

**FAIRHAVEN/NEW BEDFORD HARBOR**

NOTE: EXISTING STRUCTURES LICENSE NO. 7570 (DATE: SEP. 02, 1998),  
 EXISTING AND PROPOSED STRUCTURES LICENSE NO. 13692 (JULY 30, 2014)

(SEE NOTES, SHEET 10 OF 10)

PAGE 3 OF 10 DATE 06/12/2017

PURPOSE: TO LICENSE & MAINTAIN PROPOSED BULKHEAD, PILE SUPPORTED STRUCTURES, AND SITE IMPROVEMENTS.  
 DATUM:  
 MLW = 0.0  
 MHW = +3.7  
 HTL = +5.5  
 CLE ENGINEERING, INC.  
 15 CREEK ROAD  
 MARION, MA 02738

**PROPOSED CONDITIONS PLAN**

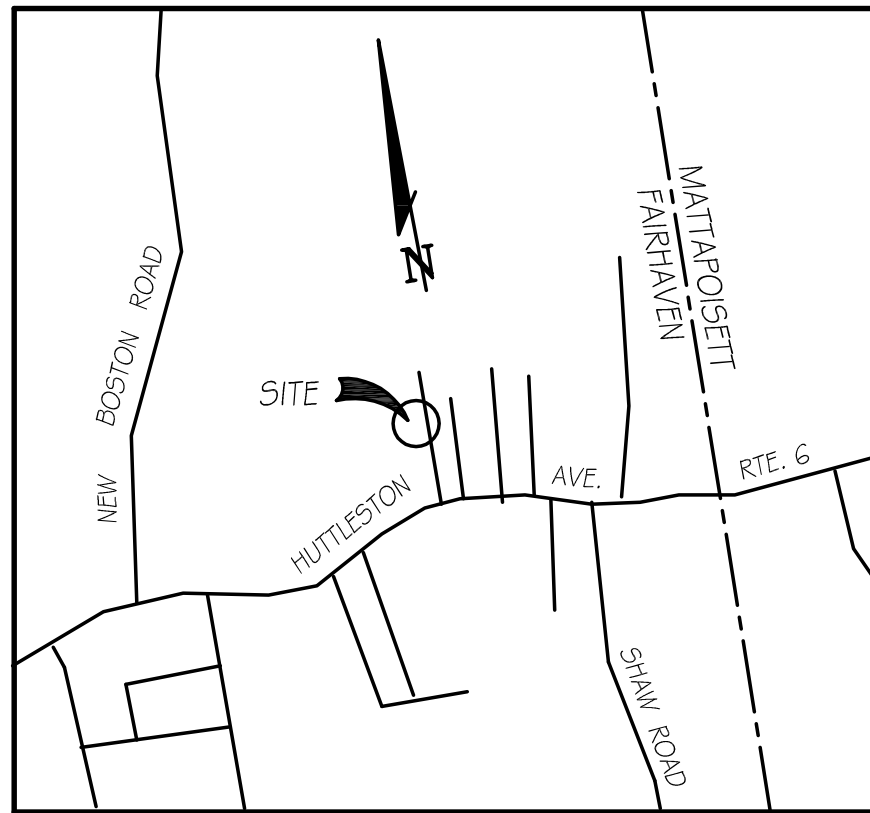
SCALE: 1" = 50'



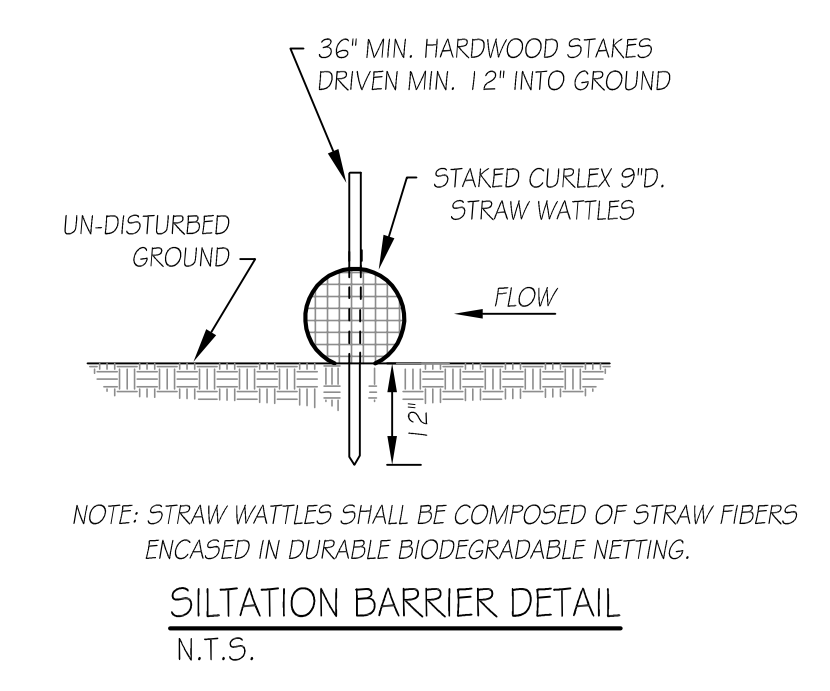
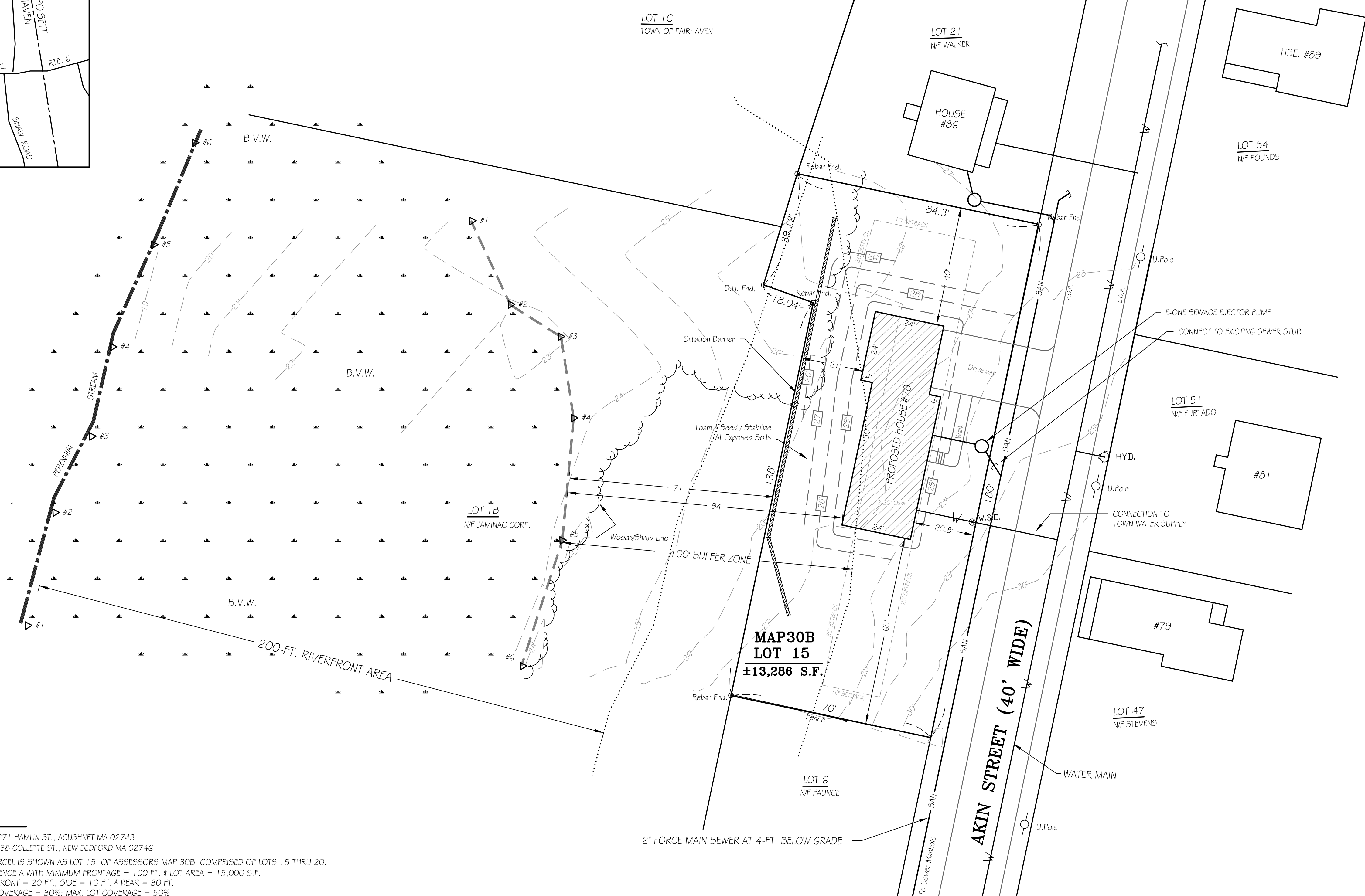
PLAN ACCOMPANYING PETITION OF:  
 TOWN OF FAIRHAVEN

TOWN OF FAIRHAVEN  
 1 UNION WHARF  
 FAIRHAVEN, MA 02179  
 COUNTY OF: BRISTOL





**LOCUS PLAN**  
1 INCH = 2000 FT. ±

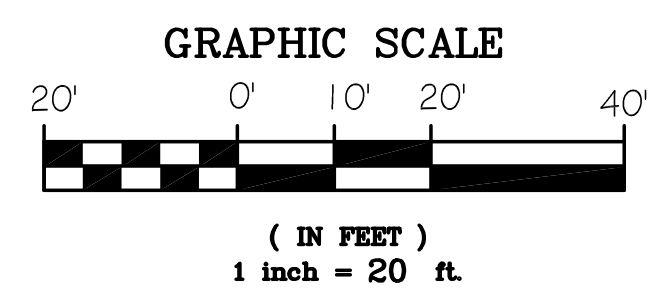


**GENERAL NOTES:**

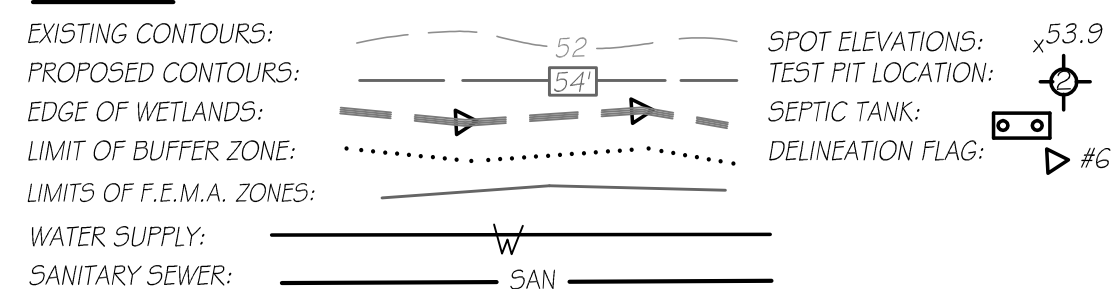
- APPLICANT: PETER ARRUDA, 271 HAMLIN ST., ACUSHNET MA 02743
- OWNER: DANIEL POUNDS, 238 COLLETTE ST., NEW BEDFORD MA 02746
- NOTE 'A': THE SUBJECT PARCEL IS SHOWN AS LOT 15 OF ASSESSORS MAP 30B, COMPRISED OF LOTS 15 THRU 20.
- NOTE 'B': ZONING IS RESIDENCE A WITH MINIMUM FRONTAGE = 100 FT. & LOT AREA = 15,000 S.F. SETBACKS ARE: FRONT = 20 FT.; SIDE = 10 FT. & REAR = 30 FT. MAX. BUILDING COVERAGE = 30%; MAX. LOT COVERAGE = 50% PROPOSED BUILDING COVERAGE = 1,776 S.F. / 13,286 S.F. = 13.4% PROPOSED LOT COVERAGE = (1,776 S.F. + 626 S.F.) / 13,286 S.F. = 18.1%
- NOTE 'C': THE DWELLING SHOWN HEREON DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON F.E.M.A. COMMUNITY PANEL NO. 25005C0413F DATED JULY 7, 2009.
- NOTE 'D': NOTIFY DIG-SAFE CENTER, LOCAL UTILITIES AND FAIRHAVEN B.P.W. 72 HOURS PRIOR TO START OF WORK
- NOTE 'E': WETLANDS DELINEATION WAS PERFORMED BY SABATIA, INC.

**SITE PLAN**

SCALE: 1" = 20 FT.

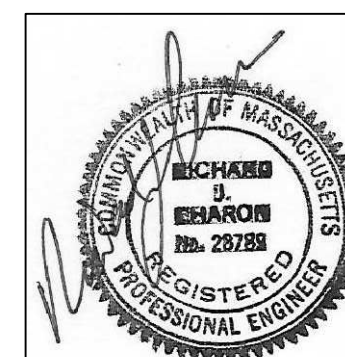


**LEGEND:**



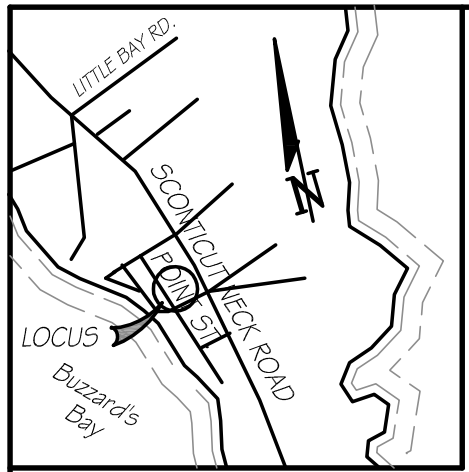
**PLAN OF SITE & SEWER CONNECTION  
FOR PROPOSED RESIDENCE**  
PREPARED FOR  
**PETER ARRUDA, BUILDER**  
78 AKIN STREET  
FAIRHAVEN, MASS.

**CAI** Charon Associates, Inc.  
Consulting Engineers  
323 Neck Road - Rochester, MA 02770  
Tel: 508-763-8362 Fax: 508-763-9582

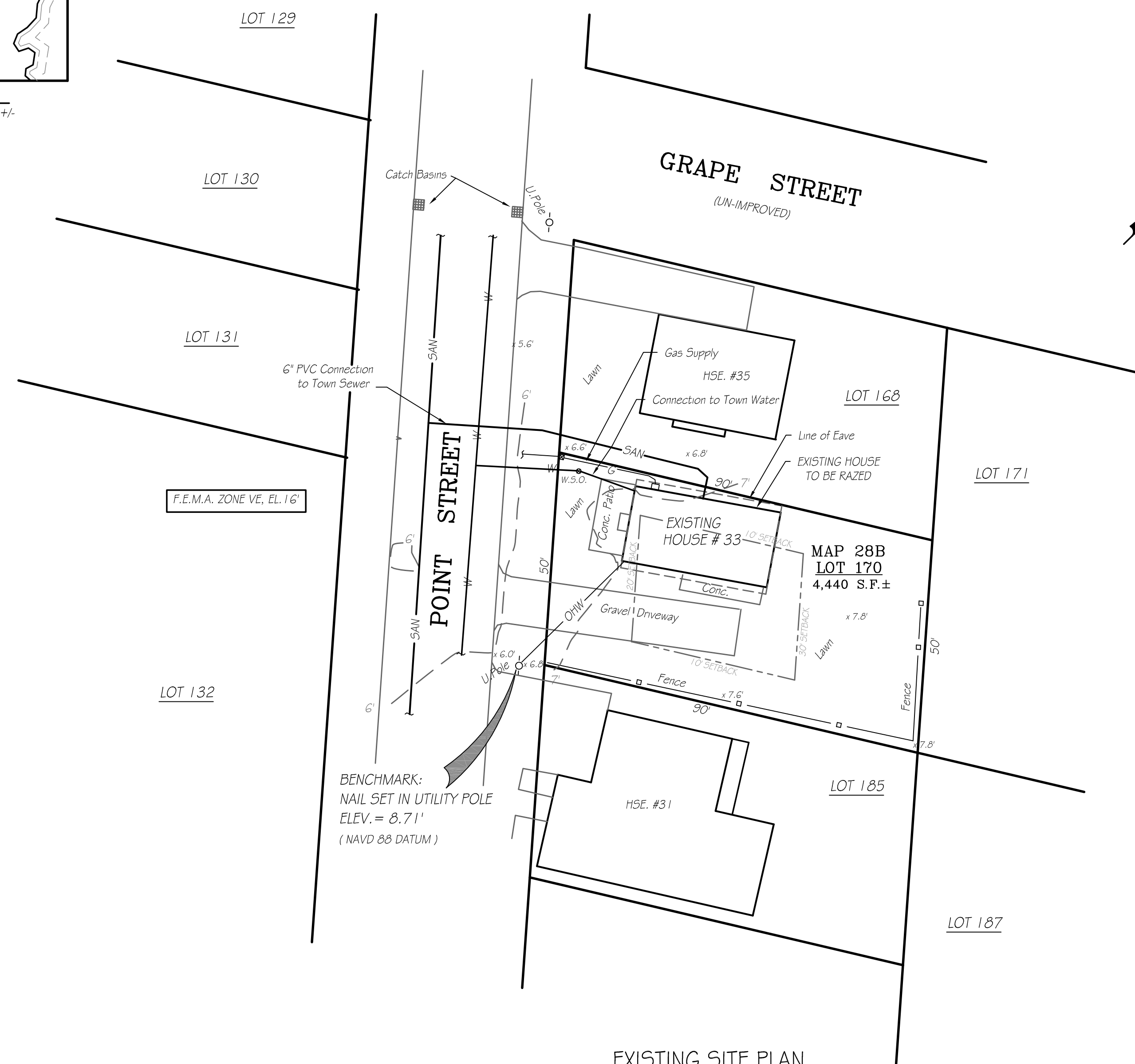


SCALE: AS NOTED  
DATE: APRIL 29, 2021  
REV. 1: APRIL 30, 2021  
REV. 2: MAY 14, 2021

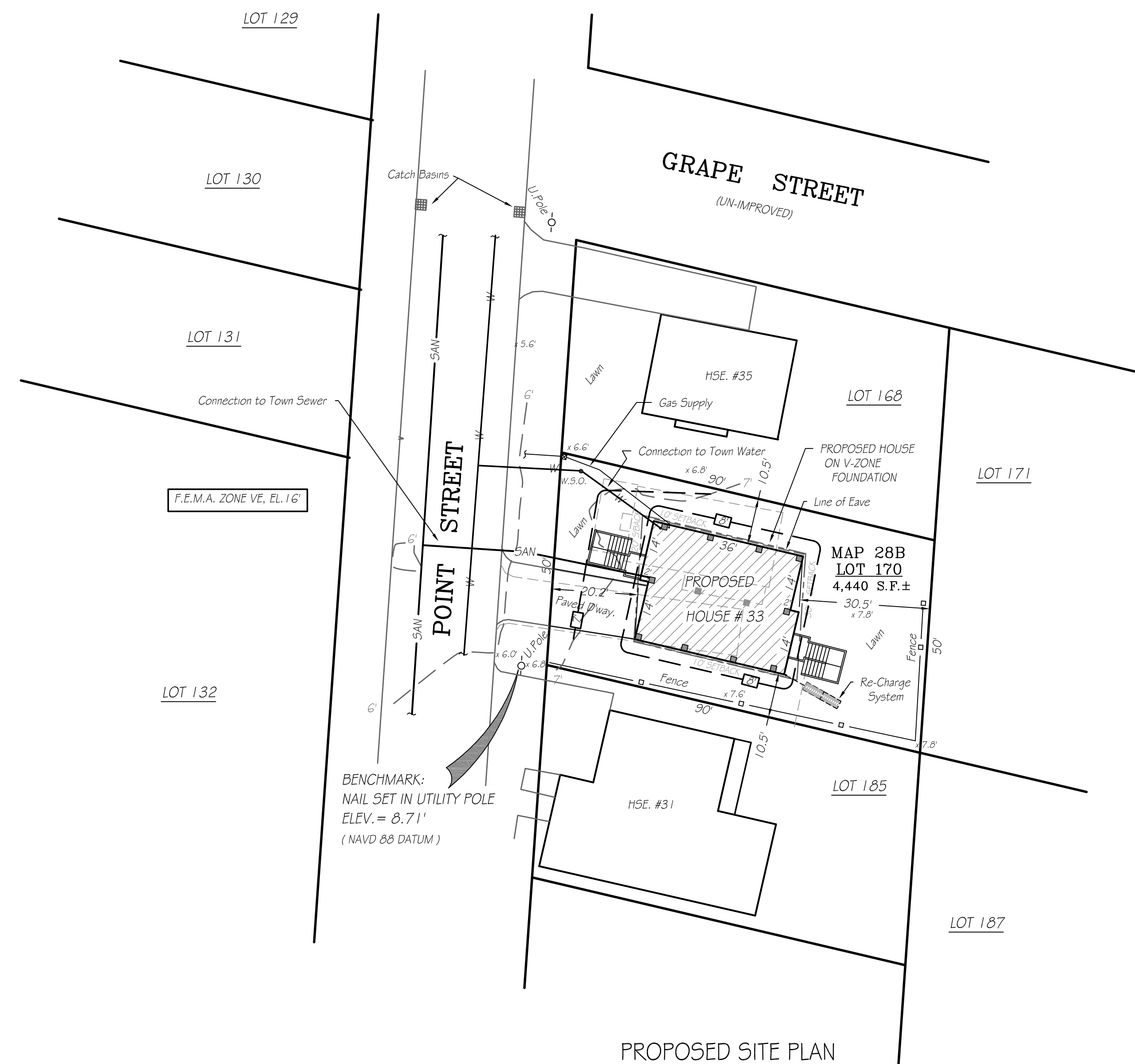
DWG. NO.  
**L-1**



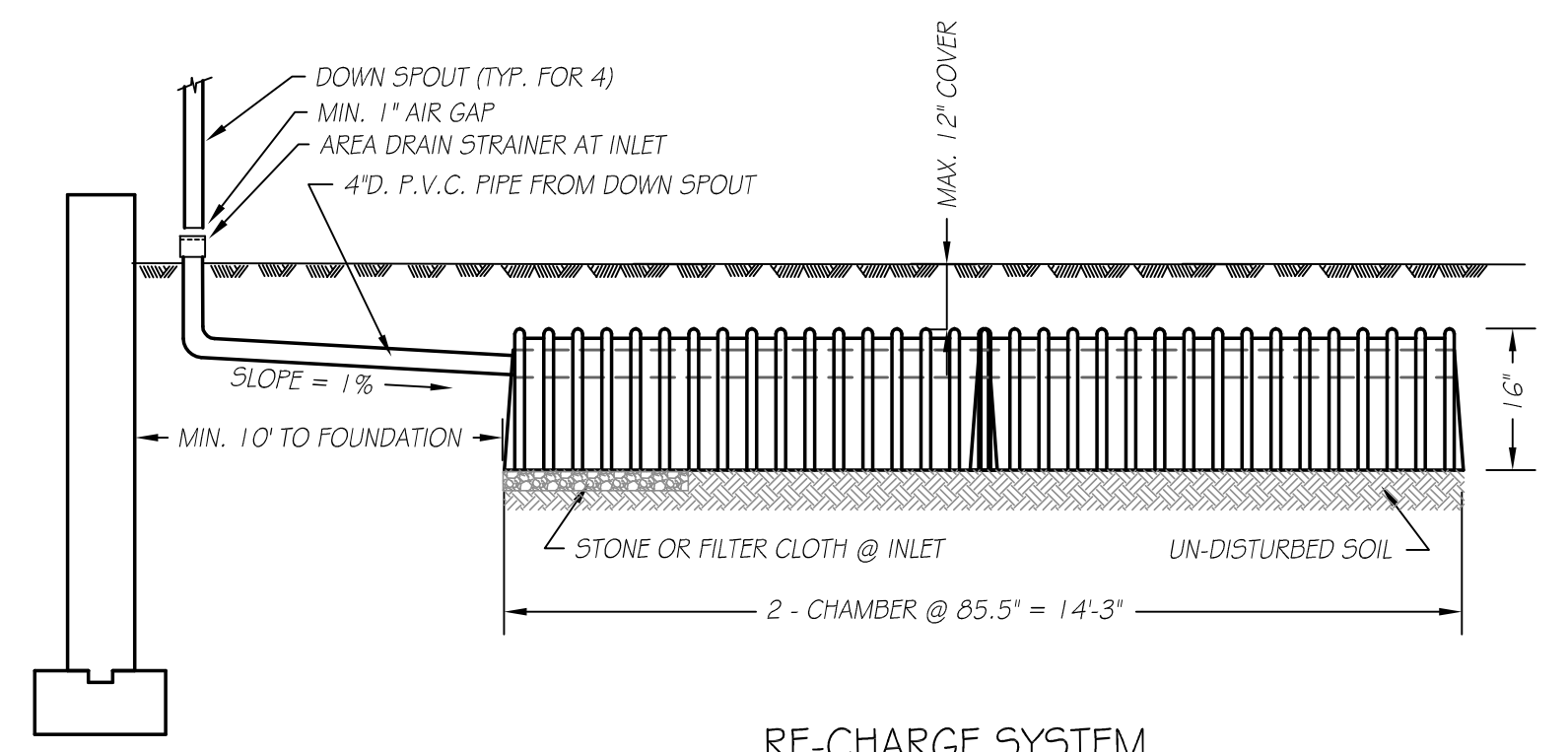
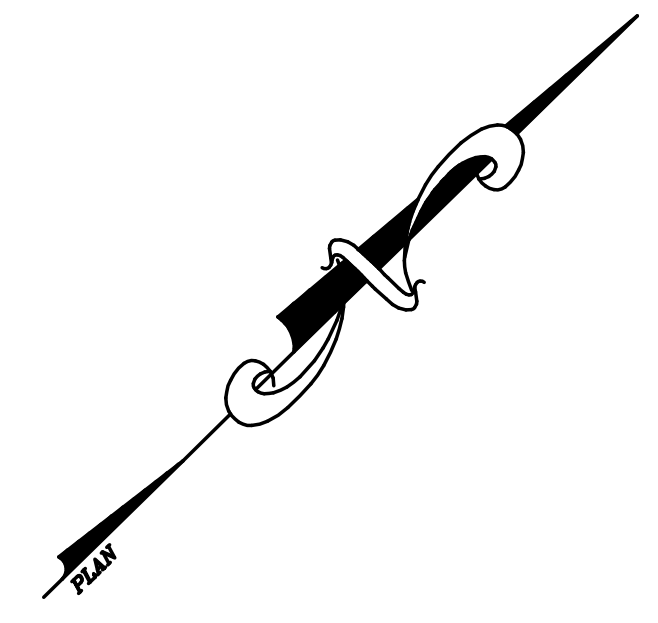
LOCUS PLAN  
1" = 2000 FT. +/-



EXISTING SITE PLAN  
SCALE: 1" = 20 FT.



PROPOSED SITE PLAN  
SCALE: 1" = 20 FT.

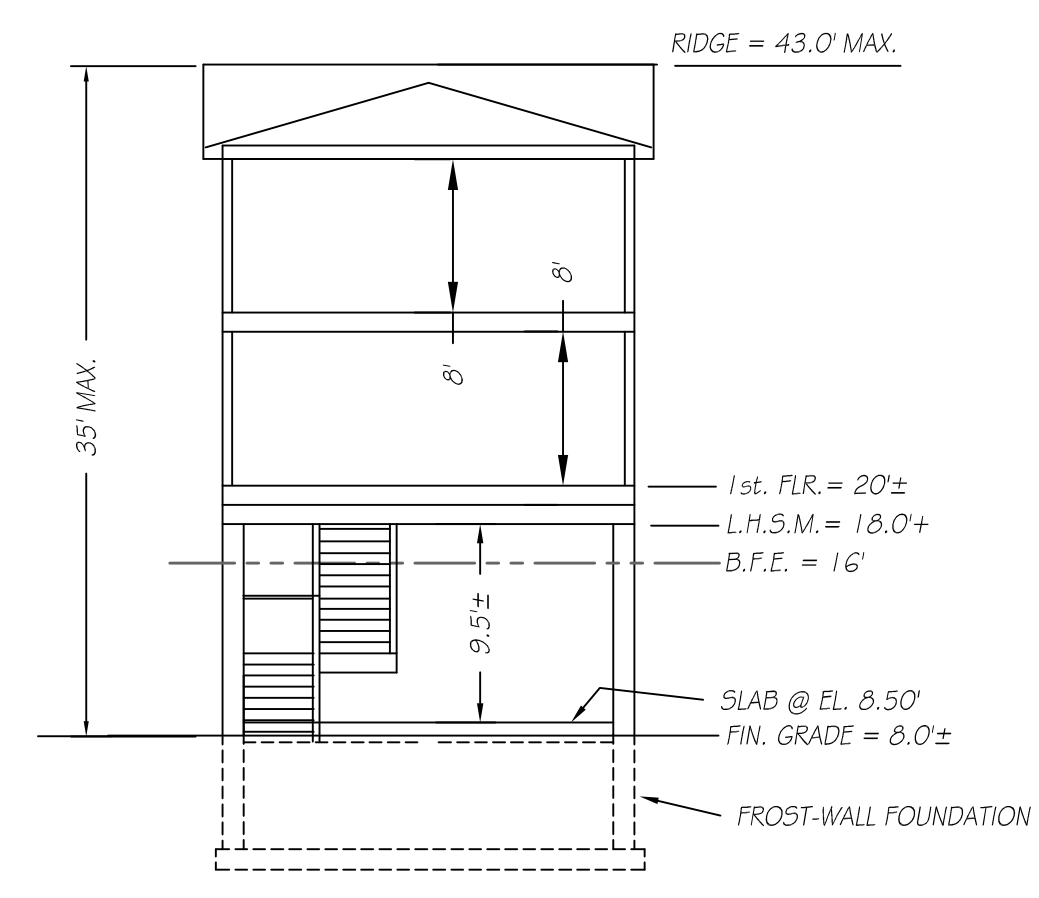


RE-CHARGE SYSTEM  
N.T.S.

COMPENSATORY RE-CHARGE SYSTEM CALCULATION FOR PAVED DRIVEWAY:  
 DRIVEWAY AREA = 270 S.F.  
 RE-CHARGE VOLUME = 270 S.F. x 1/12 = 22.5 CU. FT.  
 NO. OF CHAMBERS REQUIRED = 22.5 CU. FT. / 14.7 = 1.6 CHAMBERS - USE 2 CHAMBERS  
 CHAMBERS SHALL BE STORMTECH MODEL SC-310.  
 STRAINER SCREEN SHALL BE CLEANED ON A MONTHLY BASIS TO REMOVE LEAVES AND DEBRIS THAT MAY CLOG THE LEACHING SURFACES OF THE CHAMBERS.  
 CONNECT SYSTEM TO DOWNSPOUT FOR SOUTHEAST CORNER OF HOUSE, COVERING APPROXIMATELY 240 S.F. OF ROOF AREA.

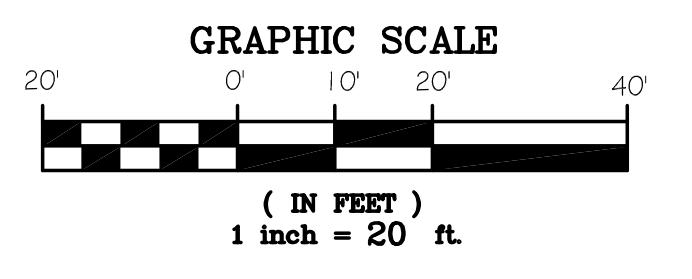
GENERAL NOTES:

- 1) THE SCOPE OF WORK INCLUDES DEMOLITION OF EXISTING HOUSE #33 AND CONSTRUCTION OF NEW RESIDENCE ON FLOOD ZONE-COMPLIANT FOUNDATION, CONNECTIONS TO TOWN SEWER AND TOWN WATER SUPPLY, AND ASSOCIATED SITEWORK & LANDSCAPING.
- 2) THIS PARCEL IS SHOWN AS LOT 170 OF ASSESSOR'S MAP 28.B ZONING: SINGLE RESIDENCE DISTRICT - RA DEED REFERENCE: BOOK 10757 PAGE 93
- 3) THE DWELLING SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD ZONE (ZONE VE, EL. 16') AS DELINEATED ON F.E.M.A. COMMUNITY PANEL 25005C0413F DATED JULY 7, 2009. PROPOSED RESIDENCE SHALL BE CONSTRUCTED ON OPEN PILE FOUNDATION IN ACCORDANCE WITH THE PROVISIONS OF THE MASS. STATE BUILDING CODE, 9th EDITION.
- 4) NOTIFY DIG-SAFE AND LOCAL UTILITIES PRIOR TO ANY EXCAVATION.
- 5) VERIFY LOCATION OF SITE UTILITIES PRIOR TO ANY WORK.
- 6) MINIMUM LOT REQUIREMENTS: 15,000 S.F. WITH 100 FT. FRONTAGE  
 FRONT SETBACK = 20 FT.  
 REAR SETBACK = 30 FT.  
 SIDE SETBACK = 10 FT.  
 MAXIMUM LOT COVERAGE = 50%  
 MAXIMUM BUILDING COVERAGE = 30%  
 EXISTING HOUSE = 838 S.F.  
 EXISTING BUILDING COVERAGE = 620 S.F. / 4,440 S.F. = 14.0%  
 EXISTING LOT COVERAGE = 838 S.F. / 4,440 S.F. = 18.9%  
 PROPOSED HOUSE = 1,009 S.F.  
 PROPOSED BUILDING COVERAGE = 1,009 S.F. / 4,440 S.F. = 22.7%  
 PROPOSED LOT COVERAGE = (1,009 S.F. + 282 S.F.) / 4,440 S.F. = 29.0%



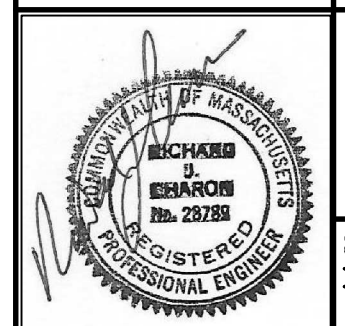
PROPOSED HOUSE ELEVATIONS  
NOT TO SCALE

HOUSE SHOWN IS SCHEMATIC ONLY AND SHOWN TO ESTABLISH MINIMUM REQUIRED ELEVATIONS AND MAXIMUM BUILDING HEIGHT.



D.E.P. FILE NO.: SE 023-1354

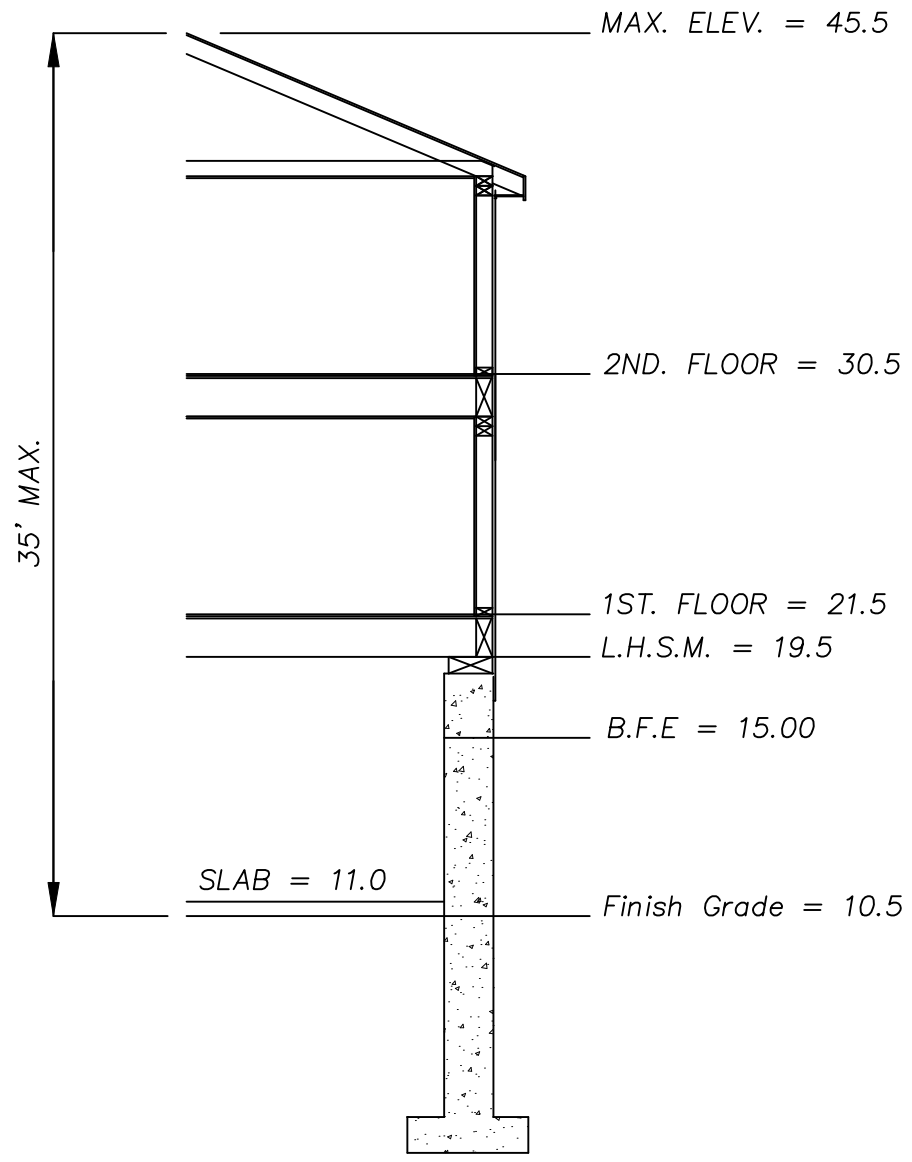
SITE PLAN OF  
 PROPOSED HOUSE & UTILITIES  
 PREPARED FOR  
 WADE AND WANDA CABANA  
 33 POINT STREET  
 FAIRHAVEN, MASS.



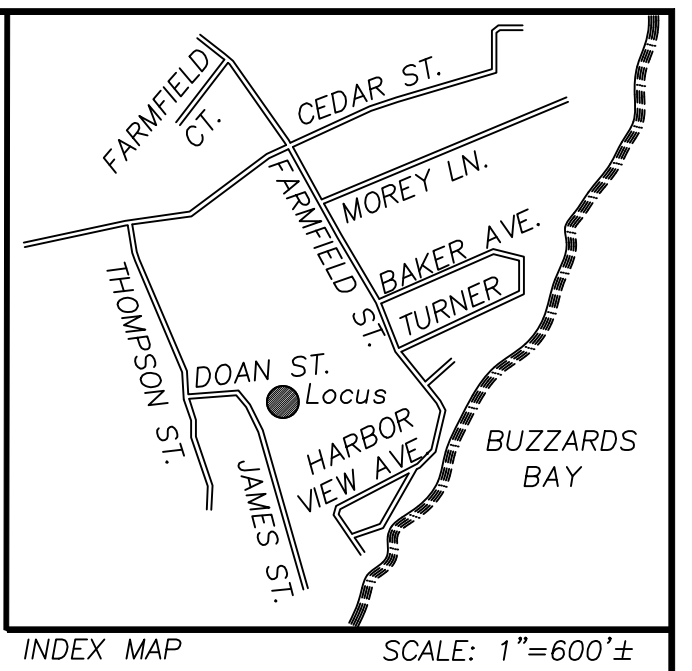
CAI Charon Associates, Inc.  
 Consulting Engineers  
 323 Neck Road - Rochester, MA 02770  
 Tel: 508-763-8362 Fax: 508-763-9582

SCALE: AS NOTED  
 DATE: APRIL 28, 2021  
 REV. 1: MAY 24, 2021  
 REV. 2: JUNE 4, 2021 (Re-Charge System)

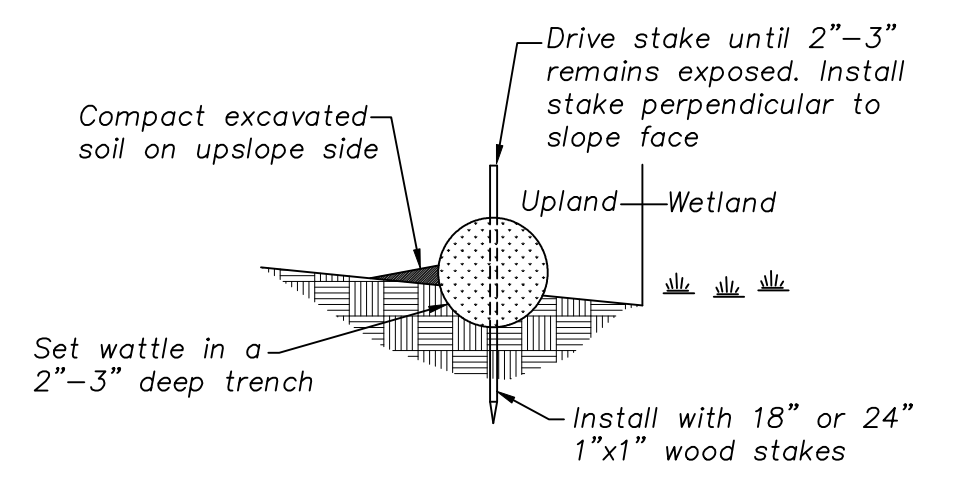
DWG. NO.  
 L-1



PROPOSED DWELLING ELEVATIONS  
Not To Scale



INDEX MAP SCALE: 1"=600'±



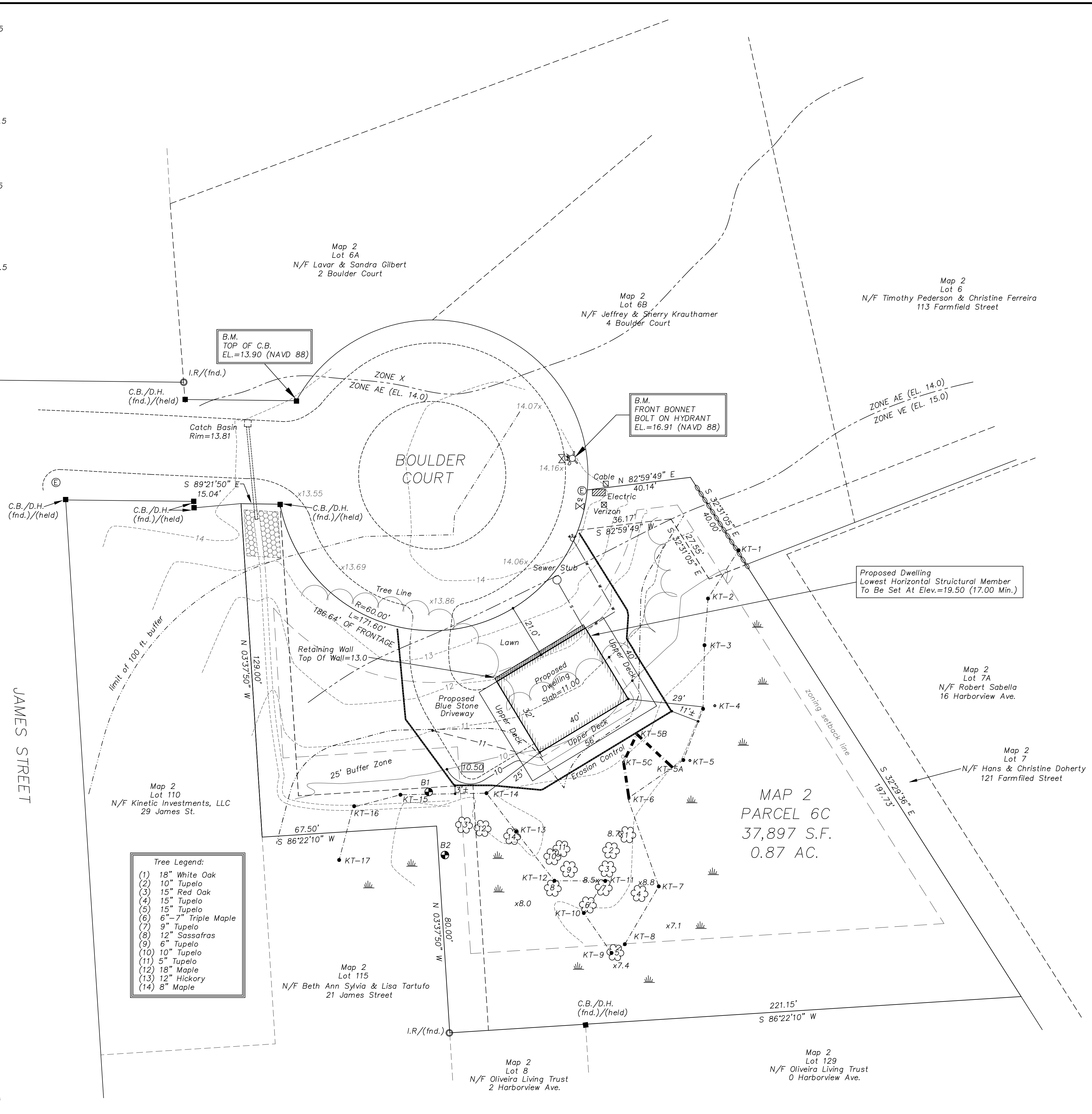
STRAW WATTLE DETAIL  
N.T.S.

ZONING	
SINGLE RESIDENCE DISTRICT - RA	
RESIDENTIAL USE	
LOT AREA . . . . .	15,000 S.F.
LOT FRONTAGE . . . . .	100 FT.
BUILDING SETBACKS	
FRONT . . . . .	20 FT.
REAR . . . . .	30 FT.
SIDE . . . . .	10 FT.

- General Notes:
- 1.-Entire Site Is Located Within A VE Zone, Elevation 15.0 As Shown The FEMA Flood Map 25005C0394G Dated 07/16/2014.
  - 2.-Disturbed Vegetated Areas Within Limit Of Work Will Be Loamed And Seeded. Landscaping Will Be Comprised Of Shrubs And Trees At Owners Discretion.
  - 3.-Lowest Horizontal Structural Member Will Be Set A Minimum 2 Feet Above VE Zone Elevation 15.0 + 2 Feet = 17.0 Minimum Elevation.
  - 4.-Deck Supports Will Be Placed On Sono Tube Footings. Foundation Will Be Designed By A Massachusetts Registered Structural Engineer.
  - 5.-Total Area Of Vegetation To Be Removed: 4,194 Square Feet.
  - 6.-A 2 Foot High Retaining Wall Will Be Constructed Along The Front Of The Proposed Dwelling To Direct Stormwater Runoff From Entering Building Area Beneath Dwelling.
  - 7.-The Total Area Of The 25 Foot Buffer Zone Is 7,707 Square Feet. Proposed Buffer Zone Disturbance Is 1,192 Square Feet (15.4%).

LEGEND	
○	EXISTING IRON PIPE
■	EXISTING CONCRETE BOUND
□	EXISTING CATCH BASIN
⊙	EXISTING DRAIN MANHOLE
⊗	EXISTING SEWER MANHOLE
⊕	WATER SHUTOFF
⊗	WATER GATE VALVE
—W—	PROPOSED WATER LINE
⊗	EXISTING FIRE HYDRANT
- - - - -	EDGE OF WETLAND
- · - · -	100 FOOT BUFFER ZONE
⊕	TREE LINE
⊕	STONEWALL
- - - - -	EXISTING CONTOUR
- - - - -	PROPOSED CONTOUR
95x5	EXISTING SPOT GRADE
95.00	PROPOSED SPOT GRADE
— — — — —	EXISTING DRAINAGE PIPE

Tree Legend:	
(1)	18" White Oak
(2)	10" Tupelo
(3)	15" Red Oak
(4)	15" Tupelo
(5)	15" Tupelo
(6)	6"-7" Triple Maple
(7)	9" Tupelo
(8)	12" Sassafras
(9)	6" Tupelo
(10)	10" Tupelo
(11)	5" Tupelo
(12)	18" Maple
(13)	12" Hickory
(14)	8" Maple



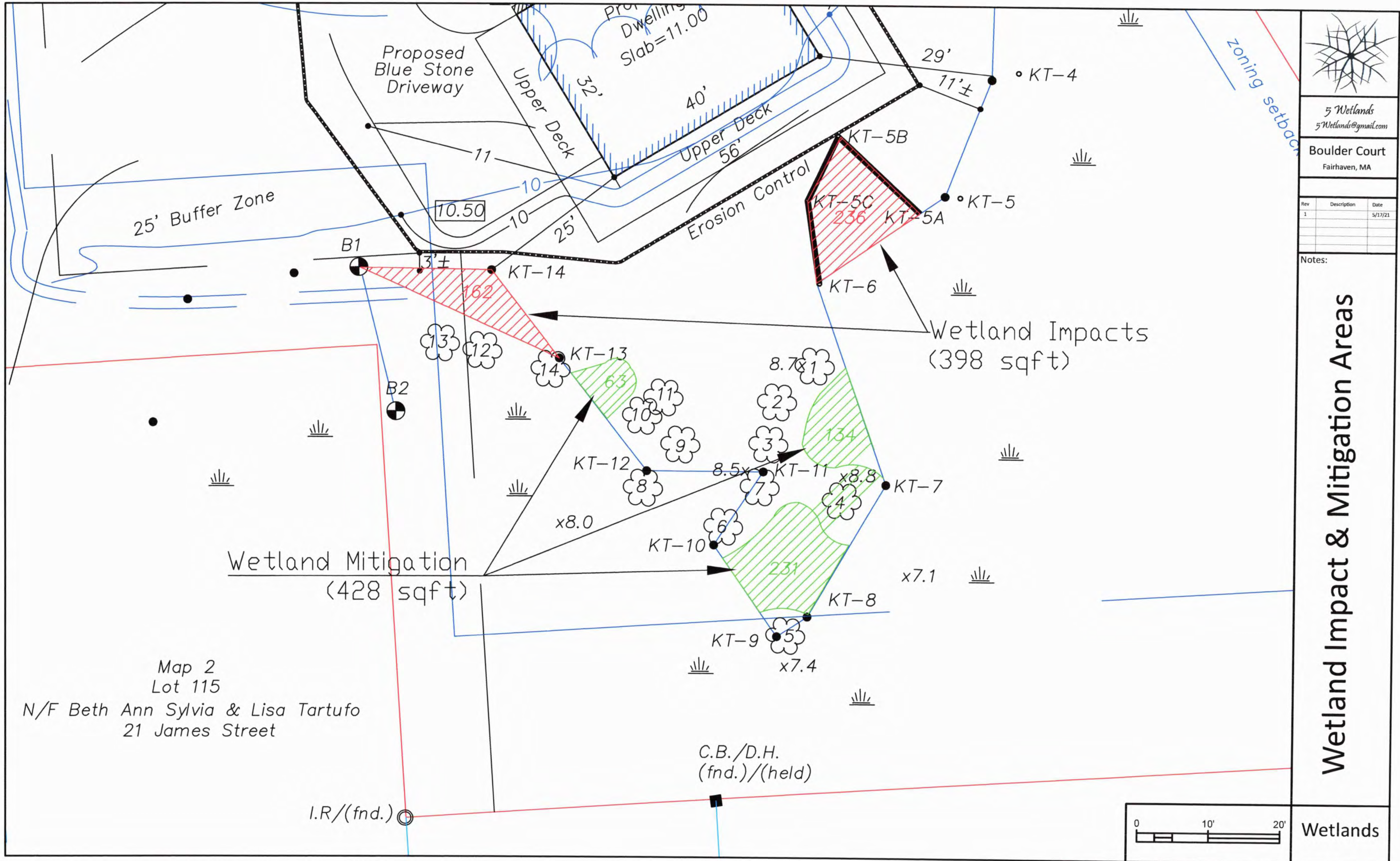
MAP 2  
PARCEL 6C  
37,897 S.F.  
0.87 AC.

PROPOSED DWELLING PLAN  
MAP 2, PARCEL 6C  
#1 BOULDER COURT  
FAIRHAVEN, MASS.

PREPARED FOR: ARTHUR & HELENA OLIVEIRA  
2 HARBORVIEW AVE  
FAIRHAVEN, MA 02719

MICHAEL J. KOSKA & ASSOCIATES, INC.  
REGISTERED CIVIL ENGINEERS & LAND SURVEYORS  
98 BROAD STREET  
BRIDGEWATER, MASS. 02324  
TEL. (508) 697-7400 FAX. (508) 697-1650  
email: m.koska.associates@gmail.com

DATE: 03/15/21	JOB# 05-33	SHEET: 1 OF 1
REV. 04/02/21	FILE# 05-33	0 10 20 40
REV. 05/17/21	DWG#	SCALE: 1"=20'



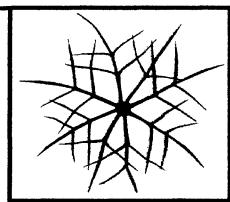
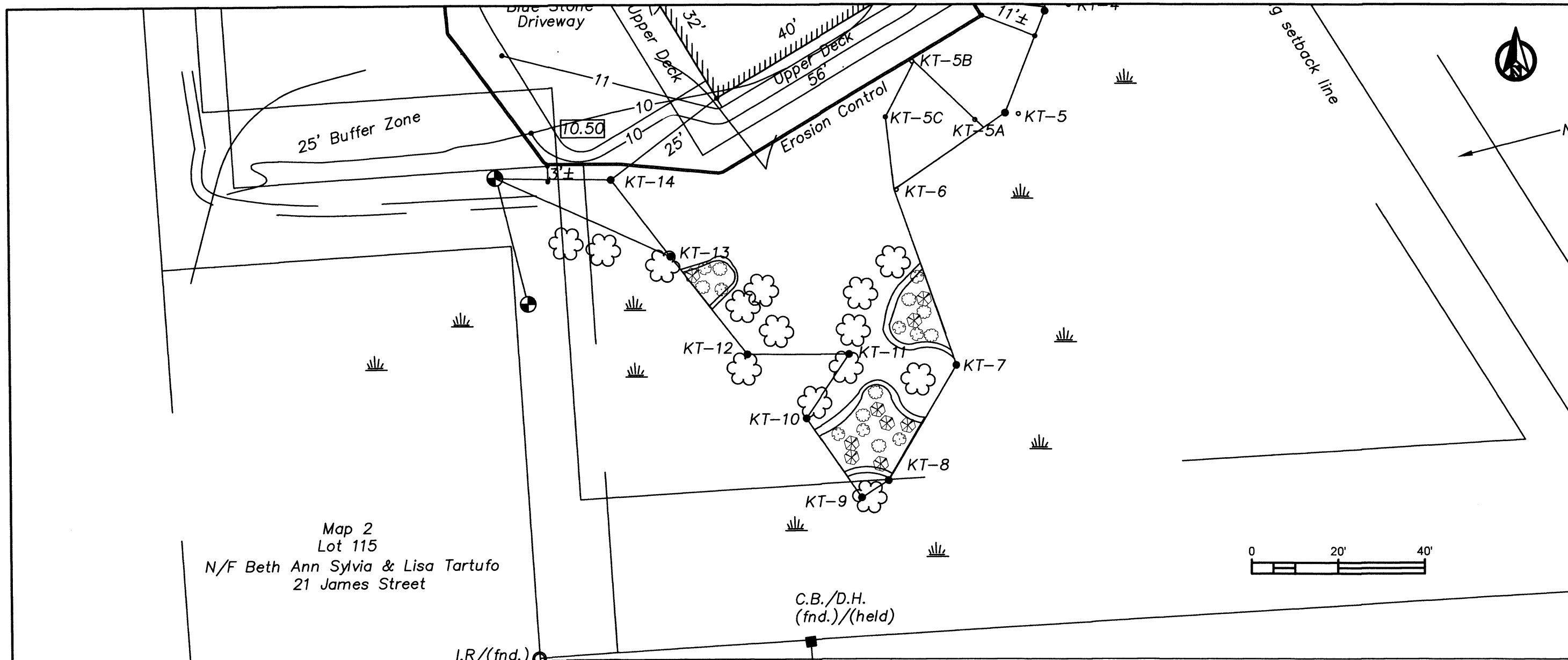
5 Wetlands  
5Wetlands@gmail.com

Boulder Court  
Fairhaven, MA

Rev	Description	Date
1		5/17/21

Notes:

# Wetland Impact & Mitigation Areas



5 Wetlands  
5Wetlands@gmail.com

Boulder Court  
Fairhaven, MA

Rev	Description	Date
1		6/3/21

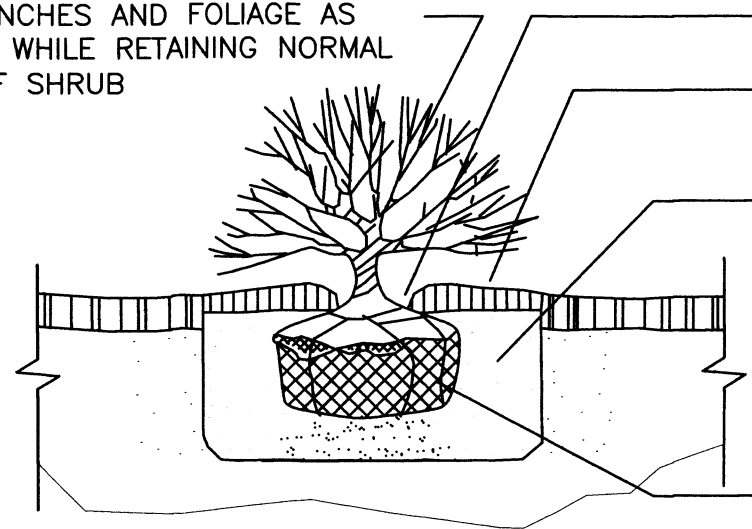
Notes:

### Plant Schedule

Symbol	Common Name	Latin Name	Size	Quantity
⊗	Silky Dogwood	Cornus amomum	18-24 In	10
⊕	Arrow-wood	Viburnum dentatum	18-24 In	8
⊙	Highbush Blueberry	Vaccinium corymbosum	18-24 In	8

Seed with New England Wet Mix at 1 lb./2500 sq. ft (.5 lbs)

THIN BRANCHES AND FOLIAGE AS DIRECTED WHILE RETAINING NORMAL SHAPE OF SHRUB



PLACE PLANT 2" ABOVE SURROUNDING GRADE  
3" DEPTH MULCH (PULL BACK AWAY FROM BASE OF SHRUB)

EXCAVATE SHRUB BED TO REQUIRED DEPTH AND BACKFILL WITH WETLAND SOIL MIX.

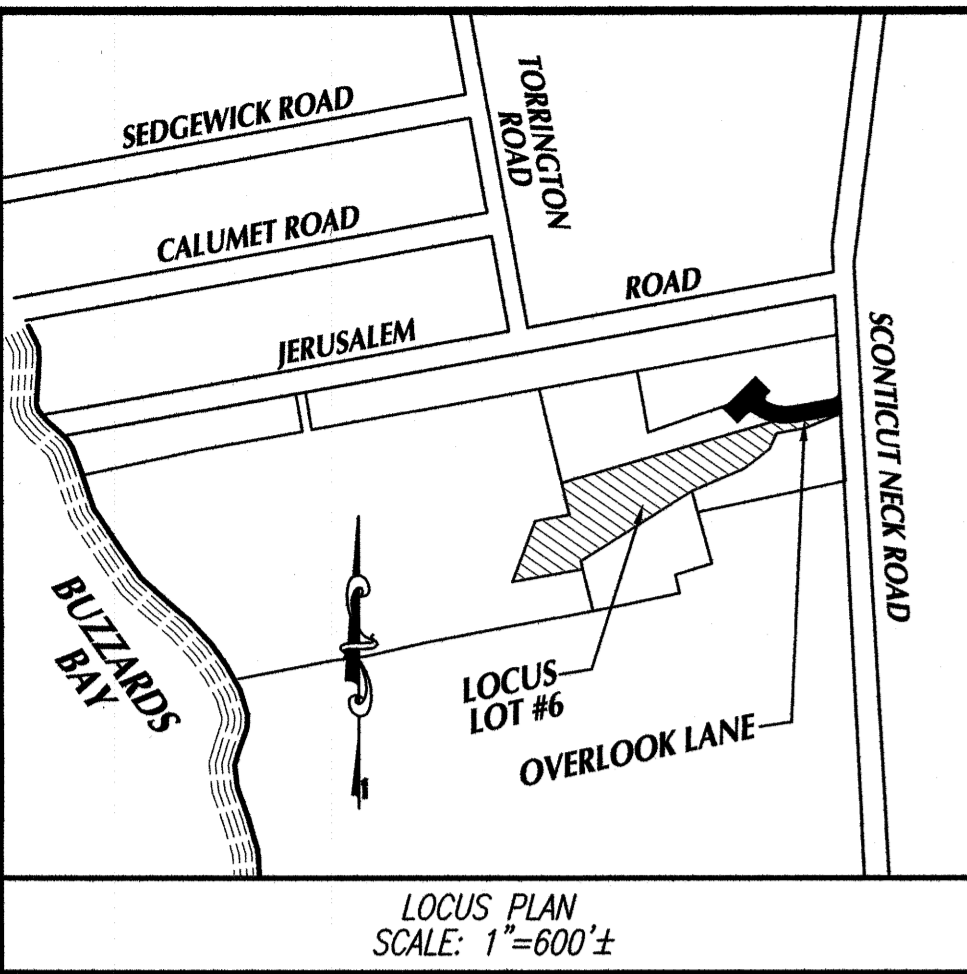
ROLL BURLAP BACK FROM TOP 1/3 OF ROOTBALL BEFORE BACKFILLING. UNTIE ROPE FROM TRUNK

Wetland Mitigation

MITIGATION



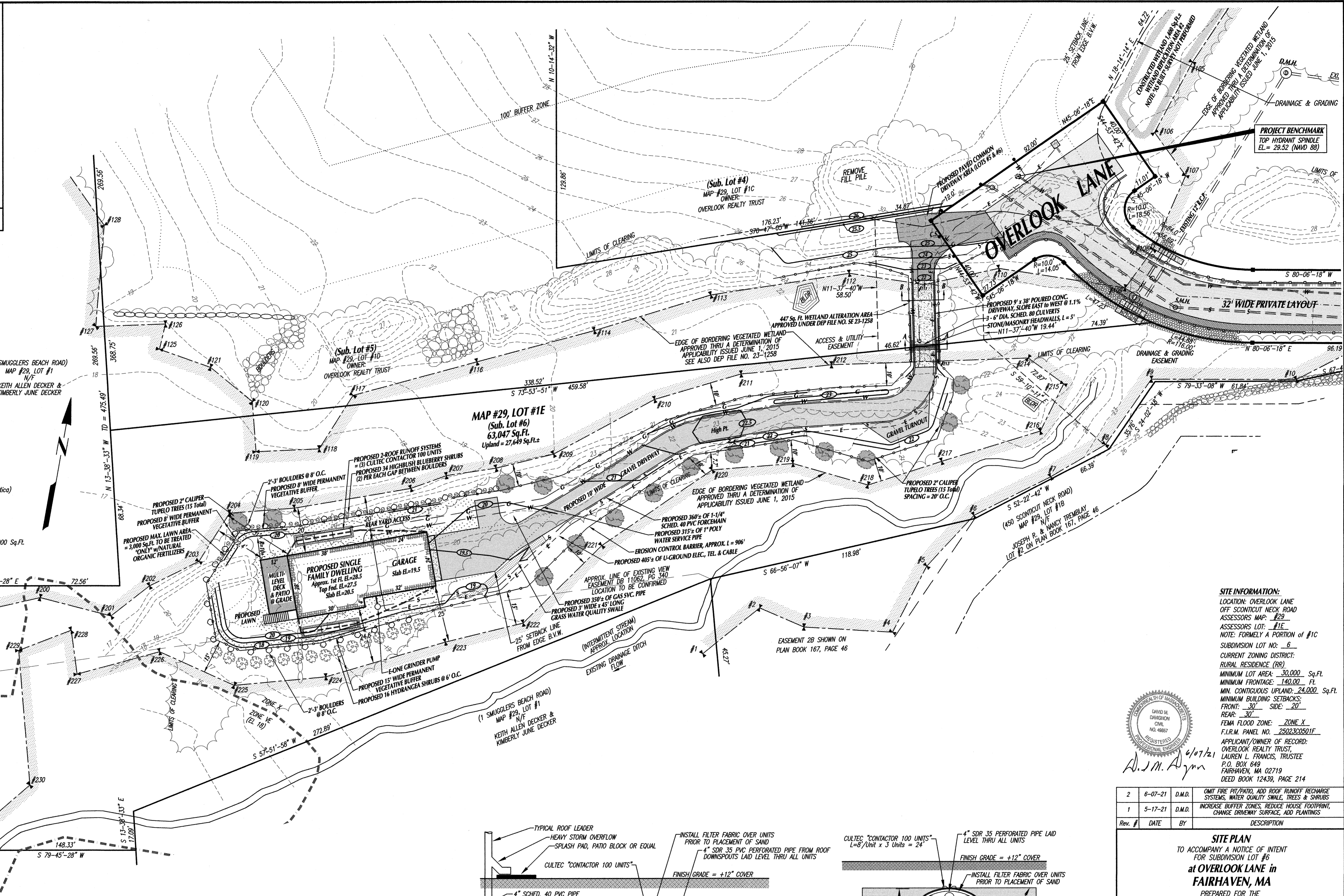
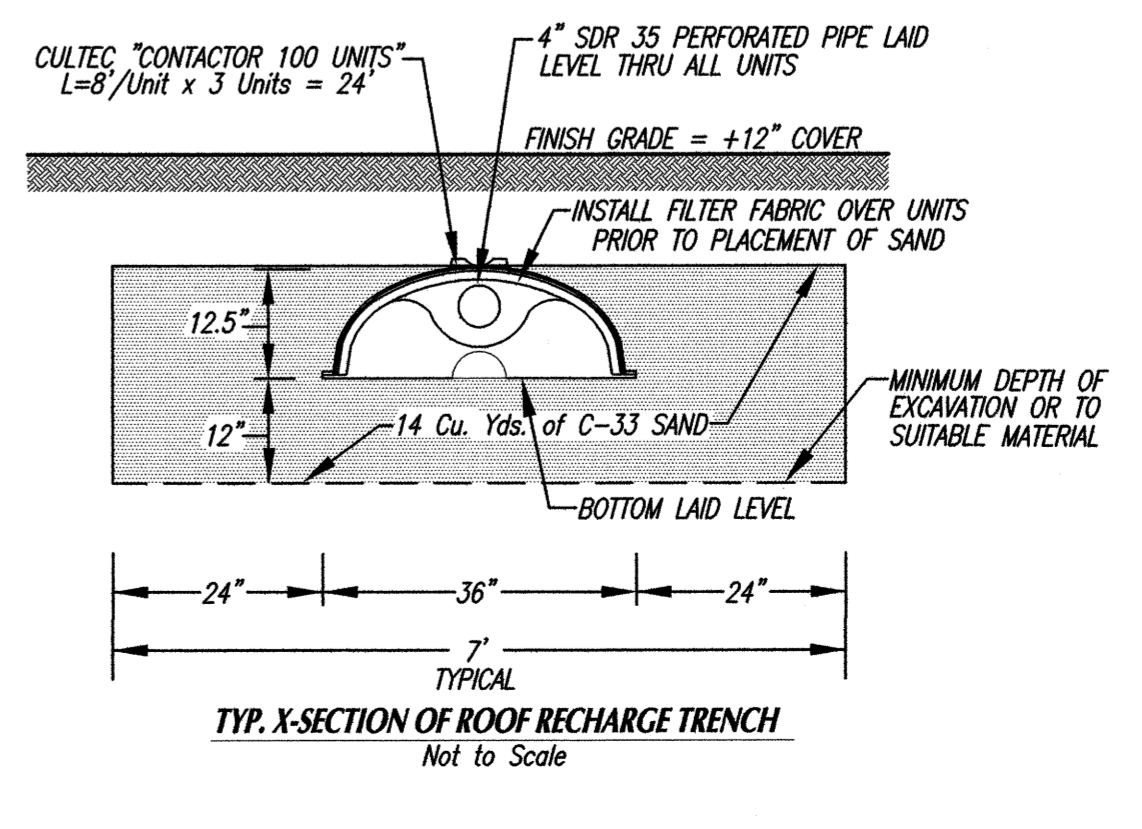
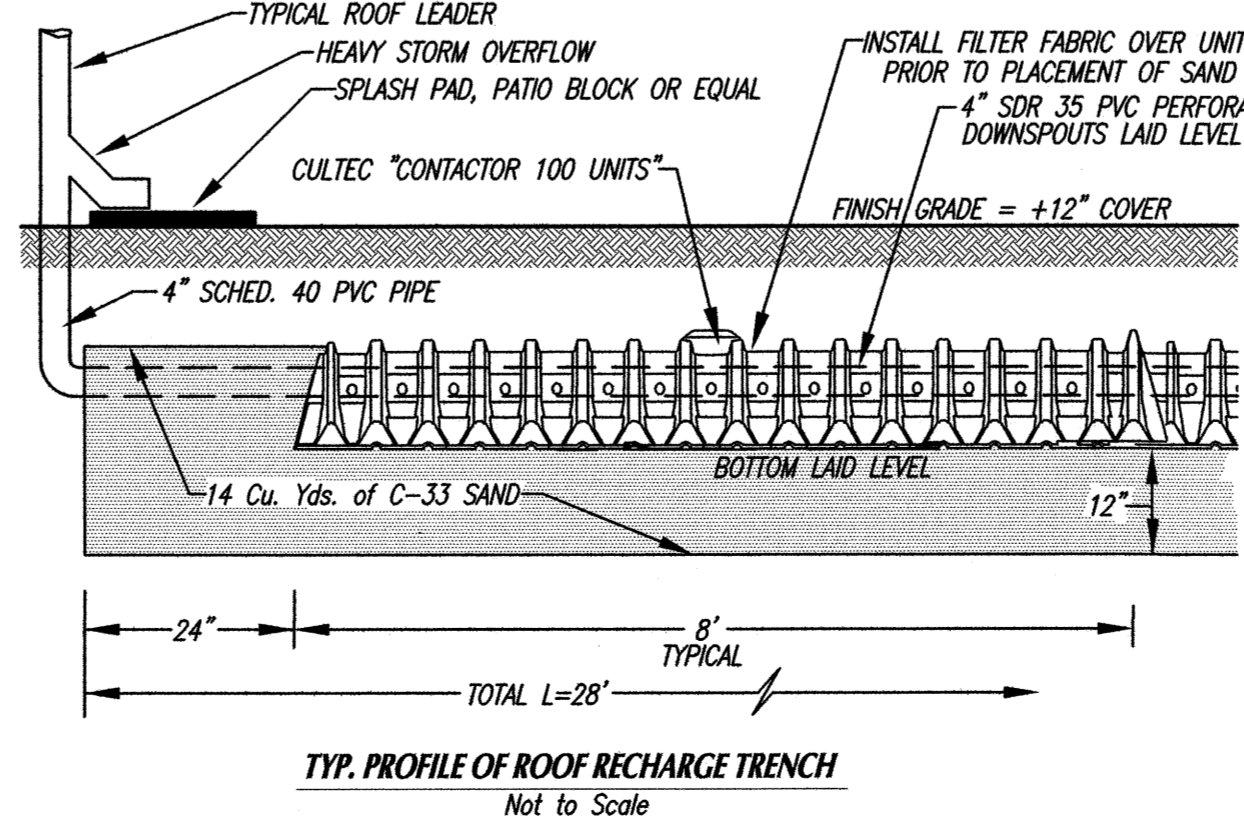
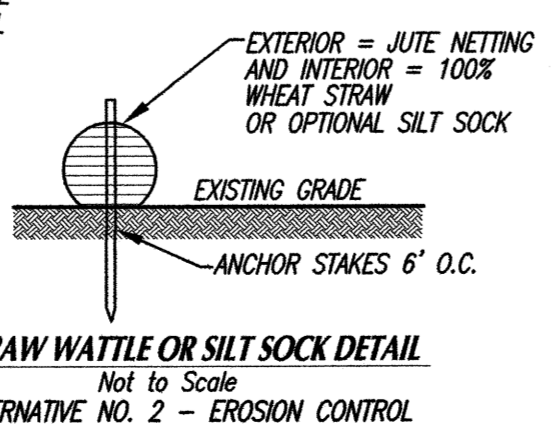
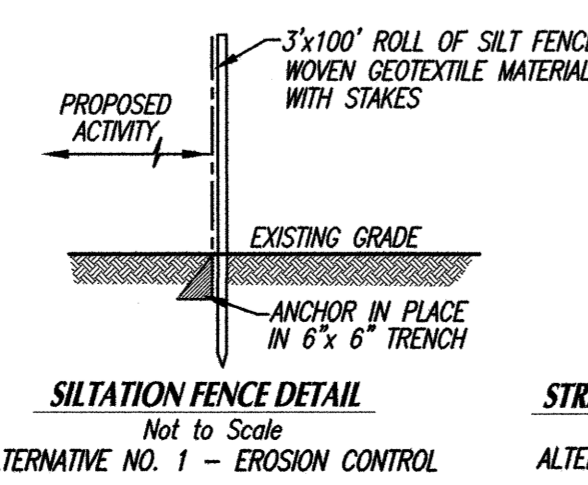




- LEGEND**
- PROPOSED CONTOURS
  - EXISTING CONTOURS
  - FLOOD ZONE LINES
  - EDGE OF TREES
  - EDGE OF LAWN
  - EDGE OF WETLAND (B.V.W.)

- PLANTING LEGEND:**
- TREES**  
15 TOTAL - 4'-6" HIGH SWAMP TUPELO TREES (*Nyssa sylvatica*)
- SHRUBS**  
16 TOTAL - NIKKO BLUE HYDRANGEA  
34 TOTAL - HIGHBUSH BLUEBERRY (*Vaccinium corymbosum*)
- LAWN AREA**  
THE PROPOSED MAXIMUM "FORMAL" LAWN AREA SHOWN = 3,000 Sq.Ft.

- GENERAL NOTES:**
1. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION THROUGH "DIG SAFE" AND OTHER APPROPRIATE AGENCIES, AND REPORT ANY DISCREPANCIES TO THIS OFFICE.
  2. CONTRACTOR SHALL NOTIFY THIS OFFICE OF ANY AND ALL DISCREPANCIES FOUND BETWEEN THE SITE CONDITIONS AND THOSE SHOWN ON THIS PLAN PRIOR TO CONTINUATION OF ANY WORK.
  3. ANY AND ALL CHANGES FROM THE SITE DESIGN LAYOUT SHOWN MUST BE APPROVED BY THIS OFFICE, AND OTHER APPROPRIATE LOCAL OFFICIALS.
  4. THE EXCAVATING CONTRACTOR SHALL READ THE ORDER OF CONDITIONS PRIOR TO THE START OF WORK. SHALL HAVE A COPY AT THE SITE AT ALL TIMES AND IS RESPONSIBLE FOR FOLLOWING ALL CONDITIONS AS THEY RELATE TO SITE WORK.
  5. THE GENERAL CONTRACTOR (ie: BUILDER) SHALL READ THE ORDER OF CONDITIONS PRIOR TO THE START OF WORK. SHALL HAVE A COPY AT THE SITE AT ALL TIMES AND IS RESPONSIBLE FOR FOLLOWING ALL CONDITIONS AS THEY RELATE TO ALL WORK ON THE PROPERTY.
  6. PRIOR TO ANY CONSTRUCTION, CONTRACTOR SHALL INSTALL A STAKED EROSION CONTROL BARRIER SHOWN AND SHALL CONTACT THE CONSERVATION COMMISSION AGENT FOR AN INSPECTION.



**SITE INFORMATION:**  
LOCATION: OVERLOOK LANE OFF SCENIC NECK ROAD  
ASSESSORS MAP: #29  
ASSESSORS LOT: #1E  
NOTE: FORMERLY A PORTION OF #1C SUBDIVISION LOT NO. 6  
CURRENT ZONING DISTRICT: RURAL RESIDENCE (RR)  
MINIMUM LOT AREA: 30,000 Sq.Ft.  
MINIMUM FRONTAGE: 140.00 Ft.  
MIN. CONTIGUOUS UPLAND: 24,000 Sq.Ft.  
FRONT: 30' SIDE: 20'  
REAR: 30'  
FEMA FLOOD ZONE: ZONE X  
F.I.R.M. PANEL NO. 2502302051F  
APPLICANT/OWNER OF RECORD: OVERLOOK REALTY TRUST, LAUREN L. FRANCIS, TRUSTEE  
P.O. BOX 649 FAIRHAVEN, MA 02719  
DEED BOOK 12439, PAGE 214

Rev. #	DATE	BY	DESCRIPTION
2	6-07-21	D.M.D.	OMIT FIRE PIT/PATIO, ADD ROOF RUNOFF RECHARGE SYSTEMS, WATER QUALITY SWALE, TREES & SHRUBS
1	5-17-21	D.M.D.	INCREASE BUFFER ZONES, REDUCE HOUSE FOOTPRINT, CHANGE DRIVEWAY SURFACE, ADD PLANTINGS

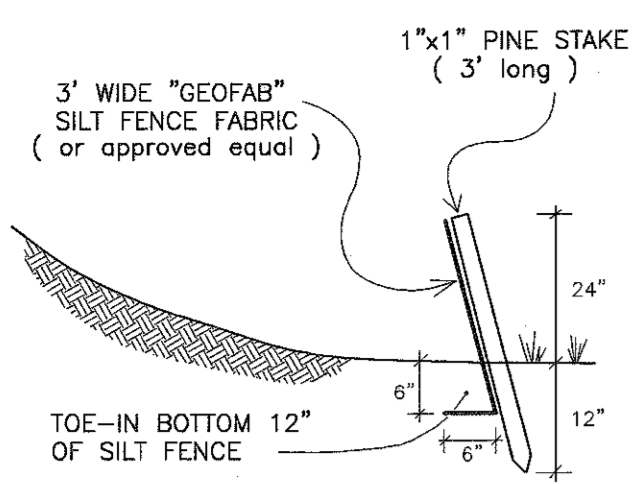
**SITE PLAN**  
TO ACCOMPANY A NOTICE OF INTENT FOR SUBDIVISION LOT #6 at OVERLOOK LANE in FAIRHAVEN, MA PREPARED FOR THE OVERLOOK REALTY TRUST

SCALE: 1"=20' DATE: APRIL 19, 2021

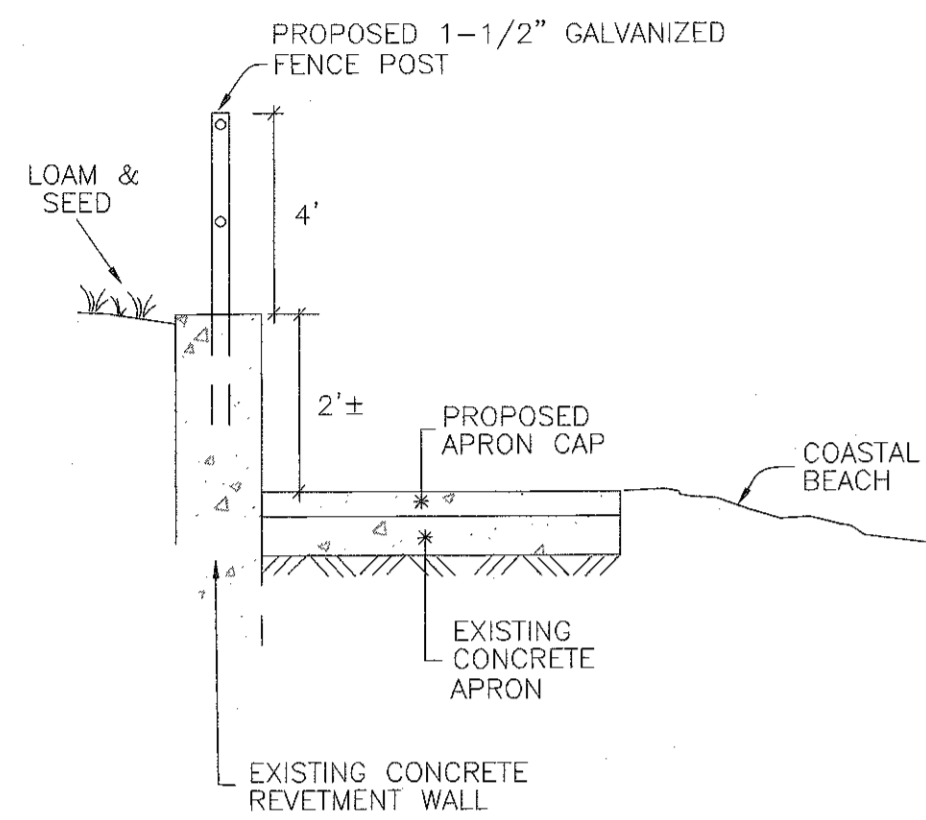
0 10 20 40 60

**SCHNEIDER, DAVIGNON & LEONE, INC.**  
PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS  
1 COUNTY RD, P.O. Box 480, MATTAPOISETT, MA 02739  
1-508-758-7868

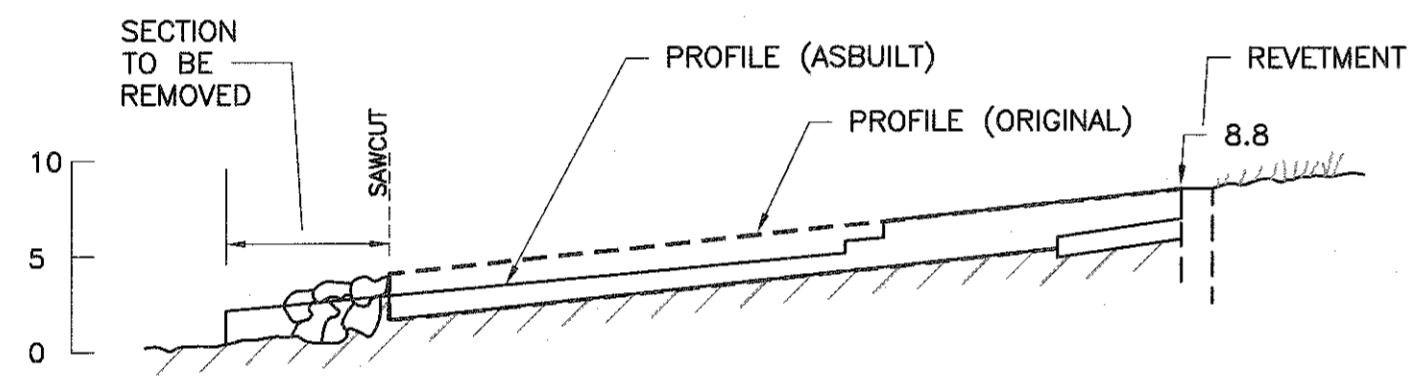
Drawn By: D.M.D. Check By: D.M.D. Job No. 2741



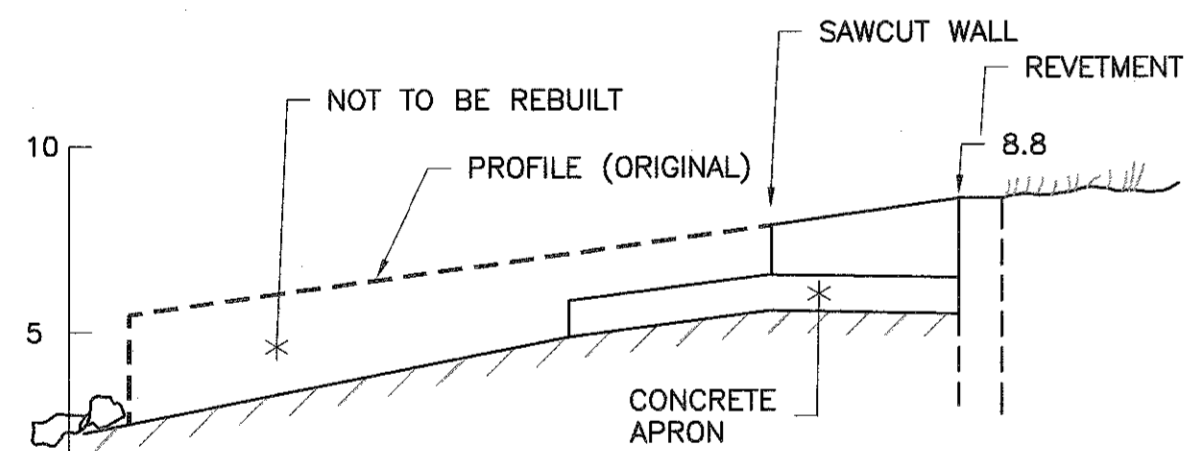
**SILT / EROSION CONTROL FENCING**  
NOT TO SCALE



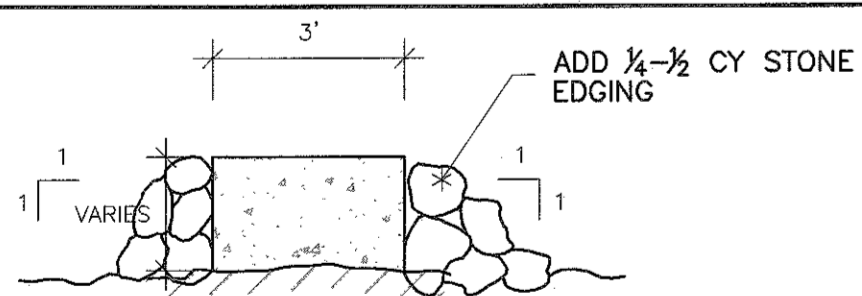
**SECTION A-A**  
(NOT TO SCALE)



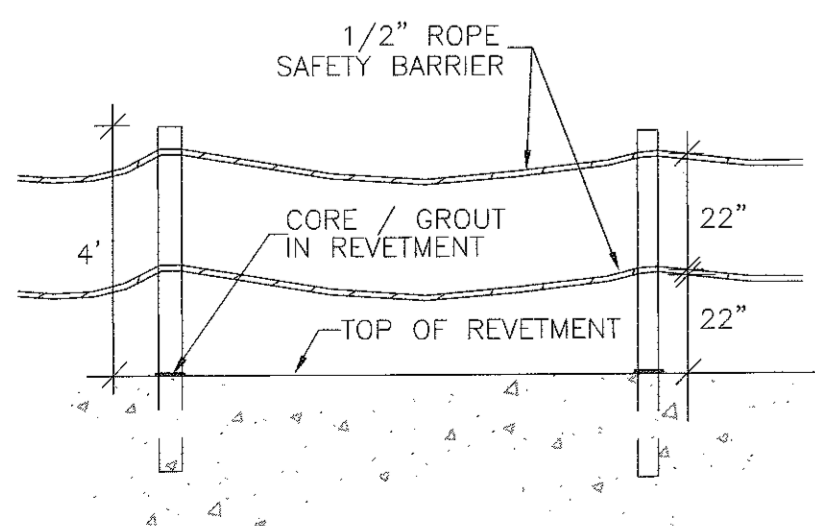
**NORTH GROIN**  
**SECTION B-B**  
1"=10'



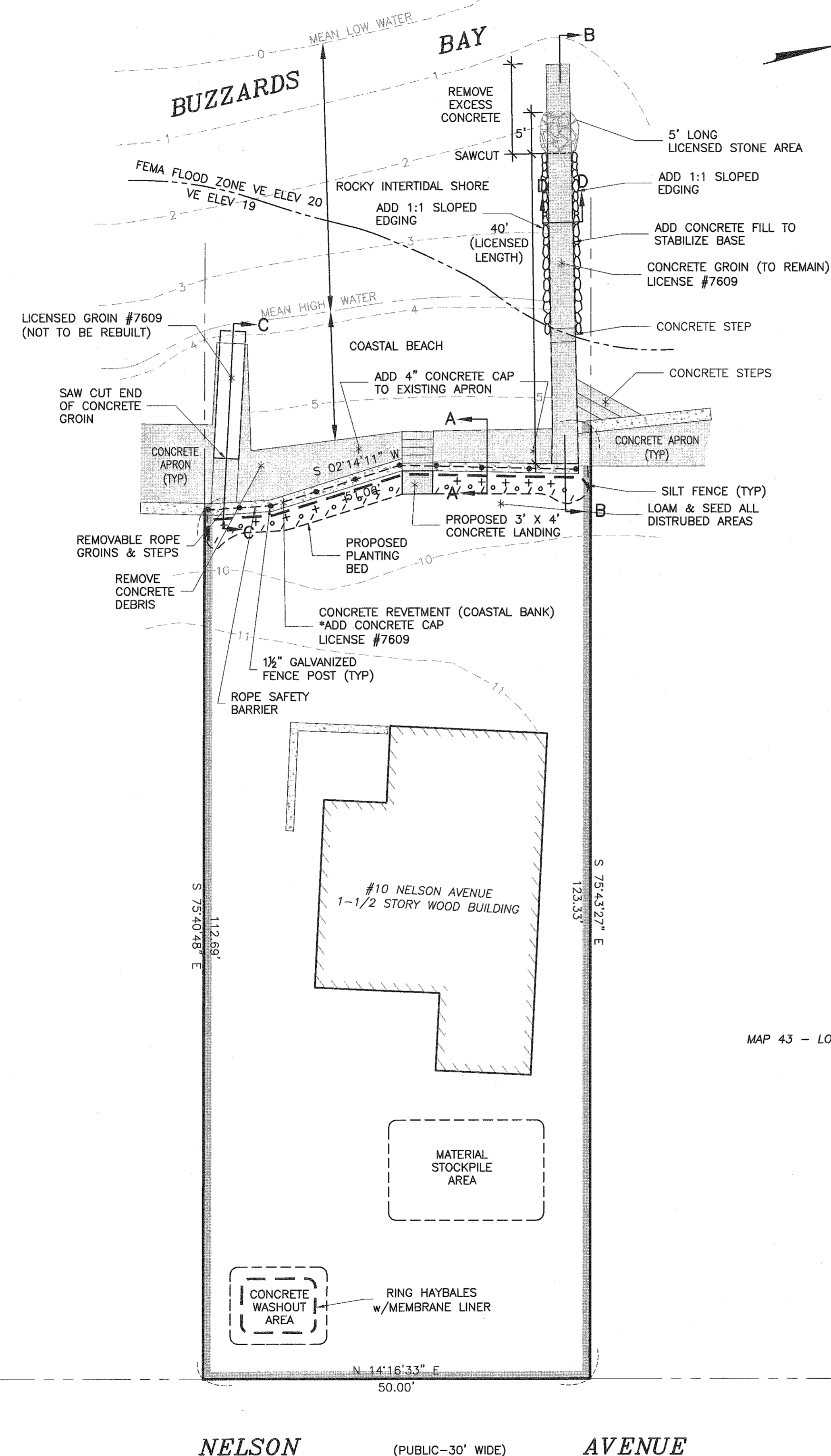
**SOUTH GROIN**  
**SECTION C-C**  
1"=5'



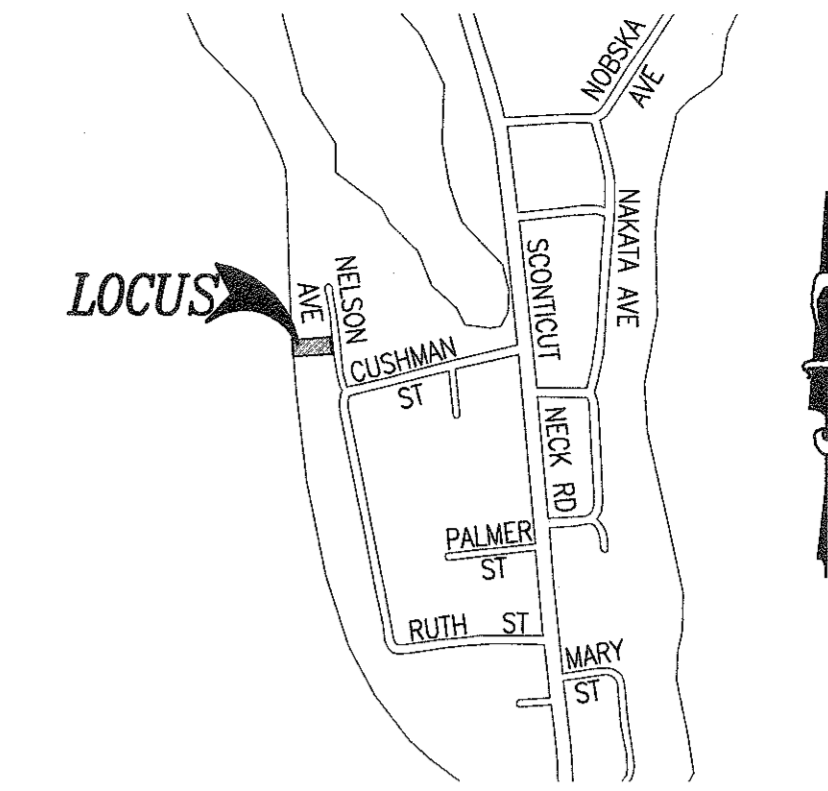
**NORTH GROIN**  
**SECTION D-D**  
1"=3'



**ROPE SAFETY BARRIER**  
(NOT TO SCALE)



MAP 43 - LOT 29



**LOCUS MAP**

SCALE: 1"=600'±

**LEGEND**

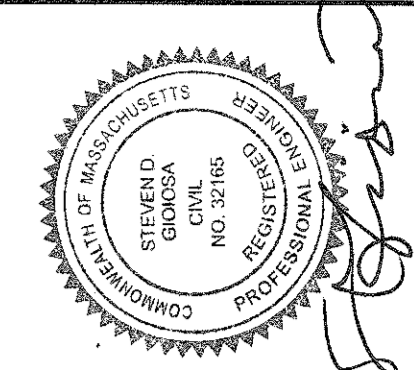
- PROPERTY LINE
- - - - - EXISTING CONTOUR

**CONSTRUCTION NOTES**

1. ALL WORK DEPICTED ON THIS PLAN IS SUBJECT TO ALL ORDER OF CONDITIONS ISSUED BY THE FAIRHAVEN CONSERVATION COMMISSION. THE CONTRACTOR SHALL HAVE A COPY OF THE ORDER AND APPROVED PLAN ON SITE AT ALL TIME DURING THE CONSTRUCTION PROVIDED.
2. A PRE-CONSTRUCTION MEETING WILL BE SCHEDULED BY THE CONTRACTOR WITH THE CONSERVATION AGENT TO REVIEW THE REQUIREMENTS OUTLINED IN THE ORDER OF CONDITIONS.
3. THE SILT FENCE FOR EROSION CONTROL SHALL BE SET PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS UNTIL ALL DISTURBED AREAS ARE STABILIZED.
4. STOCKPILING OF MATERIALS SHALL BE LIMITED TO THE DESIGNATED UPLAND AREA.
5. IF REQUIRED, A LINED CONCRETE WASHOUT PIT SHALL BE SET IN THE STOCKPILE AREA WITH SILT FENCING SET ALONG THE DOWNGRADIENT PERIMETER OF THE PIT.
6. ALL DISTURBED AREAS SHALL BE IMMEDIATELY STABILIZED WITH LOAM AND SEEDING UPON COMPLETION OF CONSTRUCTION.
7. THE USE OF HEAVY EQUIPMENT ON THE BEACH OR ROCKY INTERTIDAL SHORE IS PROHIBITED.

**PLANT LIST**

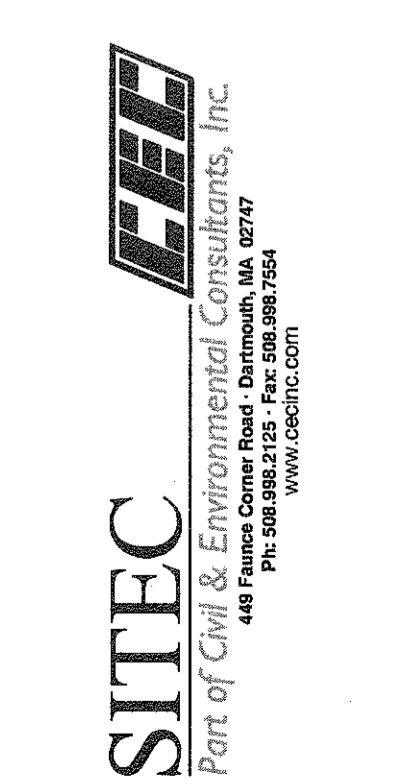
SYMBOL	QUANTITY	NAME
+	11	'EURYBIA SPECTABILIS' Eastern Showy Aster
o	12	'HEMEROCALLIS SPP.' Daylily Stelladora
/	18	'COREOPSIS ROSEA' Pink Tickseed



No.	Date	Revision Description
1	APR. 05, 2021	REVISED DESIGN/ADD PLANTINGS
2	APR. 16, 2021	REVISED PLAN DETAILS
3	MAY 17, 2021	REVISE NORTH GROIN

scale: 1"=10'  
date: FEBRUARY 11, 2021  
drawn: BPL  
checked: SDG  
approved: SDG  
sheet 1 of 1  
drawing number: CSRP-1

project: ASSESSORS MAP 43 - LOT 30  
10 NELSON AVENUE  
FAIRHAVEN, MASSACHUSETTS  
client: THE DELANO IRREVOCABLE TRUST  
drawing title: COASTAL STRUCTURE REPAIR PLAN



**OWNER/APPLICANT:**  
THE DELANO IRREVOCABLE TRUST  
10 NELSON AVENUE  
FAIRHAVEN, MA 02719

# PROPOSED IMPROVEMENTS

## BELLA VISTA ISLAND

### FAIRHAVEN, MA

**OWNER:**

HEIAM ALSWALHI  
FAIRHAVEN, MASSACHUSETTS

**PROPERTY:**

ASSESSORS MAP 43B, LOTS 326, 359, & 360



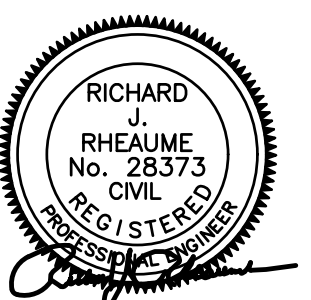
**SCHEDULE OF DRAWINGS**

SHEET #	PLAN TITLE
-	COVER SHEET
1	EXISTING CONDITIONS PLAN
2	RESOURCE AREAS PLAN
3	ACOP IMPROVEMENTS
4	PROPOSED IMPROVEMENTS PLAN
5	PROPOSED REPLANTING PLAN

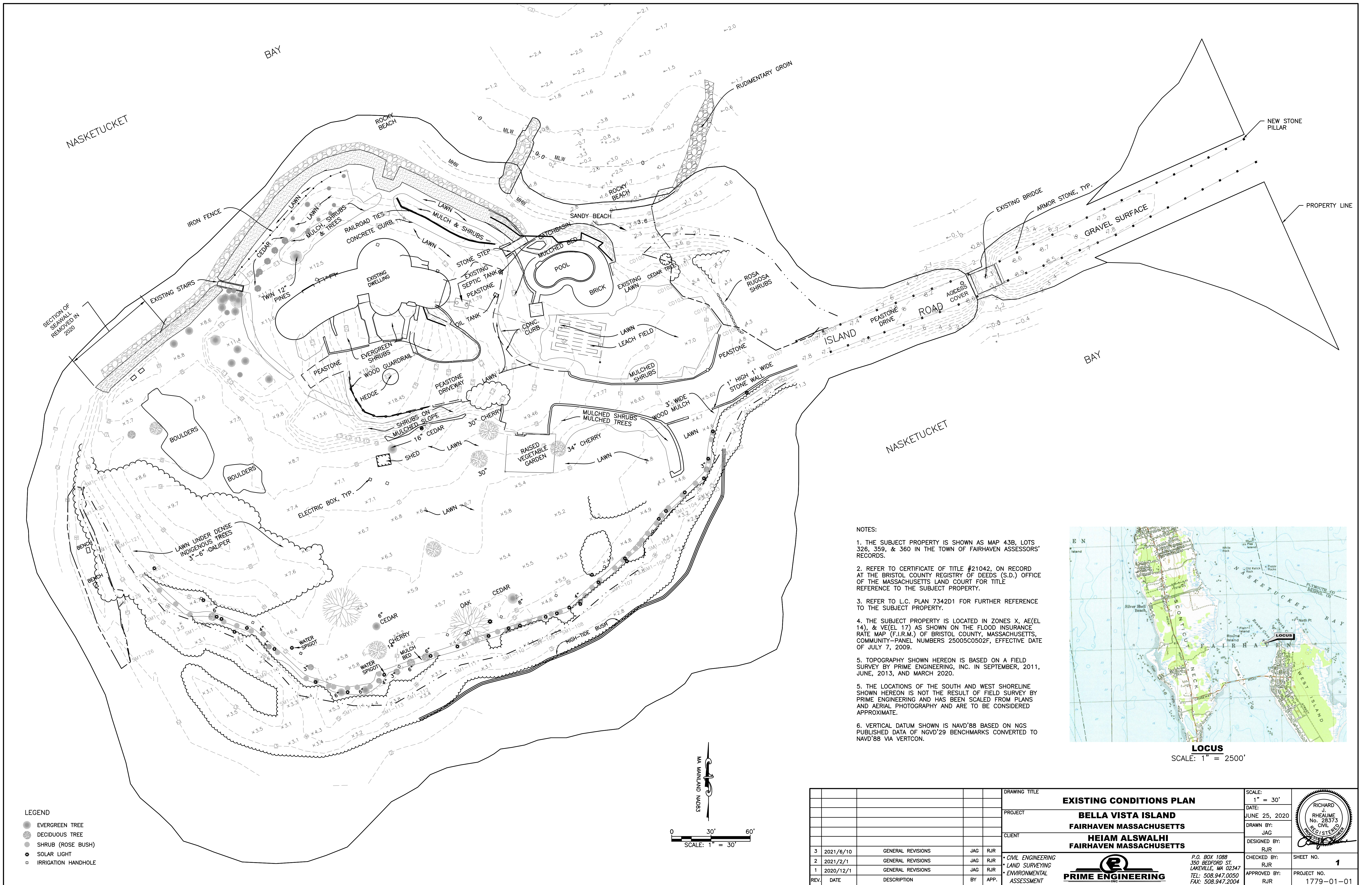
**LOCUS**  
**SCALE: 1"=100'**  
**ISSUED: JUNE 25, 2020**

**REVISED: JUNE 10, 2021**

**PREPARED BY:**



CIVIL ENGINEERING—LAND SURVEYING—ENVIRONMENTAL ASSESSMENT  
P.O. BOX 1088, 350 BEDFORD STREET, LAKEVILLE, MA 02347  
TEL: 508.947.0050 FAX: 508.947.2004



**NOTES:**



1. THE SUBJECT PROPERTY IS SHOWN AS MAP 43B, LOTS 326, 359, & 360 IN THE TOWN OF FAIRHAVEN ASSESSORS' RECORDS.
2. REFER TO CERTIFICATE OF TITLE #21042, ON RECORD AT THE BRISTOL COUNTY REGISTRY OF DEEDS (S.D.) OFFICE OF THE MASSACHUSETTS LAND COURT FOR TITLE REFERENCE TO THE SUBJECT PROPERTY.
3. REFER TO L.C. PLAN 7342D1 FOR FURTHER REFERENCE TO THE SUBJECT PROPERTY.
4. THE SUBJECT PROPERTY IS LOCATED IN ZONES X, AE(EL 14), & VE(EL 17) AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF BRISTOL COUNTY, MASSACHUSETTS, COMMUNITY-PANEL NUMBERS 25005C0502F, EFFECTIVE DATE OF JULY 7, 2009.
5. TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD SURVEY BY PRIME ENGINEERING, INC. IN SEPTEMBER, 2011, JUNE, 2013, AND MARCH 2020.
5. THE LOCATIONS OF THE SOUTH AND WEST SHORELINE SHOWN HEREON IS NOT THE RESULT OF FIELD SURVEY BY PRIME ENGINEERING AND HAS BEEN SCALED FROM PLANS AND AERIAL PHOTOGRAPHY AND ARE TO BE CONSIDERED APPROXIMATE.
6. VERTICAL DATUM SHOWN IS NAVD'88 BASED ON NGS PUBLISHED DATA OF NGVD'29 BENCHMARKS CONVERTED TO NAVD'88 VIA VERTCON.

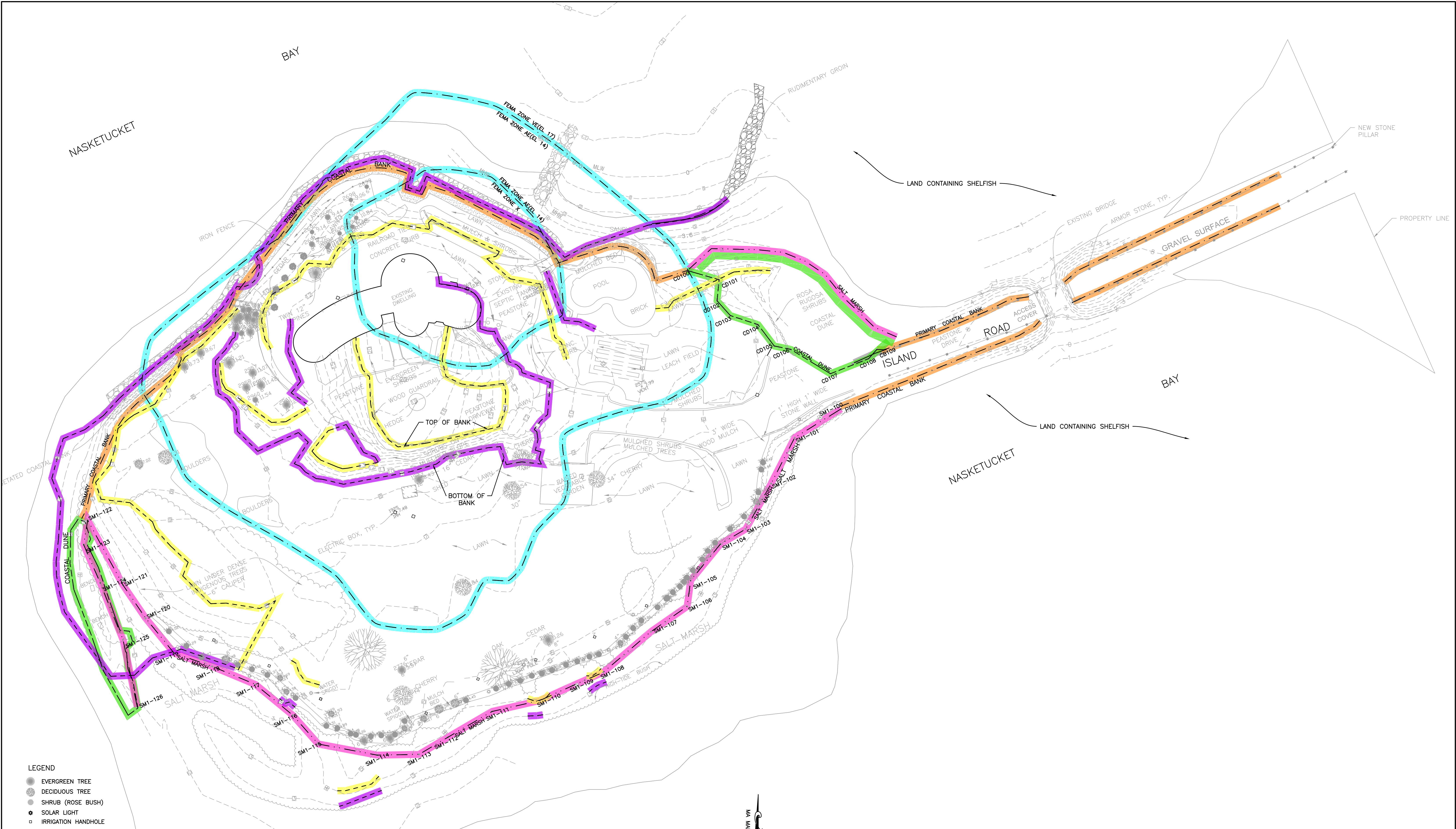


**LOCUS**  
SCALE: 1" = 2500'

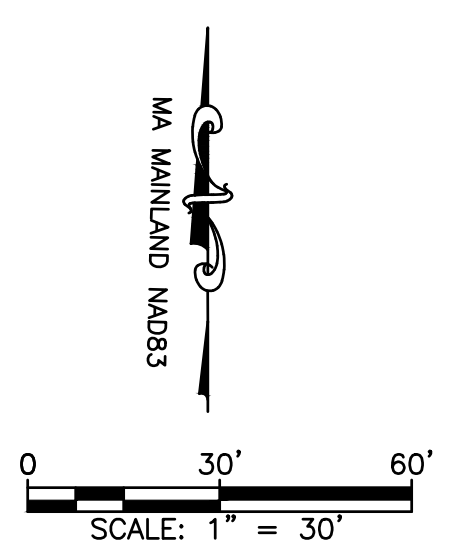
- LEGEND**
- EVERGREEN TREE
  - DECIDUOUS TREE
  - SHRUB (ROSE BUSH)
  - ⊛ SOLAR LIGHT
  - IRRIGATION HANDHOLE


REV.	DATE	DESCRIPTION	BY	APP.
3	2021/6/10	GENERAL REVISIONS	JAG	RJR
2	2021/2/1	GENERAL REVISIONS	JAG	RJR
1	2020/12/1	GENERAL REVISIONS	JAG	RJR
		DESCRIPTION	BY	APP.

DRAWING TITLE <b>EXISTING CONDITIONS PLAN</b>		SCALE: 1" = 30'
PROJECT <b>BELLA VISTA ISLAND FAIRHAVEN MASSACHUSETTS</b>		DATE: JUNE 25, 2020
CLIENT <b>HEIAM ALSWALHI FAIRHAVEN MASSACHUSETTS</b>		DRAWN BY: JAG
		DESIGNED BY: RJR
		CHECKED BY: RJR
		APPROVED BY: RJR
		SHEET NO. <b>1</b>
<p>P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004</p>		PROJECT NO. 1779-01-01

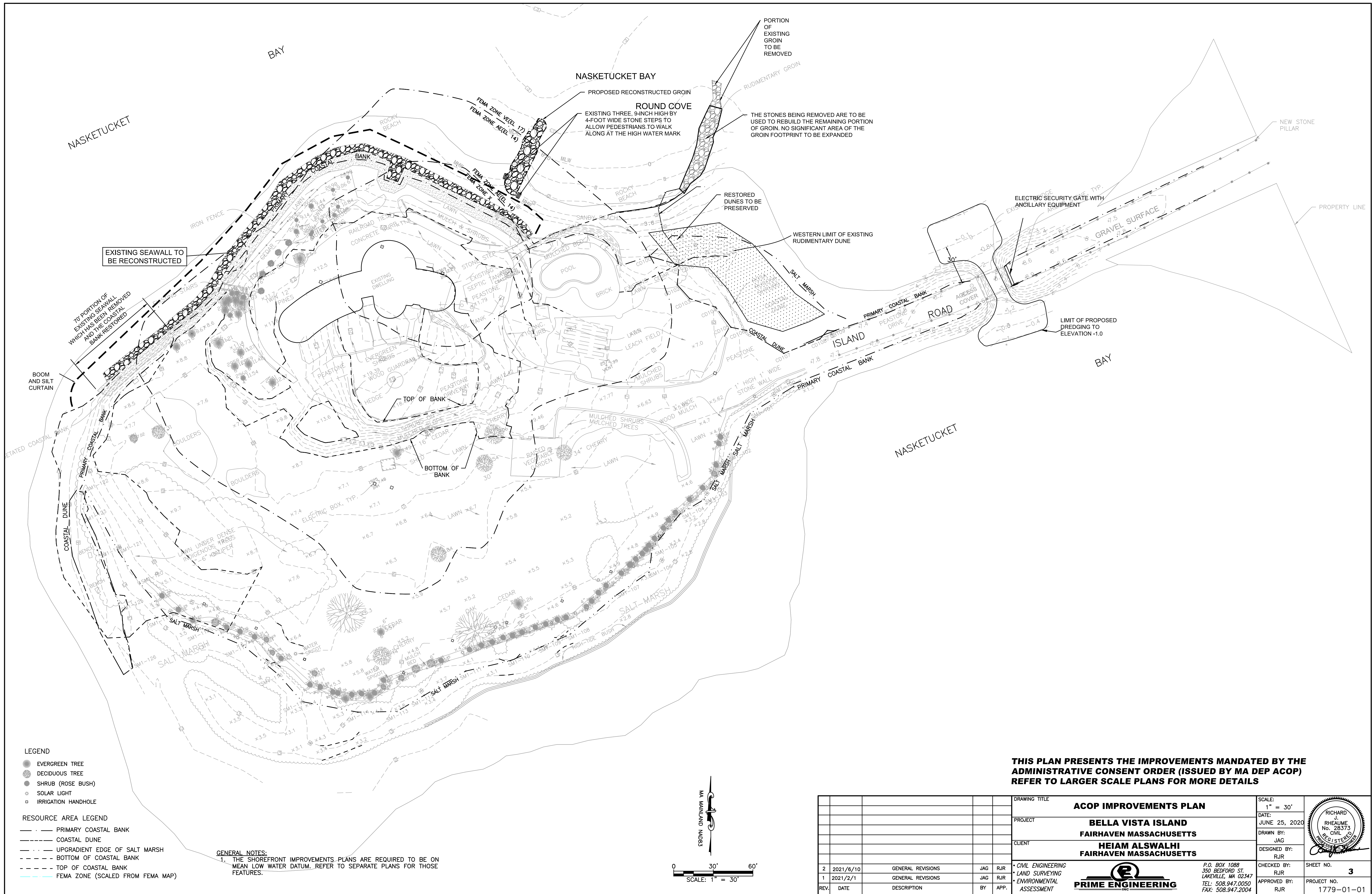


- LEGEND**
- EVERGREEN TREE
  - DECIDUOUS TREE
  - SHRUB (ROSE BUSH)
  - ★ SOLAR LIGHT
  - IRRIGATION HANDHOLE
- RESOURCE AREA LEGEND**
- PRIMARY COASTAL BANK
  - COASTAL DUNE
  - UPGRADIENT EDGE OF SALT MARSH
  - TOP OF COASTAL BANK
  - BOTTOM OF COASTAL BANK
  - FEMA ZONE (SCALED FROM FEMA MAP)



DRAWING TITLE		<b>RESOURCE AREAS PLAN</b>		SCALE:	1" = 30'
PROJECT		<b>BELLA VISTA ISLAND FAIRHAVEN MASSACHUSETTS</b>		DATE:	JUNE 25, 2020
CLIENT		<b>HEIAM ALSWALHI FAIRHAVEN MASSACHUSETTS</b>		DRAWN BY:	JAG
REV.		DATE	DESCRIPTION	BY	APP.
3	2021/6/10	GENERAL REVISIONS		JAG	RJR
2	2021/2/1	GENERAL REVISIONS		JAG	RJR
1	2020/12/1	GENERAL REVISIONS		JAG	RJR
		P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004		CHECKED BY:	RJR
				DESIGNED BY:	JAG
				APPROVED BY:	RJR
				SHEET NO.	<b>2</b>
				PROJECT NO.	1779-01-01





EXISTING SEAWALL TO BE RECONSTRUCTED

NASKETUCKET BAY  
 PROPOSED RECONSTRUCTED GROIN  
**ROUND COVE**  
 EXISTING THREE, 9-INCH HIGH BY 4-FOOT WIDE STONE STEPS TO ALLOW PEDESTRIANS TO WALK ALONG AT THE HIGH WATER MARK

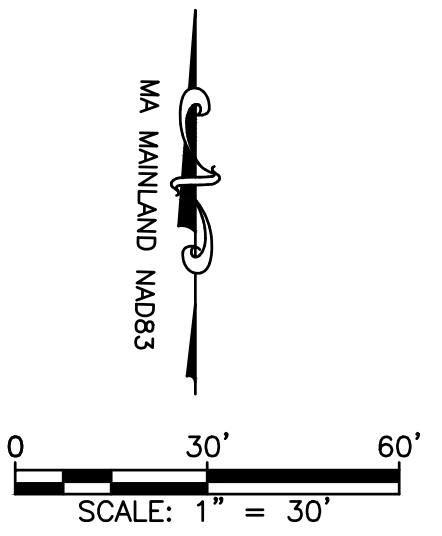
PORION OF EXISTING GROIN TO BE REMOVED  
 RUDIMENTARY GROIN  
 THE STONES BEING REMOVED ARE TO BE USED TO REBUILD THE REMAINING PORTION OF GROIN. NO SIGNIFICANT AREA OF THE GROIN FOOTPRINT TO BE EXPANDED

ELECTRIC SECURITY GATE WITH ANCILLARY EQUIPMENT

LIMIT OF PROPOSED DREDGING TO ELEVATION -1.0

- LEGEND**
- EVERGREEN TREE
  - DECIDUOUS TREE
  - SHRUB (ROSE BUSH)
  - SOLAR LIGHT
  - IRRIGATION HANDHOLE
- RESOURCE AREA LEGEND**
- PRIMARY COASTAL BANK
  - COASTAL DUNE
  - UPGRADIENT EDGE OF SALT MARSH
  - BOTTOM OF COASTAL BANK
  - TOP OF COASTAL BANK
  - FEMA ZONE (SCALED FROM FEMA MAP)

**GENERAL NOTES:**  
 1. THE SHOREFRONT IMPROVEMENTS PLANS ARE REQUIRED TO BE ON MEAN LOW WATER DATUM. REFER TO SEPARATE PLANS FOR THOSE FEATURES.

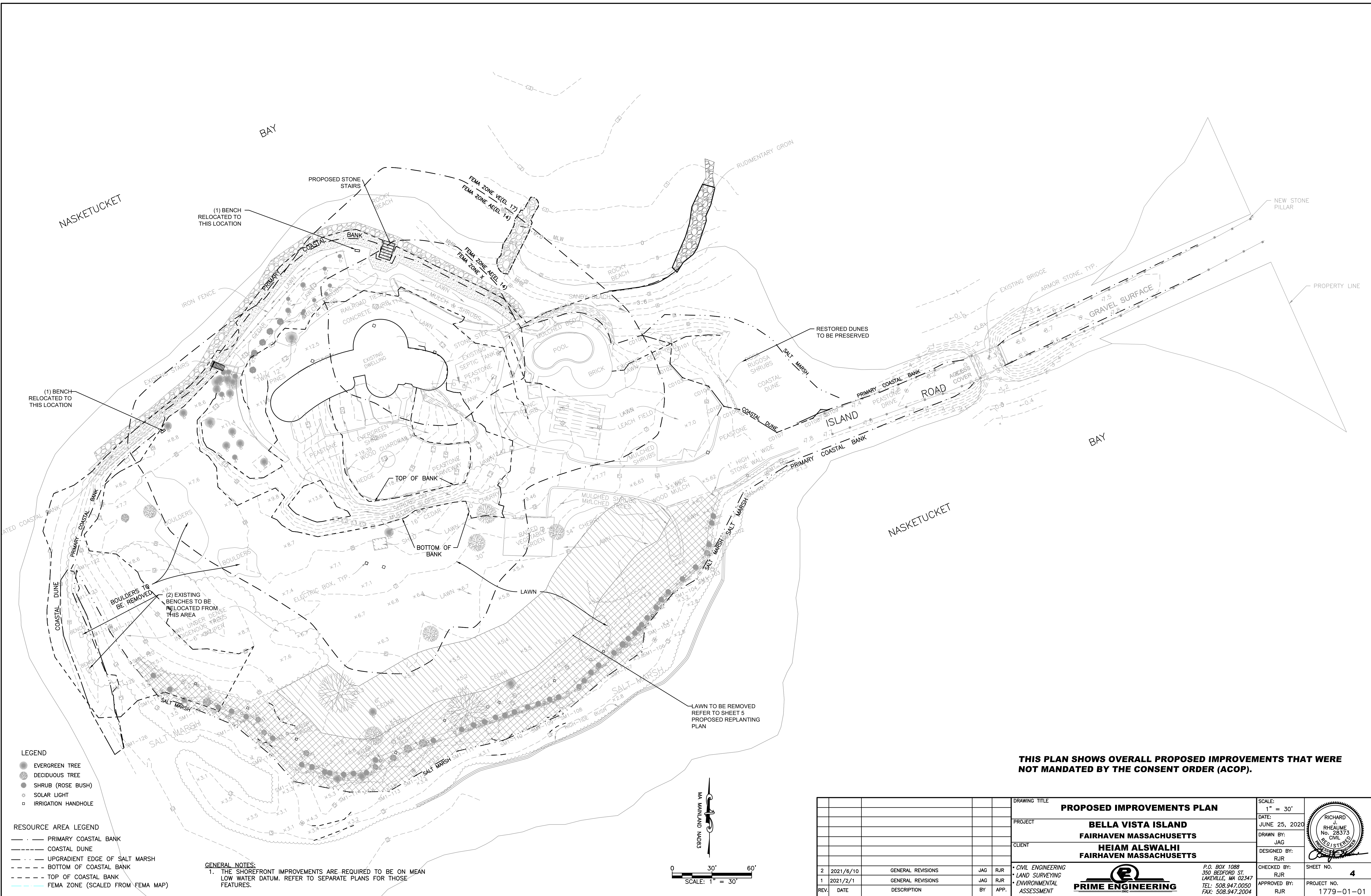


**THIS PLAN PRESENTS THE IMPROVEMENTS MANDATED BY THE ADMINISTRATIVE CONSENT ORDER (ISSUED BY MA DEP ACOP) REFER TO LARGER SCALE PLANS FOR MORE DETAILS**

DRAWING TITLE		<b>ACOP IMPROVEMENTS PLAN</b>		SCALE:	1" = 30'
PROJECT		<b>BELLA VISTA ISLAND FAIRHAVEN MASSACHUSETTS</b>		DATE:	JUNE 25, 2020
CLIENT		<b>HEIAM ALSWALHI FAIRHAVEN MASSACHUSETTS</b>		DRAWN BY:	JAG
REV.		DATE	DESCRIPTION	DESIGNED BY:	RJR
2	2021/6/10	GENERAL REVISIONS	JAG RJR	CHECKED BY:	RJR
1	2021/2/1	GENERAL REVISIONS	JAG RJR	APPROVED BY:	RJR
BY		APP.		CHECKED BY:	RJR
APP.				PROJECT NO.	1779-01-01



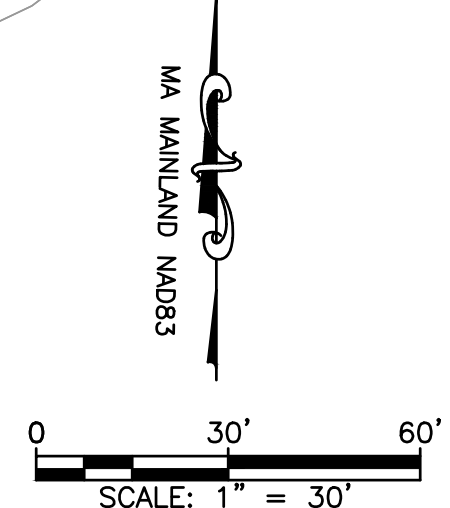
P.O. BOX 1088  
 350 BEDFORD ST.  
 LAKEVILLE, MA 02347  
 TEL: 508.947.0050  
 FAX: 508.947.2004



- LEGEND**
- EVERGREEN TREE
  - DECIDUOUS TREE
  - SHRUB (ROSE BUSH)
  - SOLAR LIGHT
  - IRRIGATION HANDHOLE

- RESOURCE AREA LEGEND**
- PRIMARY COASTAL BANK
  - COASTAL DUNE
  - - - UPGRADIENT EDGE OF SALT MARSH
  - BOTTOM OF COASTAL BANK
  - TOP OF COASTAL BANK
  - FEMA ZONE (SCALED FROM FEMA MAP)

**GENERAL NOTES:**  
 1. THE SHOREFRONT IMPROVEMENTS ARE REQUIRED TO BE ON MEAN LOW WATER DATUM. REFER TO SEPARATE PLANS FOR THOSE FEATURES.

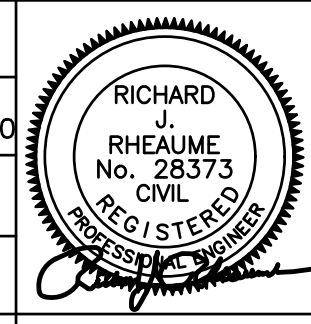


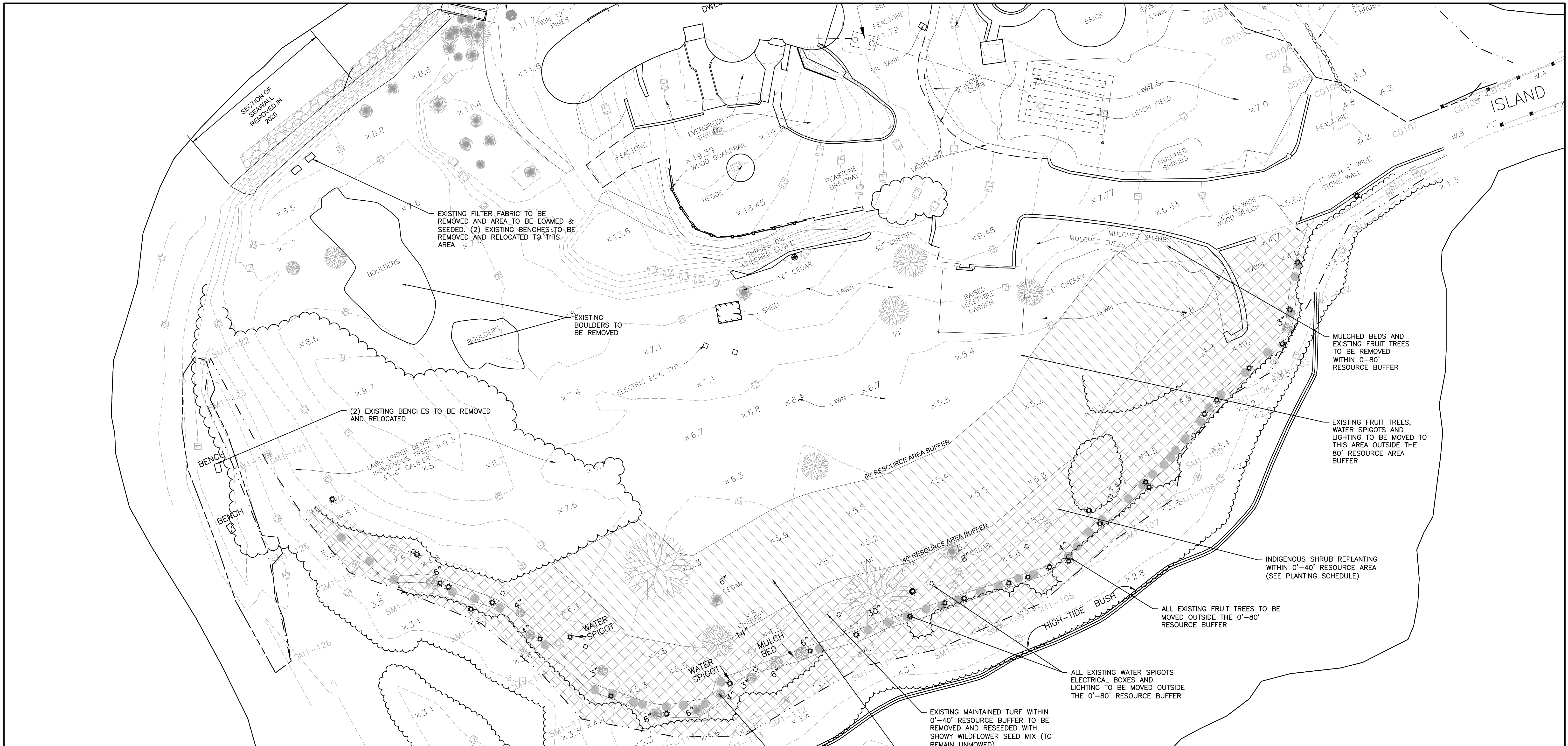
**THIS PLAN SHOWS OVERALL PROPOSED IMPROVEMENTS THAT WERE NOT MANDATED BY THE CONSENT ORDER (ACOP).**

DRAWING TITLE		<b>PROPOSED IMPROVEMENTS PLAN</b>		SCALE:	1" = 30'
PROJECT		<b>BELLA VISTA ISLAND FAIRHAVEN MASSACHUSETTS</b>		DATE:	JUNE 25, 2020
CLIENT		<b>HEIAM ALSWALHI FAIRHAVEN MASSACHUSETTS</b>		DRAWN BY:	JAG
REV.		DATE	DESCRIPTION	DESIGNED BY:	RJR
2	2021/6/10	GENERAL REVISIONS	JAG RJR	CHECKED BY:	RJR
1	2021/2/1	GENERAL REVISIONS	JAG RJR	APPROVED BY:	RJR
BY		APP.		PROJECT NO.	1779-01-01



P.O. BOX 1088  
 350 BEDFORD ST.  
 LAKEVILLE, MA 02347  
 TEL: 508.947.0050  
 FAX: 508.947.2004





**SEED MIX NOTES:**  
 0'-80' RESOURCE BUFFER AREAS TO BE SEEDDED WITH ONE POUND PER 2,000 SQUARE FEET OF NEW ENGLAND WETLAND PLANTS, INC. NEW ENGLAND SHOWY WILDFLOWER SEED MIX, OR APPROVED EQUAL WHICH CONTAINS THE FOLLOWING SPECIMENS:

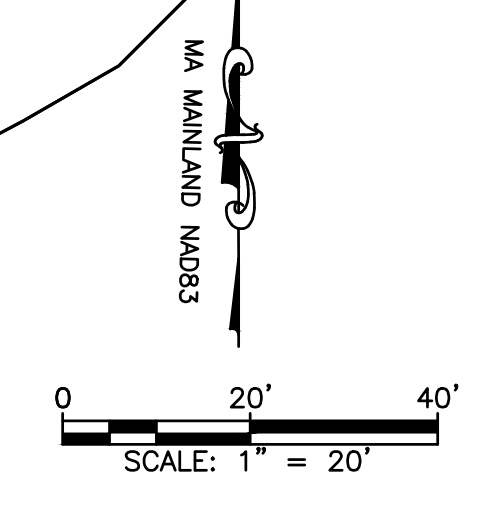
Botanical Name	Common Name	Indicator
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Chamaecrista fasciculata</i>	Partridge Pea	FACU
<i>Sorghastrum nutans</i>	Indian Grass	UPL
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Elymus canadensis</i>	Canada Wild Rye	FACU+
<i>Elymus riparius</i>	Riverbank Wild Rye	FACW
<i>Helopsis helianthoides</i>	Ox Eye Sunflower	UPL
<i>Coreopsis lanceolata</i>	Lance Leaved Coreopsis	FACU
<i>Rudbeckia hirta</i>	Black Eyed Susan	FACU-
<i>Liatris spicata</i>	Spiked Gayfeather/Marsh Blazing Star	FAC+
<i>Asclepias syriaca</i>	Common Milkweed	FACU-
<i>Yernonia noveboracensis</i>	New York Ironweed	FACW+
<i>Aster novae-angliae (Symphyotrichum novae-angliae)</i>	New England Aster	FACW-
<i>Eupatorium purpureum (Eutrochium maculatum)</i>	Purple Joe Pye Weed	FAC
<i>Asclepias tuberosa</i>	Butterfly Milkweed	NI
<i>Solidago juncea</i>	Early Goldenrod	FACW
<i>Eupatorium perfoliatum</i>	Boneset	FACW

**LEGEND**

- EXISTING EVERGREEN TREE
- EXISTING DECIDUOUS TREE
- EXISTING SHRUB (ROSE BUSH)
- ★ EXISTING SOLAR LIGHT
- EXISTING IRRIGATION HANDHOLE

**40'-80' RESOURCE BUFFER AREA**  
 -LAWN TO BE REMOVED  
 -MULCHED BEDS TO BE REMOVED  
 -RESEEDDED WITH SHOWY WILDFLOWER MIX  
 -PROPOSED MEADOW TO BE MOWED 2X A YEAR MAXIMUM.

**0'-40' RESOURCE BUFFER AREA**  
 -EXISTING FRUIT TREES, LIGHTING AND SPIGOTS TO BE REMOVED AND RELOCATED OUTSIDE THE 80' RESOURCE BUFFER AREA  
 -EXISTING LAWN TO BE REMOVED  
 -AREA TO BE REPLANTED WITH INDIGENOUS SHRUBS (SEE SCHEDULE)  
 -RESEEDDED WITH SHOWY WILDFLOWER MIX  
 -TO REMAIN UNMOWED



**PLANTING SCHEDULE**

QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
55	HIBISCUS MOSCHEUTOS	MARSH MALLOW	2 GAL.
55	AZALEA VISCOSUM	PINK MIST AZALEA	2 GAL.
55	VACCINIUM CORYMBOSUM	HIGH BUSH BLUEBERRY	2 GAL.
51	ILEX VERTICILLATA	WINTERBERRY FEMALE	3 GAL.
4	ILEX VERTICILLATA	WINTERBERRY MALE	3 GAL.
55	MYRICA PENNSYLVANICA	BAYBERRY	2 GAL.

DRAWING TITLE <b>PROPOSED PLANTING PLAN</b>		SCALE: 1" = 20'
PROJECT <b>BELLA VISTA ISLAND FAIRHAVEN MASSACHUSETTS</b>		DATE: APRIL 5, 2021
CLIENT <b>HEIAM ALSWALHI FAIRHAVEN MASSACHUSETTS</b>		DRAWN BY: JAG
REV. DATE DESCRIPTION		DESIGNED BY: RJR
2	2021/6/10 GENERAL REVISIONS	CHECKED BY: RJR
1	4/16/2021 RESPONSE TO COMMENTS	APPROVED BY: RJR
REV.	DATE DESCRIPTION	BY APP.

**PRIME ENGINEERING**  
INC.

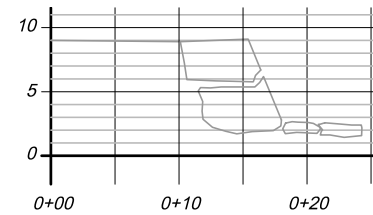
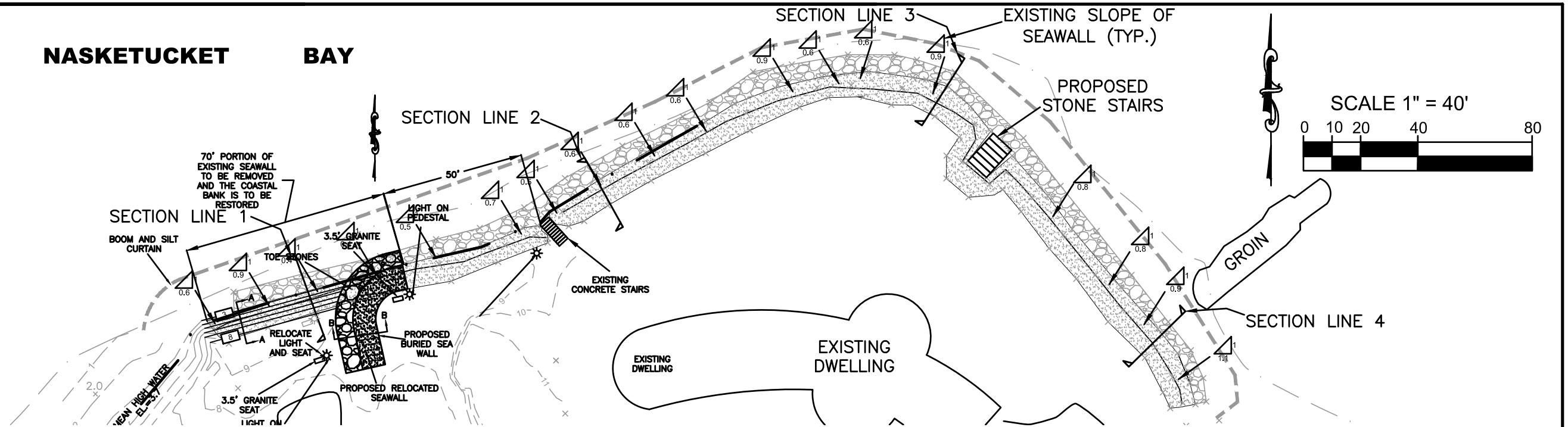
P.O. BOX 1088  
 350 BEDFORD ST.  
 LAKEVILLE, MA 02347  
 TEL: 508.947.0050  
 FAX: 508.947.2004

RICHARD J. RHEALME  
No. 28373  
CIVIL  
REGISTERED

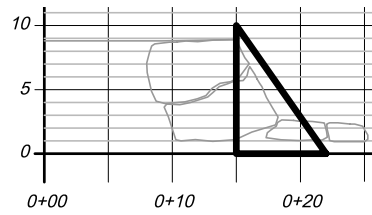
SHEET NO. **5**  
PROJECT NO. 1779-01-01



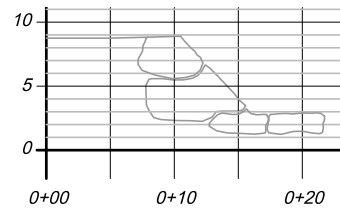
# NASKETUCKET BAY



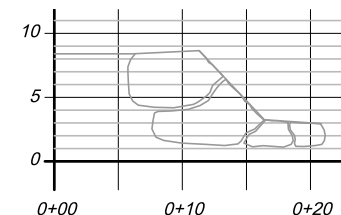
SECTION VIEW 1 - EXISTING



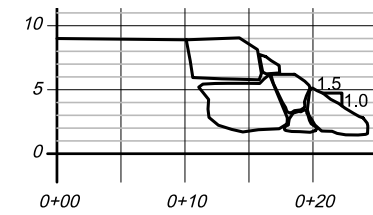
SECTION VIEW 2 - EXISTING



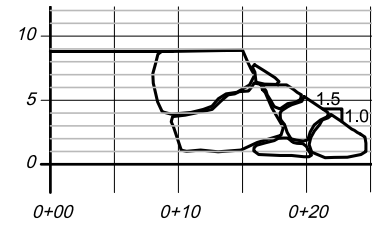
SECTION VIEW 3 - EXISTING



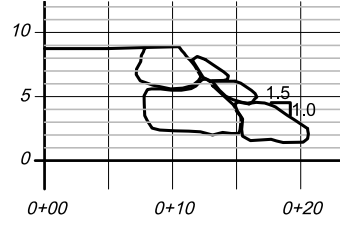
SECTION VIEW 4 - EXISTING



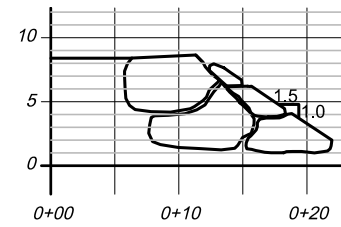
SECTION VIEW 1 - PROPOSED



SECTION VIEW 2 - PROPOSED

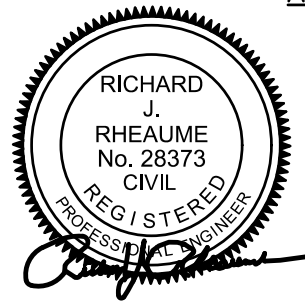


SECTION VIEW 3 - PROPOSED



SECTION VIEW 4 - PROPOSED

ALL CROSS SECTIONS  
SCALE: 1" = 5'



## SEAWALL PLAN AND CROSS SECTIONS

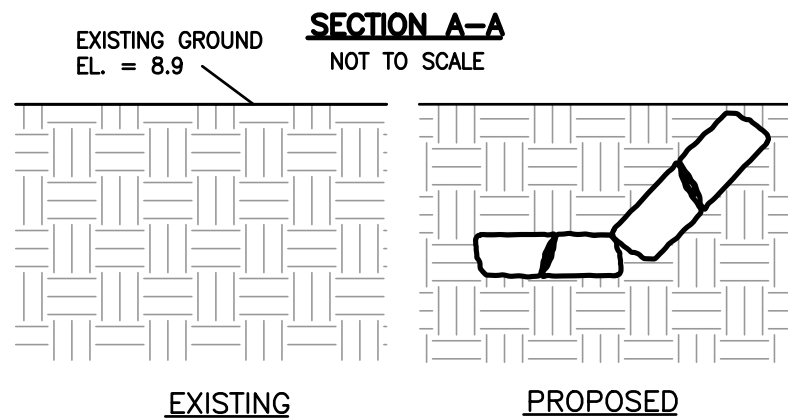
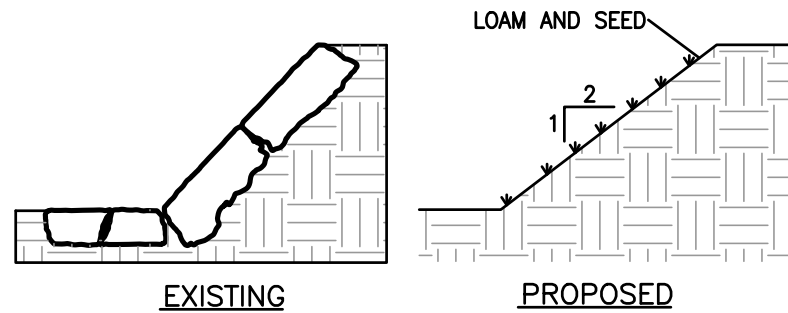
ACCOMPANYING THE PETITION OF  
HEIAM ALSAWALHI  
PROPOSED SEAWALL PERMITTING  
ROUND COVE/NASKETUCKET BAY  
BELLA VISTA ISLAND, FAIRHAVEN, MA

## EXHIBIT A



DATE: JUNE 10, 2021

SHEET 1 OF 4



**SECTION B-B**  
NOT TO SCALE

**NOTES**

1. THE VERTICAL DATUM SHOWN NAVD'88, BASED ON NGS PUBLISHED DATA OF NGVD'29 BENCHMARKS CONVERTED TO NAVD'88 VERTCON.
2. THE SUBJECT PROPERTY IS SHOWN ON THE TOWN OF FAIRHAVEN ASSESSORS' MAP 43B AS LOTS 326, 359 & 360

70' OF THE WESTERN END OF THE SEAWALL, ALONG WITH THE ANCILLARY TOE STONES, ARE TO BE REMOVED AS SHOWN ON THESE PLANS. THE COASTAL BANK IS TO BE RECONSTRUCTED BY THE PLACEMENT OF ORDINARY EARTH AT A SLOPE COMPARABLE TO THE EXISTING COASTAL BANK TO THE IMMEDIATE SOUTH. THE SURFACE SHALL BE SEEDED WITH GRASS SEED AND COVERED WITH JUTE NETTING OR A COMPARABLE TEMPORARY EROSION MATTING. THE ROCKY BEACH IN FRONT OF THE COASTAL BANK IS TO BE FILLED WITH SAND AND COBBLES TO A GRADE COMPARABLE TO THE ADJOINING BEACH. THE STONES RECOVERED FROM THE SEAWALL REMOVAL SHALL BE USED TO TURN THE THEN REMAINING WESTERN END OF THE SEAWALL SOUTHERLY INTO THE ISLAND WHERE BOTH SIDES OF THE SEAWALL WILL BE BURIED, AS SHOWN ON THE PLAN. THE WORK WILL BE PERFORMED WITH AN EXCAVATOR ON TRACKS WITH THE MAJORITY OF THE WORK BEING PERFORMED WITH THE EXCAVATOR POSITIONED LANDWARD OF THE EXISTING SEAWALL. A BOOM AND SILT CURTAIN SHALL BE EMPLOYED THROUGHOUT CONSTRUCTION.

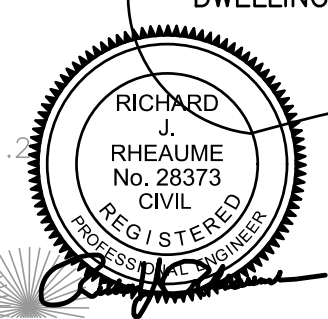
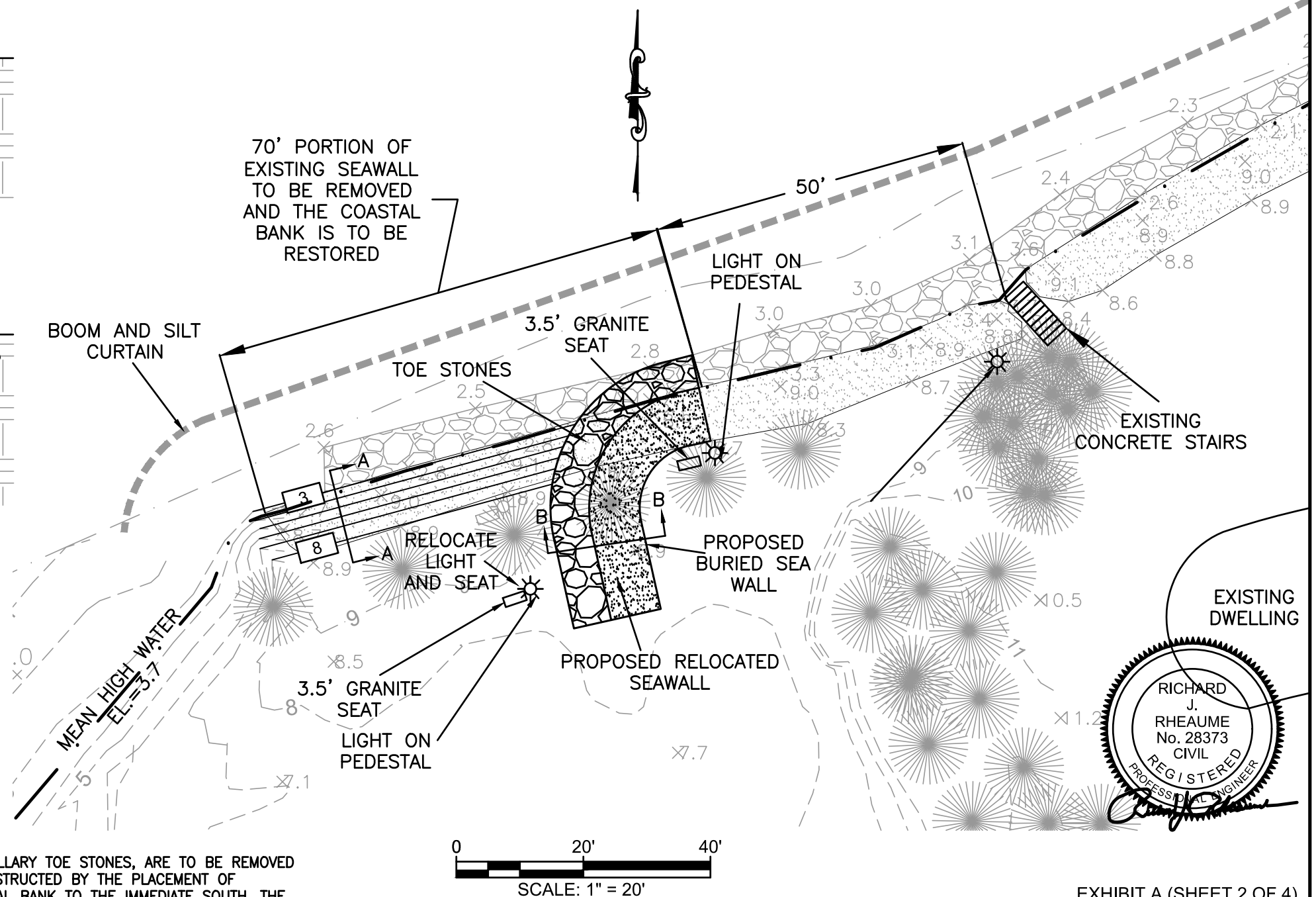


EXHIBIT A (SHEET 2 OF 4)

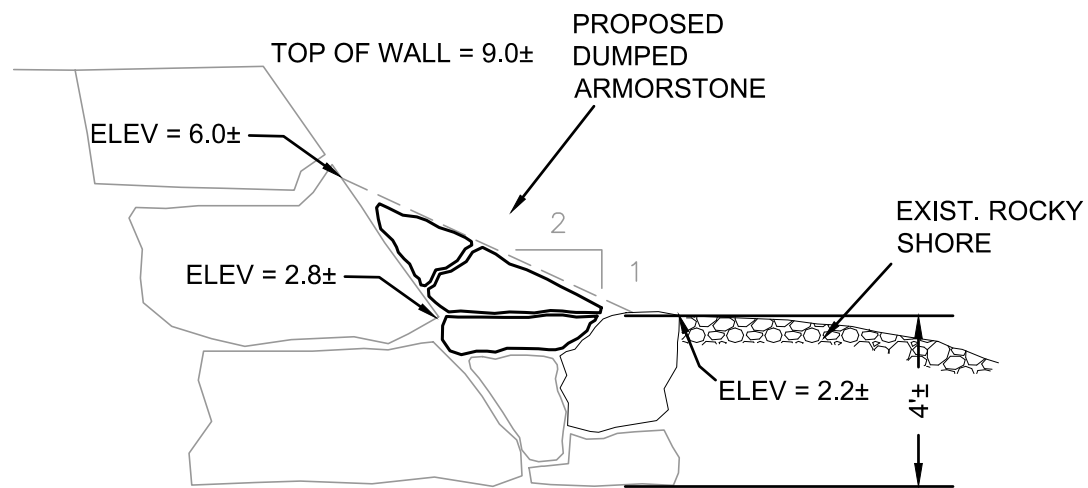
**SEAWALL PLAN**

ACCOMPANYING THE PETITION OF HEIAM ALSAWALHI  
PROPOSED SEAWALL PERMITTING  
ROUND COVE/NASKETUCKET BAY  
BELLA VISTA ISLAND, FAIRHAVEN, MA

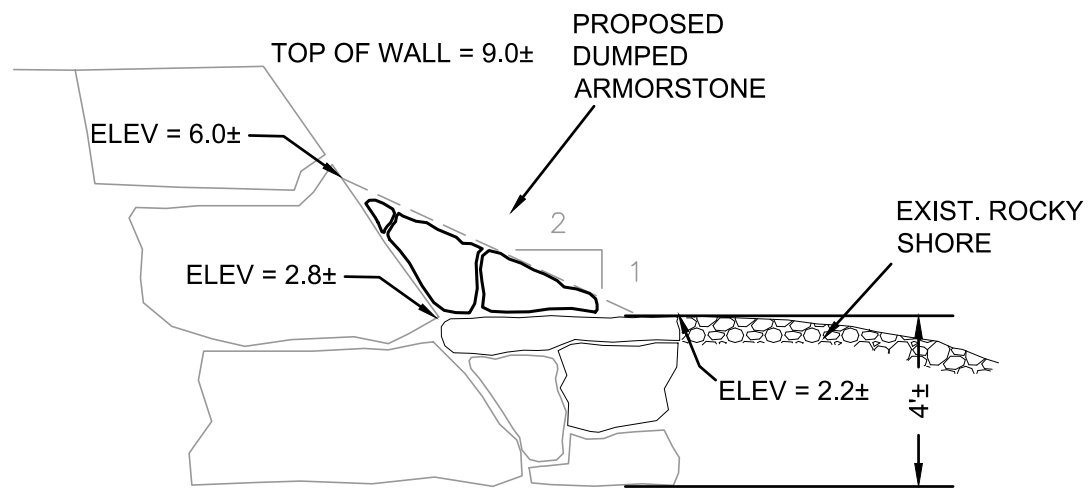
**PROPOSED PLAN**



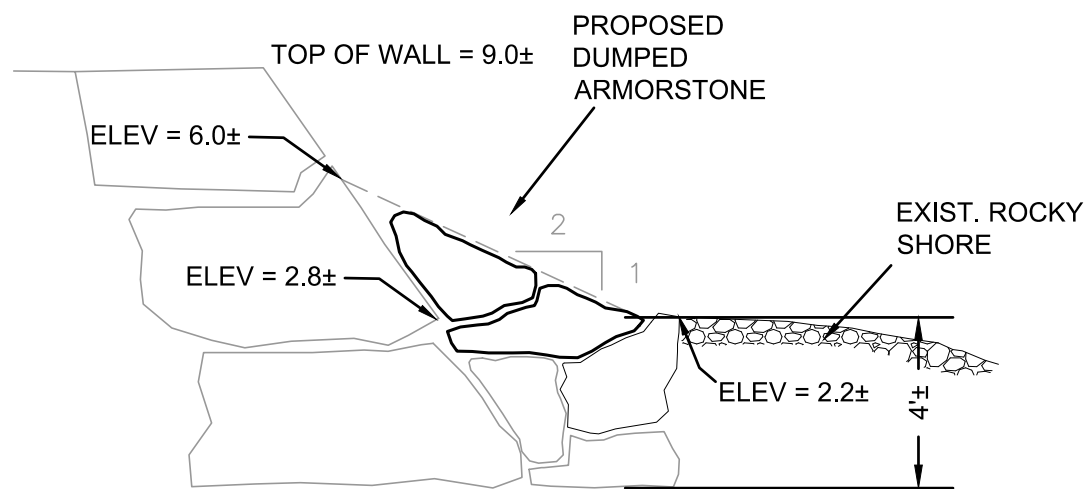
ISSUED: JUNE 10, 2021



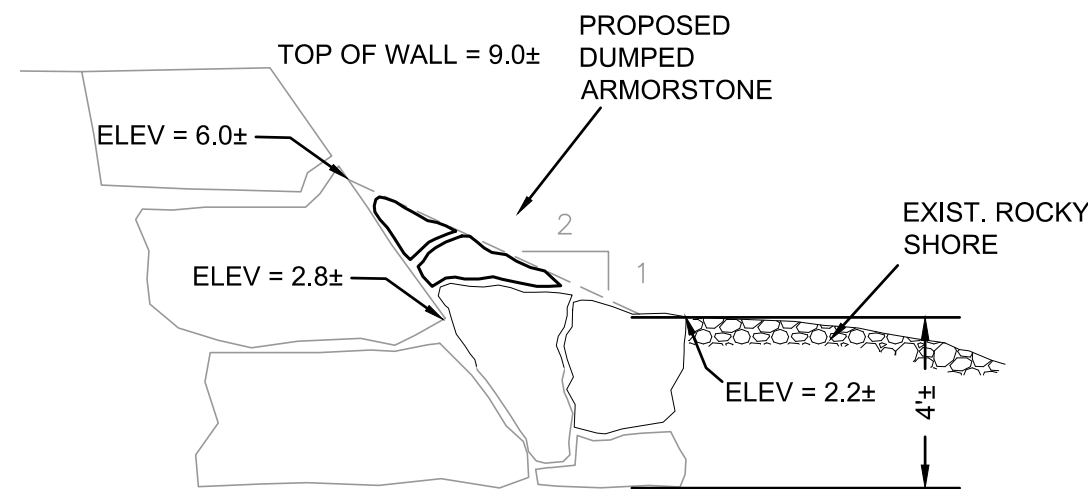
PROPOSED SEAWALL CROSS SECTION  
N.T.S.



PROPOSED SEAWALL CROSS SECTION  
N.T.S.



PROPOSED SEAWALL CROSS SECTION  
N.T.S.



PROPOSED SEAWALL CROSS SECTION  
N.T.S.

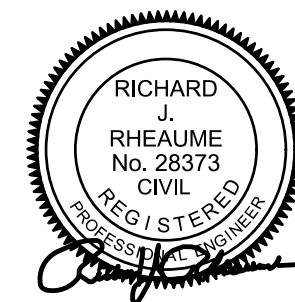
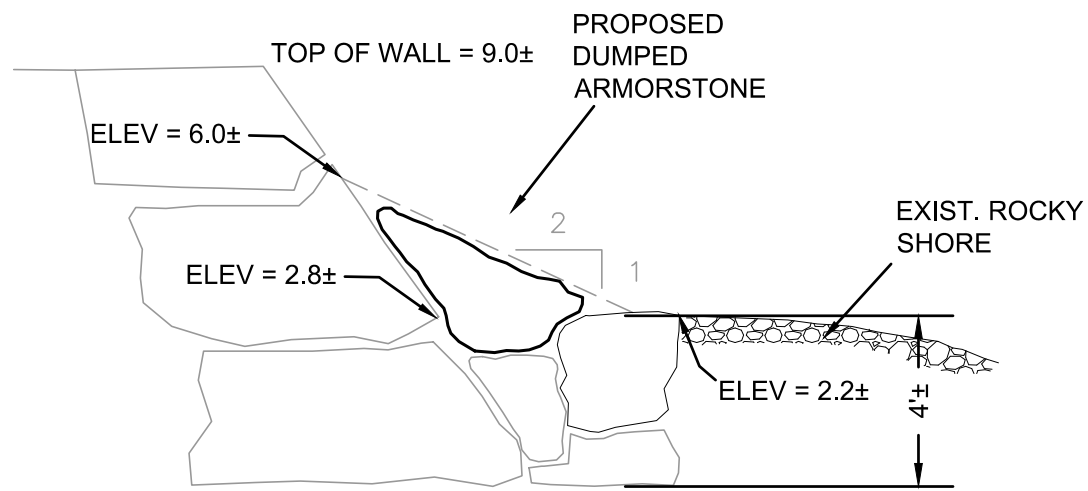


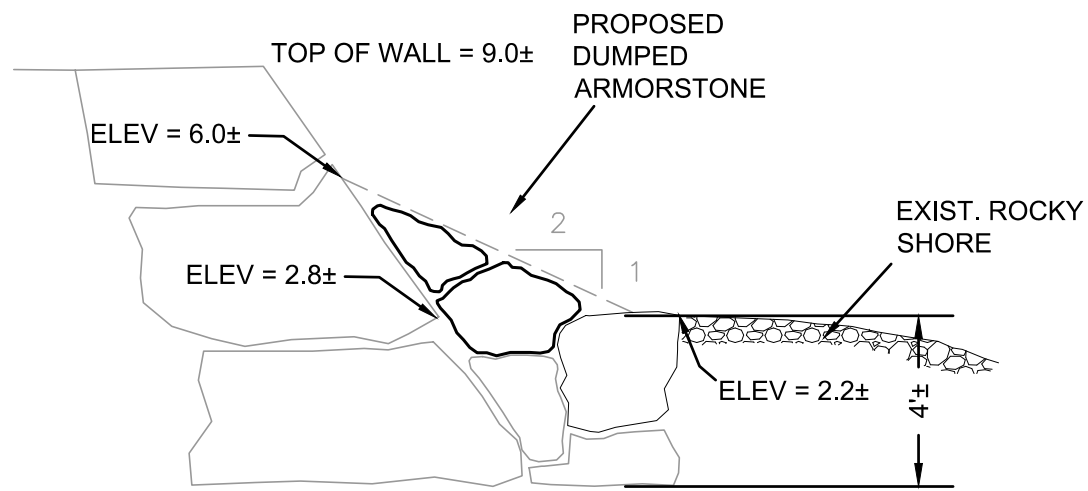
EXHIBIT A (SHEET 3 OF 4)

THE SEAWARD FACE OF THE REMAINING WALL IS TO BE RECONSTRUCTED AS SHOWN ON THESE PLANS. THE PURPOSE OF THE WORK IS TO REDUCE THE STEEPNESS OF THE SEAWALL FACE BY THE PLACEMENT OF DUMPED ARMOR STONE. DEPENDENT ON THE SIZE AND SHAPE OF THE SPECIFIC IMPORTED ROCKS, THE WORK MAY, IN SOME CASES, REQUIRE THE REMOVAL OF SOME OF THE EXISTING TOE STONES. IN OTHER CASES, THE IMPORTED ROCKS WILL BE OF ADEQUATE SIZE AND SHAPE THAT THEY CAN BE PLACED ON TOP OF THE EXISTING TOE STONES. THE INTENT OF THE WORK IS TO ESTABLISH AN AVERAGE SLOPE OF 2:1 WITH NO SIGNIFICANT PORTION OF THE SLOPE STEEPER THAN 1:1 AND NO SIGNIFICANT PORTION OF THE WALL AT A SLOPE FLATTER THAN 3:1. IN NO CASE IS THE DUMPED ARMOR STONE TO EXTEND BEYOND THE SEAWARD EXTENT OF THE CURRENT TOE STONES. THE WORK IS TO BE DONE BY AN EXCAVATOR ON TRACKS OPERATING PRIMARILY FROM MID TO LOW TIDES. THE EXCAVATOR WILL BE STAGED PARTIALLY ON EXISTING TOE STONES AND PARTIALLY ON THE ROCKY BEACH. FLOATING BOOMS WITH SILT CURTAINS WILL BE EMPLOYED THROUGHOUT THE CONSTRUCTION.

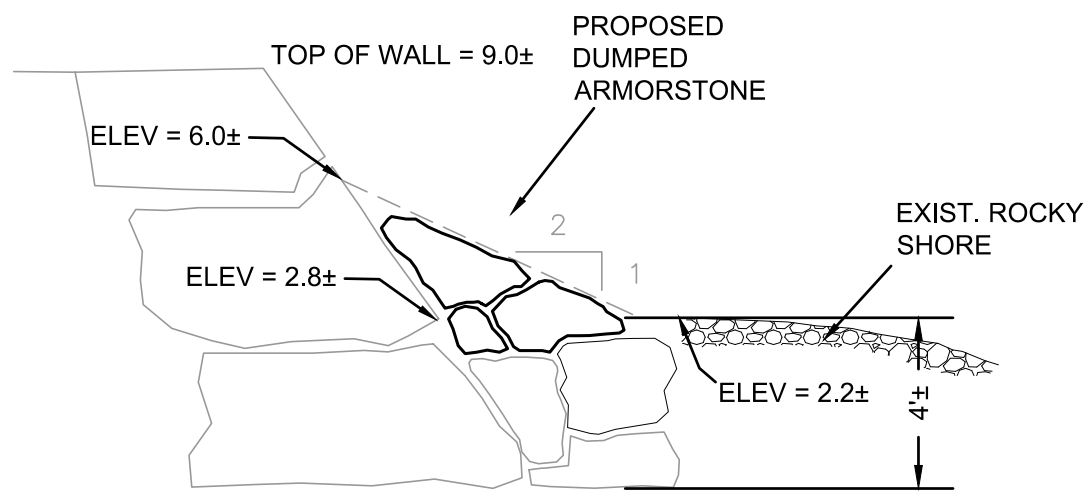
DRAWING TITLE	PROPOSED SEAWALL IMPROVEMENT SHOWING EXAMPLES OF DUMPED ARMOR STONE	
PROJECT	BELLA VISTA ISLAND, FAIRHAVEN, MA	
SCALE: N.T.S.	ISSUED: JUNE 10, 2021	
<ul style="list-style-type: none"> <li>CIVIL ENGINEERING</li> <li>LAND SURVEYING</li> <li>ENVIRONMENTAL ASSESSMENT</li> </ul>		P.O. BOX 1088 LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004



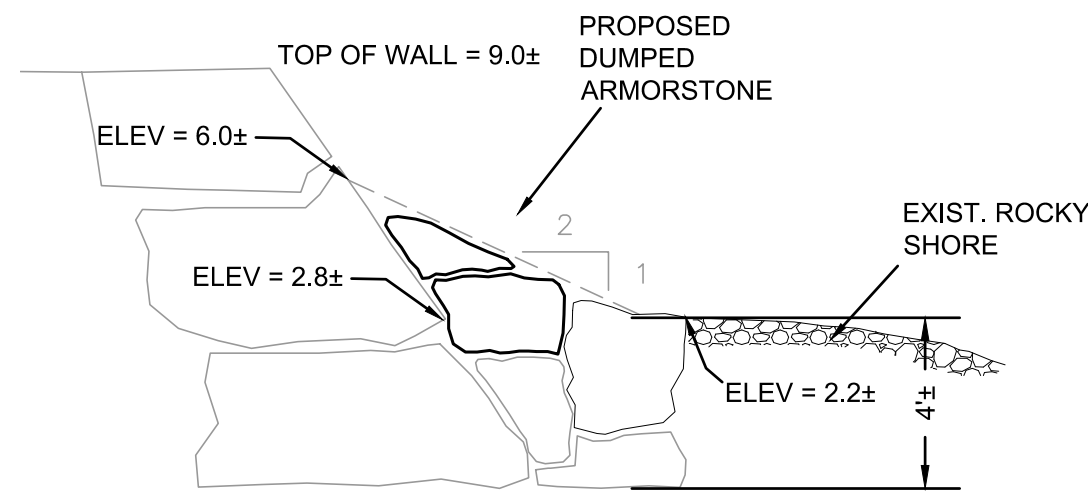
**PROPOSED SEAWALL CROSS SECTION**  
N.T.S.



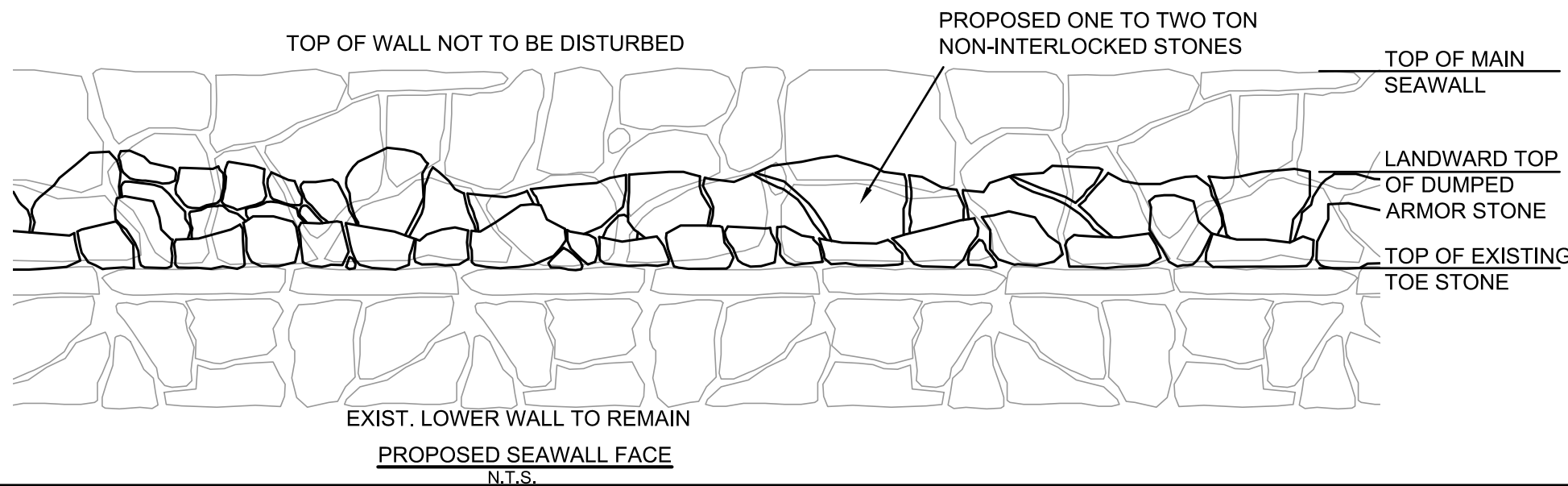
**PROPOSED SEAWALL CROSS SECTION**  
N.T.S.



**PROPOSED SEAWALL CROSS SECTION**  
N.T.S.



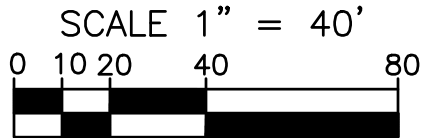
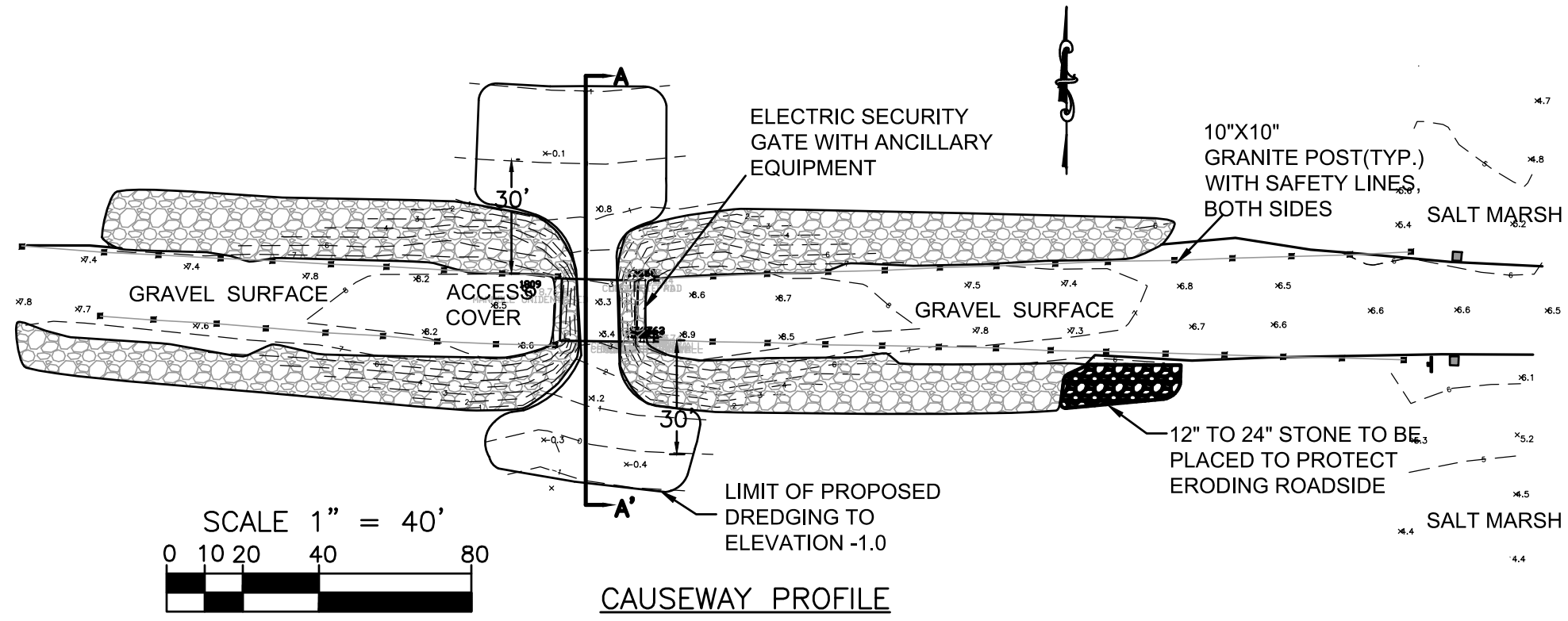
**PROPOSED SEAWALL CROSS SECTION**  
N.T.S.



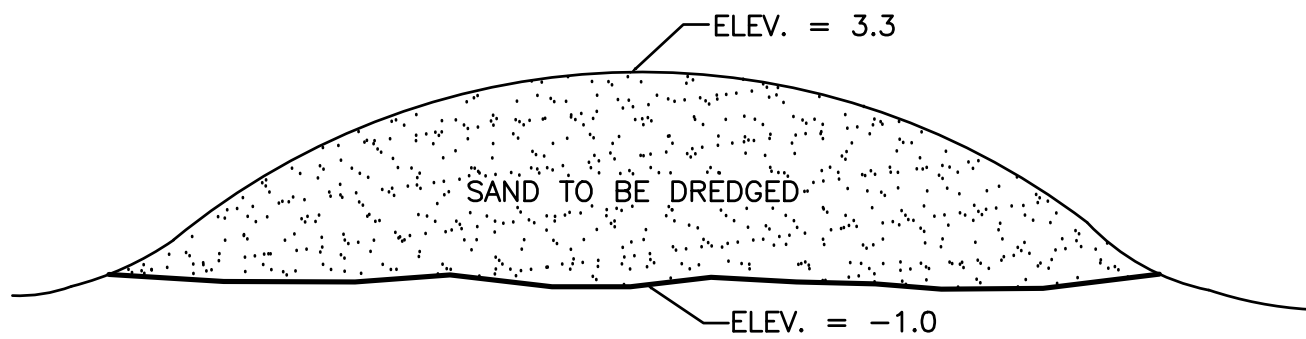
THE GOAL IS TO HAVE THE LOWER WALL AT AN AVERAGE SLOPE OF 2.0 TO 1.0 WITH NO SIGNIFICANT PORTION BEING STEEPER THAN 1.0 TO 1.0 AND NO SIGNIFICANT PORTION BEING FLATTER THAN 3.0 TO 1.0.

EXHIBIT A (SHEET 4 OF 4)

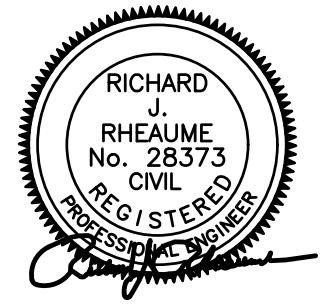
DRAWING TITLE	PROPOSED SEAWALL IMPROVEMENT SHOWING EXAMPLES OF DUMPED ARMOR STONE	
PROJECT	BELLA VISTA ISLAND, FAIRHAVEN, MA	
SCALE: N.T.S.	ISSUED: JUNE 10, 2021	
<ul style="list-style-type: none"> <li>CIVIL ENGINEERING</li> <li>LAND SURVEYING</li> <li>ENVIRONMENTAL ASSESSMENT</li> </ul>		P.O. BOX 1088 LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004



CAUSEWAY PROFILE



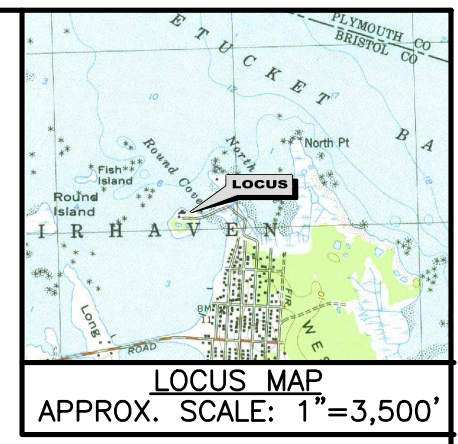
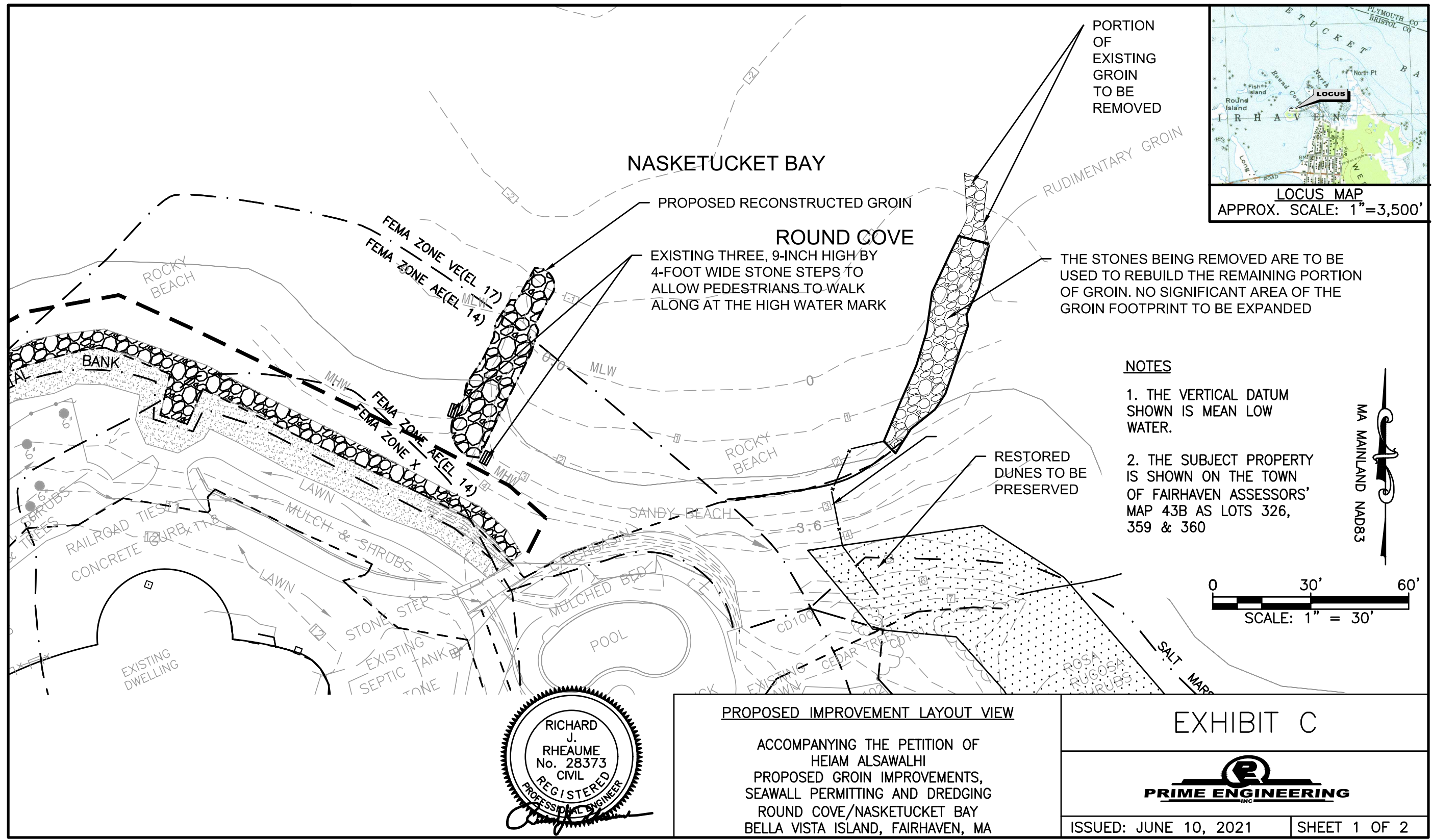
CROSS SECTION A-A'  
NOT TO SCALE



**CAUSEWAY DETAIL AND DREDGING PLAN**  
 ACCOMPANYING THE PETITION OF  
 HEIAM ALSAWALHI  
 PROPOSED GROIN IMPROVEMENTS,  
 SEAWALL PERMITTING AND DREDGING  
 ROUND COVE/NASKETUCKET BAY  
 BELLA VISTA ISLAND, FAIRHAVEN, MA

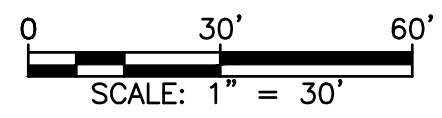
**EXHIBIT B**

ISSUED: JUNE 10, 2021 | SHEET 1 OF 1



**NOTES**

1. THE VERTICAL DATUM SHOWN IS MEAN LOW WATER.
2. THE SUBJECT PROPERTY IS SHOWN ON THE TOWN OF FAIRHAVEN ASSESSORS' MAP 43B AS LOTS 326, 359 & 360



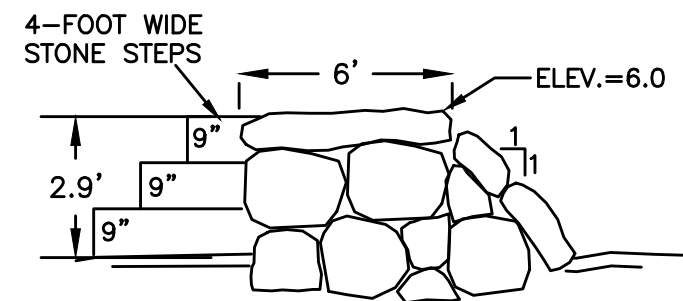
**PROPOSED IMPROVEMENT LAYOUT VIEW**

ACCOMPANYING THE PETITION OF HEIAM ALSAWALHI  
PROPOSED GROIN IMPROVEMENTS,  
SEAWALL PERMITTING AND DREDGING  
ROUND COVE/NASKETUCKET BAY  
BELLA VISTA ISLAND, FAIRHAVEN, MA

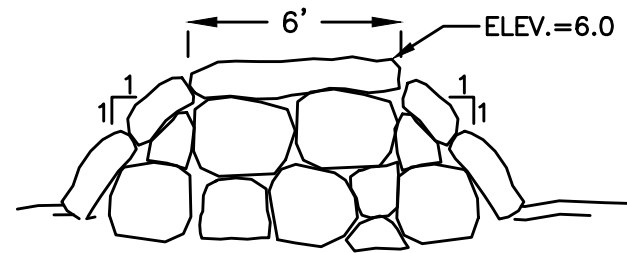
**EXHIBIT C**



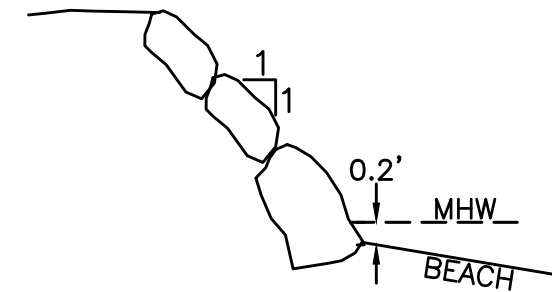
3.6	MEAN HIGH WATER	/
2.6	MEAN SEA LEVEL	1.0'
0	MEAN LOW WATER	2.6'
<u>TIDE ELEVATIONS</u>		



CROSS SECTION OF  
PROPOSED RECONSTRUCTED GROIN  
AT STONE STAIRS (TYP.)  
NOT TO SCALE



CROSS SECTION OF PROPOSED  
RECONSTRUCTED GROIN (TYP.)  
NOT TO SCALE



SECTION A-A  
EXISTING POOL SEAWALL  
NOT TO SCALE



PROFILE PLAN OF GROIN IMPROVEMENT

ACCOMPANYING THE PETITION OF  
HEIAM ALSAWALHI  
PROPOSED GROIN IMPROVEMENTS,  
SEAWALL PERMITTING AND DREDGING  
ROUND COVE/NASKETUCKET BAY  
BELLA VISTA ISLAND, FAIRHAVEN, MA

EXHIBIT C



ISSUED: JUNE 10, 2021

SHEET 2 OF 2