FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

FORTY STEPS BEACH
PROPOSED BEACH NOURISHMENT

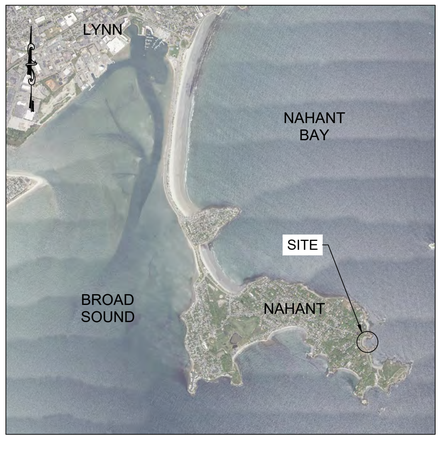
NAHANT, MASSACHUSETTS
MAY 2025

Prepared for:
Town of Nahant

Prepared by:
Sustainable Coastal Solutions, INC
In Partnership With
Massachusetts Coastal Zone Management
&
Foth Infrastructure & Environment, LLC

DRAWING INDEX

SHEET NUMBER	TITLE
C	COVER SHEET
1	EXISTING SITE PLAN
2	PROPOSED SITE PLAN
3	CROSS SECTIONS 1
4	CROSS SECTIONS 2
5	CROSS SECTIONS 3



VICINITY MAP

LOCATION MAP

SHEET TITLE
COVER SHEET

SHEET NUMBER
C

Thursday, May 29, 2025 12:30:58 PM
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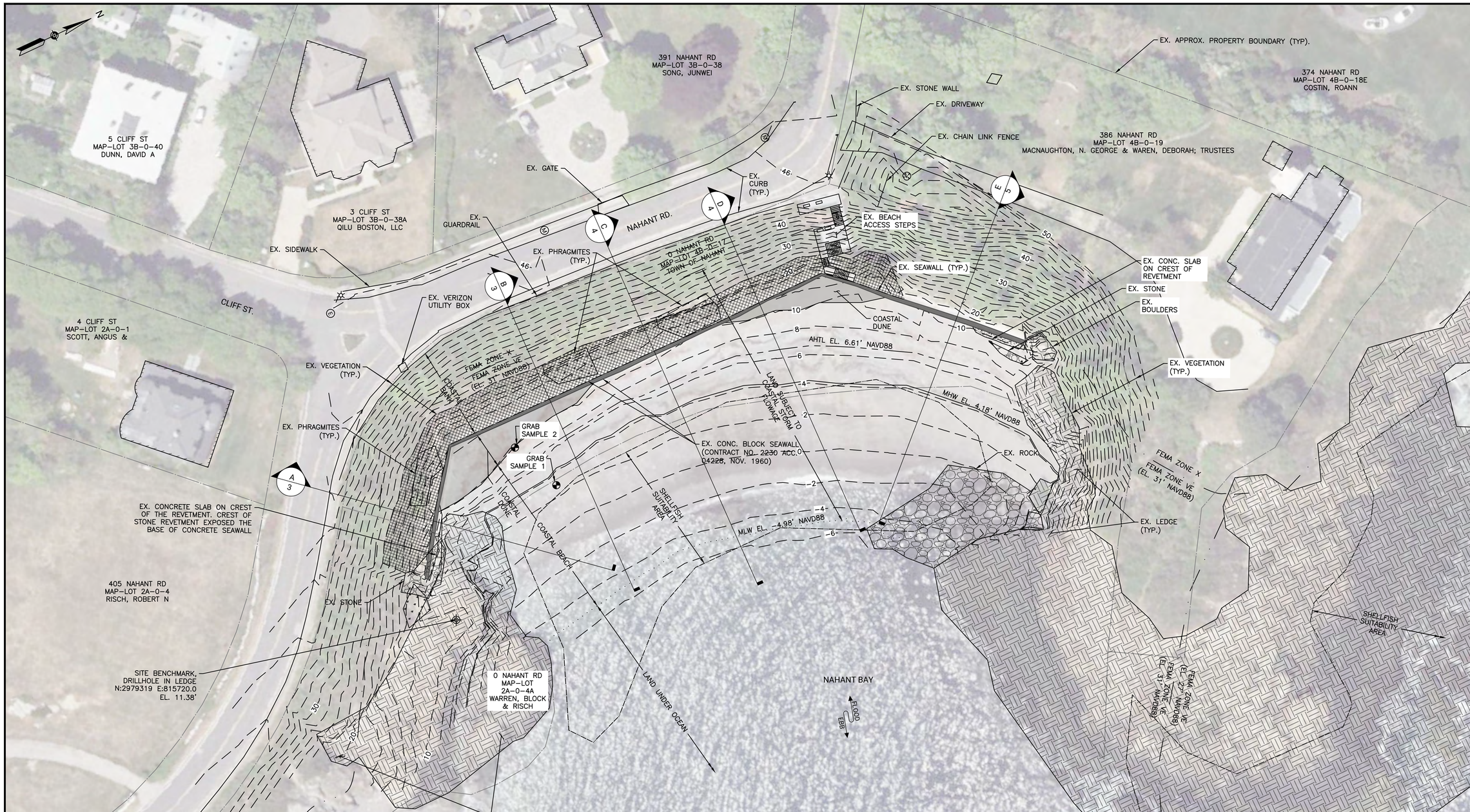

0 30 75 150

SCALE: 1" = 30'

GENERAL NOTES:

1. TOPOGRAPHIC SURVEY INFORMATION SHOWN WAS COLLECTED BY FOTH INFRASTRUCTURE & ENVIRONMENT, LLC ON 01/31/2023.
2. PROJECT BENCH MARK IS THE CITY OF LYNN BENCH MARK 439A PROVIDED BY THE MASSACHUSETTS HIGHWAY DEPARTMENT. IT IS LOCATED ON THE NORTHWEST CORNER OF A CONCRETE DECK RETAINING WALL AT ELEVATION 27.32FT NAVD88.
3. SITE BENCHMARK ESTABLISHED ON JANUARY 31, 2023 AS A DRILL HOLE IN LEDGE ON THE SOUTH END OF THE SITE AT ELEVATION 11.38 FT NAVD88.
4. PROPERTY LINES AND OWNER INFORMATION SHOWN ARE BASED UPON THE TOWN OF NAHANT ASSESSOR'S DATABASE AND MASSGIS INFORMATION AVAILABLE AT THE TIME THIS PLAN WAS PREPARED.
5. ELEVATIONS SHOWN ARE IN US SURVEY FEET AND REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
6. FLOOD ZONE INFORMATION SHOWN REFLECTS FEMA FIRM 25009C0541G EFFECTIVE DATE JULY 16, 2014, LOMR 18-01-0243P EFFECTIVE 12/29/2017, AND LOMR 16-01-2425P EFFECTIVE 7/7/2017.
7. SHELLFISH SUITABILITY AREAS SHOWN ARE BASED UPON THE MOST RECENT AVAILABLE MASSGIS INFORMATION.
8. INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS PERFORMED ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SURVEY POINTS IS NOT GUARANTEED. DIFFERING CONDITIONS MAY EXIST BETWEEN THE POINTS.

SURVEY NOTES:

1. PROJECT NAME: NAHANT 40 STEPS BEACH EXISTING CONDITIONS
2. PROJECT NUMBER: 023S011.00
3. PLOT SCALE: AS NOTED
4. SURVEY DATE: JANUARY 31, 2023
5. SURVEYOR: M. COUNT, J. HILL, D. ESPINOSA
6. EQUIPMENT: TRIMBLE R8, 2M ROD, LEICA TOTAL STATION
7. CORRECTIONS: RTK; VRS-KEYNET
8. WEATHER COND: CLEAR, 40 DEGREES, WIND NW 5-10, SEAS CALM
9. PROJECT DATUM: NAVD88
10. COOR. SYSTEM: NAD-83, MA-2001 MASS MAINLAND
11. PROJECT BENCHMARK: MA HIGHWAY DEPT DISK "439A" ON SEAWALL IN LYNN, MA ELEVATION: 27.32FT NAVD88
12. SITE BENCHMARK: DRILL HOLE IN LEDGE AT SOUTHERN END OF 40 STEPS BEACH. ESTABLISHED 1/31/23. ELEVATION = 11.38FT NAVD88

DATUM OFFSET

MLW	NAVD88	
11.59	6.61	AHTL
9.60	4.62	MHHW
9.16	4.18	MHW
4.98	0.0	NAVD88
0.0	-4.98	MLW
-0.34	-5.32	MLLW

OFFSETS TAKEN FROM NOAA STATION 8443187 (LYNN HARBOR, MA)

COMMONWEALTH OF MASSACHUSETTS
JOHN S RAMSEY
CIVIL
No. 38532
REGISTERED PROFESSIONAL ENGINEER

LEGEND:

- TREE
- BENCHMARCH
- SAMPLE
- ELECTRICAL MANHOLE
- MISC. MANHOLE
- LIGHT POLE
- EX. PHRAGMITES
- EX. LEDGE
- EX. ERODED COASTAL BANK

SCS Foth

FORTY STEPS BEACH
PROPOSED BEACH NOURISHMENT
NAHANT, MASSACHUSETTS

TOWN OF NAHANT,
MASSACHUSETTS

REVISIONS

NO.	BY	DATE	DESCRIPTION
△			
△			
△			
△			
△			

DATE OF PREPARATION

	BY	DATE
SURVEYED	MEC, JAH	01/31/2023
DRAWN	CEM	01/22/2024
DESIGNED		
CHECKED		

SHEET TITLE:

EXISTING SITE PLAN

ISSUANCE:

FOR PERMITTING PURPOSES ONLY

PROJECT NO: 0023S011.00

SHEET NUMBER

1

Thursday, May 29, 2025 12:31:06 PM
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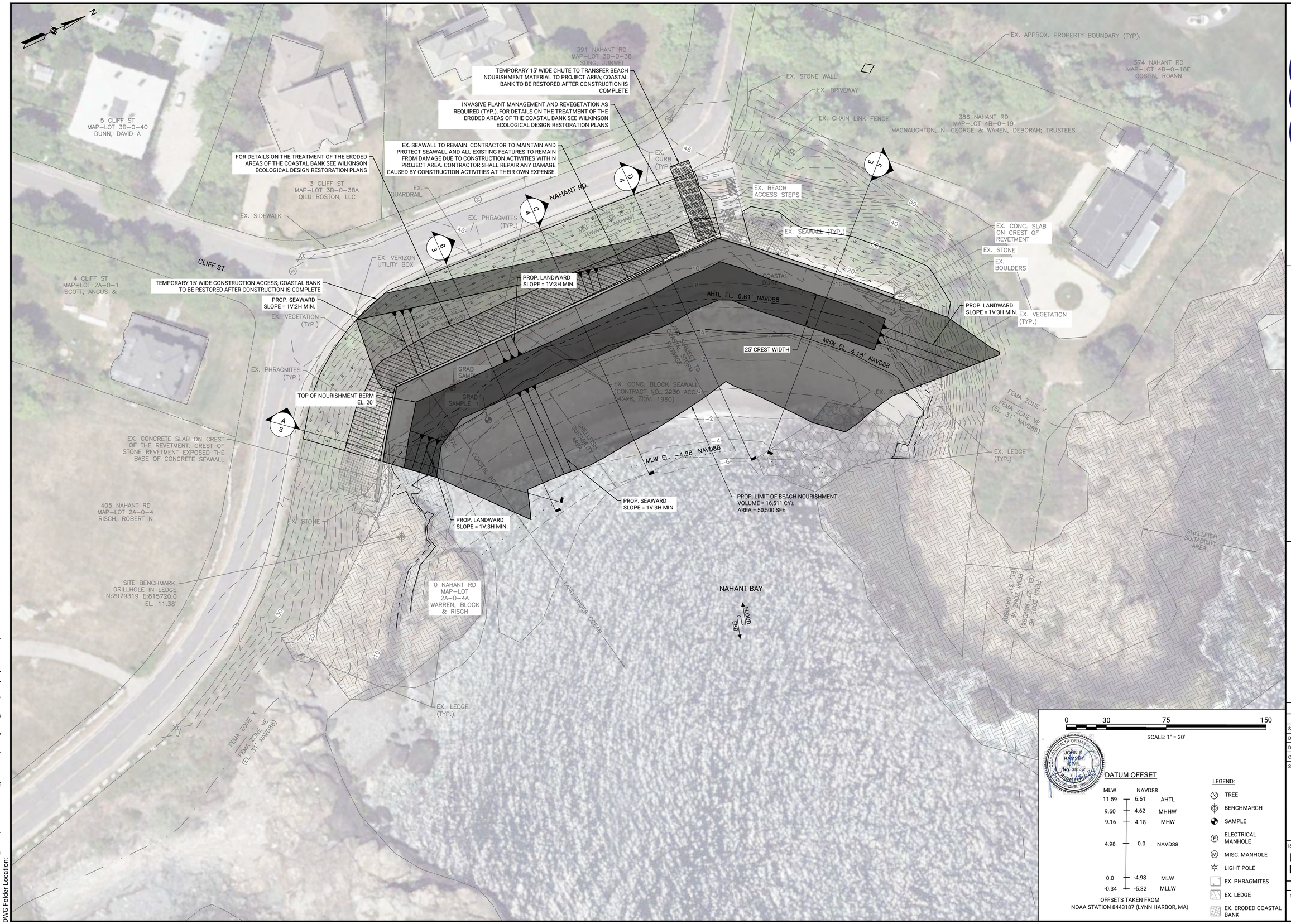

SCS Foth

FORTY STEPS BEACH
PROPOSED BEACH NOURISHMENT
NAHANT, MASSACHUSETTS

TOWN OF NAHANT, MASSACHUSETTS

REVISIONS

NO.	BY	DATE	DESCRIPTION
△	VS	APRIL 2025	TEMPORARY CONSTRUCTION ACCESS REVISION
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△			
△			
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DATE OF PREPARATION

	BY	DATE
SURVEYED	MEC, JAH	01/31/2023
DRAWN	CEM	01/22/2024
DESIGNED		
CHECKED		

SHEET TITLE:

PROPOSED SITE PLAN

ISSUANCE:

FOR PERMITTING PURPOSES ONLY

PROJECT NO: 0023S011.00

SHEET NUMBER

2

Thursday, May 29, 2025 12:31:19 PM
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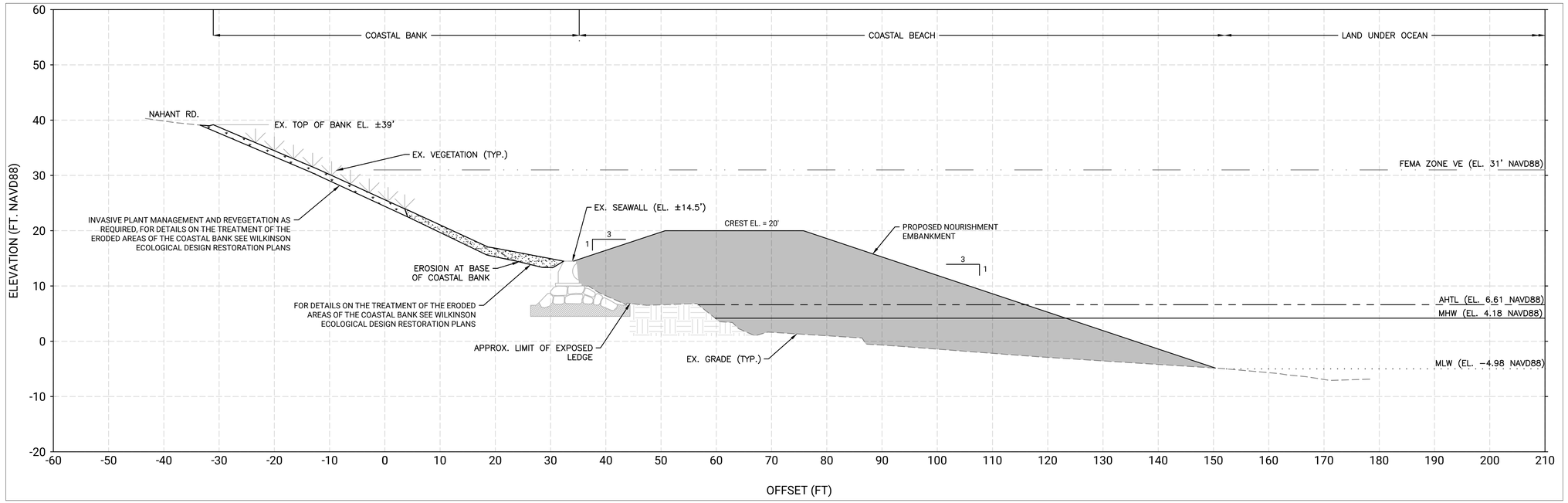
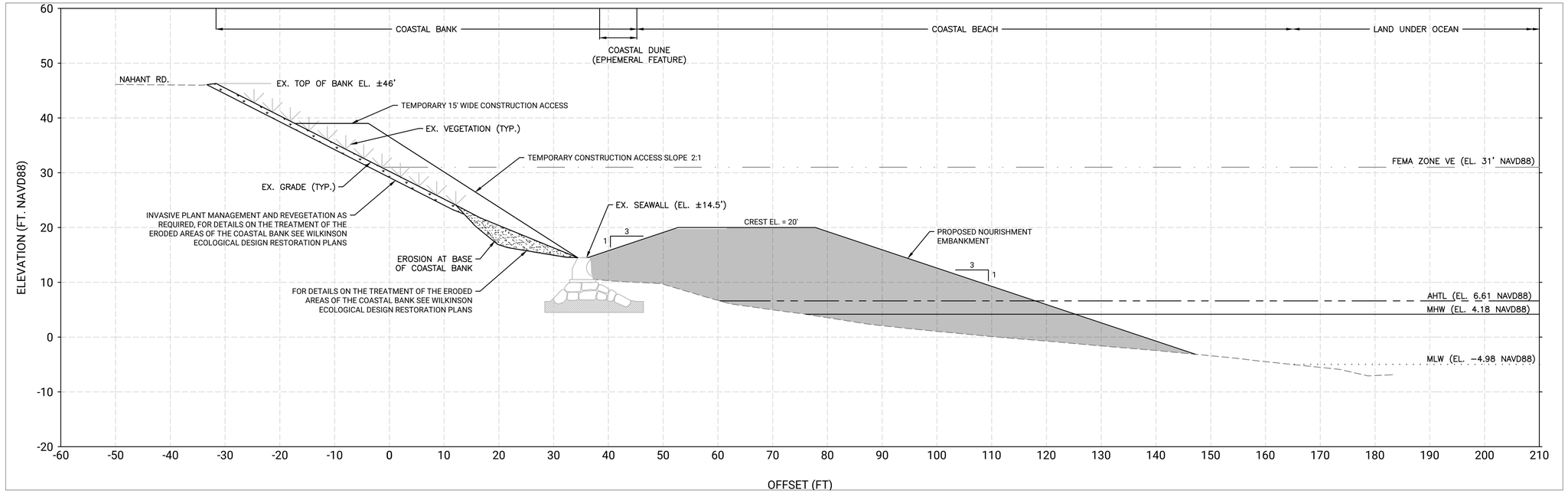


A / 3 SECTION A-A
SCALE: 1" = 10'



B / 3 SECTION B-B
SCALE: 1" = 10'

0 10 25 50
SCALE: 1" = 10'

SCS Foth

FORTY STEPS BEACH
PROPOSED BEACH NOURISHMENT
NAHANT, MASSACHUSETTS

TOWN OF NAHANT,
MASSACHUSETTS

REVISIONS

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DATE OF PREPARATION

	BY	DATE
SURVEYED	MEC, JAH	01/31/2023
DRAWN	CEM	01/22/2024
DESIGNED		
CHECKED		

SHEET TITLE:

CROSS SECTIONS 1

ISSUANCE:

FOR PERMITTING PURPOSES ONLY

PROJECT NO: 0023S011.00

SHEET NUMBER

3

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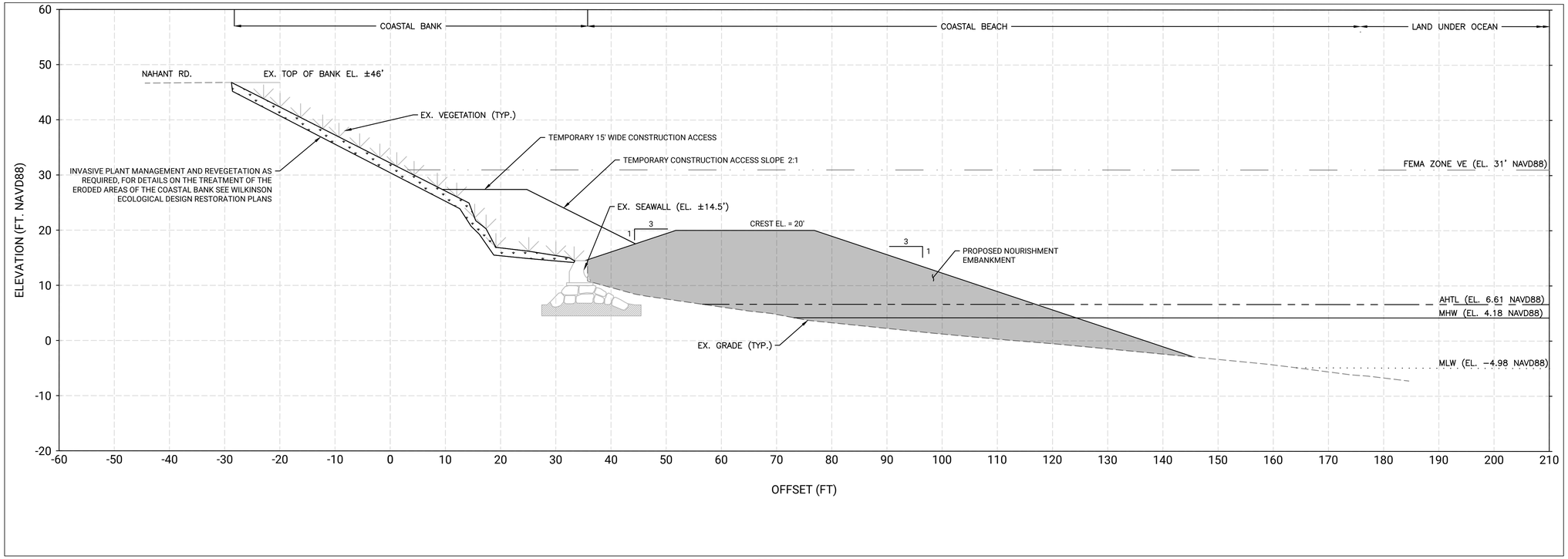
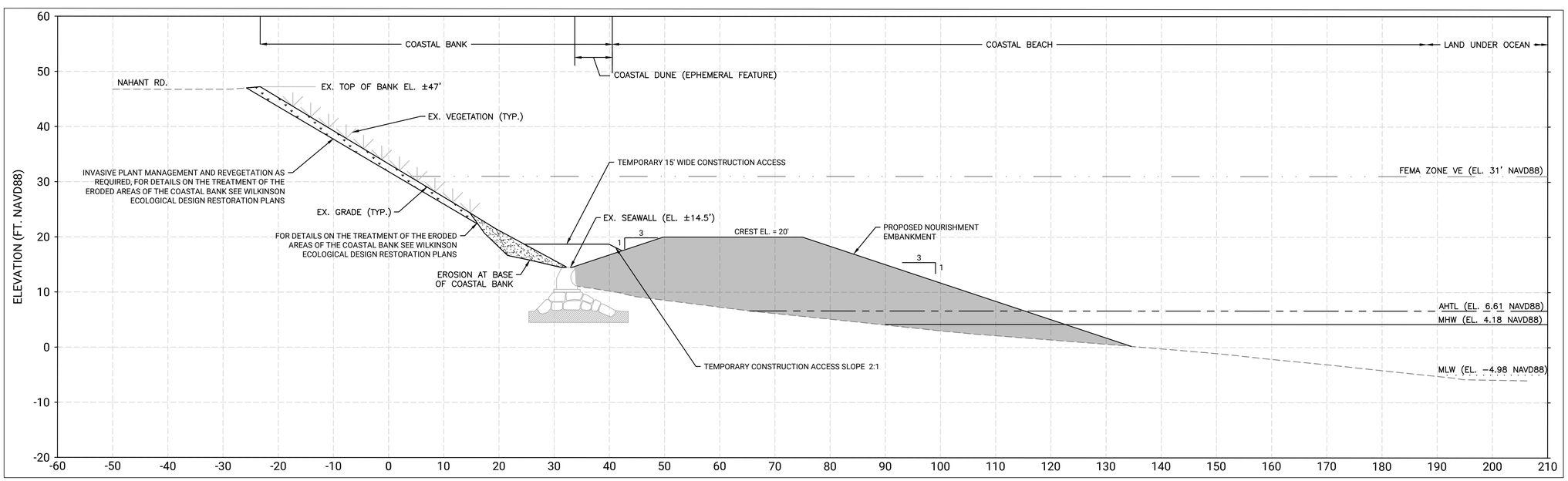


C / 4 SECTION C-C
SCALE: 1" = 10'



D / 4 SECTION D-D
SCALE: 1" = 10'

0 10 25 50
SCALE: 1" = 10'

COMMONWEALTH OF MASSACHUSETTS
JOHN S. RUNSTEN
CIVIL
No. 38532
PROFESSIONAL ENGINEER

SCS Foth

FORTY STEPS BEACH
PROPOSED BEACH NOURISHMENT
NAHANT, MASSACHUSETTS

TOWN OF NAHANT,
MASSACHUSETTS

REVISIONS

NO.	BY	DATE	DESCRIPTION
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DATE OF PREPARATION

	BY	DATE
SURVEYED	MEC, JAH	01/31/2023
DRAWN	CEM	01/22/2024
DESIGNED		
CHECKED		

SHEET TITLE:

CROSS SECTIONS 2

ISSUANCE:

FOR PERMITTING PURPOSES ONLY

PROJECT NO: 0023S011.00

SHEET NUMBER

4

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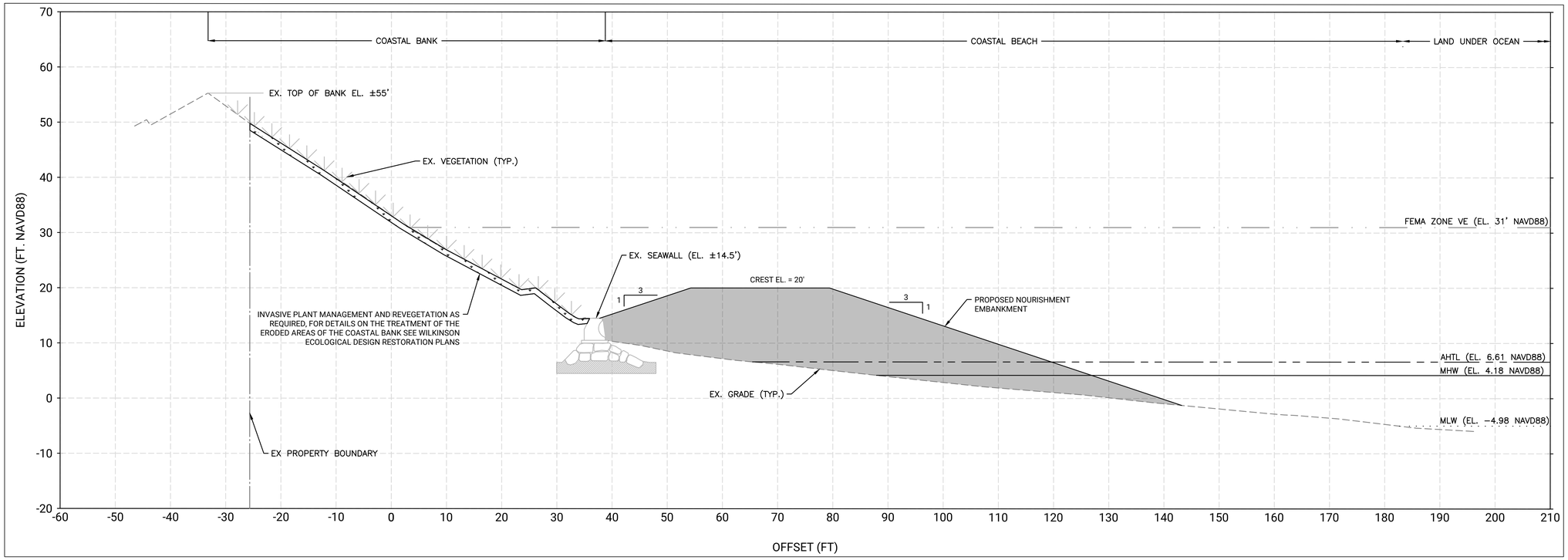

E / 5 SECTION E-E
SCALE: 1" = 10'

0 10 25 50
SCALE: 1" = 10'

SCS Foth

FORTY STEPS BEACH
PROPOSED BEACH NOURISHMENT
NAHANT, MASSACHUSETTS

TOWN OF NAHANT,
MASSACHUSETTS

REVISIONS

NO.	BY	DATE	DESCRIPTION
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DATE OF PREPARATION

	BY	DATE
SURVEYED	MEC, JAH	01/31/2023
DRAWN	CEM	01/22/2024
DESIGNED		
CHECKED		

SHEET TITLE:

CROSS SECTIONS 3

COMMONWEALTH OF MASSACHUSETTS
JOHN S. RUNSTEN
CIVIL
No. 38532
PROFESSIONAL ENGINEER

ISSUANCE:

FOR PERMITTING PURPOSES ONLY

PROJECT NO: 0023S011.00

SHEET NUMBER

5

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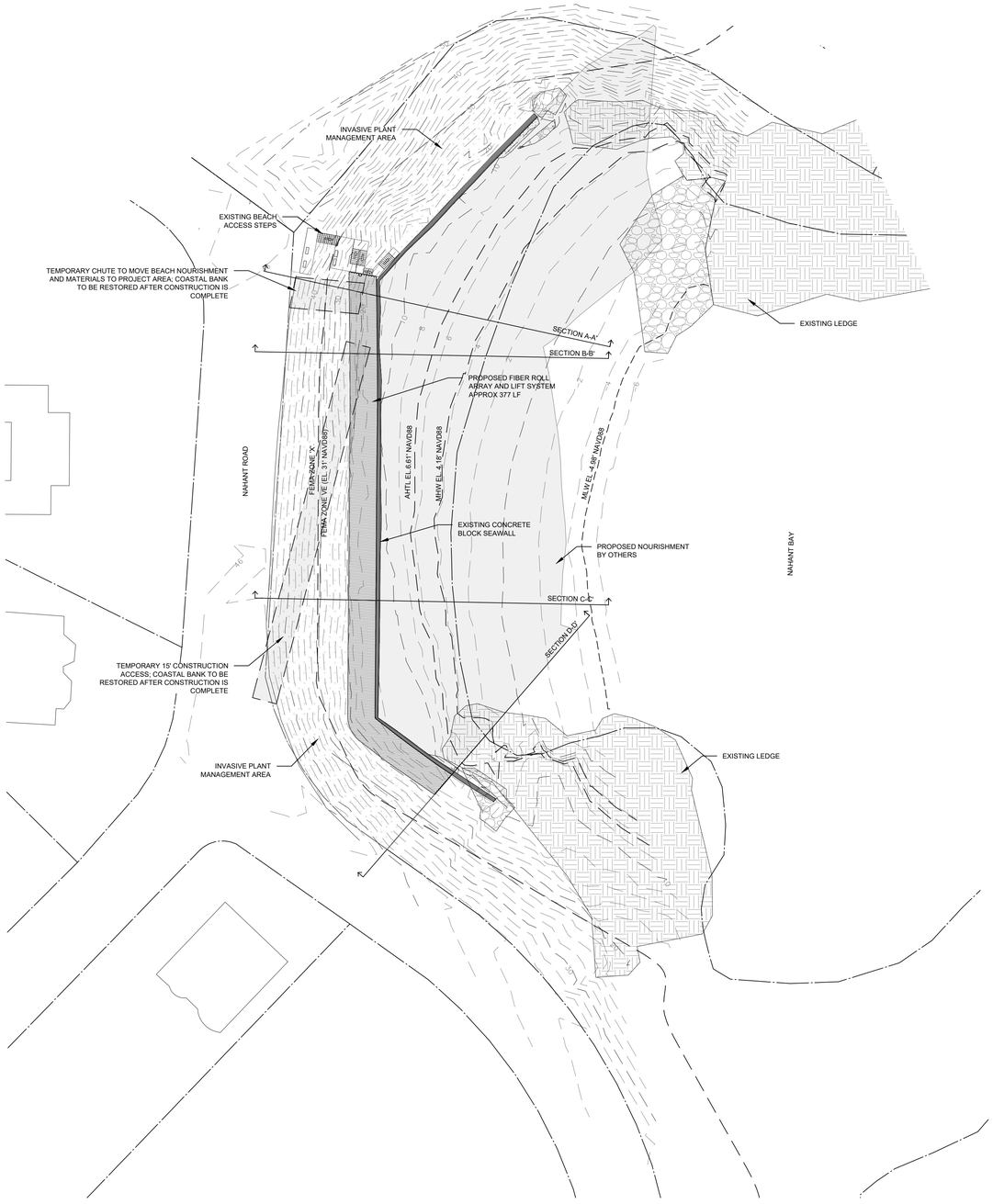
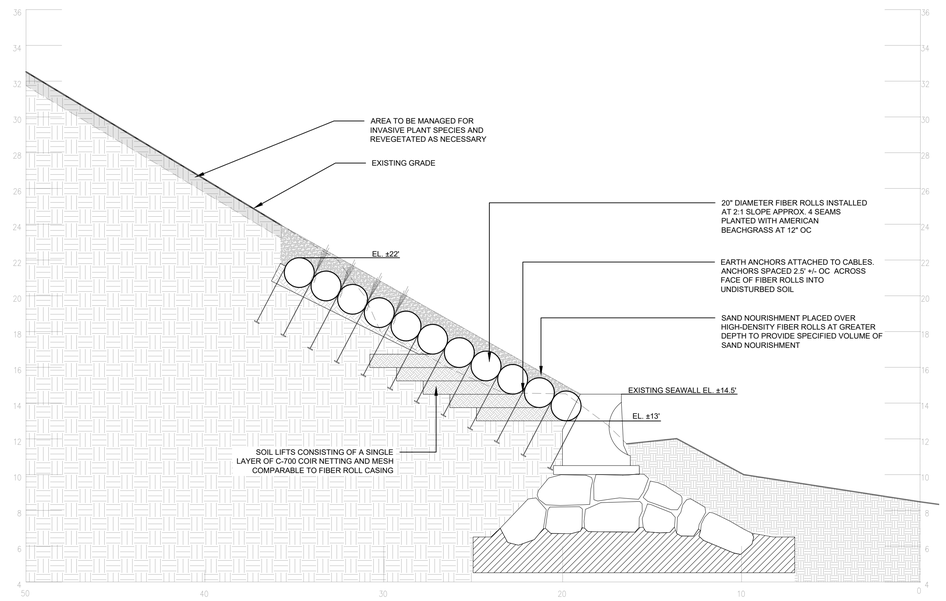


1 RESTORATION PLAN

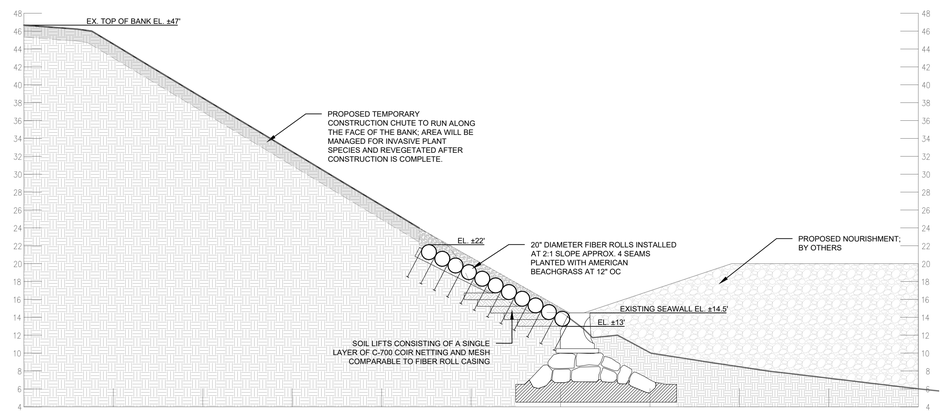
Scale: 1"= 40'



2 SECTION TYP.

DETAIL PROVIDED BY WILKINSON ECOLOGICAL DESIGN, SPECIALISTS IN COSTAL STABALIZATION CONSTRUCTION
U.S. PATENT #10,125,462 -#11,306,454B2 - #11,306,455 B2

Scale: 1/4"= 1-0'



3 SECTION A-A'

DETAIL PROVIDED BY WILKINSON ECOLOGICAL DESIGN, SPECIALISTS IN COSTAL STABALIZATION CONSTRUCTION
U.S. PATENT #10,125,462 -#11,306,454B2 - #11,306,455 B2

Scale: 1/8"= 1'-0"

WILKINSON
ECOLOGICAL DESIGN

28 Lots Hollow Rd., Orleans, MA 02653
TEL: (508) 255-1113 FAX: (508) 255-9477
WWW.WILKINSONECOLOGICAL.COM

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SURVEY PROVIDED BY:

FOTH INFASTRUCTURE & ENVIRONMENTAL, LLC

NOTES:

1.CONSTRUCTION OF THE BIOENGINEERING MEASURES SHOWN ON THIS DOCUMENT TO BE OVERSEEN BY A CERTIFIED ECOLOGICAL RESTORATION PRACTITIONER.

2. A TEMPORARY, AUTOMATED ABOVE-GROUND IRRIGATION SYSTEM MAY BE REQUIRED FOR THE FIRST TWO/THREE GROWING SEASONS WHILE NEW PLANTS ARE ESTABLISHING. ONCE PLANTS ARE ESTABLISHED IRRIGATION WILL BE REMOVED.

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REV	DATE	DESCRIPTION
		DRAFT FOR COORDINATION

40 STEPS BEACH

NAHANT, MASSACHUSETTS

DATE: 04/04/2025	SCALE: VARIES
DRAWN BY: MP	CHECKED BY: JS/IP

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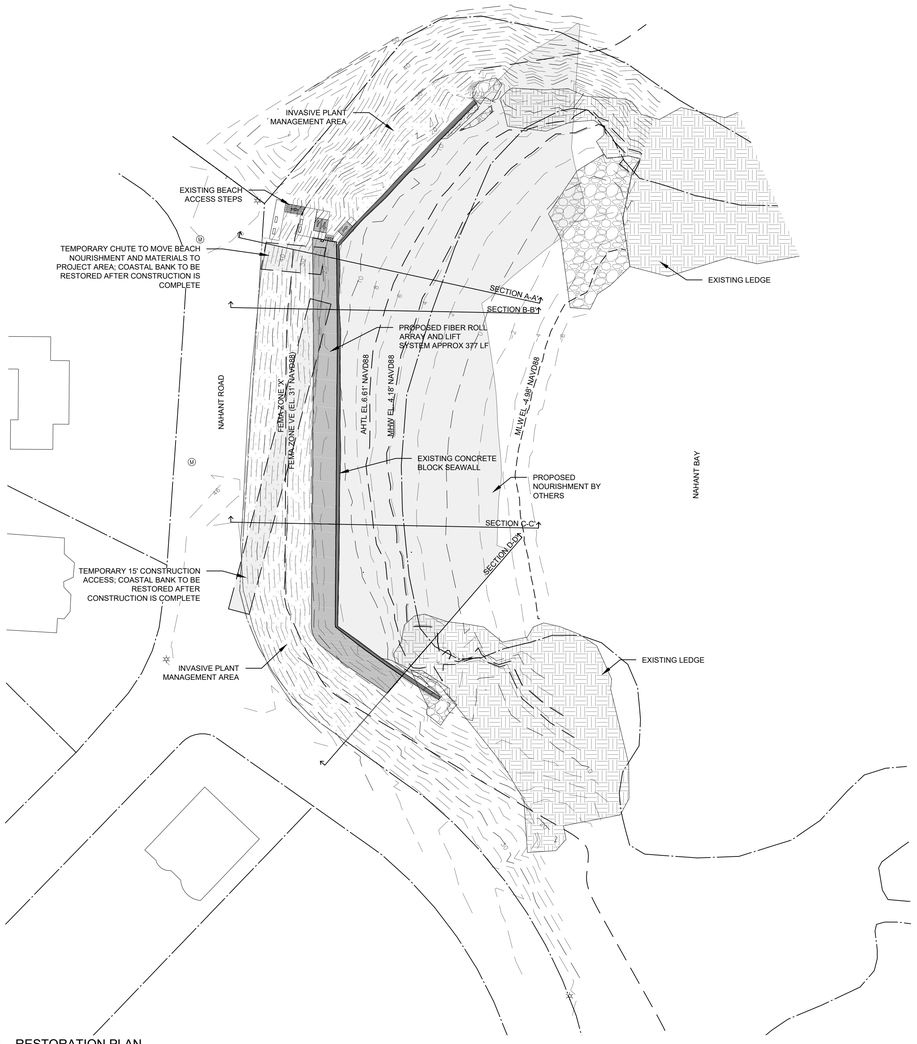
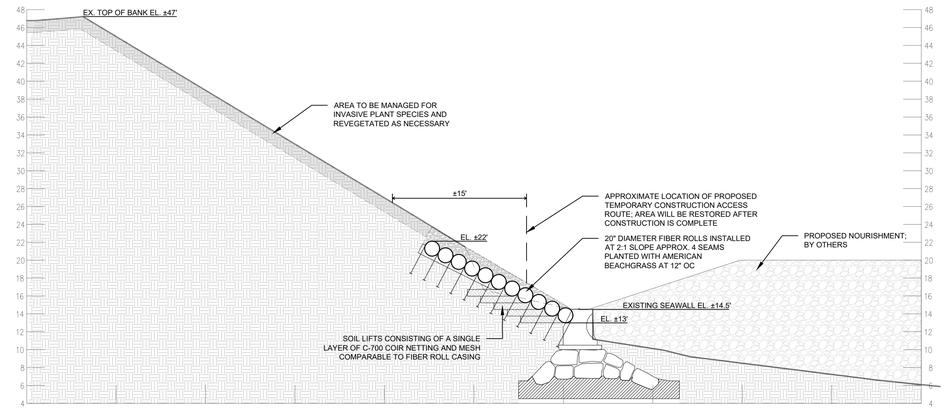
RESTORATION PLAN

1-Mar-24 k:\clients\forty steps beach_nahant\conceptplans\restoplan\2025\402_forty steps beach_nahant revised draft3.dwg



1 RESTORATION PLAN

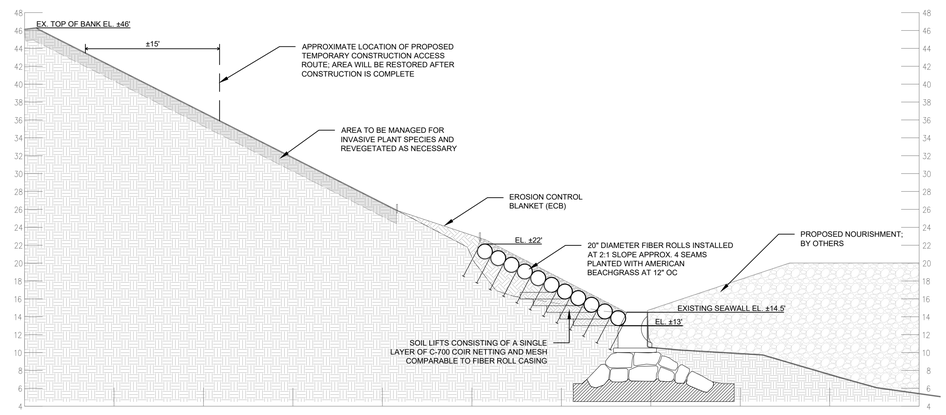
Scale: 1"= 50'



3 SECTION B-B'

DETAIL PROVIDED BY WILKINSON ECOLOGICAL DESIGN, SPECIALISTS IN COSTAL STABALIZATION CONSTRUCTION
U.S. PATENT #10,125,462 -#11,306,454B2 - #11,306,455 B2

Scale: 1/8"= 1'-0"



4 SECTION C-C'

DETAIL PROVIDED BY WILKINSON ECOLOGICAL DESIGN, SPECIALISTS IN COSTAL STABALIZATION CONSTRUCTION
U.S. PATENT #10,125,462 -#11,306,454B2 - #11,306,455 B2

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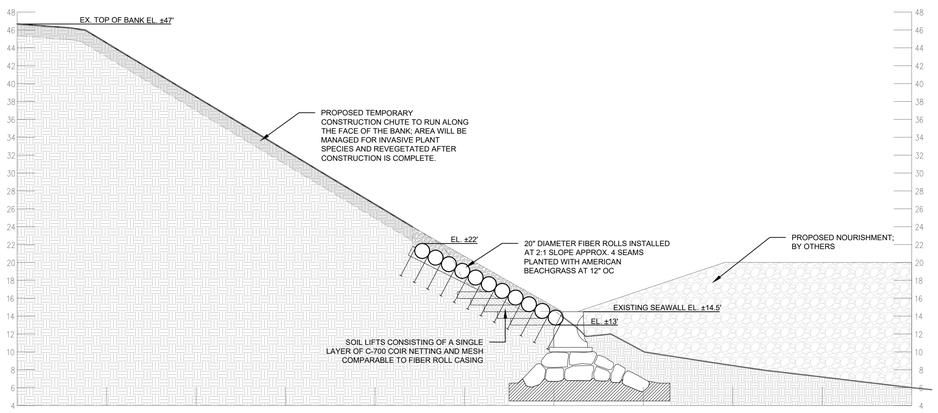
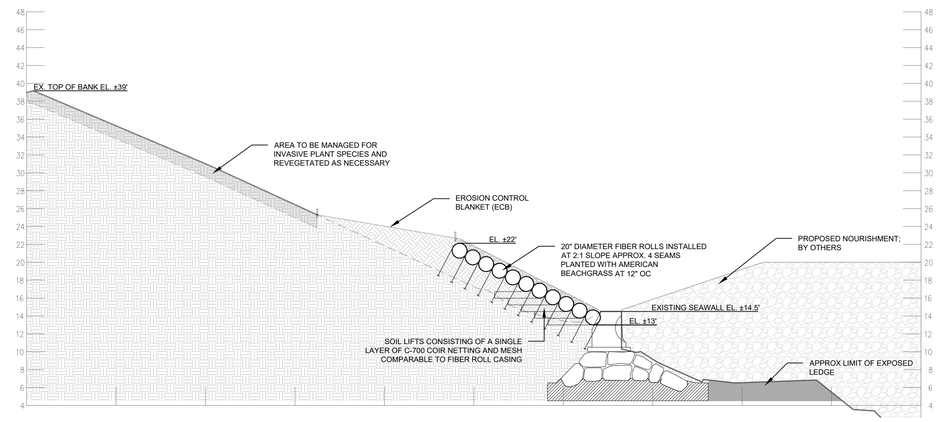


2 SECTION A-A'

DETAIL PROVIDED BY WILKINSON ECOLOGICAL DESIGN, SPECIALISTS IN COSTAL STABALIZATION CONSTRUCTION
U.S. PATENT #10,125,462 -#11,306,454B2 - #11,306,455 B2

Scale: 1/8"= 1'-0"



5 SECTION D-D'

DETAIL PROVIDED BY WILKINSON ECOLOGICAL DESIGN, SPECIALISTS IN COSTAL STABALIZATION CONSTRUCTION
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Scale: 1/8"= 1'-0"

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SURVEY PROVIDED BY:

FOTH INFASTRUCTURE & ENVIRONMENTAL, LLC

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		DRAFT FOR COORDINATION

40 STEPS BEACH

NAHANT, MASSACHUSETTS

DATE: 04/04/2025	SCALE: VARIES
DRAWN BY: MP	CHECKED BY: JS/IP

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RESTORATION PLAN

Mar-24 k:\clients\forty steps beach_nahant\conceptplans\restoplan\20250402_forty steps beach_nahant revised draft3.dwg