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Orleans | Sandwich | Nantucket

coastalengineeringcompany.com

# TRANSMITTAL

To:	Dennis Conservation Commission Attn: Erin Burnham, Agent 685 Route 134	Date: Via:	9/8/22	Project No. ]Pick up 🔀 🛛	C19681.00 DeliveryFed Ex
	South Dennis, MA 02660	Phone:			
		Fax:			
Subject:	Notice of Intent Revised Plans	No. of pag	ges to follow:		
	Proposed Access Staircase & Mitigation				
	Plantings				
	David and Deborah Salant				
	41 & 83 Alfred Metcalf Drive				
	S. Dennis, MA				
	Map 183 Parcels 86 & 88				
	DEP File No: SE 16-2650				
🔀 Plans	Copy of Letter Specification	ons 🖂	Other		
We are sending the following items:					

# CopiesDateNo.Description109/8/2022Summary of Revisions10REV 8/25/2022Philip L. Cheney, Mitigation Plan10REV 9/1/2022C-100, C-300Coastal Engineering Co., Inc., Plan Showing Proposed Beach Access Stair

#### These are transmitted as checked below:

for approval	igeefor your use	as requested	for review & comment	
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Remarks:	Enclosed please find copies of the supplemental documents and revised plans for the above referenced
	project.

If you have any questions, please contact our office.

cc:	Mass. DEP/SERO - Wetlands	By:	Carla Davis
	David Salant	-	
	Follins Pond Realty Trust		
	Philip L. Cheney		
	Nathan D. Jones, Project Manager		

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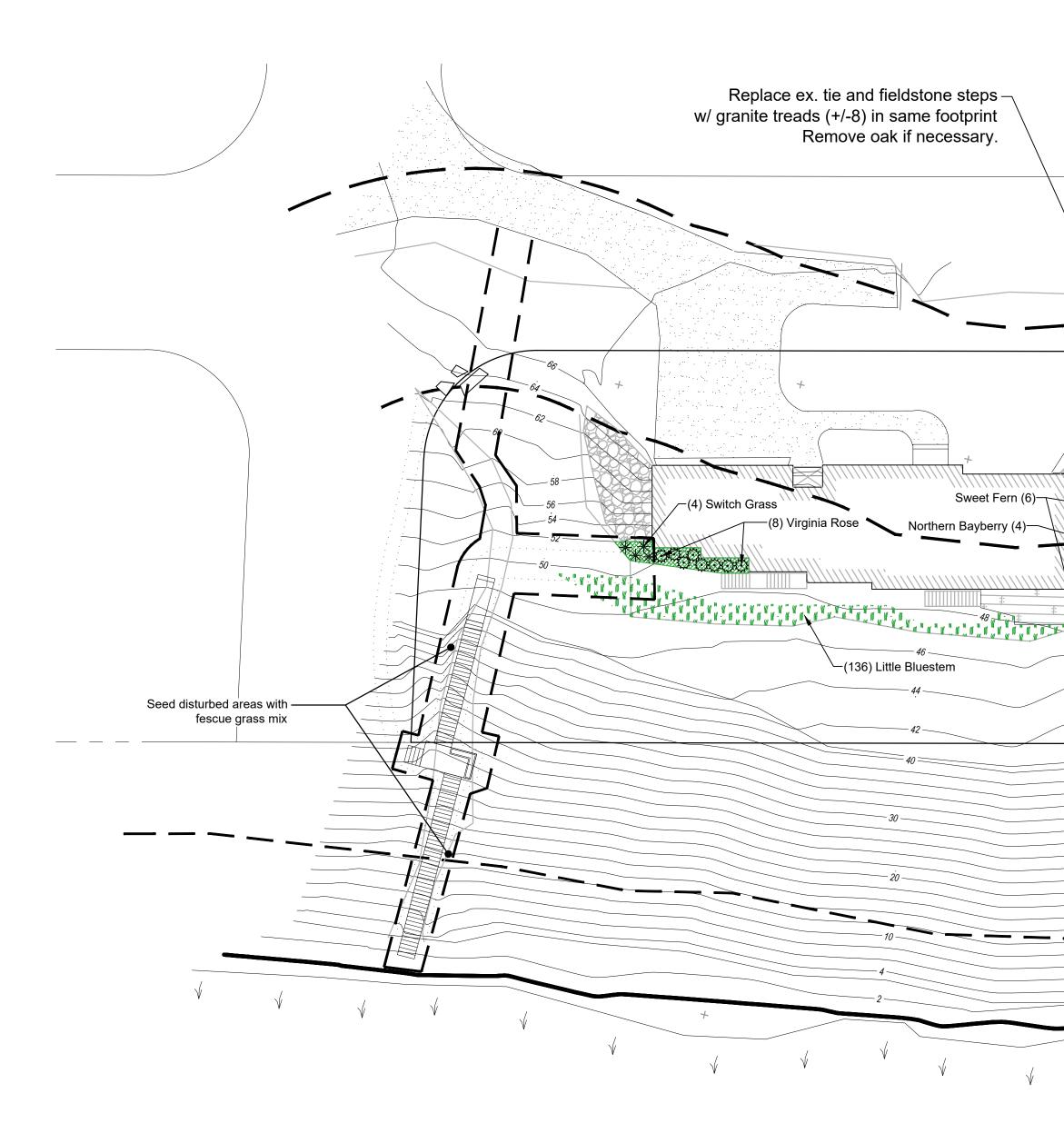
#### **Summary of Revised Documents**

The following describes the modifications between the initial Notice of Intent (NOI) filing documents and the most recent revised documents submitted to the Conservation Commission. At the initial Conservation Commission hearing on August 4, 2022, the Commission made comments about altering the location of the proposed stairs to avoid the large oak tree at the bottom of the coastal bank. The Commission also received public comments regarding the intended use of the proposed stairs with respect to the applicant's and the other property owners in the neighborhood with deeded rights to 83 Alfred Metcalf Drive. The Commission asked the applicant to work with the Trustee of the Follins Pond Realty Trust to establish the intended use.

Taking the Commissions comments into consideration, the project plans C-100 and C-300 prepared by Coastal Engineering Company, Inc. (CEC) were revised. The revised plans dated 09/01/2022 show a slightly rotated proposed stair location which avoids the existing oak tree at the bottom of the coastal bank. There is one oak tree about halfway down the Coastal Bank that is proposed to be removed. This tree has become severely undermined exposing much of the tree's root system. The tree could cause damage to the coastal bank and the proposed stairs if it were to fall after the stairs are built. Photos of the undermined oak tree were submitted to the Commission on 08/10/2022.

The project plans also show an alternate proposed footpath through Susan Eldrege Way to access the intermediate platform of the proposed stairs. The proposed stairs are intended to be used by the Salants and the property owners in the neighborhood with deeded rights to 83 Alfred Metcalf Drive. The primary access for the other property owners in the neighborhood is through the existing footpath on 41 Alfred Metcalf Drive that leads to the top of the proposed stairs. The Salants are allowing the other homeowners to access the stairs through their property. However, to account for any change in ownership of 41 Alfred Metcalf Drive, the Trustee of the Follins Pond Realty Trust and the Salants are proposing an additional alternative footpath through Susan Eldrege Way to access the intermediate platform of the proposed stairs. This would allow the other homeowners in the neighborhood to continue to access the stairs and beach if access through 41 Alfred Metcalf Drive was ever negated.

If the alternate footpath was ever built and used, steps would be needed to access the intermediate platform from the footpath. These additional steps are shown on the project plans and increase the total coverage from 404 sf to 419 sf. The mitigation plan prepared by Philip L. Cheney was revised on 08/25/2022 to show the new proposed stair location and the updated mitigation area of 838 sf.

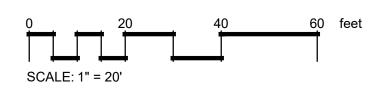


EBB FLOOD

### **PLANT SCHEDULE Mitigation**

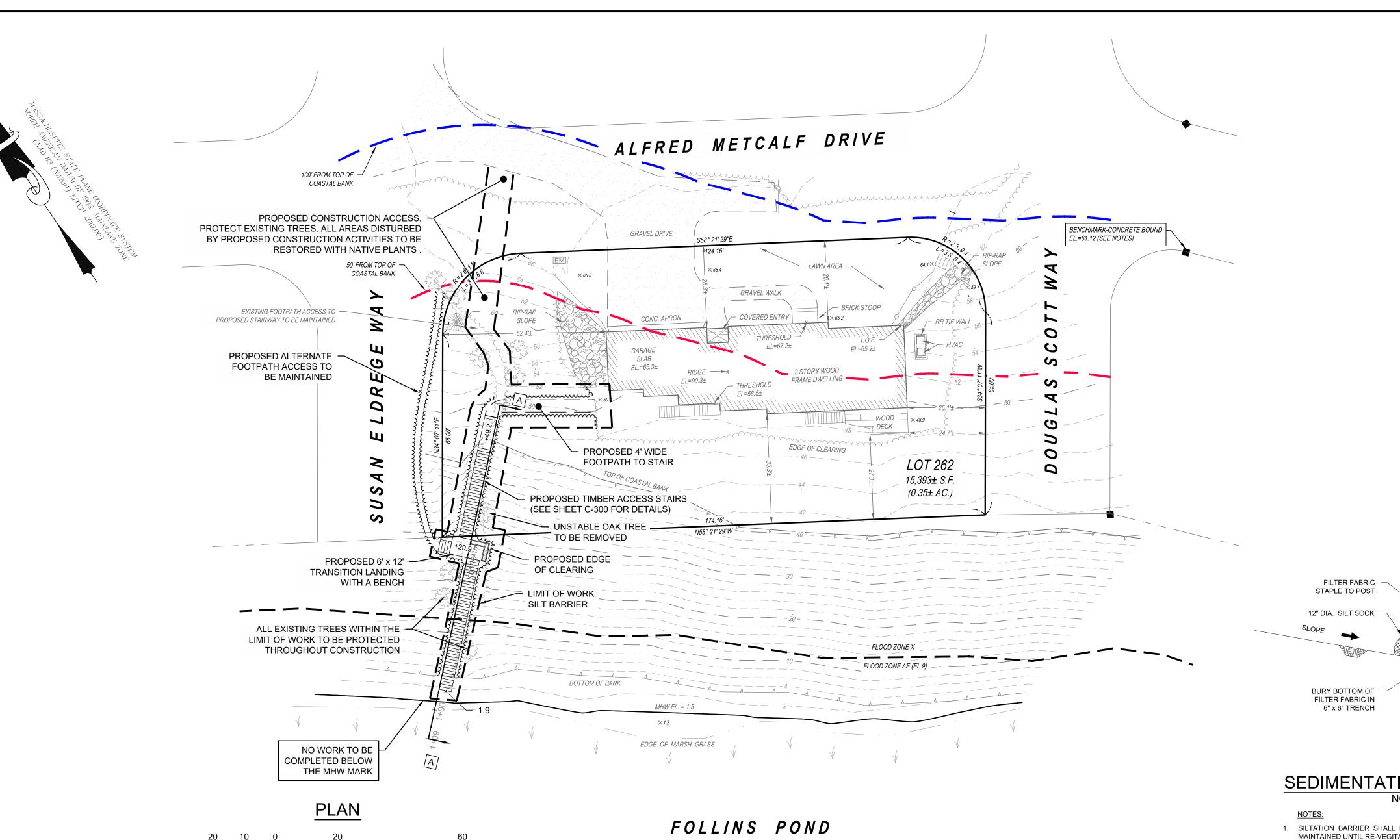


Proposed Hardscape = +/-419sqft. Mitigation Provided = +/-838sqft.



# Mitigation Plan

The Salant Residence 41 Alfred Metcalf Drive, South Dennis By: Philip L. Cheney 508-394-1373 Scale: 1" = 20'-0" 3/25/2022 Rev. Mitigation 8/3/22 Rev. Steps location 8/9/22 Rev. steps & Mitigation 8-25-22



#### GENERAL NOTES:

1. SUPPLY ALL MATERIAL, EQUIPMENT AND LABOR FOR CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS AS DESCRIBED AND SHOWN ON THE PLAN AND DETAILS.

1 inch = 20 ft.

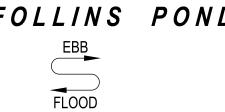
- 2. STAGING AREA FOR MATERIALS TO BE IN THE EXISTING DRIVEWAY. NO WORK IS TO BE PERFORMED BELOW THE MEAN HIGH WATER ELEVATION. STAGING AREA FOR EQUIPMENT TO BE IN THE EXISTING DRIVEWAY. WHEN MACHINERY AND EQUIPMENT ARE NOT IN USE, THEY SHALL BE KEPT IN THE EXISTING DRIVEWAY.
- 3. PERFORMANCE OF THE WORK SHALL BE IN COMPLIANCE WITH THE PLAN, DETAILS, AND ORDER OF CONDITIONS ISSUED BY THE DENNIS CONSERVATION COMMISSION FOR THE REFERENCED PROJECT AND AS DESCRIBED BELOW.
- 4. ALL DIMENSIONS, GRADES, ETC. SHOWN ON THIS PLAN SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ANY DISCREPANCIES BROUGHT TO THE ATTENTION OF THE ENGINEER TO BE RESOLVED PRIOR TO CONSTRUCTION.
- 5. ABUTTERS NAMES SHOWN HEREON REFERENCE THE CURRENT TOWN OF DENNIS ASSESSORS RECORDS.

#### TIMBER NOTES:

- 1. FRAMING LUMBER SHALL CONFORM TO THE LATEST EDITION OF THE AFPA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", AND SUPPLEMENT "DESIGN VALUES FOR WOOD CONSTRUCTION", LATEST EDITION. MAXIMUM MOISTURE CONTENT SHALL BE 19%.
- 2. WOOD TREATMENT (IN ACCORDANCE WITH AWPA C3): LUMBER 3" WIDE AND GREATER: 0.6 CCA ALL OTHER LUMBER: 0.6 ACQ OR 0.23 MCA
- 3. CONNECTORS, CONNECTIONS, FASTENERS, ETC. USED TO SECURE PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED, UNLESS NOTED OTHERWISE
- 4. LUMBER WHICH IS SPLIT, CRACKED, NOTCHED OR OTHERWISE ALTERED OR DAMAGED SHALL BE IMMEDIATELY REJECTED AND NOT ALLOWED FOR USE, UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

#### HELICAL PILE NOTES:

- EVENTS.
- PILE SHAFTS.
- BY INSTALLATION.



1. HELICAL PILES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE INTERNATIONAL RESIDENTIAL BUILDING CODE (IRC-15) WITH AMENDMENTS PER MASSACHUSETTS STATE BUILDING 780- CMR, FOR THE LOCAL JURISDICTION.

2. HELICAL PILE SYSTEM AND COMPONENTS SHALL BE RECOGNIZED BY ICC. THE MANUFACTURER SHALL HOLD A CURRENT ICC-ES ESR REPORT SHOWING COMPLIANCE WITH AC358 AND CURRENT INTERNATIONAL BUILDING CODE (IBC) ADOPTED BY THE LOCAL JURISDICTION.

3. PILE SHAFTS SHALL BE SELECTED TO SUSTAIN LATERAL AND AXIAL LOADS AS DESIGNATED ON PLANS, WITH DUE CONSIDERATION FOR BUCKLING IN THE UPPER SOIL STRATA FROM LIMITED RESTRAINT PROVIDED BY SUB-SOILS IN THE LIQUEFIED STATE DURING EXTREME STORM

4. HELICAL PILES, EXTENSIONS, CAPS, CONNECTIONS, AND APPURTENANCES SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153.

5. MINIMUM AND MAXIMUM INSTALLATION TORQUES SHALL BE SPECIFIED BY THE HELICAL PILE MANUFACTURER. THE MINIMUM INSTALLATION TORQUE SHALL BE HIGH ENOUGH TO ACHIEVE THE REQUIRED BEARING CAPACITY, INCLUDING A SAFETY FACTOR OF 2. THE MAXIMUM INSTALLATION TORQUE SHALL NOT EXCEED THE ALLOWABLE TORSIONAL CAPACITY OF THE

6. THE ALLOWABLE CAPACITY OF THE HELICAL PILES SHALL BE NO LESS THAN 10 KIPS (20 KIPS ULTIMATE). THE HELICAL PILES SHALL BE EMBEDDED A MINIMUM OF 10 FEET.

7. HELICAL PILES SHALL BE DESIGNED AND MANUFACTURED TO RESIST ALL STRESSES INDUCED

8. EXISTING CONDITIONS AND UNDERGROUND OBSTRUCTIONS SHALL BE CONFIRMED BY THE PILE INSTALLER. PROBING OR SCANNING MAY BE NECESSARY TO LOCATE UNDERGROUND OBSTRUCTIONS. REPORT ANY UNFORESEEN OBSTRUCTIONS TO THE STRUCTURAL ENGINEER.

### 0' - 50' BUFFER ZONE COVERAGE TABLE

COMPLETION OF PROJECT.

HEIGHT OF THE SILT SOCK.

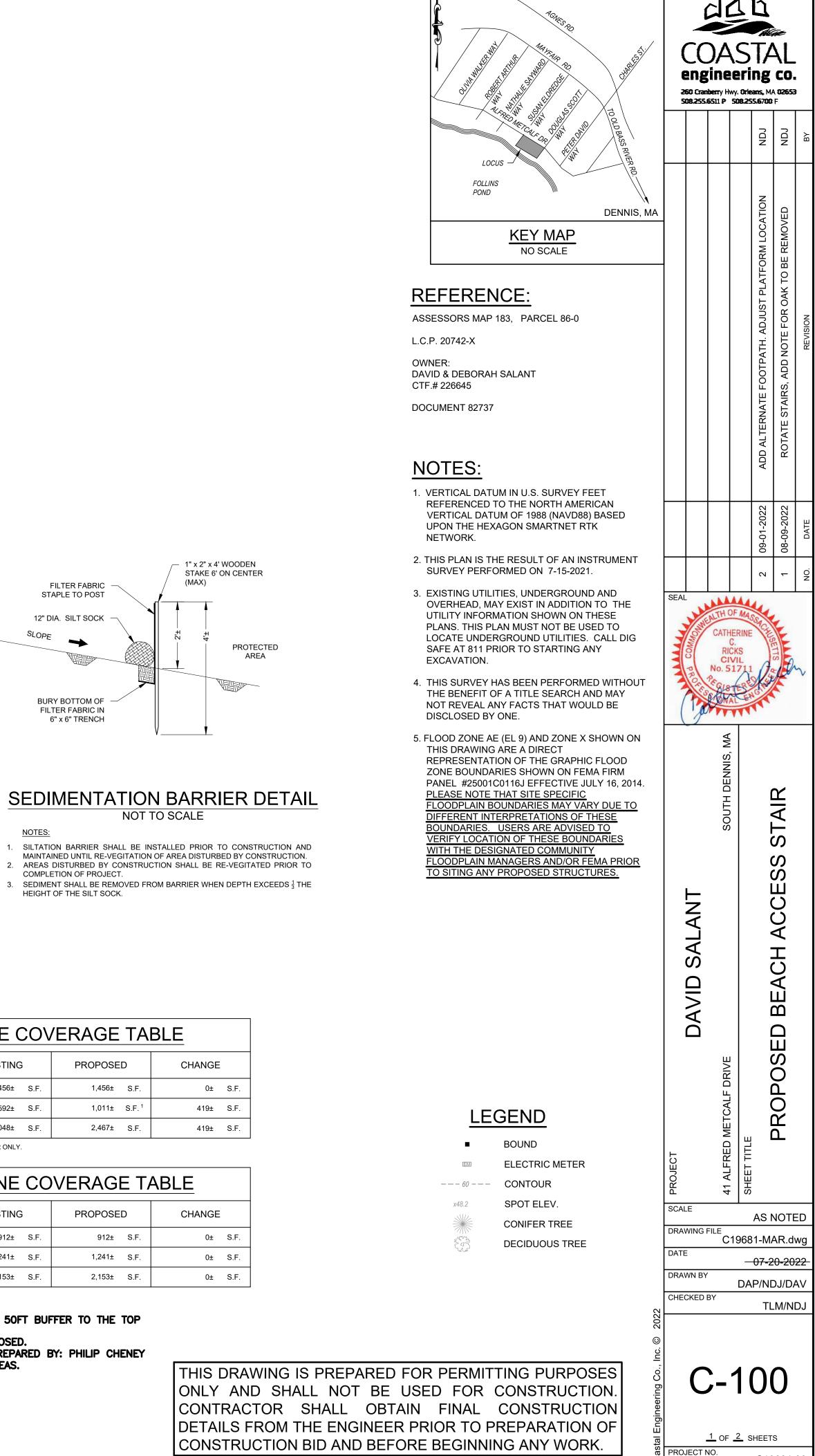
	SUBJECT	EXISTING	6	PROPOSE	D
	BUILDINGS	1,456±	S.F.	1,456±	S.F.
	HARDSCAPES (PATIO, DECK, DRIVEWAY, ETC)	592±	S.F.	1,011±	S.F. <sup>1</sup>
	TOTAL COVERAGE WITHIN 0' -50' BUFFER	2,048±	S.F.	2,467±	S.F.
1. ADDITIONAL 404 S.F. OF HARDSCAPE IS FROM THE TIMBER ACCESS STAIR ONLY.					

### 50' - 100' BUFFER ZONE COVERAGE TABLE

SUBJECT	EXISTING	PROPOSED
BUILDINGS	912± S.F.	912± S.F.
HARDSCAPES (PATIO, DECK, DRIVEWAY, ETC)	1,241± S.F.	1,241± S.F.
TOTAL COVERAGE WITHIN 50' -100' BUFFER	2,153± S.F.	2,153± S.F.

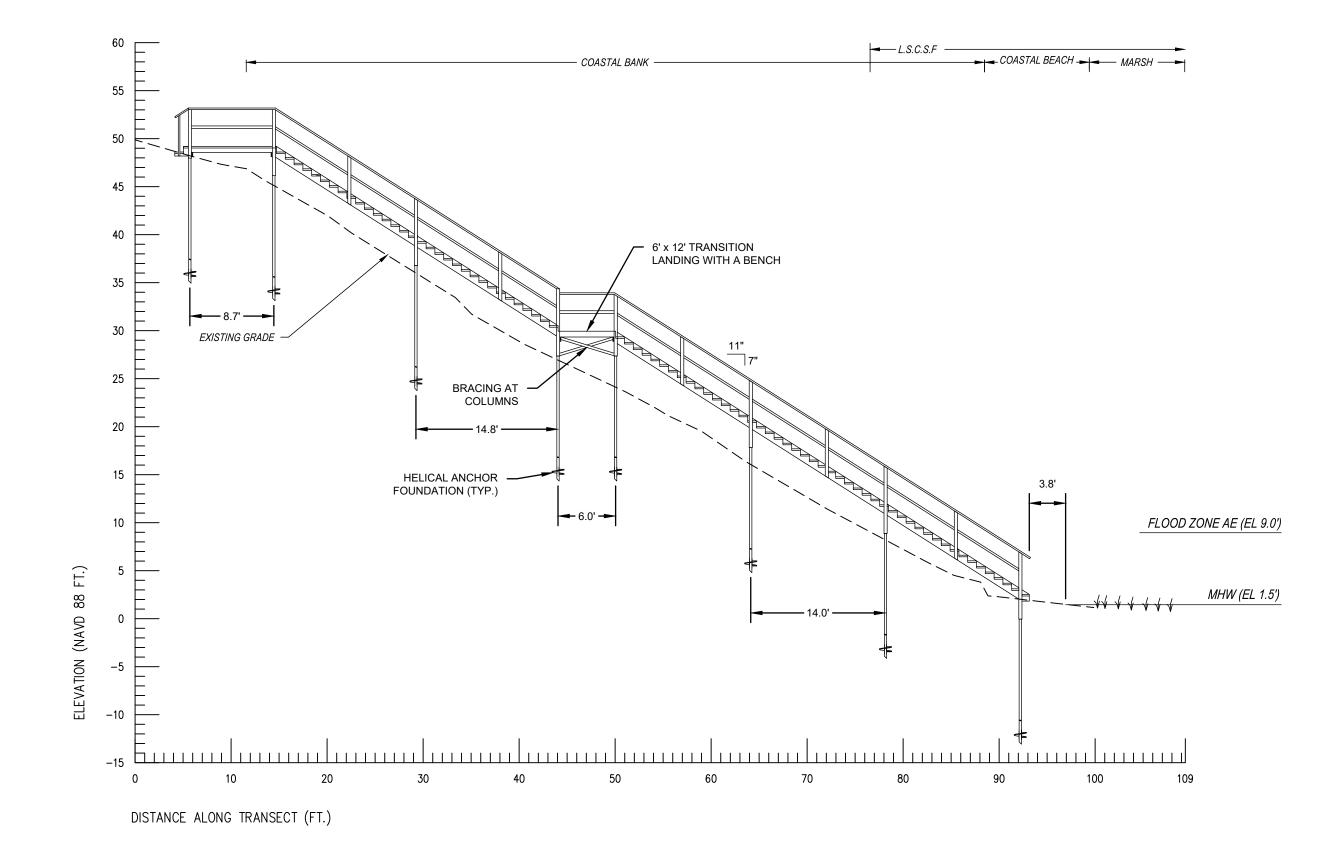
MITIGATION NOTE: TOTAL COVERAGE ON THE COASTAL BANK AND 50FT BUFFER TO THE TOP OF COASTAL BANK = $419\pm$ S.F.

838 S.F.± OF NATIVE PLANT MITIGATION PROPOSED. REFERENCE PLAN TITLED:"MITIGATION PLAN", PREPARED BY: PHILIP CHENEY FOR DETAIL ON THE PROPOSED MITIGATION AREAS.



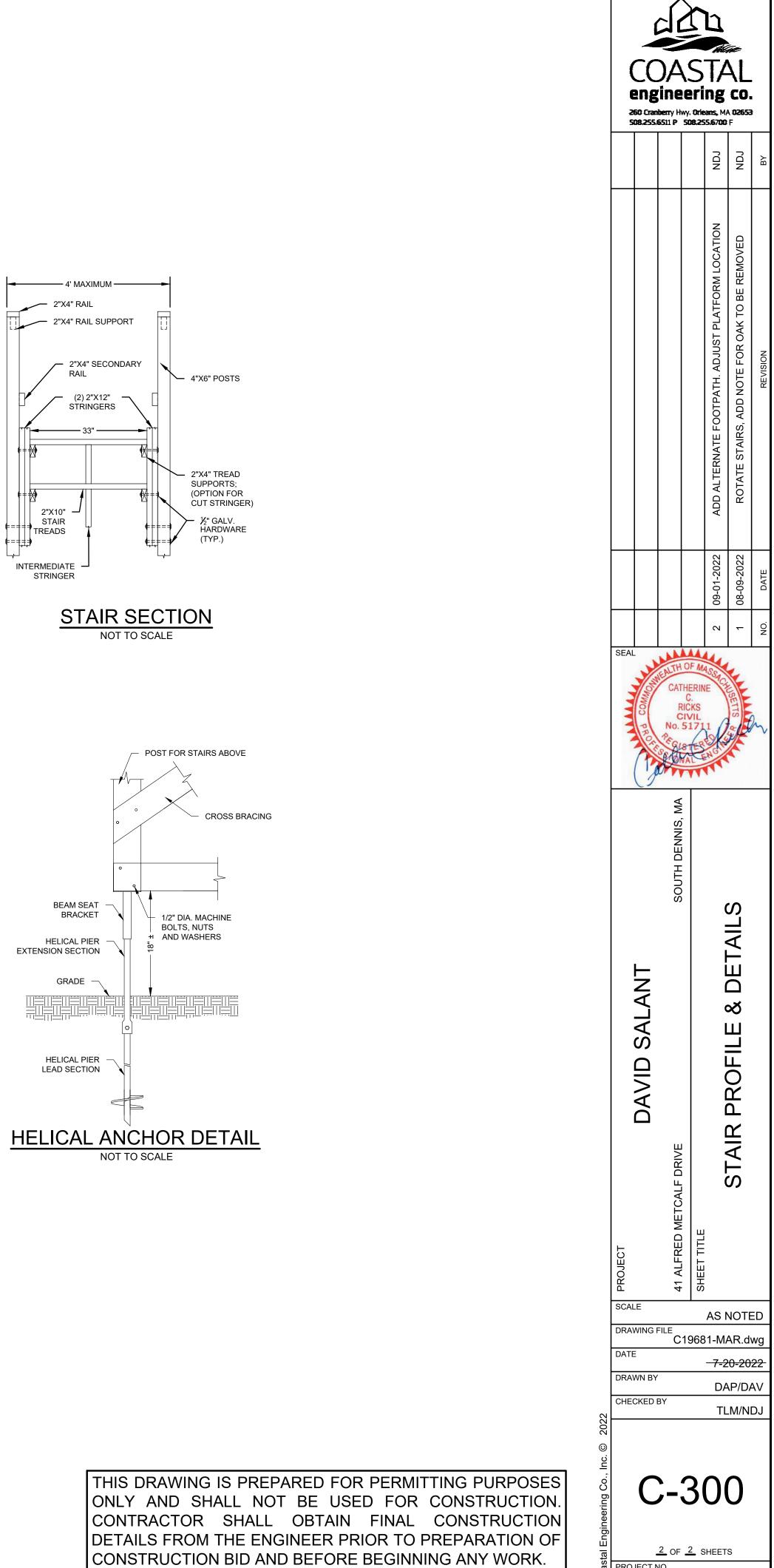
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## **STAIR PROFILE SECTION A - A**

0 2.5 5 10 1"= 10'



PROJECT NO.

C19681.00