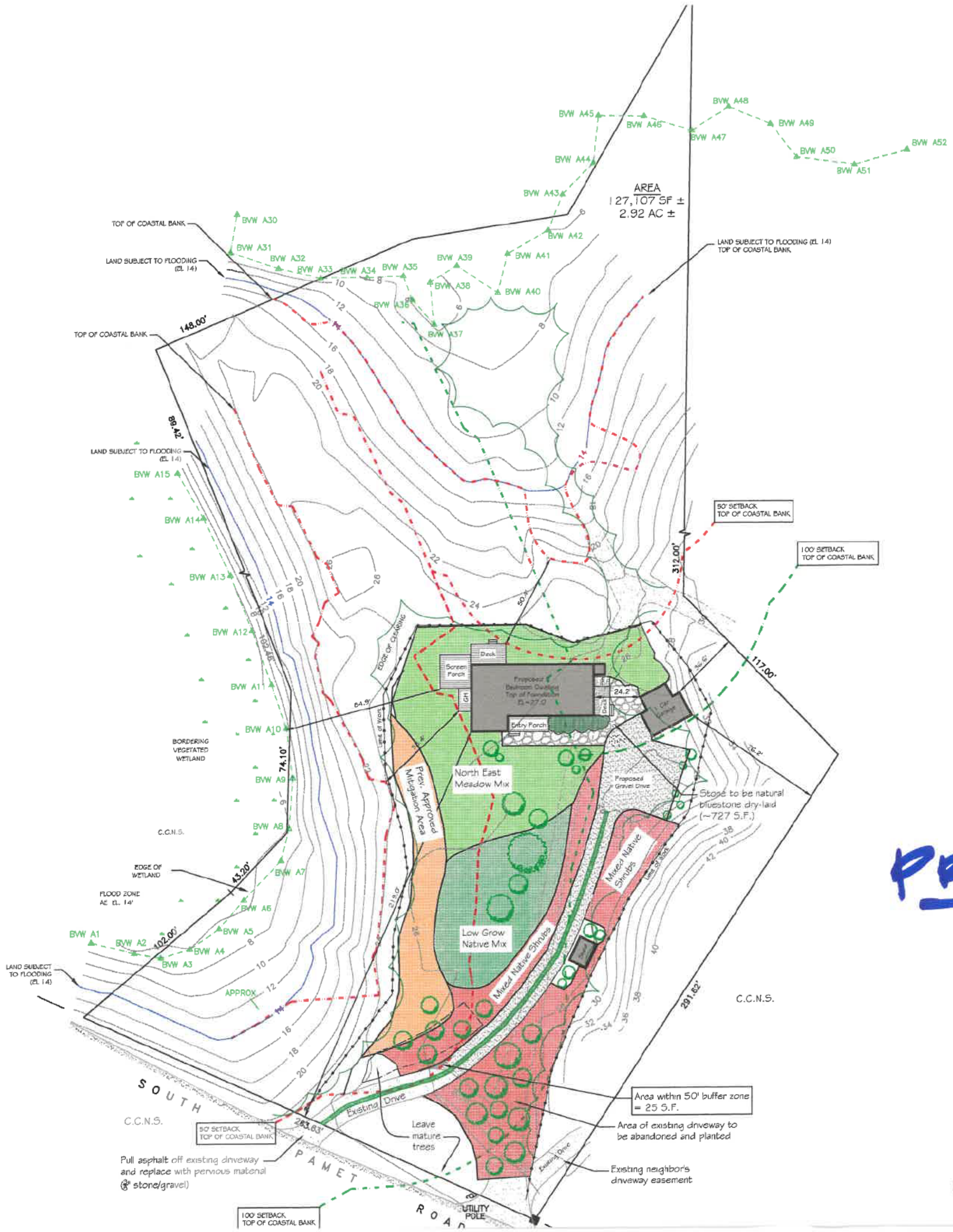
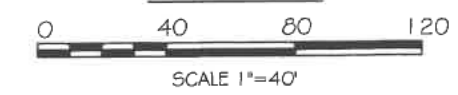
SEED SPECIFICATIONS

- Low Grow Native Mix: Sheep Fescue, Blue X Hard Fescue, Coastal Wavy Hair Grass
- North East Meadow Mix: Autumn Bentgrass, Little Bluestem, Switchgrass

PROPOSED



SITE PLAN



REVISION 01/13/2025: Added mitigation areas/planting plan, Removed existing dwellings/utilities, Revised Limit of Work/buffer zone line.

Proposed Site Plan  
82 South Pamet Rd., Truro, MA

Prepared for:  
Victor Rivera  
82 South Pamet Rd.  
Truro, MA 02666



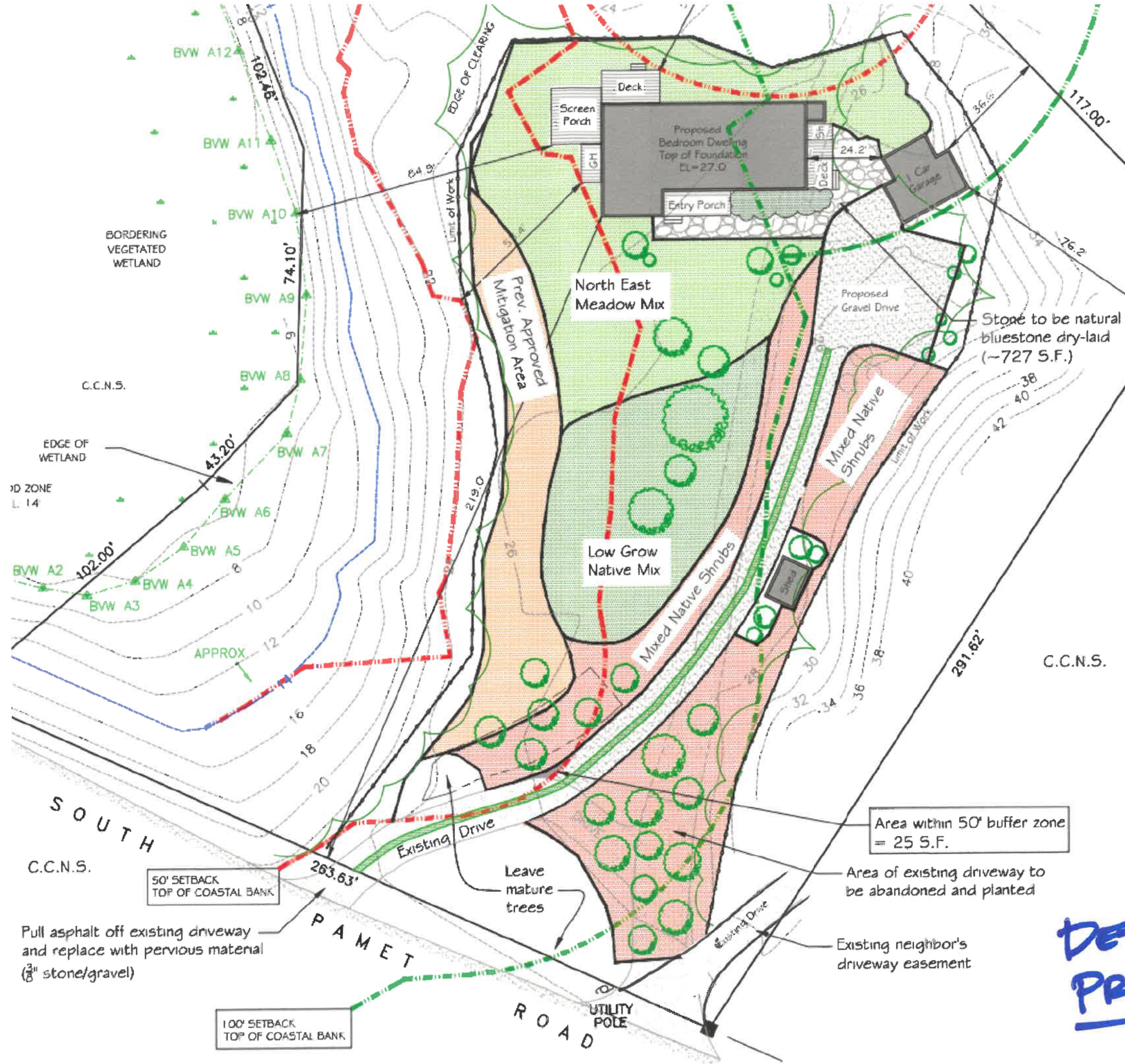
P.O. Box 201  
Brewster, MA 02631  
Phone: (508) 896-1783

DATE: SCALE: DESIGN: CHECK: JOB NO:









Conservation Commission  
TOWN OF TRURO  
JAN 24 2025

**DETAIL OF  
PROPOSED**



**Arozana Davis**

---

**From:** [REDACTED]  
**Sent:** Monday, January 27, 2025 12:49 PM  
**To:** Arozana Davis  
**Subject:** Re: #2 Ryder Hollow Changes  
**Attachments:** 2 Ryder Hollow Changes Conservation Commission.pdf

Hi Arozana,

Thanks for meeting with us last Thursday. As discussed, please find a brief summary of what was discussed. Thanks for your help with this.

At 2 Ryder Hollow on the small approved addition on the right rear corner of the house, we are asking for approval to make the following changes:

Relocate the large sliding door to the front of the approved balcony. (see marked drawing attached)  
Extend balcony to the front of the approved stairs. (see marked drawing attached)  
Relocate two approved Diamond Piers to the front of the new balcony. (see marked drawing attached)  
No change to approved roof size. (see drawing attached)

Please let me know if you have any questions or I need to do anything else?

On Mon, Jan 27, 2025 at 10:38 AM Arozana Davis <[ADavis@truro-ma.gov](mailto:ADavis@truro-ma.gov)> wrote:

Yes, that is fine!



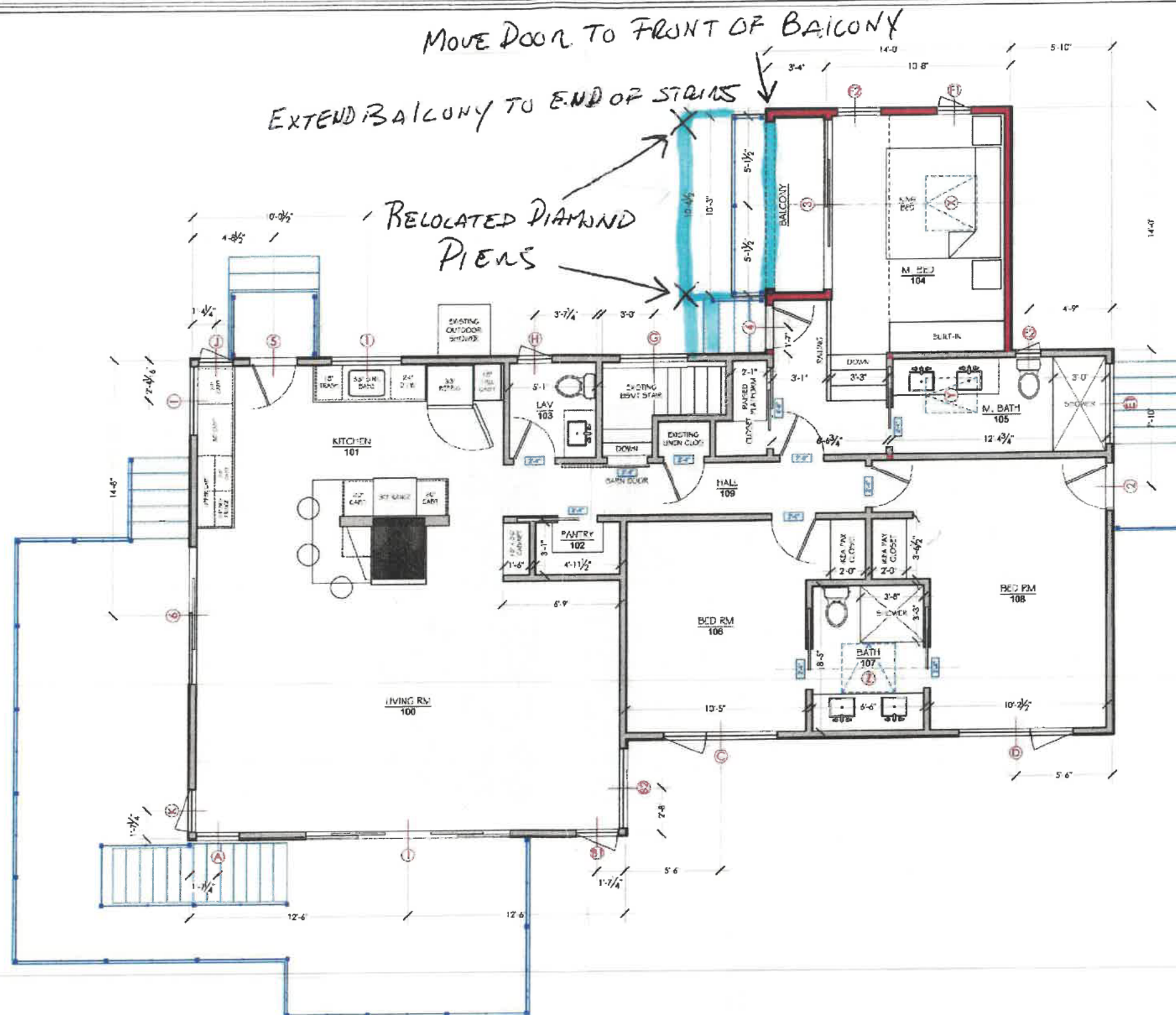
**Arozana  
Davis,  
RS/REHS, CPO**

Asst. Health &  
Conservation Agent

**PHONE:** 508-214-0202  
**EMAIL:** [adavis@truro-ma.gov](mailto:adavis@truro-ma.gov)  
**WEB:** [www.truro-ma.gov](http://www.truro-ma.gov)  
**ADDRESS** Town of Truro  
24 Town Hall Rd  
PO Box 2030  
Truro, MA 02666

The site plan illustrates the layout of an existing dwelling and its proposed expansion. Key features include:
 

- EXISTING DWELLING:** The main structure with a chimney and a vent.
- PROPOSED ADDITION 1 STORY:** A rectangular extension to the existing dwelling.
- BRICK PATIO:** Located between the existing dwelling and the proposed addition.
- DECK:** Situated to the right of the existing dwelling.
- DRIVEWAY:** An existing driveway leading to a garage.
- SETBACKS AND DIMENSIONS:** Various setbacks are marked, including 195.07' from the street, 100' from the coast, and 25' minimum setbacks from the driveway and deck.
- UTILITIES:** A water line (W) and a gas line (G) are shown crossing the property.
- PROPOSED FENCE:** A dashed line indicates the proposed fence line.
- BRACE POLE:** A pole is located near the driveway.
- STORM FLOWAGE:** An area designated for storm water flowage.
- ASSESSORS STRIP:** A strip of land adjacent to the property.



aline

architecture

100 Route 6a Orleans MA 02653  
Direct: 508-240-8500  
Fax: 508-240-8502  
www.alinearchitecture.com

Project: BERNSTEIN RESIDENCE

Location: 2 RYDER HOLLOW ROAD,  
TRURO, MA

rev.

rev.

project no.

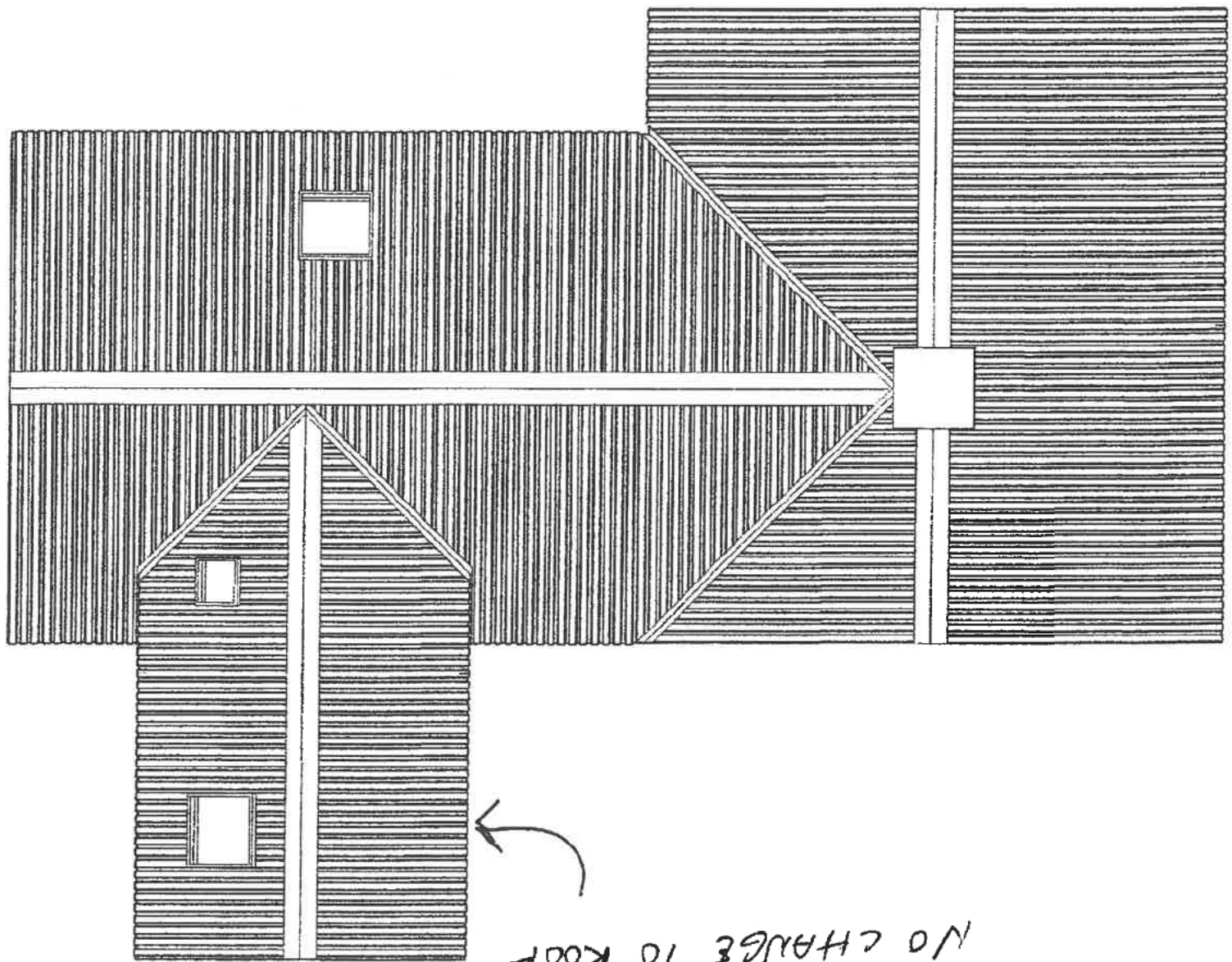
design:

drawn: MC

date: 05/13/24

scale: AS NOTED

A1.2



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



## Courtney Warren

**From:** Stanley Humphries <stan@ecrwetlands.com>  
**Sent:** Wednesday, January 29, 2025 9:10 AM  
**To:** Emily Beebe  
**Cc:** Arozana Davis; Courtney Warren; Wendy Lurie  
**Subject:** RE: Field Change Request - 39 and 41 Bayview Rd.; 2 and 4 Heron Ln.; 15 and 19 Avocet Rd.; 7 and 8 Kestrel Ln.; and 8 Falcon Ln.

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Emily,

On behalf of the owners residing at the above-referenced addresses, we respectfully request a field change regarding protection of exposed coir log arrays at these eight properties.

We request permission to cover the coir logs with a biodegradable burlap fabric that will best protect the logs, now that it's no longer possible to keep them covered with sand at all times due to rising tides. We discussed coir matting with SumCo and they agreed it provides less protection against the UV rays than burlap, which is why we request using this product: <https://www.homedepot.com/p/Agfabric-3-ft-x-50-ft-Biodegradable-Weed-Barrier-Nonwoven-Landscape-Fabric-for-Raised-Bed-Organic-Ground-Cover-W1HDWBBBK350/317138681#overlay>

As one can see from the attached image, it does come in a color similar to the logs so that is what we propose to install. The idea would be to put down a couple of layers, and to have SumCo sew them onto the existing coir logs so that they remain in place year round. This request is not being made to replace sand nourishment, but is requested as an added protection to the installation for those periods when it is not possible to keep the logs covered with sand.

Please confirm whether this can be handled with or without a public hearing.

Sincerely,  
Stan



**Stan Humphries**  
Coastal Geologist  
Mobile: 617.543.1654  
Email: [stan@ecrwetlands.com](mailto:stan@ecrwetlands.com)  
26 Union Street | P.O. Box 4012  
Plymouth, MA 02361  
[www.ecrwetlands.com](http://www.ecrwetlands.com)

*per email  
from Wendy Lurie -  
this link is  
incorrect. See  
attached photo.  
CW  
1/31/2025*

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

- 96" x 50 yds



Absorbs moisture while allowing airflow. 10 oz. natural fibers.



PERMIT # 2025-01



# TOWN OF TRURO

## Conservation Commission

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

Conservation Commission  
TOWN OF TRURO

JAN 07 2025

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

PERMIT FEE \$20

PAID  
CC

Applicant Name: Lexvest 640 Shore LLC - Truro Beach Cottages Telephone: [REDACTED]

Email address: [REDACTED]

Owner Name: Lexvest 640 Shore LLC Telephone: [REDACTED]

(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)

Address of subject property: 640 Shore Road Map: 2 Parcel: 11

Description of proposed work: Take off and replace deck boards and railings. Structural supports will not be changed. *+ take off deckboards on unit 1 porch - no structural.*

Proximity to Resource Areas:

Coastal Due, Barrier Beach and Sand Subject To Coastal Storm Flowage

### 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.

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.

MSB January 6, 2025  
 (Signature of Applicant) (Date)

**FOR OFFICE USE ONLY:**

Agent's Comments: popping off deck boards and replacing railings;  
no ground disturbance.

Site Inspection Date: 1/13/2025 Application Approved: ☒ Yes ☐ No

Conservation Commission Review: Meeting Date: _____ Permit Approved: ☐ Yes ☐ No  
 Conditions: _____

Signature of Commission Chair or Agent: _____ Date: _____

Conservation Commission

State of Florida

JAN 10 2025



PERMIT # 2025-02



# TOWN OF TRURO

## Conservation Commission

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

Conservation Commission  
TOWN OF TRURO

JAN 10 2025

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

**PERMIT FEE \$20**

**PAID**  
#4772

Applicant Name: Gary Sharpless Telephone: [REDACTED]

Email address: [REDACTED]

Owner Name: Gary and Kathy Sharpless Telephone: [REDACTED]

(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)

Address of subject property: 2 Bay View Path, North Truro Map: 39 Parcel: 34

Description of proposed work:

Reinstall (16) 8ft long drift fence sections (105 ft total) onto existing posts within the same footprint that were taken down for sand nourishment on Permit # 2024-46. Sections rebuilt off site. Will use Cold Storage Beach access with 4-wheel drive truck at the lowest tide line to reinstall panels sections by hand and bolted to existing posts. Requesting 60-day completion period.. (see attachments)

Proximity to Resource Areas: on coastal beach, 50', 100'

### 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.

60 DAY REQUEST



- 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.

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)

1/10/25

(Date)

**FOR OFFICE USE ONLY:**

Agent's Comments _____

Site Inspection Date: _____ Application Approved: Yes No

Conservation Commission Review: Meeting Date: _____ Permit Approved: Yes No  
Conditions: _____

Signature of Commission Chair or Agent: _____ Date: _____



PERMIT # 2025-03



# TOWN OF TRURO

## Conservation Commission

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

Conservation Commission  
JAN 10 2025

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

PERMIT FEE \$20

PAID  
#4772

Applicant Name: Gary Sharpless Telephone: [REDACTED]  
Email address: [REDACTED]  
Owner Name: Anastasia Song and Susan Flanagan Telephone: [REDACTED]  
(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)  
Address of subject property: 17 Bay View Rd, North Truro Map: 39 Parcel: 233

#### Description of proposed work:

Reinstall (16) 8ft long drift fence sections (105 ft total) onto existing posts within the same footprint that were taken down for sand nourishment on Permit # 2024-40. Sections rebuilt off site. Will use Cold Storage Beach access with 4-wheel drive truck at the lowest tide line to reinstall panels sections by hand and bolted to existing posts. Requesting 60-day completion period.. (see attachments)

Proximity to Resource Areas: on coastal beach, 50', 100'

### 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.

60 DAY REQUEST

- 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.

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)

1/10/25

(Date)

**FOR OFFICE USE ONLY:**

Agent's Comments _____

Site Inspection Date: _____ Application Approved: Yes No

**Conservation Commission Review:** Meeting Date: _____ Permit Approved: Yes No  
Conditions: _____

Signature of Commission Chair or Agent: _____ Date: _____

**From:** [REDACTED]  
**Subject:** Authorization of Gary Sharpless re: Representation of Song/Flanagan  
**Date:** January 6, 2025 at 9:29 AM  
**To:** Gary Sharpless [REDACTED]  
**Cc:** Susan Flanagan [REDACTED]

---

We Anastasia Song and Susan Flanagan owners of 17 Bay View Rd, North Truro, Ma 02652, Map 39 Parcel 233 give our written permission for Gary Sharpless our neighbor of 2 Bay View Path, North Truro Ma. 02652 to manage reinstalling of the the drift fence on my existing posts that are on our beach after the sand nourishment was successfully completed last month. The work consists of reinstalling (16) 8ft long drift fence sections (105ft total) onto existing posts within the same footprint that were taken down and stored off beach for sand nourishment per Permit # 2024-40 . Will use Cold Storage Beach Access with 4-wheel drive truck at the lowest tide line and installed by hand;

Thank you,

Anastasia Song & Susan Flanagan  
17 Bay View Rd.  
Truro, MA

PERMIT # 2025-04



# TOWN OF TRURO

## Conservation Commission

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

CONSERVATION COMMISSION

JAN 10 2025

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

PERMIT FEE \$20

PAID  
#4742

Applicant Name: Gary Sharpless Telephone: [REDACTED]

Email address: [REDACTED]

Owner Name: Lucy Karanfilian Telephone: [REDACTED]

(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)

Address of subject property: 19 Bay View Rd, North Truro Map: 39 Parcel: 35

Description of proposed work:

Reinstall (11) 8ft long drift fence sections (78 ft total) onto existing posts within the same footprint that were taken down for sand nourishment on Permit # 2024-42. Sections rebuilt off site. Will use Cold Storage Beach access with 4-wheel drive truck at the lowest tide line to reinstall panels sections by hand and bolted to existing posts. Requesting 60-day completion period.. (see attachments)

Proximity to Resource Areas: on coastal beach, 50', 100'

### 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.

60 DAY REQUEST

#### 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.

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)

1/10/25

(Date)

**FOR OFFICE USE ONLY:**

Agent's Comments _____

Site Inspection Date: _____ Application Approved: Yes No

Conservation Commission Review: Meeting Date: _____ Permit Approved: Yes No  
Conditions: _____

Signature of Commission Chair or Agent: _____ Date: _____



**From:** Lucy karanfilian [REDACTED]  
**Subject:** Fence work authorization  
**Date:** January 6, 2025 at 11:27 AM  
**To:** Gary Sharpless [REDACTED]

---

LK

I, Lucy Karanfilian, as manager of the J&M Family LLC of 19 Bay View Rd, North Truro, MA 02652, Map 39 Parcel 35, give my written permission for Gary Sharpless, my neighbor of 2 Bay View Path, North Truro MA 02652 to manage reinstalling of the the drift fence on my existing posts that are on my beach after the sand nourishment was successfully completed last month, December 2024. The work consists of reinstalling (11) 8ft long drift fence sections (78ft total) onto existing posts within the same footprint that were taken down and stored off beach for sand nourishment per Permit # 2024-42 . Will use Cold Storage Beach Access with 4-wheel drive truck at the lowest tide line and installed by hand.

1/10/25

Conservation Commission

## **Administrative Review Applications Summary:**

JAN 1 2025

The following proposal is to reinstall drift fence panel sections on existing posts (in the same footprint – approximately 288ft long) that were taken down and stored off the beach to enable beach nourishment to be completed in December 20, 2024 for Map 39, Parcel 34, 233 and 35. Upon careful review of the condition and deterioration of the slats of the panel sections, it was evident that these panels that were replaced previously in 2010, also needed to be redesigned and replaced again. The Truro Conservation regulation suggests a design for the panels of a serpentine drift fence that can only use untreated 2x3's for slats nailed to the top and bottom 2x4 cross members (because pressure treated 2x3 lumber is not commercially available). However, after several years in the saltwater environment the wood and nails get partially decomposed compromising the structural integrity of these drift fence components. The 1/2" galvanized lag bolt screws that attach the panels to the posts seemed to be in decent shape so they are less susceptible to breaking off if the panel is severally impacted.

In this proposal we are suggesting a redesign of these panel sections that takes advantage of using all MCA pressure treated 2x4's. MCA (Micronized Copper Azole) is equivalent and less environmentally impactful than ACQ (Alkaline Copper Quaternary) that is called out in the same conservation regulations. All panel sections will be fabricated off site and made with 100% galvanized bolts, nuts, washers & lock washers recommended by Truro Conservation for potential long-term personal safety on the beach. Additionally, any individual slats that a broken can be easily replaced by unbolting and reinstalling a new slat as required over the lifetime of the panel without screws or nails. However, note that MCA treated southern yellow pine used here is estimated to last 20-40 years depending upon climate conditions.

In calculating the approximate wave loads on the double 2x4 top and bottom braces and the slats that are thru bolted with 1/4" galvanized bolts - collectively the total structure should still be in better shape for strength and durability compared to the previous legacy panel construction. Also, each of the panel sections would be thru bolted or lagged to the existing 6-8" diameter post with long 1/2" diameter galvanized bolts or galvanized lags at each corner and should easily take the same loads. All galvanized bolts and lag will be assembled with galvanized nuts and washers as required to insure long-term securing the panel's components together and to the posts. All panel bolts will not protrude more than 1/2-1" beyond the nuts. All sections will be transported down to the beach from Cold Storage with a four-wheel drive truck and reinstalled with hand tools on the beach using the existing posts. (see attached hand drawing & description of the 4ft x 8ft fence panel sections, Map 39 of the three Parcels 34, 233 and 35, PowerPoint describing the successful completed sand nourishment and plans for new panel sections installed on existing posts).

We are also requesting from the a 60-day completion period to get all work completed depending the time required to get the off-site fabrication of the panels done and depending upon tide and weather conditions. However, the actual work to reinstall the panels to the existing poles on the beach should take less than one week time frame based on with good weather & a reasonable low tide. Assuming the sand stays in place over the winter, we plan to plant beach grass in the spring or fall of 2025 behind the fence under an additional ARs as required.



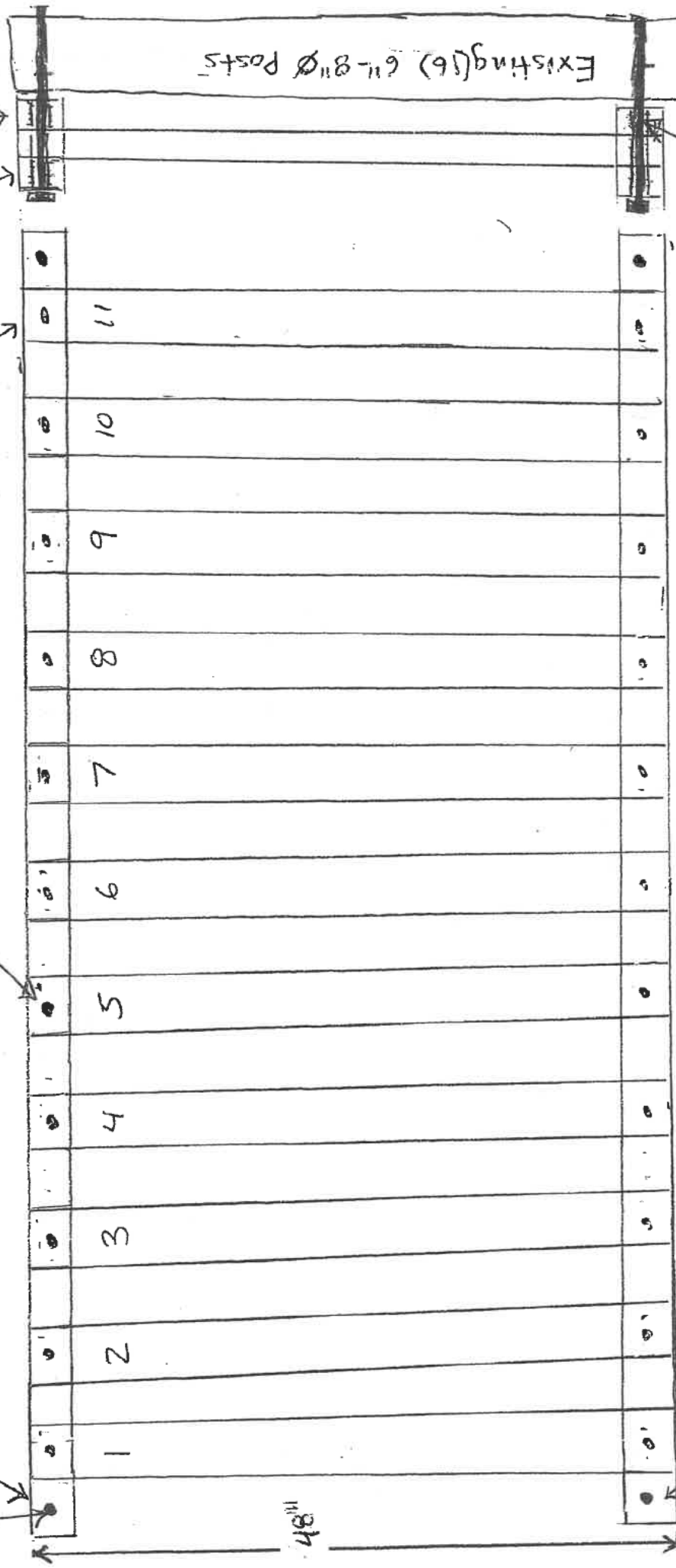
1/10/25

GCS

(16) Sections - 8 ft x 4 ft Sane Drift Fence

- (4)  $\frac{1}{2}$ " x 12" Long galvanized bolts or Lag Bolts and galvanized nut & washer as required  
 (22)  $\frac{1}{4}$ " x 5" long galvanized bolts  
 washers, lock washers and (11) 2" x 4" x 4 ft (slats) 2" x 4" x 8"  
 nuts

(2) 2" x 4" x 8 ft (Front & Back)

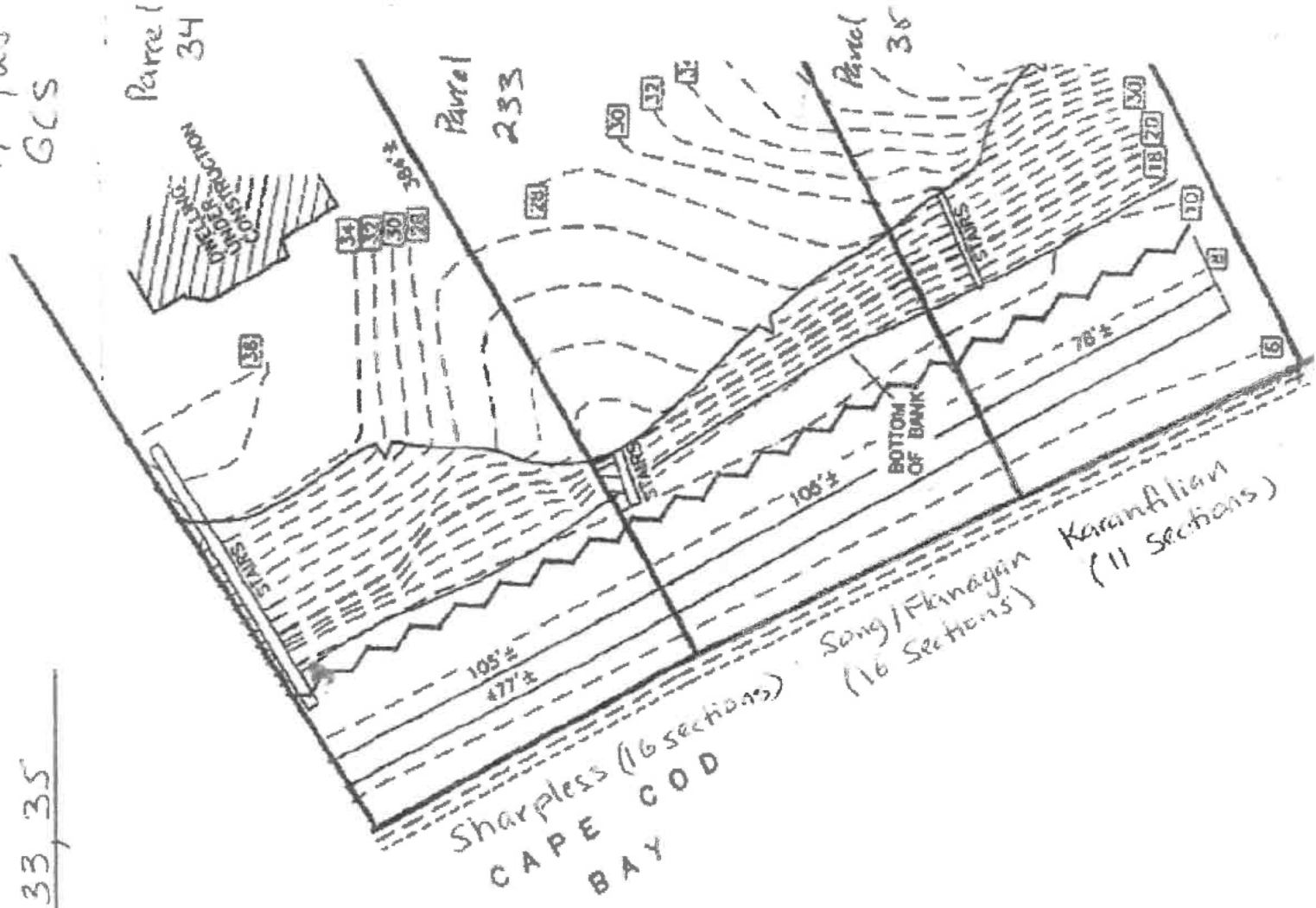


96"

Materials list for (16) sections

- (64) Front & Back 2" x 4" x 8 ft  
 (88) Vertical slats 2" x 4" x 8 ft / cut to 4 ft  
 (64)  $\frac{1}{2}$ " x 12" galvanized bolts or lag bolts  
 (64)  $\frac{1}{2}$ " washers, lock washers and nuts as required  
 (352)  $\frac{1}{4}$ " x 5" galvanized bolts  
 (352)  $\frac{1}{4}$ " washers, lock washers and nuts  
 (2) 2" x 4" x 8 ft (Front & Back)  
 Need (16) 8 ft x 4 ft section fabricated with MCA PT 2" x 4" x 8 ft lumber and all galvanized bolted fasteners for 8 ft sections  
 $\frac{1}{2}$ " thru Bolted or Lag Bolted to post

Map 39 Parcels 34, 233, 35

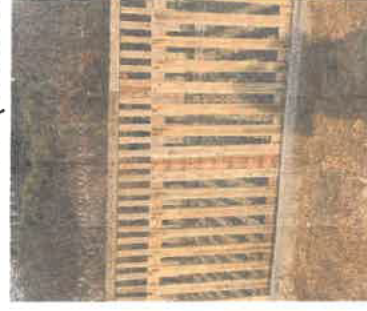


**FELCO, INC.**  
ENGINEERING - LAND SURVEYING  
P.O. BOX 1366 ORLEANS, MA 02653  
(508) 255-8141 (FAX) 255-2954

**Bay View Beach Fences before & after successful sand nourishment completed by Crawford on 12-20-24**



11/11/24 old fences in good condition, before extreme high tide & high west wind on 1/12/24 -1/13/24 that caused about 10ft of erosion into the dune. Fence intact after those events. Then looked at potential contractors to do sand nourishment (Crawford).



11/1/24 removed fence sections so equipment could get to dune. Sections stored off beach, possible reuse but during inspection better to rebuild new panel sections that could be bolted to posts. Plan is to reinstall fence sections on exiting posts at lowest tides.

Conservation Commission

JAN 10 2025



12-20-24 Crawford Land Management sand nourishment from Cold Storage Beach, North Truro to 1/2 mile to the south –  
 Successful Completion of Project with sand nourishment raked out & beach graded back to original with clean parking area



Conservation Commission

JAN 10 2025

12-2-24 Crawford Land Management sand nourishment from Cold Storge Beach, North Truro to 1/2 mile to the south – 1st day







# TOWN OF TRURO

## Conservation Commission

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

PERMIT # 2024-40

**PAID**  
1031

Conservation Commission  
TOWN OF TRURO

SEP 24 2024

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

**PERMIT FEE \$20**

Applicant Name: Nick Crawford Telephone: [REDACTED]  
Email address: nick@crawfordLM.com  
Owner Name: Anastasia Song and Susan Flanagan Telephone: [REDACTED]  
(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)  
Address of subject property: 17 Bay View Road Map: 39 Parcel: 233  
Description of proposed work: Beach nourishment of approximately 100' of shoreline with 50 yards of compatible sand from approved source NOONS via Cold Storage parking area to the beach; via front end loader all tracks to be smooth out everyday. Clean-up of parking area upon completion.  
Proximity to Resource Areas: on coastal beach, 50', 100'

### 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, sonotubes, 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.



PERMIT # 2024-42



# TOWN OF TRURO

## Conservation Commission

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

**PAID**  
1029

Conservation Commission  
TOWN OF TRURO

SEP 24 2024

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

**PERMIT FEE \$20**

Applicant Name: Nick Crawford Telephone: [REDACTED]  
Email address: nick@crawfordLM.com  
Owner Name: Lucy Karanfilian Telephone: _____

(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)

Address of subject property: 19 Bay View Road Map: 39 Parcel: 35

Description of proposed work: Beach nourishment of approximately 100' of shoreline with 50 yards of competitive sand from approved source NOONS

via Cold Storage parking area to the beach via front end loader all tracks to be smooth out everyday. Clean-up of parking area upon completion.

Proximity to Resource Areas: on coastal beach, 50', 100'

### 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.

PERMIT # 2024-46



# TOWN OF TRURO

## Conservation Commission

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

**PAID**  
1025

Conservation Commission  
TOWN OF TRURO

SEP 24 2024

### APPLICATION FOR ADMINISTRATIVE REVIEW PERMIT

#### PERMIT FEE \$20

Applicant Name: Nick Crawford Telephone: [REDACTED]

Email address: nick@crawfordLM.com

Owner Name: Gary and Kathy Sharpless Telephone: _____

(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)

Address of subject property: 2 Bay View Road Path Map: 39 Parcel: 34

Description of proposed work: Beach nourishment of approximately 100' of shoreline with 50 yards of compatible sand from approved source NOONS via Cold Storage parking area to the beach via front end loader all tracks to be smooth out everyday. Clean-up of parking area upon completion.

Proximity to Resource Areas: on coastal beach, 50', 100'

### 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.

JAN 28 2025

DAID #4694

PERMIT # 2025-16



# 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: Ken Rose Septic Service Telephone: [REDACTED]

Email address: [REDACTED]

Owner Name: Paul & Balir Resika Telephone: [REDACTED]

(If the applicant is not the owner of the property, written consent to the work MUST be attached to this Application.)

Address of subject property: 24 Cliff Rd Map: 29 Parcel: 13

Description of proposed work: remove cesspool from buffer zone to a coastal bank  
- 90 Day request +  
Based upon installer's  
schedule

Proximity to Resource Areas: Coastal Bank - see plan

### 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.

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.

Gavin Fox      1/28/25  
(Signature of Applicant)      (Date)

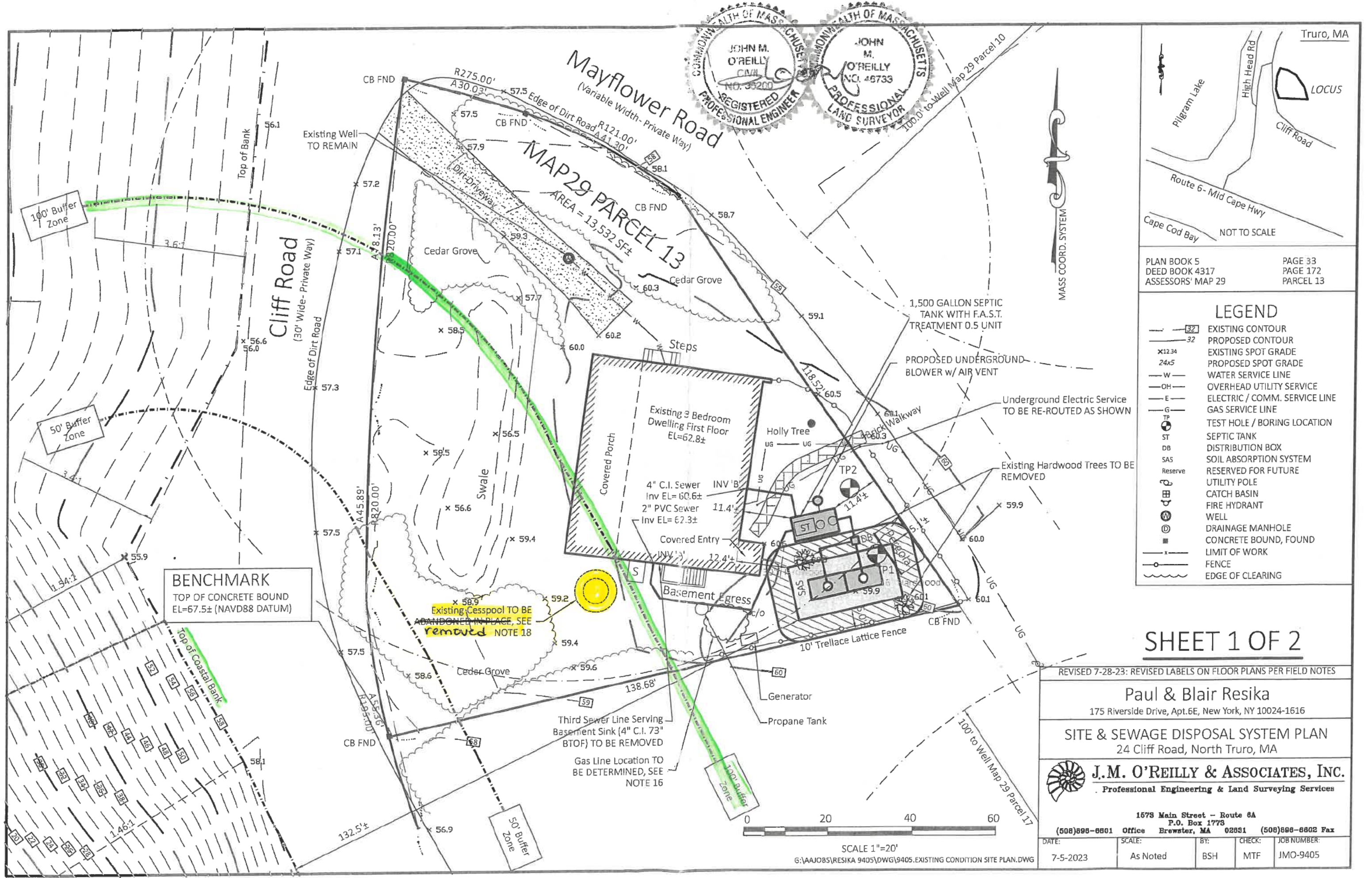
**FOR OFFICE USE ONLY:**

Agent's Comments: plan says abandon, but conservation department/commission wants it removed.

Site Inspection Date: 1/28/25 Application Approved: ☒ Yes ☐ No

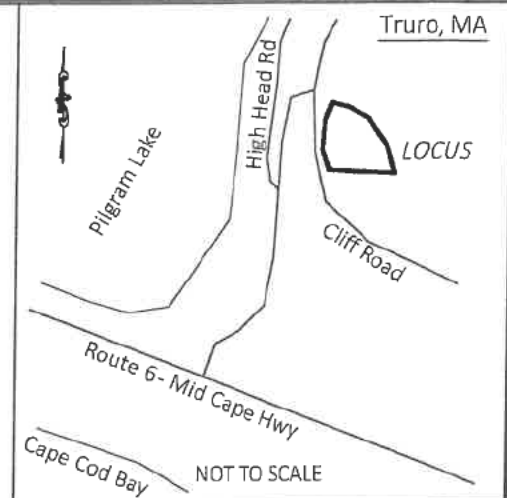
Conservation Commission Review: Meeting Date: 2/3/2025 Permit Approved: ☐ Yes ☐ No  
Conditions: _____

Signature of Commission Chair or Agent: _____ Date: _____



JOHN M. O'REILLY  
CIVIL  
NO. 35200  
REGISTERED  
PROFESSIONAL ENGINEER

JOHN M. O'REILLY  
NO. 46733  
PROFESSIONAL  
LAND SURVEYOR



PLAN BOOK 5  
DEED BOOK 4317  
ASSESSORS' MAP 29

PAGE 33  
PAGE 172  
PARCEL 13

- ### LEGEND
- EXISTING CONTOUR
  - PROPOSED CONTOUR
  - EXISTING SPOT GRADE
  - PROPOSED SPOT GRADE
  - WATER SERVICE LINE
  - OVERHEAD UTILITY SERVICE
  - ELECTRIC / COMM. SERVICE LINE
  - GAS SERVICE LINE
  - TEST HOLE / BORING LOCATION
  - SEPTIC TANK
  - DISTRIBUTION BOX
  - SOIL ABSORPTION SYSTEM
  - RESERVED FOR FUTURE
  - UTILITY POLE
  - CATCH BASIN
  - FIRE HYDRANT
  - WELL
  - DRAINAGE MANHOLE
  - CONCRETE BOUND, FOUND
  - LIMIT OF WORK
  - FENCE
  - EDGE OF CLEARING

## SHEET 1 OF 2

REVISED 7-28-23: REVISED LABELS ON FLOOR PLANS PER FIELD NOTES

**Paul & Blair Resika**  
175 Riverside Drive, Apt. 6E, New York, NY 10024-1616

**SITE & SEWAGE DISPOSAL SYSTEM PLAN**  
24 Cliff Road, North Truro, MA

**J.M. O'REILLY & ASSOCIATES, INC.**  
Professional Engineering & Land Surveying Services

1578 Main Street - Route 8A  
P.O. Box 1773  
Brewster, MA 02601 (508)898-8801 Office (508)898-8802 Fax

DATE:	SCALE:	BY:	CHECK:	JOB NUMBER:
7-5-2023	As Noted	BSH	MTF	JMO-9405



GENERAL NOTES:

- A.) NEITHER DRIVEWAYS NOR PARKING AREAS ARE ALLOWED OVER SEPTIC SYSTEM UNLESS H-20 COMPONENTS ARE USED.
- B.) THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE SYSTEM AS DESIGNED UNLESS CONSTRUCTED AS SHOWN. ANY CHANGES SHALL BE APPROVED IN WRITING.
- C.) CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCEMENT OF WORK.

CONSTRUCTION NOTES:

- 1.) ALL CONSTRUCTION SHALL CONFORM TO THE STATE ENVIRONMENTAL CODE, TITLE 5, AND THE REQUIREMENTS OF THE LOCAL BOARD OF HEALTH.
- 2.) SEPTIC TANK(S), GREASE TRAP(S), DOSING CHAMBER(S) AND DISTRIBUTION BOX(ES) SHALL BE SET ON A LEVEL STABLE BASE WHICH HAS BEEN MECHANICALLY COMPACTED, OR ON A 6 INCH CRUSHED STONE BASE.
- 3.) SEPTIC TANK(S) SHALL MEET ASTM STANDARD C1127-93 AND SHALL HAVE AT LEAST THREE 20" DIAMETER MANHOLES. THE MINIMUM DEPTH FROM THE BOTTOM OF THE SEPTIC TANK TO THE FLOW LINE SHALL BE 48".
- 4.) SCHEDULE 40 PVC INLET AND OUTLET TEES SHALL EXTEND A MINIMUM OF 6" ABOVE THE FLOW LINE OF THE SEPTIC TANK AND SHALL BE INSTALLED ON THE CENTERLINE OF THE TANK DIRECTLY UNDER THE CLEANOUT MANHOLE.
- 5.) RAISE COVERS OF THE SEPTIC TANK AND DISTRIBUTION BOX WITH PRECAST CONCRETE WATER TIGHT RISERS OVER INLET AND OUTLET TEES TO WITHIN 6" OF FINISH GRADE, OR AS APPROVED BY THE LOCAL BOARD OF HEALTH AGENT.
- 6.) PIPING SHALL CONSIST OF 4" SCHEDULE 40 PVC OR EQUIVALENT. PIPE SHALL BE LAID ON A MINIMUM CONTINUOUS GRADE OF NOT LESS THAN 1%.
- 7.) DISTRIBUTION LINES FOR SOIL ABSORPTION SYSTEM (AS REQUIRED) SHALL BE 4" DIAMETER SCHEDULE 40 PVC LAID AT 0.005 FT/FT. LINE SHALL BE CAPPED AT END OR AS NOTED.
- 8.) OUTLET PIPES FROM DISTRIBUTION BOX SHALL REMAIN LEVEL FOR AT LEAST 2' BEFORE PITCHING TO SOIL ABSORPTION SYSTEM. WATER TEST DISTRIBUTION BOX TO ENSURE EVEN DISTRIBUTION.
- 9.) DISTRIBUTION BOX SHALL HAVE A MINIMUM SUMP OF 6" MEASURED BELOW THE OUTLET INVERT.
- 10.) BASE AGGREGATE FOR THE LEACHING FACILITY SHALL CONSIST OF 3/4" TO 1-1/2" DOUBLE WASHED NATIVE STONE FREE OF IRON, FINES AND DUST AND SHALL BE INSTALLED BELOW THE CROWN OF THE DISTRIBUTION LINE TO THE BOTTOM OF THE SOIL ABSORPTION SYSTEM. BASE AGGREGATE SHALL BE COVERED WITH A LAYER OF FILTER FABRIC OR APPROVED EQUIVALENT.
- 11.) VENT SOIL ABSORPTION SYSTEM WHEN DISTRIBUTION LINES EXCEED 50 FEET; WHEN LOCATED EITHER IN WHOLE OR IN PART UNDER DRIVEWAYS, PARKING AREAS, TURNING AREAS OR OTHER IMPERVIOUS MATERIAL; OR WHEN PRESSURE DOSED.
- 12.) SOIL ABSORPTION SYSTEM SHALL BE COVERED WITH A MINIMUM OF 9" OF CLEAN MEDIUM SAND (EXCLUDING TOPSOIL).
- 13.) FINISH GRADE SHALL BE A MAXIMUM OF 36" OVER THE TOP OF ALL SYSTEM COMPONENTS, INCLUDING THE SEPTIC TANK, DISTRIBUTION BOX, DOSING CHAMBER AND SOIL ABSORPTION SYSTEM. SEPTIC TANKS SHALL HAVE A MINIMUM COVER OF 9".
- 14.) FROM THE DATE OF INSTALLATION OF THE SOIL ABSORPTION SYSTEM UNTIL RECEIPT OF A CERTIFICATE OF COMPLIANCE, THE PERIMETER OF THE SOIL ABSORPTION SYSTEM SHALL BE STAKED AND FLAGGED TO PREVENT THE USE OF SUCH AREA FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE SYSTEM.

- 15.) SOIL REMOVAL: ALL FILL, TOPSOIL AND SUBSOIL SHALL BE REMOVED FOR A DISTANCE OF 5' FROM THE SOIL ABSORPTION SYSTEM DOWN TO THE CLEAN SAND LAYER. PLEASE NOTE FILL CONTAINS LARGE CHUNKS OF CONCRETE. AREA TO BE BACKFILLED WITH CLEAN SAND AND COMPACTED TO MINIMIZE SETTling.
- 16.) INSTALLER TO CONFIRM LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO START OF CONSTRUCTION.
- 17.) ALL 4" PVC CLEANOUTS SHALL BE WITHIN 3" OF FINISH GRADE. CLEANOUTS SHALL BE MARKED WITH A PIECE OF #5 REBAR FOR FUTURE LOCATION.
- 18.) EXISTING SEPTIC SYSTEM TO BE REMOVED OR ABANDONED-IN-PLACE IN ACCORDANCE WITH 310 CMR 15.354. ANY CONTAMINATED SOIL WITHIN 5' OF THE PROPOSED SOIL ABSORPTION SYSTEM SHALL BE REMOVED AND REPLACED WITH CLEAN SAND. AREA TO BE COMPACTED TO MINIMIZE SETTling.



SYSTEM DESIGN CALCULATIONS:

SEWAGE DESIGN FLOW:  
3 BEDROOM DWELLING @ 110 GPD = 330 GPD

LEACHING CAPACITY REQUIRED:  
3 BEDROOMS (MAX.) @ 110 GPD = 330 GPD REQUIRED

SEPTIC TANK CAPACITY REQUIRED:  
DAILY FLOW = 330 GPD @ 200% = 660 GAL. REQUIRED

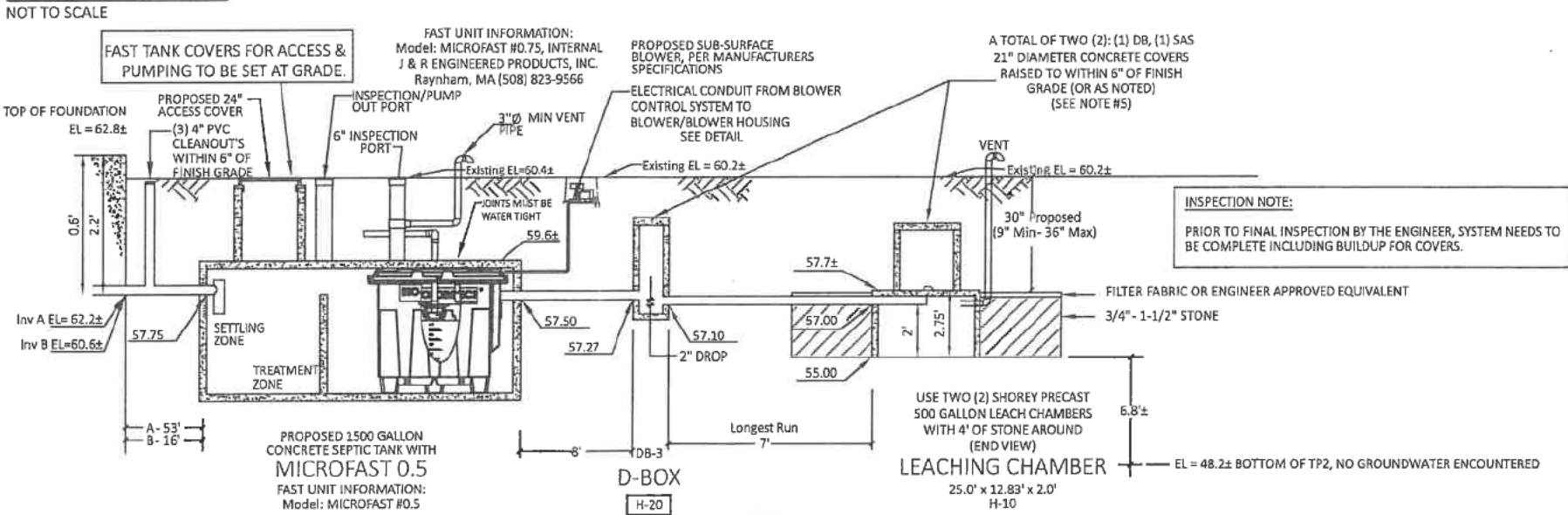
SEPTIC TANK CAPACITY PROVIDED:  
1500 GALLON SEPTIC TANK (MIN. ALLOWED)

LEACHING CAPACITY PROVIDED:  
ONE (1) 25.0' X 12.83' X 2.0' LEACHING CHAMBER CAN LEACH:  
 $V_t = [(25.0 \times 12.83) + (25.0 \times 2.0)2] \times 0.74 \text{ GPD/SF} = 349.3 \text{ GPD}$   
349 GPD > 330 GPD REQUIRED

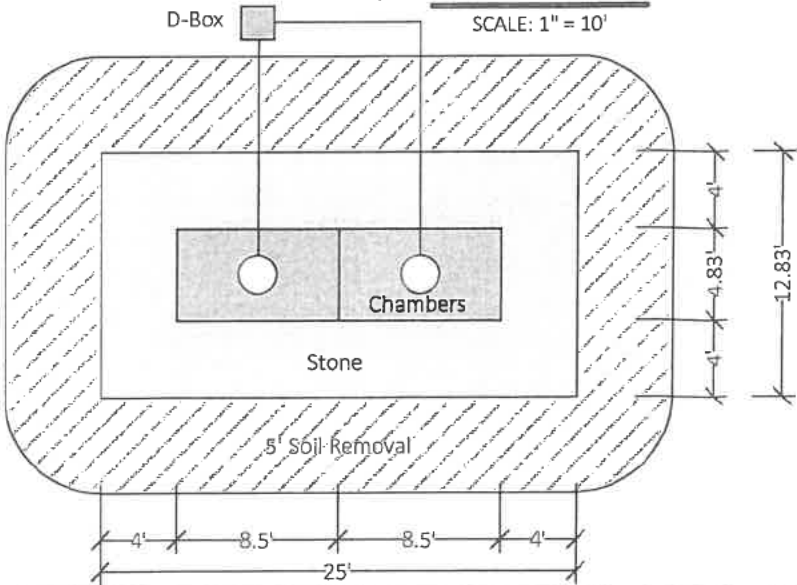
NOTE: A GARBAGE DISPOSAL IS NOT PERMITTED WITH THIS DESIGN.

INSTALL:  
ONE (1)- 1500 GALLON SEPTIC TANK WITH A F.A.S.T. 0.5 TREATMENT UNIT  
ONE (1)- 3 OUTLET DISTRIBUTION BOX (H-20 RATED)  
TWO (2)- 500 GALLON LEACH CHAMBERS WITH 4' OF STONE ALL AROUND

FLOW PROFILE:



SAS DETAIL:



SOIL TEST LOGS:

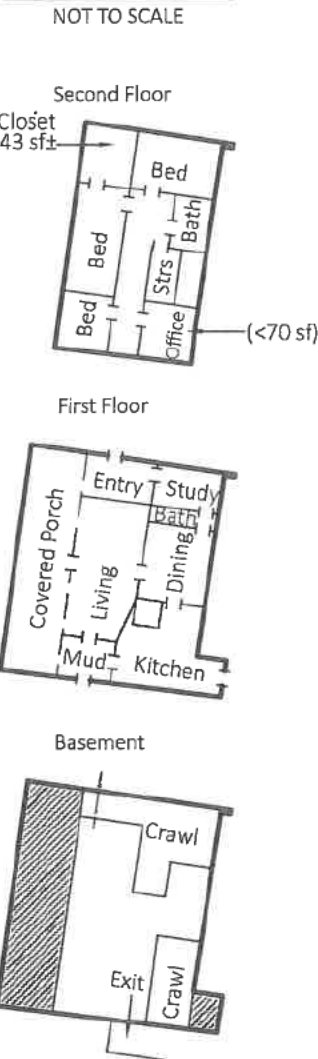
TEST HOLE 1: EL=60.5±					
DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
0-100"	F	FILL	N/A	NONE	
100-152"	C1	COARSE SAND	10YR7/6	NONE	LOOSE

TEST HOLE 2: EL=60.5±					
DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
0-19"	F	FILL	N/A	NONE	CONTAINS CONCRETE DEMO
19-30"	Ab	LOAMY FINE SAND	10YR2/2	NONE	
30-72"	B	LOAMY FINE SAND	10YR5/6	NONE	PERC @ 51"; <5MIN/IN
72-148"	C	COARSE SAND	10YR7/6	NONE	LOOSE

DATE OF TESTING: 05/25/2023  
PERCOLATION RATE: LESS THAN 5 MIN/INCH IN "C" LAYERS.  
WITNESSED BY: MATT FARRELL, EIT, J.M. O'REILLY & ASSOCIATES, INC.  
AROZANA DAVIS, HEALTH AGENT, TRURO HEALTH DEPARTMENT

NO WATER ENCOUNTERED  
USE A LOADING RATE OF 0.74 GPD/SF FOR SIZING OF SOIL ABSORPTION SYSTEM.

FLOOR PLAN



VARIANCES REQUESTED

LOCAL UPGRADE APPROVALS: 310 CMR 15.403

- VARIANCES: 310 CMR 15.211 (Setbacks)
- 1.) Soil Absorption System not 10' from Property Line  
5' held 5' variance
- 2.) Soil Absorption System not 20' from cellar wall  
12.0' held 8.0' variance
- 3.) Soil Absorption System not 100' from Locus Well  
90.0' held 10.0' variance
- VARIANCES: 310 CMR 15.248 (Reserve Area)
- 4.) No Reserve Area  
Remove and Replace Requested
- LOCAL REGULATIONS:
- 5.) Soil Absorption System not 150' from Wetland  
132' held 18' variance

SHEET 2 OF 2

REVISED 7-28-23: REVISED LABELS ON FLOOR PLANS PER FIELD NOTES

Paul & Blair Resika

175 Riverside Drive, Apt.6E, New York, NY 10024-1616

SEWAGE DISPOSAL SYSTEM DESIGN & NOTES  
24 Cliff Road, North Truro, MA



J.M. O'REILLY & ASSOCIATES, INC.  
Professional Engineering & Land Surveying Services

1573 Main Street - Route 6A

P.O. Box 1773

(508)898-8801 Office Brewster, MA 02631 (508)898-8802 Fax

DATE:	SCALE:	BY:	CHECK:	JOB NUMBER:
7-5-2023	As Noted	BSH	MTF	JMO-9405





## TOWN OF TRURO CONSERVATION COMMISSION

P.O. Box 2030  
Truro MA 02666-0630

### **Conservation Commission Meeting Minutes: November 4, 2024**

**Commissioners Present:** Chair Carol Girard-Irwin, Commissioners Bob White, Clint Kershaw, and Connie Mather. **Commissioners Absent:** Vice Chair Linda Noons-Rose, Commissioner Diane Messinger **Others Present:** Emily Beebe, Conservation Agent; Courtney Warren, Assistant Conservation Agent

This was a hybrid meeting with both in-person and remote participants. Chair Carol Girard-Irwin called the meeting and public hearings to order at 5:00 pm and provided the virtual meeting instructions.

**Request for Determination of Applicability: 67 North Pamet Road, Anne Peretz:** 1:1 replacement of deck/stoop; water heater enclosure; driveway repair; Buffer Zone to a Coastal Bank (Map 47, Parcel 141) Richard Buckley represented the request. The existing deck is proposed to be replaced 1:1 and supported by sonotubes. The bricks under the existing deck would be removed. Some deteriorating brick steps on the side of the cottage were proposed to be removed and a new landing installed. A water heater that is currently inside the cottage would be relocated to an enclosure on blocks outside of the cottage. Hardener would be added to the driveway and some selected rough spots regraded. No widening of the driveway was proposed. **Motion:** Chair Carol Girard-Irwin moved for a negative 3 determination; **Second:** Commissioner Clint Kershaw; **Vote:** 4-0-0; the motion carried.

**Request for Determination of Applicability: 43 Ryder Beach Road, Noel O'Connell:** enclose portion of existing carport on an existing slab for a utility room; Land Subject to Coastal Storm Flowage, Coastal Dune. (Map 63, Parcel 19) Homeowner Vince O'Connell represented the request to enclose part of an existing carport. Discussion ensued about where exactly the floodplain was and whether flood vents or a break-away wall would be required. **Motion:** Commissioner Clint Kershaw moved for a negative 3 determination with the condition that the Building Commissioner approve the plan; **Second:** Commissioner Bob White; **Vote:** 4-0-0; the motion carried.

**Request for Determination of Applicability: 8 Mill Pond Road, Susan Collins:** Addition of screened enclosure to existing deck. Homeowner Susan Collins was present to represent the request. Commissioner Bob White asked for clarification about roof runoff. Any runoff will continue to be directed under the deck. **Motion:** Commissioner Connie Mather moved for a negative 3 determination; **Second:** Chair Carol Girard-Irwin; **Vote:** 4-0-0; the motion carried.

**Notice of Intent: 556 Shore Rd, Shoreline Beach Condo Trust (SE#75-1205):** sand drift fence, coir envelopes, and nourishment work; Barrier Beach, Land Subject to Coastal Storm Flowage, and Coastal Dune. (Map 6, Parcel 6) Stan Humphries from ECR described

the project to restore and protect a primary frontal dune. A pyramid of coir logs will be covered by ~250 cu. yds of sand. ~3400 sq ft of revegetation is proposed. A sturdy sand drift fence would be installed on the seaward side of the coir logs. Two of the three existing access points will remain with a small set of wooden steps for access over the restored dune. A pedestrian easement exists on the western end of the property and the Trustees have been in communication with the easement holder. At this time, no proposed work would extend on to the easement. Chair Carol Girard-Irwin read a letter from easement holder Rick Bashian stating that the easement holders oppose any extension of the project across the easement. Commissioner Bob White congratulated the Association on their stewardship of their existing foredune but noted that the proposal was not staked for the Commissioners to visualize the project. Commissioner Clint Kershaw asked if a wooden stairway could be built as a bridge for the easement. Stan Humphries said he could not commit to that without talking to all the parties. One objective of the project is to align with the project next door. The Agent noted that having the stakes might help the conversation with the easement holder as well as aiding the Commissioners. She also asked about the equipment access plan. Access will be between building A & B to access through the middle of the property with no need to go onto adjacent properties. The Agent also asked about nourishment plans. Stan Humphries has provided an initial volume and noted that renourishment would be done after exposure and at least annually. NHESP has issued conditions for this site. Bob Frattaroli, a trustee from Shoreline, noted that at this point, they are intending to leave the easement as is, but they would like to join with the fence to the north with stairs going up and over for access. The trustees are aware that nourishment is required and have planned for that. **Motion: Commissioner Clint Kershaw moved to continue the hearing until December 2, 2024; Second: Chair Carol Girard-Irwin; Vote: 4-0-0; the motion carried.**

**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 10/7/2024)* The applicant requested a continuation until the December 2, 2024 meeting. **Motion: Commissioner Clint Kershaw moved to continue the hearing until December 2, 2024; Second: Commissioner Bob White; Vote: 4-0-0; the motion carried.**

**Notice of Intent: 5 Knowles Heights Rd, Alina Roytberg & Lev Glazman (SE#75-1206):** beach stair repair; Coastal Bank, Coastal Beach, Land Subject to Coastal Storm Flowage. (Map 23, Parcel 1) John O'Reilly represented the project. Commissioner Clint Kershaw asked about having removable stairs. John O'Reilly noted that the stairs are on the higher dune and need repair but has no issue with making them seasonal. Commissioner Kershaw then asked about the support structure. John O'Reilly stated that they propose adding helical piles to add structural support and described the process of installing the anchors using a tripod and a small machine. **Motion: Commissioner Clint Kershaw moved to approve the Notice of Intent; Second: Commissioner Connie Mather; Vote: 4-0-0; the motion carried.**

**Notice of Intent: 17 Avocet Road, Jennifer & Michael Freitag (SE#075-1204):** installation of sturdy sand drift fence, coir logs, and beach stairs; Coastal Beach; Land Subject to Coastal Storm Flowage, and Coastal Bank. (Map 39, Parcel 217) *(continued*

from 10/7/2024) Jen Crawford from Crawford Land Management was present in person and other team members including Nick Crawford, Lars Jensen, and Tara Marden were present virtually. Jen Crawford highlighted some of the changes that were made to the design as a result of the last hearing. More field measurements were done and the main array has been shifted to match the abutters' installations. They now propose to add three rows of "additional coir" above and below the main array. Commissioner Clint Kershaw asked why they were going so much higher. Jen Crawford replied that they designed the coir to the flood elevation which is elevation 15. She confirmed that both the "additional coir" and the sturdy fence would maintain a 25' setback to the abutting properties. She also noted that the proposed and existing stair configurations had been superimposed on the plan for clarity. However, the copies that the commissioners received were not in color. The Agent noted that she was on-site today with Bryan McCormack from the Cape Cod Cooperative Extension and that he questioned the proposal to bury the sturdy drift fence. Jen Crawford stated that the intent is to protect the toe because they are concerned about scour under the toe. The Agent asked how they would install such a large, buried fence. Jen Crawford noted that they had provided photos of an installation they had done in Chatham. Commissioner Clint Kershaw stated that the Commission has only seen fencing and coir proposed as a system. The Agent agreed that fencing and coir as a system is the only context that has been permitted in town. She suggested that the three buried coir along with the buried sturdy fence were like a "Plan B" if a catastrophic event occurred and stated that the size and height of this installation feels more like a revetment that would lock up a lot of sediment. Jen Crawford explained the planting strategy of plugging beach grass plantings into the rolls to eventually hold the upper rolls in place. They would plant bare root culms between the rolls. Chair Carol Girard-Irwin was concerned that if the abutting properties were not linked, the chance of scour would be higher. The Agent asked the applicant's representative that the Commission be given time to receive a report from Bryan McCormack.

Commissioner Clint Kershaw said he was concerned with the amount of digging that would be required to bury the fence. He then asked about proposed access for this work. Jen Crawford stated that ideally construction and maintenance access would be from Cold Storage beach but that they have shown access from the top of the bank in the event that access is not allowed from Cold Storage. Commissioner Connie Mather asked if there was any remedial work that could be done in the 25' set back to the abutter properties. Jen Crawford said that coir matting could be added there.

Abutter Rick Summers from 15 Avocet Road stated that they were glad that the Freitags were stabilizing the bank but had concerns about discontinuities between what is proposed versus what is already installed on their properties. Specifically, he thinks the "additional coir" proposed under the main array needs to be set back 25'. His other concern is about both the slope of the coir logs and the large amount of sand nourishment changing water flow patterns and the potential impact to abutter properties. The Agent noted this proposal is very different than others that have been proposed in town. The Chair stated that she would like to see pictures of what this would look like and asked if photos from an installation in another town could be provided. **Motion: Commissioner Clint Kershaw moved to continue the hearing until December 2, 2024; Second: Chair Carol Girard-Irwin; Vote: 4-0-0; the motion carried.**

**Administrative Review Applications:** 1.) The following addresses are requesting a 60-



day extension to previously approved sand nourishment: 2 Bay View Path, 4 Bay View Path, 1 Merryfield Path, 0 Bay View Rd, 17 Bay View Rd, 19 Bay View Rd, 23 Bay View Rd, 25 Bay View Rd, 29 Bay View Rd, 55 Pond Rd; 2.) 33 Knowles Heights Road: cut 2 pine trees; 3.) 433 Shore Rd: irrigation well; 4.) 35 Black Pond Rd: cesspool upgrade; 5.) 535 Route 6: after-the-fact filing for excavation and restoration of a section of lawn within the buffer zone; 6.) 472 Shore Rd: nourishment, 60 day extension request; 7.) 8 Falcon Ln: dead tree removal, 60 day extension request **Motion: Chair Carol Girard-Irwin moved to approve the administrative Review permit applications; Second: Commissioner Clint Kershaw; Vote: 4-0-0; the motion carried.**

**Minutes September 9, 2024 Motion: Commissioner Clint Kershaw moved to approve the minutes from September 9, 2024 as presented; Second: Chair Carol Girard-Irwin; Vote: 4-0-0; the motion carried.**

#### **Mitigation discussion**

Commissioner Clint Kershaw proposed a definition of mitigation to be “to repair, replace, renew, or substitute” to include in the list of definitions within the regulations. The goal would eventually be to have requirements for mitigation in the regulations. The Commissioners then discussed whether this would be better as a policy or as a regulation. The Agent opined that a policy could be used as a trial before implementation of a regulation. Commissioners Clint Kershaw and Connie Mather volunteered to be a mitigation sub-committee and to bring ideas back to the full Commission at a meeting. Mitigation discussion will remain a standing agenda item.

**Commissioner Clint Kershaw moved to adjourn the meeting; Second: Chair Carol Girard-Irwin; Vote: 4-0-0; the motion carried.**

The meeting was adjourned at 6:29 PM.

*Respectfully Submitted by Courtney Warren*

### § 30.11 Lot Clearing

**A. Purpose:** The purposes of this bylaw are to:

1. Protect the health, safety and property of the residents of the Town of Truro by regulating clearing and grading activities associated with land development and preserving existing trees and vegetation, preventing erosion and sedimentation of inland and coastal wetlands, ponds and other waterbodies, controlling stormwater runoff, minimizing fragmentation of wildlife habitat and loss of vegetation;
2. Limit land clearing and alteration of natural topography prior to development review;
3. Protect water quality of adjacent wetlands and surface water bodies;
4. Encourage the use of Best Management Practices that prevent and reduce nonpoint sources of pollutants;
5. Promote land development and site planning practices that are responsive to the town's scenic character without preventing the reasonable development of land;

**B. Definitions:** In this bylaw, the following words have the meanings indicated:

1. Best Management Practices. (BMPs) - A structural, nonstructural, or managerial technique recognized to be the most effective and practical means to prevent and reduce nonpoint source pollutants. BMPs should be compatible with the productive use of the resource to which they are applied, and should be cost-effective.
2. Clean Fill. – Compactable granular soils (sand, stone, rock) or inert ground concrete free of oils, organics, PCBs, PFAs or other contaminants hazardous to humans or the environment.
3. Filling. - The act of transporting or placing (by any manner or mechanism) material from, to, or on any soil surface or natural vegetation.
4. Grading. - Any excavating, filling, clearing, or the creation of impervious surface, or any combination thereof, which alters the existing surface of the land.
5. Site Alteration Special Permit. - A special permit issued by the Planning Board authorizing land clearing and grading activities in the town of Truro.
6. Understory vegetation. - Small trees, shrubs, and groundcover plants, growing beneath and shaded by the canopy of trees.

**C. Applicability:** Meeting or exceeding the following threshold limits shall not be permitted without first obtaining a Site Alteration Special Permit from the Planning Board, unless specifically exempted under Section E of this bylaw.

1. Clearing or grading activities of an area greater than 20,000 square feet.

2. Importing more than 100 cubic yards of fill materials from offsite.
  3. Exporting more than 100 cubic yards of excavated soil material off the site.
- D. Review and Decision:** Upon receipt of a completed application and required plans as described in Section F below, the Planning Board shall transmit one copy each to the Conservation Commission, Building Inspector, and Department of Public Works. Within 45 days of receipt of completed application/plans, these agencies shall submit recommendations to the Planning Board. The Planning Board shall act on applications according to the procedure specified in G.L. c. 40A, §9.
- E. Exemptions:** The provisions of this bylaw shall not apply to the following activities:
1. Removal of hazardous trees, as defined herein;
  2. Routine maintenance of vegetation and removal of dead or diseased limbs and/or trees necessary to maintain the health of cultivated plants, to contain noxious weeds and/or vines in accordance with a Department of Environmental Management (DEM) - approved Forest Management Plan, or to remedy a potential fire or health hazard or threat to public safety;
  3. Construction and maintenance of public and private streets and utilities within town-approved roadway layouts and easements;
  4. Work conducted in accordance with a valid earth removal permit issued by the Town of Truro;
  5. Agricultural activities in existence at the time a bylaw is adopted, work conducted in accordance with an approved Natural Resource Conservation Service Agricultural Plan or agricultural uses on parcels of land of more than five acres as specified in MGL c. 40A Section 3.
  6. Construction of roadways and associated infrastructure for subdivisions approved in accordance with the Town of Truro Subdivision Rules and Regulations.
  7. Construction of any state or town agency project approved by the town manager, town council, or town selectmen.
  8. Construction or installation of public utilities.
  9. Non-commercial cutting for fuel, provided that clear-cutting does not occur.
- F. Application Requirements:** Unless determined otherwise by the Planning Board the following submittals are required at the time of application:
1. Survey of existing vegetation conducted by an individual qualified through appropriate academic credentials and field experience. A statement of credentials should be submitted with the survey. The survey of existing vegetation shall include the following information:
    - a. Identification by species of the major upland vegetational communities located on the site, including trees, shrub layer, ground cover and herbaceous vegetation.



- b. Size (trunk diameter) and height of trees.
2. Submission of a locus map at a scale of 1" = 500' showing the proposed site in relation to the surrounding area.
3. Submission of a plan at a scale of 1" = 40' of the project site showing existing and proposed contour lines at intervals of not more than 2 feet prepared by a registered civil engineer or land surveyor.
4. Soil survey or soil logs indicating predominant soil types on the project site, including information on erosion potential from the Natural Resources Conservation Service.
5. Delineation of all bodies of water, including wetlands, vernal pools, streams, ponds, and coastal waters within 100 feet of the project site/limit of work and delineation of the 100-year floodplain.
6. Submission of a plan at a scale of 1" = 40' indicating the limit of work. The limit of work shall include all building, parking, and vehicular use areas, and any grading associated with the proposed development. The plan or accompanying narrative shall document the species and quantities of specimen trees and/or other vegetation to be removed or relocated within the project area.
7. Construction schedule which describes the timing of vegetation removal, transplanting or replacement in relation to other construction activities.
8. Plans and/or description of Best Management Practices to be employed in development of the project site.
9. Submission of an erosion and sedimentation control plan at a scale of 1" = 40'. This plan shall include BMPs for erosion and sediment control (vegetative and/or structural) to prevent surface water from eroding cut and fill side slopes, road shoulders and other areas and measures to avoid sedimentation of nearby wetlands and ponds. The following information shall be submitted on erosion control and sedimentation plans submitted with the project application:
  - a. scale
  - b. Spillway designs showing calculations and profiles
  - c. Notes and construction specifications
  - d. Type of sediment trap
  - e. Drainage area to any sediment trap
  - f. Volume of storage required
  - g. Outlet length or pipe sizes
10. Plans and details of any sediment and erosion control structure(s) drawn at a scale of 1" = 40', with details at larger scales as appropriate, to include:

10. A description of the sequence of construction activities which specifies the time frame for soil stabilization and completion and any necessary winter stabilization measures.
11. Identification of the source and estimated quantity of all fill materials proposed to be placed on the site, including certification that any such materials meet the definition of “Clean Fill” per Section B above.
12. Identification and classification of any existing on-site soils or fill materials to be excavated or removed from the site, including estimated quantities and final disposition.
13. A Statement of Need outlining in narrative form the reason or justification for requesting the Site Alteration Special Permit.

**G. Review Standards:**

1. The applicant shall demonstrate that the following measures are employed in development of the site:
2. Minimize site alteration/land clearing:
  - a. Site/building design shall preserve natural topography outside of the development footprint to reduce unnecessary land disturbance and to preserve natural drainage channels on the site.
  - b. Clearing of vegetation and alteration of topography shall be limited to the following maximum percentages of the site, as determined by use and zoning district, per the table below. Disturbed areas replanted with native vegetation shall be considered to be uncleared.

Land Use	% Clearing Allowed
Agriculture (where permitted)	80%
Residential District	40%
Seashore District	25%
Commercial and Beach Point Districts	70%

- c. Clearing for utility trenching shall be limited to the minimum area necessary to maneuver a backhoe or other construction equipment. Roots should be cut cleanly rather than pulled or ripped out during utility trenching.
- d. Protect hilltops and/or scenic views within the town of Truro. Placement of buildings, structures or parking facilities shall not detract from the site’s scenic qualities and shall blend with the natural landscape.

- e. Sites shall be designed in such a way as to maintain contiguous forested areas.
- f. In the design of a development, priority shall be given to retention of existing stands of trees, trees at the site perimeter, contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions).
- g. Understory vegetation beneath the dripline of preserved trees shall also be retained in an undisturbed state. During clearing and/or construction activities, all vegetation to be retained shall be surrounded by temporary protective fencing or other measures before any clearing or grading occurs, and maintained until all construction work is completed and the site is cleaned up. Barriers shall be large enough to encompass the essential root zone of all vegetation to be protected. All vegetation within the protective fencing shall be retained in an undisturbed state.
- h. Forested areas shall be preserved if they are associated with:
  - 01 Significant, endangered or rare forest communities.
  - 02 wetlands, waterbodies and their buffers;
  - 03 critical wildlife habitat areas;
  - 04 slopes over 25 percent.
- i. Minimize cut and fill in site development:
  - 01 Development envelopes for structures, driveways, wastewater disposal, lawn areas and utility work shall be designated to limit clearing and grading.
  - 02 Other efforts to minimize the clearing and grading on a site associated with construction activities shall be employed, such as parking of construction vehicles, offices/trailers, stockpiling of equipment/materials, etc. in areas already planned for permanent structures. Topsoil shall not be stockpiled in areas of protected trees, wetlands, and/or their vegetated buffers.
  - 03 Finished grades should be limited to no greater than a 2:1 slope, while preserving, matching, or blending with the natural contours and undulations of the land to the greatest extent possible.
  - 04 Employ proper site management techniques during construction:
    - BMPs shall be employed to avoid detrimental impacts to existing vegetation, soil compaction, and damage to root systems.
    - The extent of a site exposed at any one time shall be limited through phasing of construction operations. Effective sequencing shall occur within the boundaries of natural drainage areas.
  - 05 Protect the site during construction through adequate erosion and sedimentation controls:



- Temporary or permanent diversions, berms, grassed waterways, special culverts, shoulder dikes or such other mechanical measures as are necessary may be required by the Board to intercept and divert surface water runoff. Runoff flow shall not be routed through areas of protected vegetation or revegetated slopes and other areas. Temporary runoff from erosion and sedimentation controls shall be directed to BMPs such as vegetated swales. Retaining walls may be required where side slopes are steeper than a ratio of 2:1.
- Erosion and sedimentation controls shall be constructed in accordance with the DEP Stormwater Guidance manual.
- Erosion control measures shall include the use of erosion control matting, mulches and/or temporary or permanent cover crops. Mulch areas damaged from heavy rainfalls, severe storms and construction activity shall be repaired immediately.
- Erosion control matting or mulch shall be anchored where plantings are on areas subject to mulch removal by wind or water flows or where side slopes are steeper than 2:1 or exceed 10 feet in height. During the months of October through March when seeding and sodding may be impractical, anchored mulch may be applied at the Board's discretion.
- Runoff from impervious surfaces shall be recharged on the site by stormwater infiltration basins, vegetated swales, constructed wetlands or similar systems covered with natural vegetation. Runoff shall not be discharged directly to rivers, streams, or other surface water bodies. Dry wells shall be used only where other methods are not feasible. All such basins and wells shall be preceded by oil, grease, and sediment traps. The mouths of all catch basins shall be fitted with filter fabric during the entire construction process to minimize siltation or such basins shall be designed as temporary siltation basins with provisions made for final cleaning.
- The applicant shall be required to conduct weekly inspections of all erosion and sedimentation control measures on the site to ensure that they are properly functioning as well as to conduct inspections after severe storm events.

06 Revegetate the site immediately after grading:

- Proper revegetation techniques shall be employed using native plant species, proper seed bed preparation, fertilizer and mulching to protect germinating plants. Revegetation shall occur on cleared sites within 7 (seven) calendar days of final grading and shall occur during the planting season appropriate to the selected plant species.
- A minimum of 4" of topsoil shall be placed on all disturbed surfaces which are proposed to be planted.
- Finished grade shall be no higher than the trunk flare(s) of trees to be

retained. If a grade change of 6" or more at the base of the tree is proposed, a retaining wall or tree well may be required.

**H. Required Security:** The Planning Board may require a performance guarantee in a form acceptable to the town to cover the costs associated with compliance with this bylaw under a Site Alteration Special Permit.

1. The required performance guarantee in the amount of 150% of the cost of site restoration shall be posted prior to the issuance of a Site Alteration Special Permit for the proposed project.
2. The performance guarantee shall be held for the duration of any prescribed maintenance period required by the Planning Board to ensure establishment and rooting of all new plantings, and may be reduced from time to time to reflect completed work. Plantings which die within the prescribed maintenance period shall be replaced. Securities shall not be fully released without a final inspection and approval of vegetation replacement by the town.

**I. Monitoring and Inspections:**

1. Prior to commencement of construction, the applicant, land owner, contractor, town engineer and site engineer shall conduct a meeting to review the proposed construction phasing and number and timing of site inspections.
2. Initial site inspection of erosion and sedimentation controls and placement of tree protection measures shall occur after installation of barriers around preserved areas and construction of all structural erosion and sedimentation controls, but before any clearing or grading has begun.
3. Routine inspections of preserved areas and erosion and sedimentation controls shall be made at varying intervals depending on the extent of site alteration and the frequency and intensity of rainfall.
4. Effective stabilization of revegetated areas must be approved by the town before erosion and sedimentation controls are removed. The town shall complete an inspection prior to removal of temporary erosion and sedimentation controls.

**J. Enforcement:** The town of Truro may take any or all of the enforcement actions prescribed in this bylaw to ensure compliance with, and/or remedy a violation of this bylaw; and/or when immediate danger exists to the public or adjacent property, as determined by the Truro Building Inspector. Securities described in Section H above may be used by the town in carrying out any necessary enforcement actions.

1. The Truro Building Inspector may post the site with a Stop Work order directing that all vegetation clearing not authorized under a Site Alteration Permit cease immediately. The issuance of a Stop Work order may include remediation or other requirements which must be met before clearing activities may resume.
2. The Town may, after written notice is provided to the applicant, or after the site has been posted with a Stop Work order, suspend or revoke any Site Alteration Special Permit issued by the Town.

3. No person shall continue clearing in an area covered by a Stop Work order, or during the suspension or revocation of a Site Alteration Special Permit except work required to correct an imminent safety hazard as prescribed by the Town.

**K. Severability:**

1. If any provision of this bylaw is held invalid by a court of competent jurisdiction, the remainder of the bylaw shall not be affected thereby. The invalidity of any section or sections or parts of any section or sections of this bylaw shall not affect the validity of the remainder of the [town]'s zoning bylaw.



www.SafeHarborEnv.com



# LOW IMPACT COASTAL PROTOCOLS

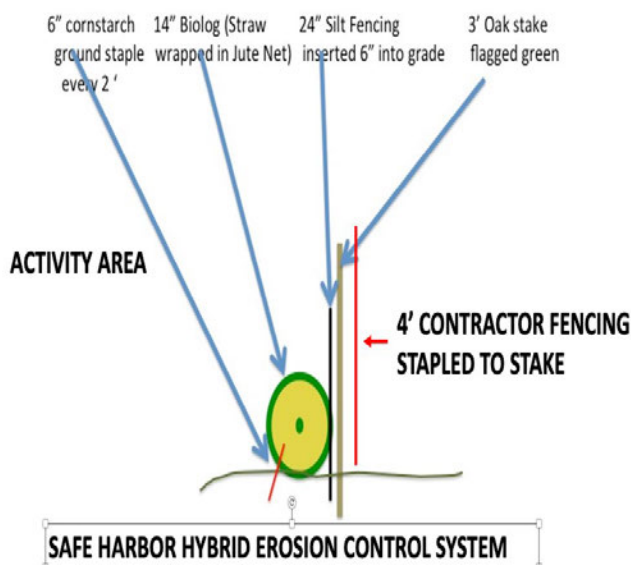
REVISED EDITION, GORDON PEABODY, JANUARY 2025

<https://www.safeharborenv.com/> [gordonpeabody@gmail.com](mailto:gordonpeabody@gmail.com)

95 Commercial Street, Room 211, Wellfleet, MA, PO Box 880, 02667

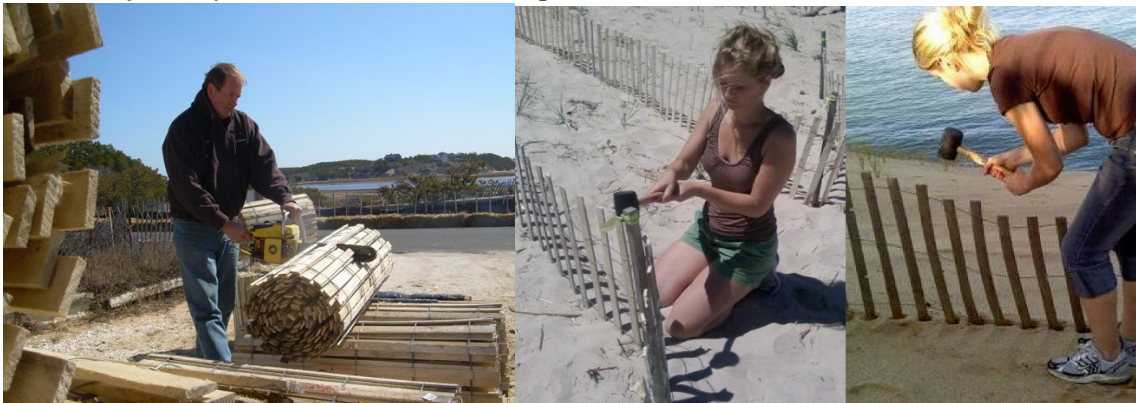
These Safe Harbor developed systems, for use in Dunes, Coastal Banks, Beaches and LSCSF, comply with performance standards and are offered as Public Domain material.

1. **Terrestrial Erosion Control-** Necessary when stabilizing vegetation is removed.  
**Recommendation:** Only use 24" silt fencing, with extra stakes in windy areas.



2. **Coastal Erosion Control-** Sand (snow) Fence is a wood slat system, wired together, only available in four-foot heights. While it cannot be disputed that the system functions by reducing erosion and collecting sand, two jurisdictional issues emerge and should be considered: first, the installation creates impacts because the height requires posts of wood or metal, making it semi structural; secondly, the fences are often utilized with plantings of American Beach Grass. Eastern Cottontail Rabbits are known to feed on the grass and the tall fencing impacts predator prey relationships in the habitat by creating unintentional “Kill Zones”, where Foxes, Coyotes and Hawks can trap escaping Rabbits against the tall fencing.

**Recommendation:** We use a chain saw to cut the four-foot-long rolls of sand fencing into two - two foot rolls. Instead of digging or driving in wooden posts or metal stakes, the fencing slats are easily installed using a rubber mallet and Eastern Cottontails can easily escape over the short fencing.



We recommend lines facing the wind, with 3 ft spacing and if they get covered, can be pulled higher. In multidirectional wind field, we use a curved configuration.



3. **Planting Beach Grass-** Native Beach Grass is more sustainable erosion control. **Recommendation:** plant bare roots December to March, 1 ft apart, 3 culms each. Can be planted between sand fencing. Wind-blown sand will collect around grass.







4. **Ramps and Stairways** – Vertical transit on a slope can transfer a bodyweight of sand for every ten feet traversed. While stairs themselves may reduce impacts associated with slope transit, the Limit of Work necessary for building or replacing stairs has the potential to generate significant impacts. Shading from the finished structure reduces stabilizing habitat growth, which may contribute to more erosion.

**Recommendation:** We reduce site impacts with a Zero L.O.W. using our Caterpillar System, constructing or deconstructing structures from within their own footprint.



**Recommendation:** We may use reduced impact treads (flow thru open treads), which provide safe transit, while providing vertical passage of wind, rain and sunlight, allowing native vegetation to create stabilizing habitat under the structure.







5. **Access on Steep Banks-** Vertical transit erodes a bodyweight of sand every 10 ft. **Recommendation:** On any unprotected sloped surface, minimal mitigations require use of a ladder to defer foot traffic on. The ladders should be secured using wooden stakes driven in vertically, not perpendicular to the slope.



6. **Nourishment-** Bayside storm events can remove 1/3 cubic yard of sand per event. For any erosion control system applied to the coast, sand nourishment is required.



**Recommendation:** 1 cubic yd of sand per foot of shoreline, against the toe of bank. This should be spread up the bank, planted with Beach grass and using biomimicry.



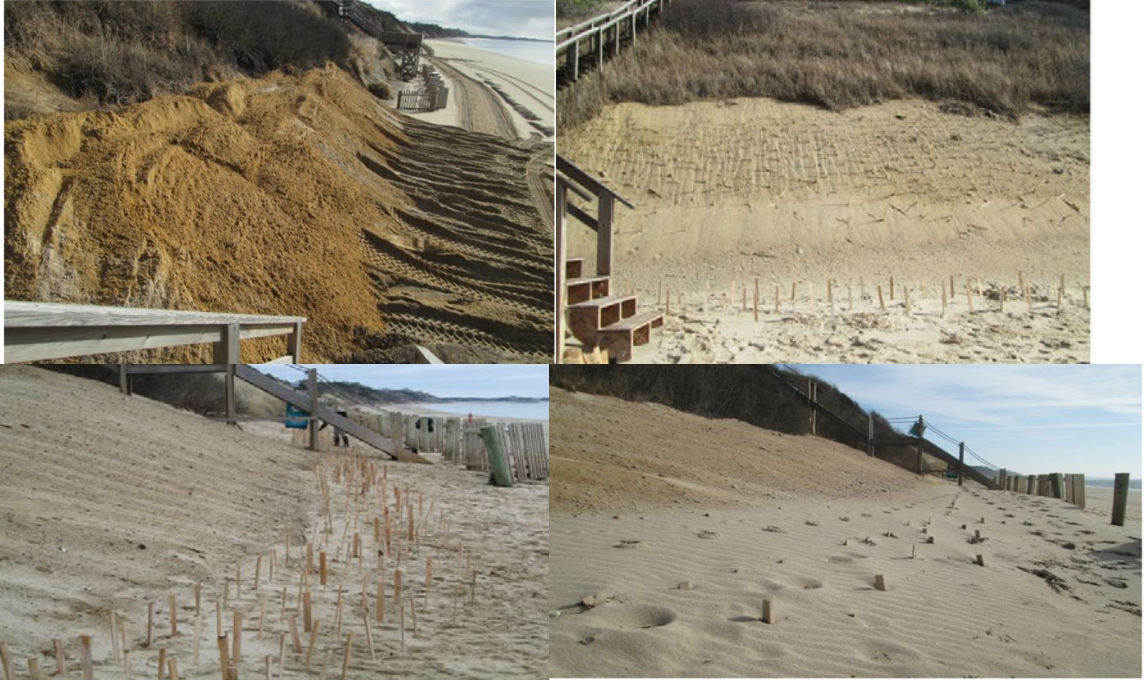


Image G. Peabody. Biomimicry at base of newly nourished dune. Image by G. Peabody. A few weeks later, ready for adjustment.

7. **Invasive Marsh Crabs**-square back crabs can be a problem where public access discourages predators. Especially in marshes that do not have seaweed populations.



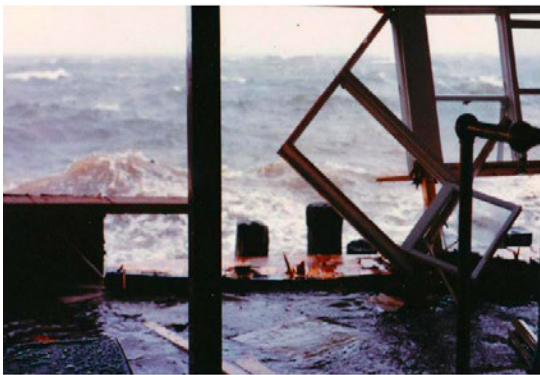
**Recommendation:** Use ecologically adapted seaweed to displace invasive crabs. These seaweeds can grow in some marshes but due to reduced salinity, reproduce by division







8. **Managing Wave Energy**-Wind energized water mass becomes destructive waves.



**Recommendation:** use a Spoiler system that manages wave energy, not wave mass. The spoiler piles divide the energized water mass and redirect it into itself.

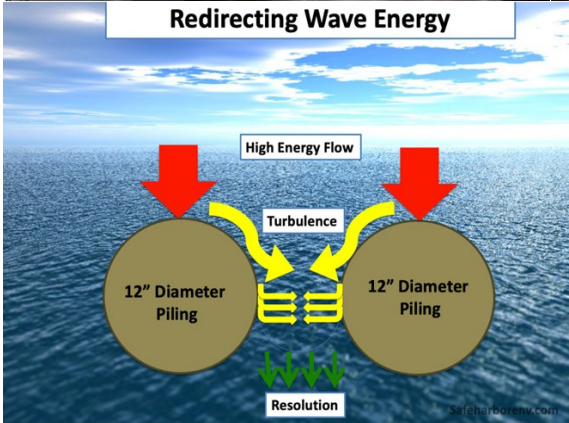




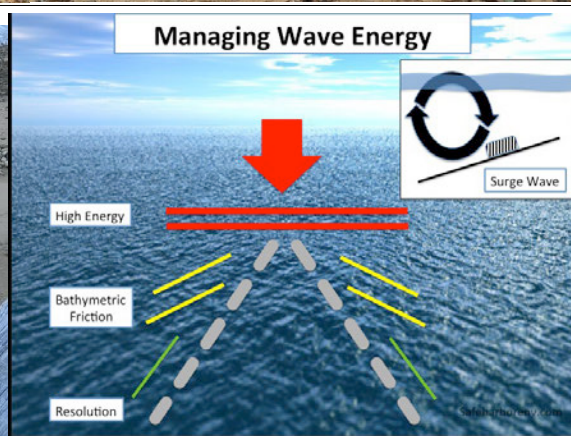
# WAVE ENERGY; REDIRECTION; TURBULENCE; PROTECTION



## Redirecting Wave Energy



**Recommendation:** Benthic Friction, waves are circular in motion and the surface is only 1 point in the circle to reduce energy. This reduces energy in the lower circle.





9. **Sand Pathways** -Pedestrian intuition creates straight line paths where foot traffic removes Beach Grass and storm wind blowouts invite destructive over wash events.



**Recommendation:** using winter storm winds for sand collection with Biomimicry.



10. **Raised Walkways**- Access walkways in sand may require vertical clearance, for repositioning of sand elevations by wind. Excavation activity can generate impacts with spoil resettlement changing grade elevations and smothering native vegetation.
- Recommendation:** we prefer using easy to install pin piles instead of excavation.



11. **Sand Surface Walkways**- It is understood that any traffic directly on the sand surface may have impacts. Most often on sloped sand surface such as dunes.

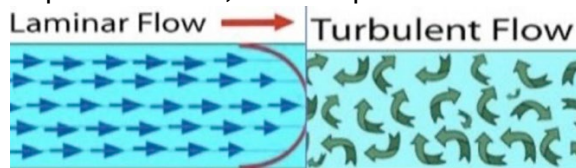


**Recommendation:** While linked durable plastic mats have become popular, we prefer wood: a Bosun's ladder, or roll up roll down treads, each can be seasonal.



**12. Biomimicry-** Laminar surface flow winds are transporting sand from erosion areas.

**Recommendation:** Storm winds that erode sand in one area, can deliver it to a deposition area, when exposed to turbulence inducing shims, which reduce velocity







the Harbor Image, 2023, Head of Meadow restoration area

13. **Seawalls-** Concrete seawalls create impacts but are expensive to replace.  
**Recommendations:** Retrofitting existing walls can significantly improve performance and reduce impacts. Thank you to Joy Cuming for illustration.