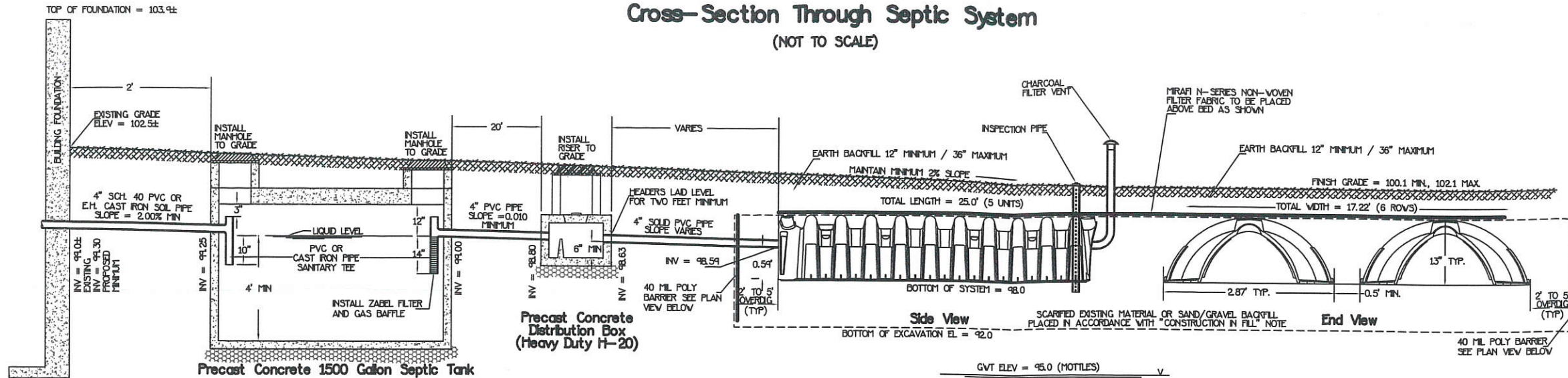


Cross-Section Through Septic System (NOT TO SCALE)

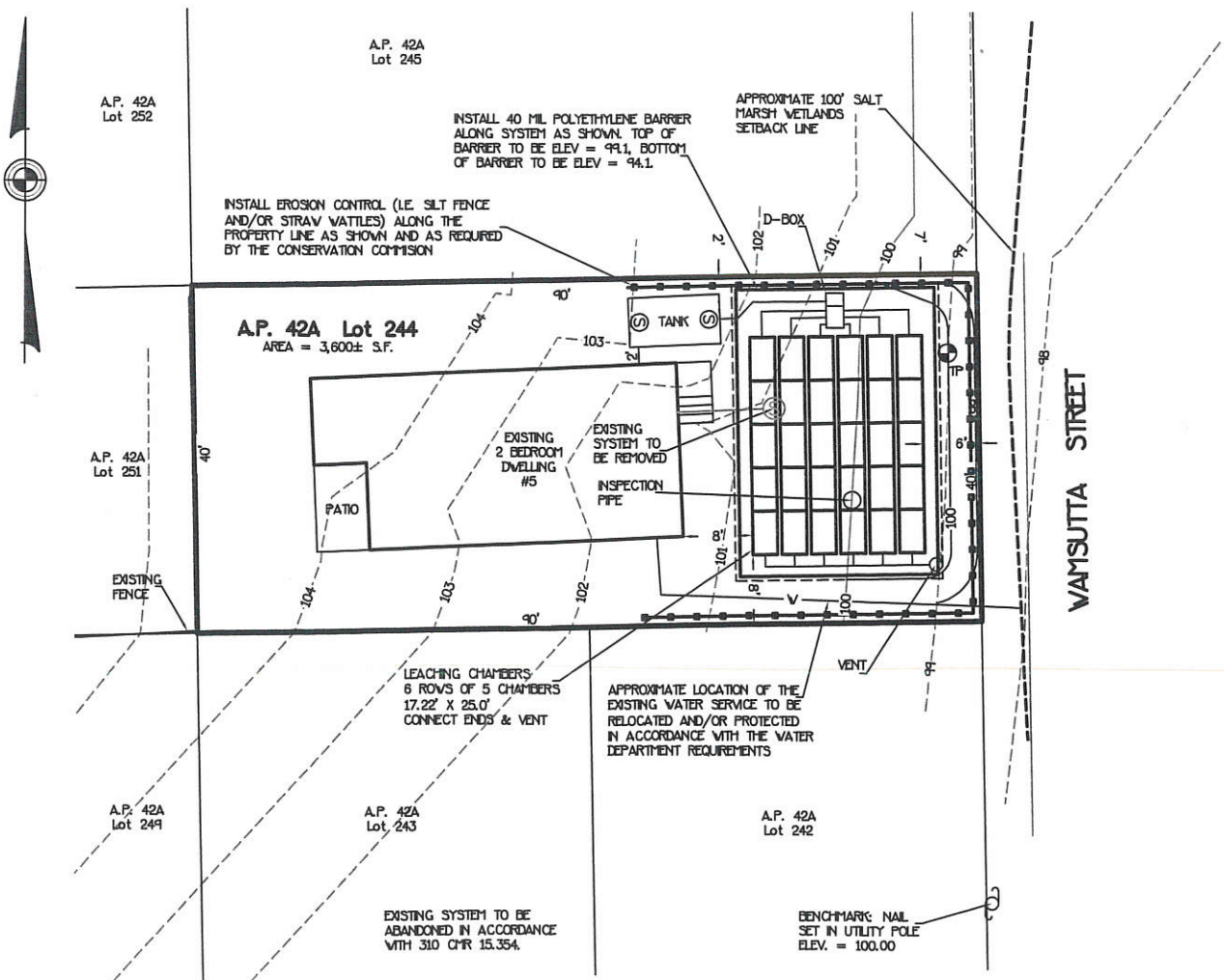


NOTE: EXISTING INVERT ELEVATION WAS DETERMINED FROM BEST AVAILABLE DATA. EXISTING ELEVATIONS TO BE VERIFIED IN FIELD BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

NOTE: SEPTIC TANK AND D-BOX TO BE INSTALLED ON MINIMUM 6" COMPACTED CRUSHED STONE BASE.

NOTE: DISCHARGE FROM A WATER TREATMENT SYSTEM (SOFTENER) IS NOT ALLOWED INTO THIS SEPTIC SYSTEM.

NOTE: EXISTING PIPING IN CRAWL SPACE TO BE RAISED AND RELOCATED FROM THE FRONT OF THE DWELLING TO THE SIDE, AS SHOWN.



S.W. COLE ENGINEERING, INC.

Client: PPL Line Engineering
150 GARDINERS NECK ROAD
SWANSEA, MA 02777

Job No: 19-0084
Date: 12/20/19
Report No: 20457

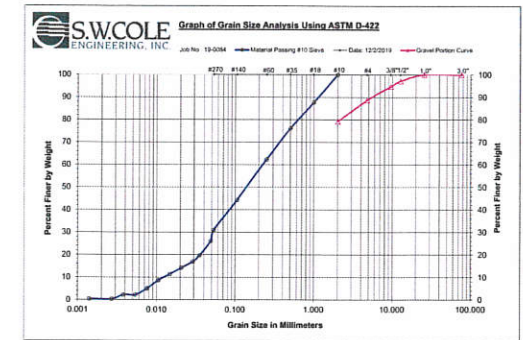
Project: 5 Wamsutta St Fairhaven, MA

Combined Hydrometer and Sieve Analysis Report
ASTM D-422

Sieve Analysis		Hydrometer Analysis of the Portion Retained on #10 Sieve	
Sieve	% Pass	Sieve	% Pass
3/8"	100.0	No. 10	2.0000
1/2"	100.0	No. 18	1.0000
3/4"	99.2	No. 20	0.5000
1"	94.7	No. 30	0.2500
1 1/4"	88.7	No. 40	0.1500
1 1/2"	79.2	No. 60	0.0750
		No. 80	0.0400
		No. 100	0.0200
		No. 150	0.0100
		No. 200	0.0050
		No. 250	0.0025
		No. 300	0.0015
		No. 350	0.0010
		No. 400	0.0007
		No. 450	0.0005
		No. 500	0.0003
		No. 550	0.0002
		No. 600	0.0001
		No. 650	0.0001
		No. 700	0.0001
		No. 750	0.0001
		No. 800	0.0001
		No. 850	0.0001
		No. 900	0.0001
		No. 950	0.0001
		No. 1000	0.0001

Percent of Total Solids Retained on the No. 10 Sieve: 2.0%

Soil Classification: CLAY



FORM 11-001, EVALUATOR FORM

On-site Review

Deep Hole Number: 1 Date: 11/21/19 Time: 9:00 Station: SURRY

Location (Identify on site plan): YES

Land Use: RESIDENTIAL Slope: 0.0-3.0% Surface Water: NONE

Vegetation: SLASH

Location: 5 WAMSU... Position on landscape (Identify on the back):

Distances from:

- Open Water Body: >100 feet
- Possible Wet Area: >100 feet
- Drinking Water Well: >100 feet
- Drainage Way: >50 feet
- Property Line: >10 feet
- Other: N/A

DEEP OBSERVATION HOLE LOG

Depth (Feet)	Soil Type	Soil Color (Munsell)	Soil Consistency	Other Observations (Moisture, Odors, etc.)
0'-10"	A	LOAM	10YR	NONE FRAGILE
10'-20"	B	SANDY LOAM	10YR	NONE FRAGILE
20'-30"	C	SANDY LOAM	2.5YR	SYN MEDIUM TO STONE

MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (provide): GLAZED TELL Depth to Bedrock: N/A

Depth to Groundwater: Standing Water in the Hole: 100"

Moisture from Pit Face: 100%

Estimated Seasonal High Ground Water: 48" MOTTLES

FORM 12-001, PERCOLATION TEST

COMMONWEALTH OF MASSACHUSETTS
FAIRHAVEN, MASSACHUSETTS

Percolation Test

Date: NOVEMBER 15, 2019 Time: 9:30

Observation Hole # 1

Depth of Pipe

Start Pre-soak: COULD NOT PERC

End Pre-soak: DUE TO SATURATION

Time at 12": OBTAINED

Time at 8": NONE SAMPLE

Time at 4": 0.7"

Time (0'-4")

Rate 12"/4":

Site Pinned Site Filled REPAIR

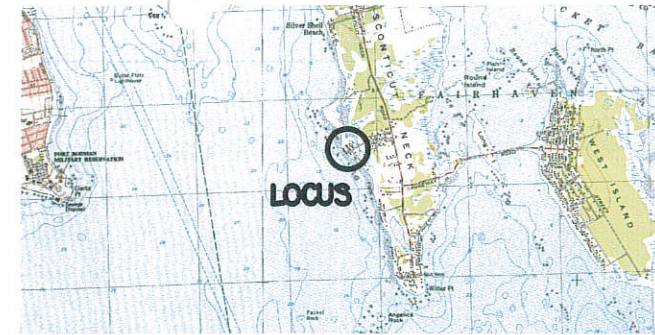
Performed By: ROBERT M. BERUBE, P.E.

Witnessed By: MARY FREIRE-KELLOGG, AGENT

Comments:

Soil Report & Test Data

Location (not to scale) Map



Notes & Specifications

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR 15 (TITLE 5) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN OF FAIRHAVEN BOARD OF HEALTH.

THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

1500 GALLON SEPTIC TANK (STANDARD DUTY) AND 7 OUTLET DISTRIBUTION BOX (HEAVY DUTY H-20) SHALL BE AS MANUFACTURED BY BRISTOL COUNTY PRECAST, INC. OR APPROVED EQUAL.

OPEN BOTTOM LEACHING CHAMBERS (HEAVY DUTY H-20) DESIGN BY ADS, INFILTRATOR CULTEC, OR APPROVED EQUAL.

ALL PIPING SHALL BE 4" DIA. SCHD. 40 NSF PVC, WITH ALL JOINTS SEALED WATERTIGHT.

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.

THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WITHIN 100 FEET (RADIALLY) OF THE PROPOSED SYSTEM.

EXCAVATE ALL TOP, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN INTO THE MEDIUM SANDY LOAM LAYER, ELEVATION = 92.0 AND FOR A HORIZONTAL DISTANCE OF 2' TO 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACKFILL TO ELEVATION = 94.1 WITH SELECT ON-SITE OR IMPORTED SOIL MATERIAL, CONSISTING OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SEIVE SIZE REQUIREMENTS OF 310 CMR 15.255(3) & (5) [CONSTRUCTION IN FILL].

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON ASSUMED DATUM.

MAGNETIC LOCATION TAPE TO BE PLACED OVER SEPTIC SYSTEM COMPONENTS IN ACCORDANCE WITH 310 CMR 15.221 (12).

SOIL ABSORPTION SYSTEM SHALL HAVE A MINIMUM OF ONE (1) INSPECTION PORT CONSISTING OF A PERFORATED FOUR (4) INCH PIPE PLACED VERTICALLY DOWN INTO THE STONE TO THE NATURALLY OCCURRING SOIL OR SAND FILL BELOW THE STONE. THE PIPE SHALL BE CAPPED WITH A SCREW TYPE CAP AND ACCESSIBLE TO WITHIN THREE (3) INCHES OF FINISH GRADE IN ACCORDANCE WITH 310 CMR 15.240 (13).

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF CONSTRUCTION.

PROPOSED SYSTEM IS NOT LOCATED WITHIN 100' OF A BORDERING VEGETATIVE WETLANDS. PROPOSED SYSTEM IS LOCATED WITHIN A COASTAL FLOOD ZONE.

Design Data

Average Daily Sewage Flow (gallons)
EXISTING 2 BEDROOM DWELLING @ 110 GPD PER BEDROOM = 220 GPD

Septic Tank Sizing (gallons)
200% AVERAGE DAILY FLOW = 2 (220) = 440 GALLONS
2 BEDROOM HOME REQUIRES 1500 GALLON TANK (MINIMUM)

Leaching Area Calculation
SOIL CLASS: CLASS II (SANDY LOAM) UNABLE TO PERC DUE TO SATURATION
DESIGN FOR 30 MFI PER SEIVE ANALYSIS

Required Minimum Leaching Area
ADF = 220 GPD / 0.33 GPD / SF = 667 SF MINIMUM
TRY: OPEN BOTTOM LEACHING CHAMBERS
667 SF / 4.80 SF/LF OF CHAMBER = 139 LF OF CHAMBERS
5 ROWS OF 6 CHAMBERS @ 5.0 LF EACH = 150 LF OF CHAMBERS
DESIGN = 150 LF > REQUIRED = 139 LF OK

Septic System Repair Plan A.P. 42A Lot 244

5 Wamsutta Street, Fairhaven, Massachusetts
PREPARED FOR
Ethan Barnes
65 Sycamore Street, Fairhaven, Massachusetts 02719
PREPARED BY

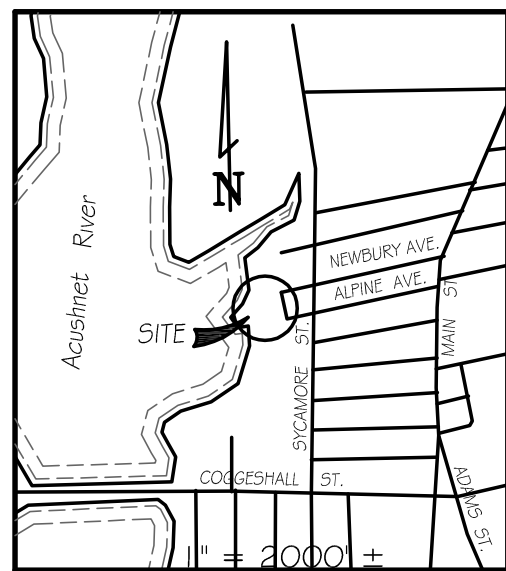


Date: January 17, 2020 Scale: 1" = 10'
Revised: January 30, 2020 Con Comm Comments

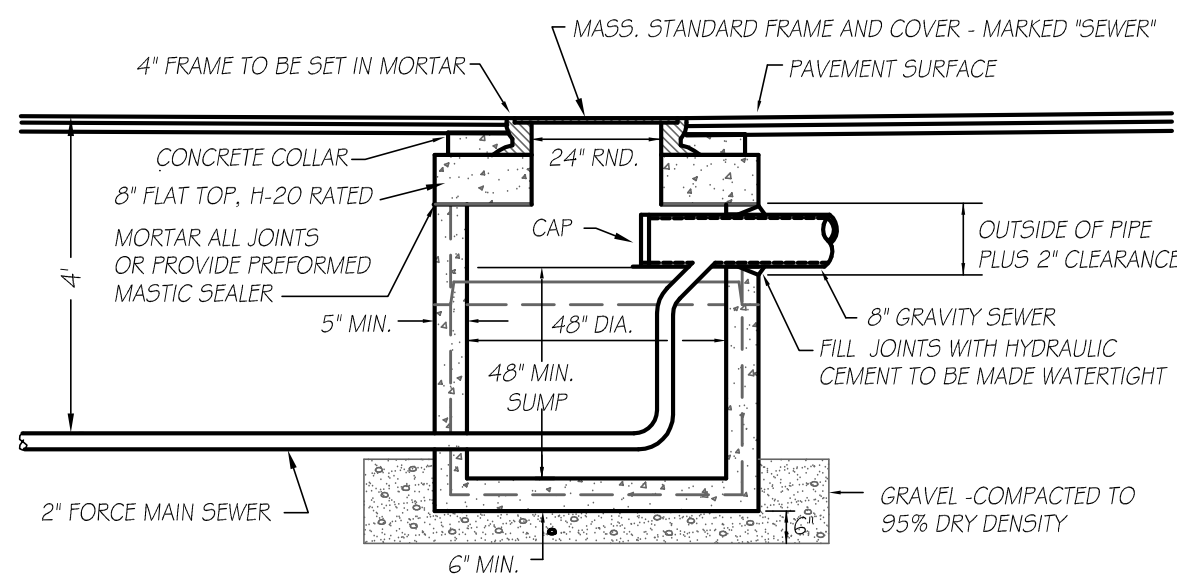
SITE PLAN

2/6/2020





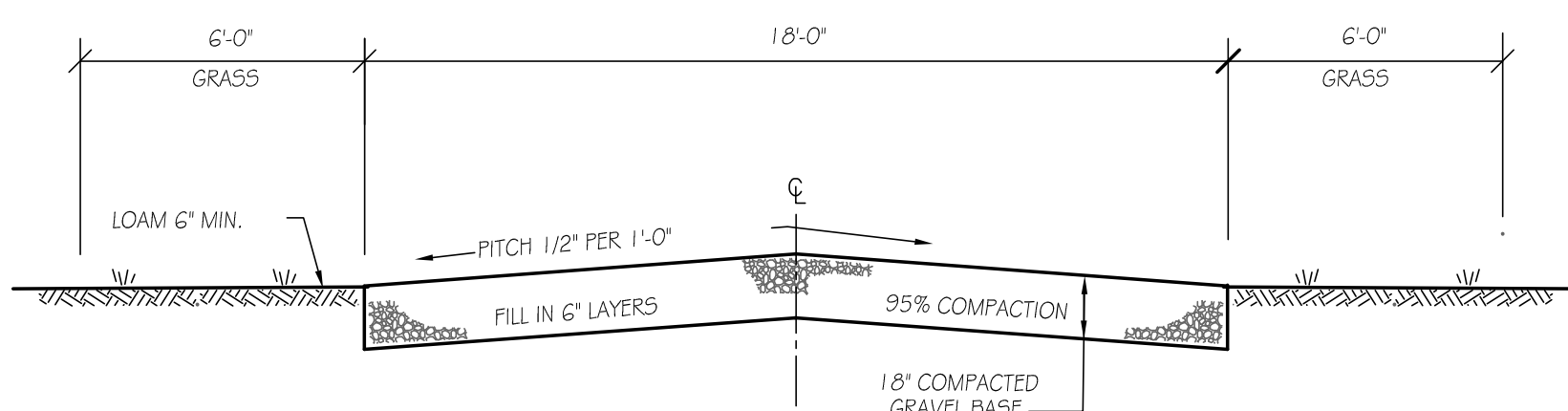
LOCUS PLAN



SEWER MANHOLE DETAIL

NOT TO SCALE

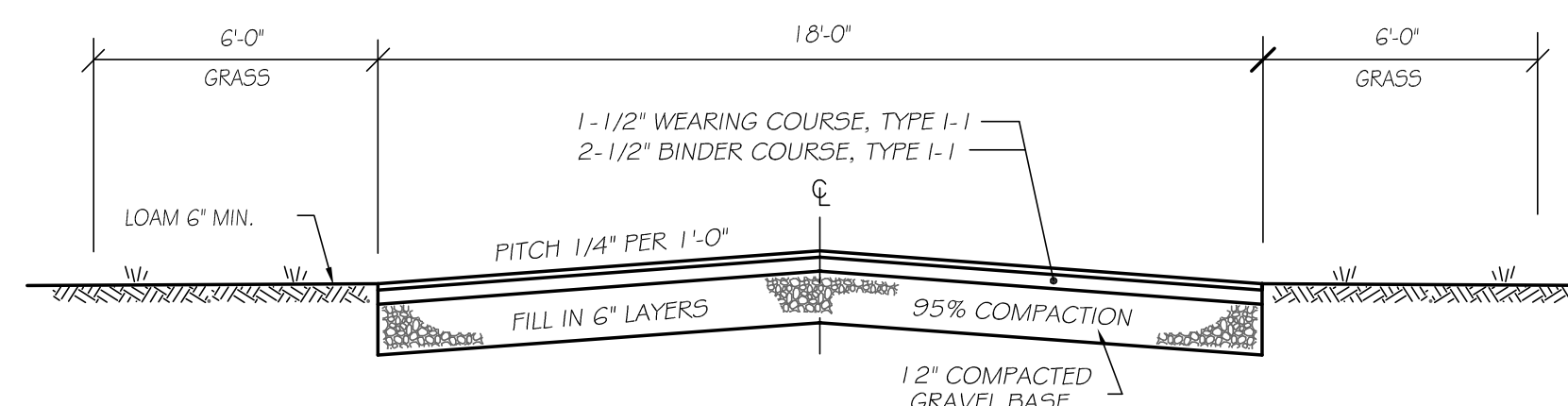
NOTE: BARRELS & CONES SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE MANHOLE RIGERS & TOPS DESIGNATION C478-63T.



GRAVEL ROADWAY SECTION

NOT TO SCALE

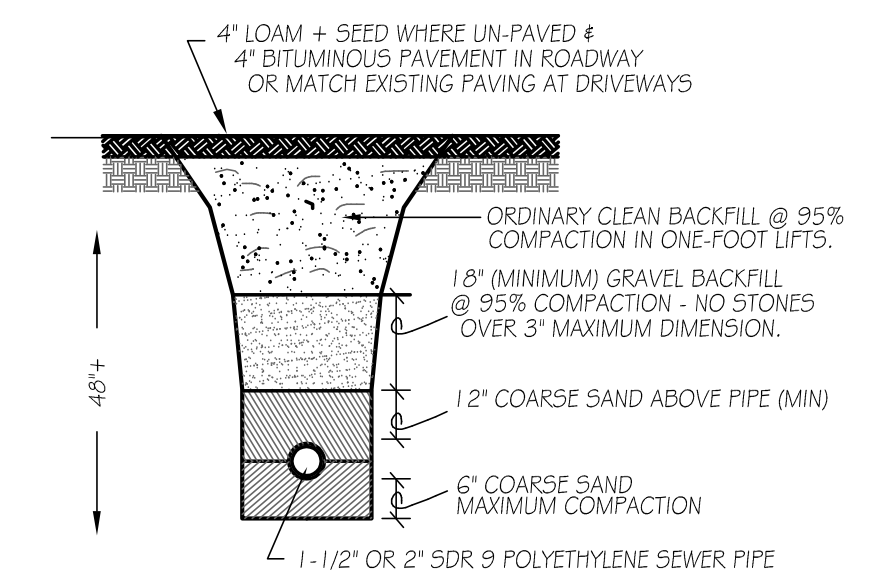
NOTES:
1. REMOVE EXISTING TOPSOIL AND SUBSOIL UNDER PROPOSED ROADWAY AND FILL TO SUBGRADE WITH GRAVEL BORROW AND COMPACT TO 95% DENSITY.
2. COMPACTED GRAVEL BASE SHALL CONFORM TO MASS. DPW SPEC. M-1.03.0 FOR GRAVEL BORROW. COMPACT GRAVEL BASE TO 95% DENSITY.



TYPICAL ROADWAY SECTION

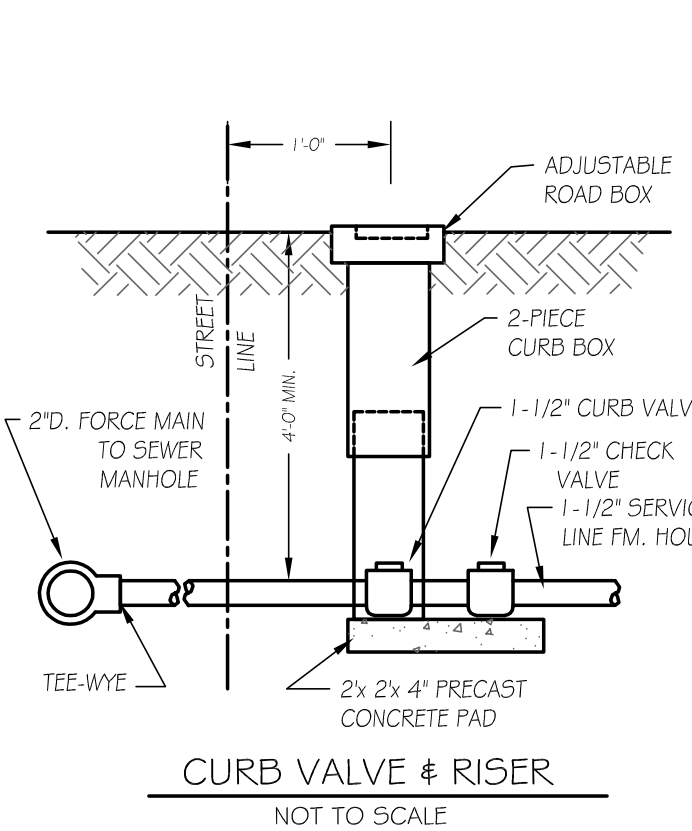
NOT TO SCALE

NOTES:
1. PROVIDE THE HIGHWAY SUPERINTENDENT WITH THE PROPOSED BITUMINOUS BATCH PLANT JOB MIX FORMULA FOR APPROVAL PRIOR TO PAVING.
2. COMPACTED GRAVEL BASE SHALL CONFORM TO MASS. DPW SPEC. M-1.03.0 FOR GRAVEL BORROW. COMPACT GRAVEL BASE TO 95% DENSITY.
3. BITUMINOUS PAVEMENT SHALL CONFORM TO MASS. DPW SPEC. 3.1.1.00 FOR CLASS 1, TYPE I-1 PAVEMENT.



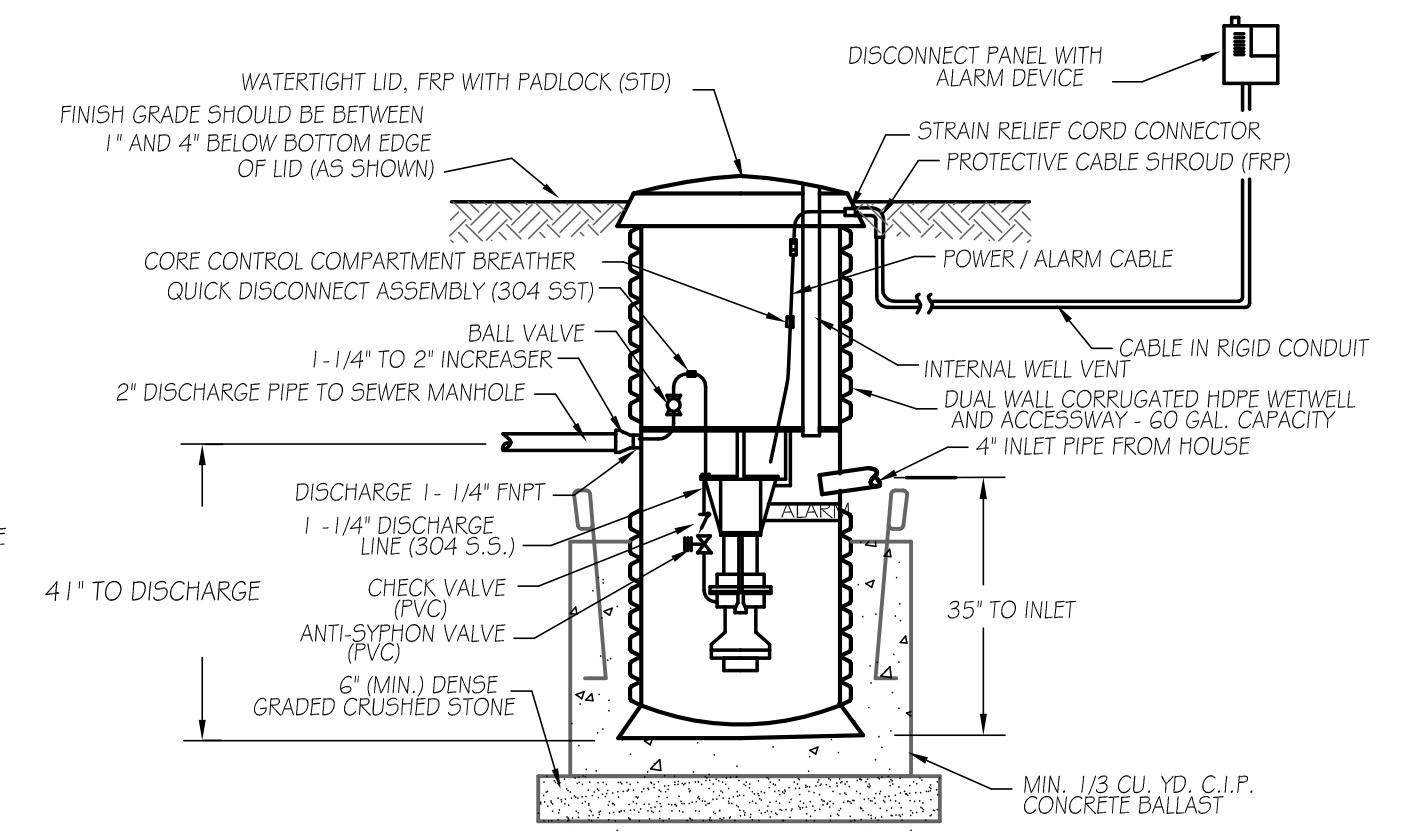
TRENCH PIPE BEDDING DETAIL

NOT TO SCALE



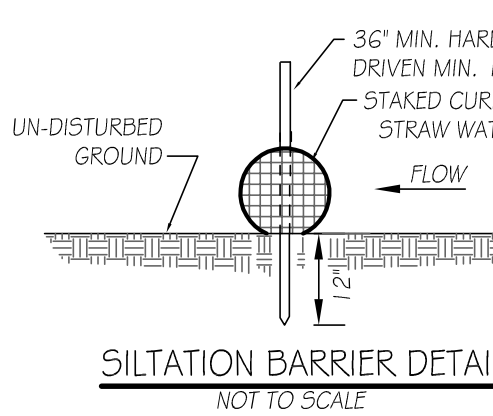
CURB VALVE & RISER

NOT TO SCALE



TYPICAL GRINDER PUMP DETAIL

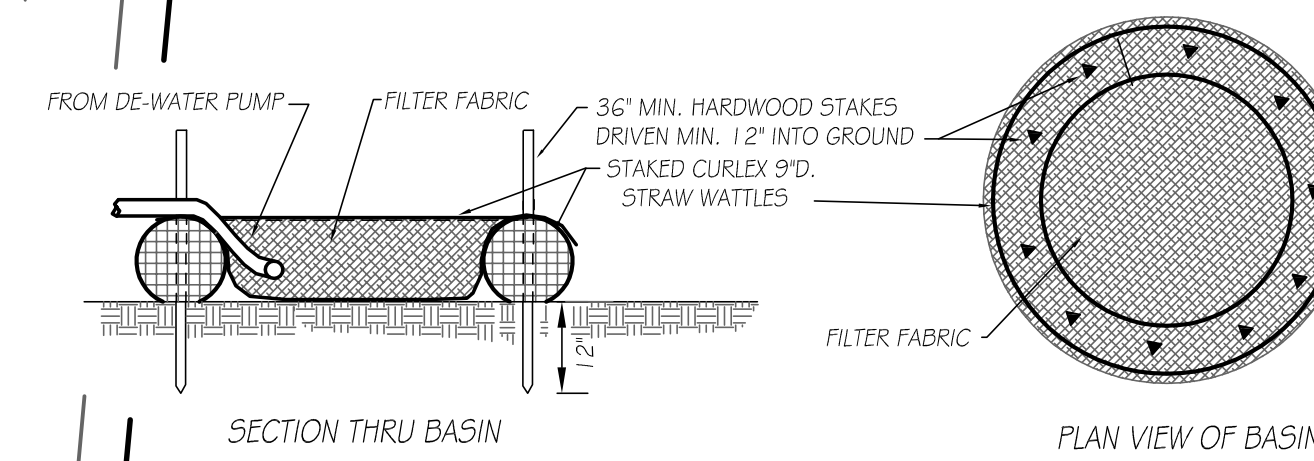
(NOT TO SCALE) USE ENVIRONMENT ONE MODEL NO. GP 2010



SILTATION BARRIER DETAIL

NOT TO SCALE

NOTE: STRAW WATTLES SHALL BE COMPOSED OF STRAW FIBERS ENCASED IN DURABLE BIODEGRADABLE NETTING.



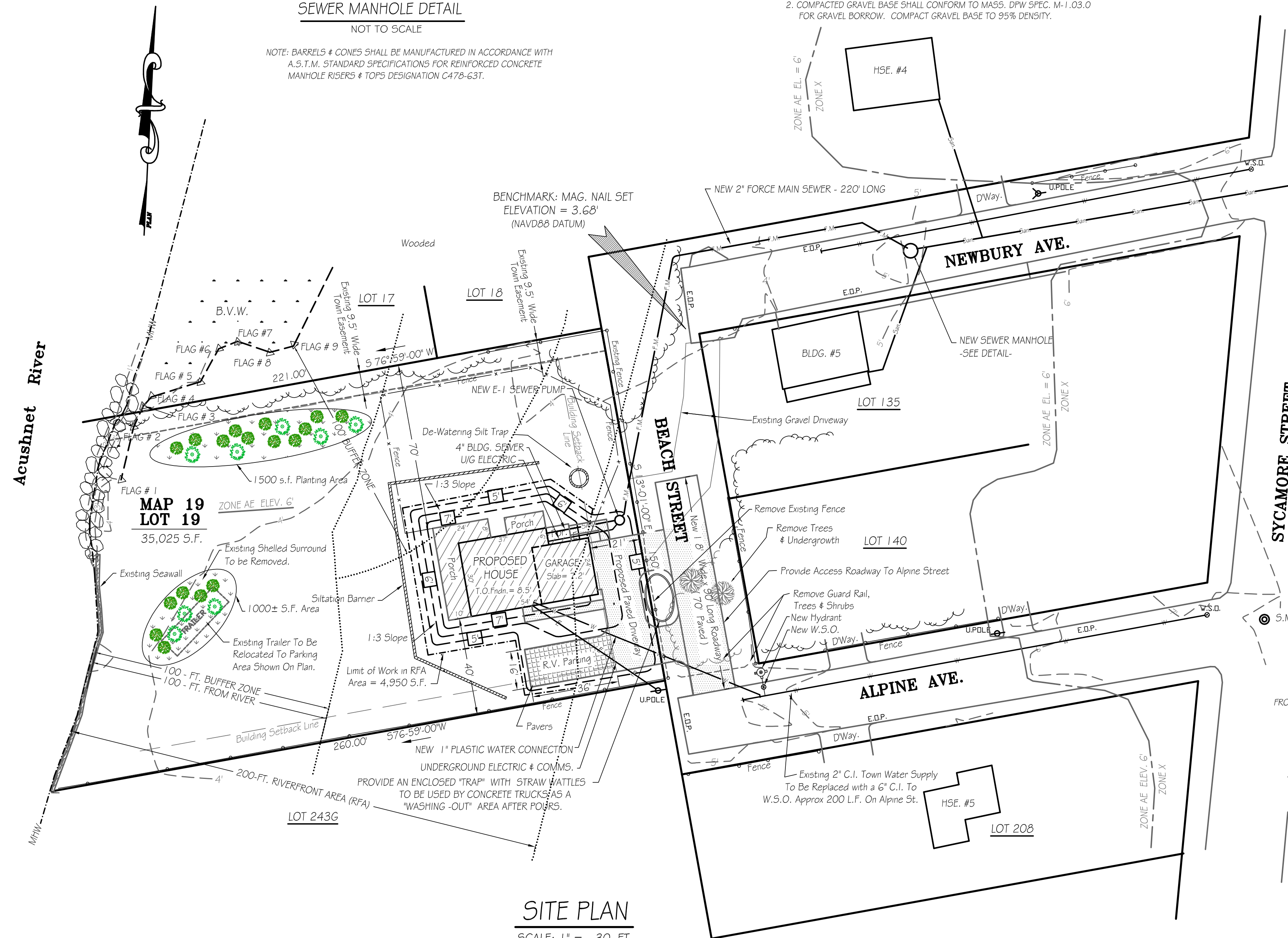
SECTION THRU BASIN

PLAN VIEW OF BASIN

DE-WATERING SILT TRAP

NOT TO SCALE

NOTE:
1. ALL EXCAVATION BELOW THE GROUND WATER TABLE SHALL BE DE-WATERED WITH PUMP DISCHARGE TO DE-WATERING SILT TRAP.



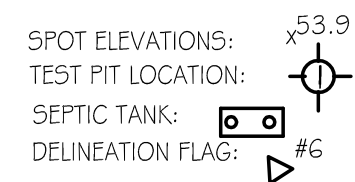
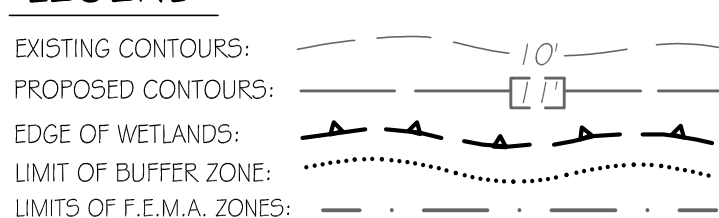
SITE PLAN

SCALE: 1" = 30 FT.

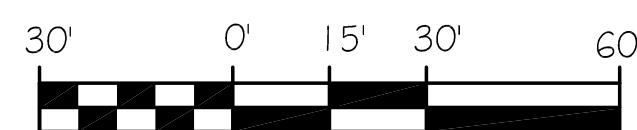
GENERAL PLANTING NOTES:

- SUITABLE PLANTINGS SHALL INCLUDE INKBERRY (LEX GLABRA), BAYBERRY (MORELLA CAROLINENSIS), AND EASTERN RED CEDAR (JUNIPERUS VIRGINIANA). SUITABLE GROUND COVER SHALL INCLUDE PURPLE LOVEGRASS (ERAGROSTIS SPECTABILIS), NEW YORK ASTER (SYMPHYOTRICHUM NOVI-BELGII), AND GRAY GOLDENROD (SOLIDAGO NEMORALIS).
- PROPOSED PLANTING ACTIVITIES ARE NOT TO HAPPEN WHEN THE SOIL CONDITIONS ARE FROZEN OR WHEN SOILS WILL BE TOO DRY TO PERMIT PLANTING. OPTIMUM PLANTING PERIOD IS MID-MARCH TO MID-APRIL. PLANTS SHALL BE IRRIGATED REGULARLY AFTER PLANTING FROM THE WELL TO BE INSTALLED ON THE PROPERTY OR FROM RELIABLE ALTERNATIVE SOURCE.
- ALL PLANTING HOLES SHALL BE HAND-BACKFILLED WITH NATIVE SOIL AS POSSIBLE. ADDITIONAL SOIL SHALL BE SCREENED TOPSOIL AND COMPOST MIX. ALL PLANTED TREES SHALL RECEIVE ORGANIC SLOW-RELEASE FERTILIZER AND BE STAKED AS NECESSARY.

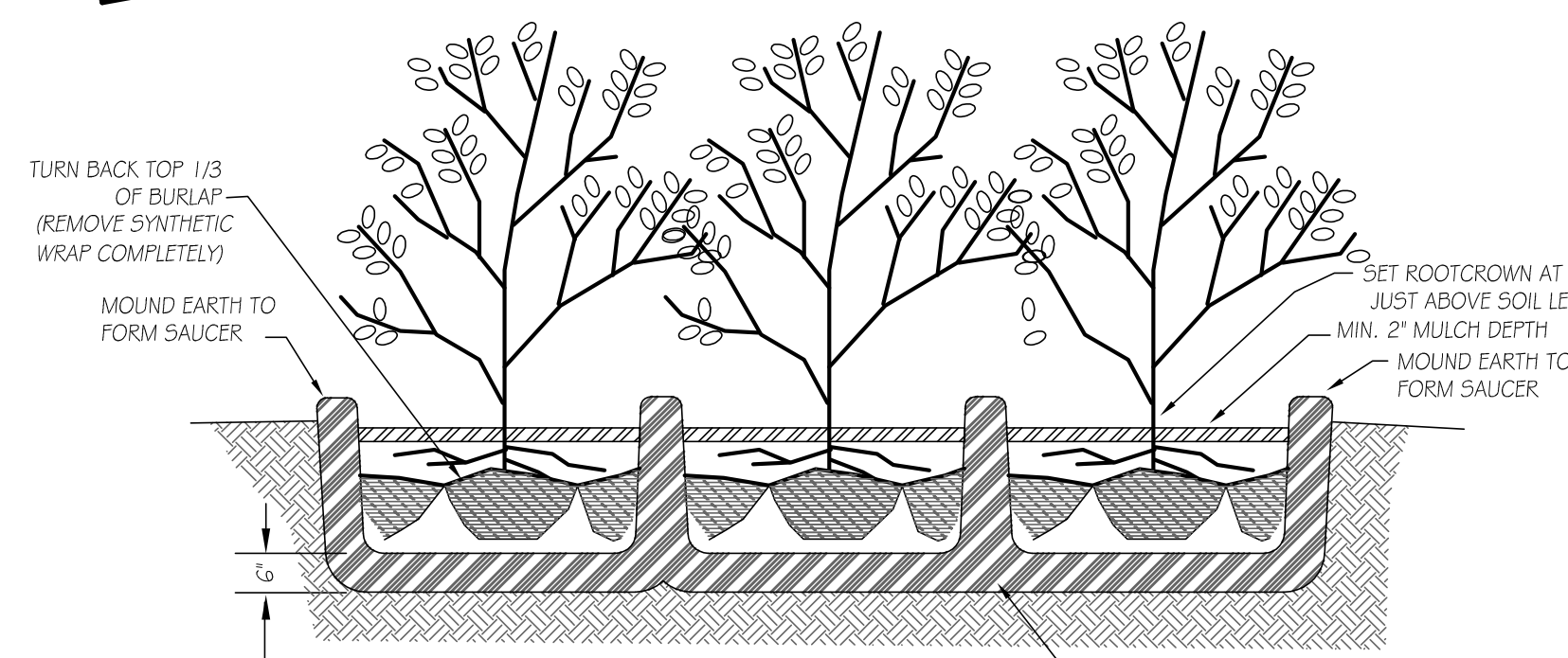
LEGEND:



GRAPHIC SCALE

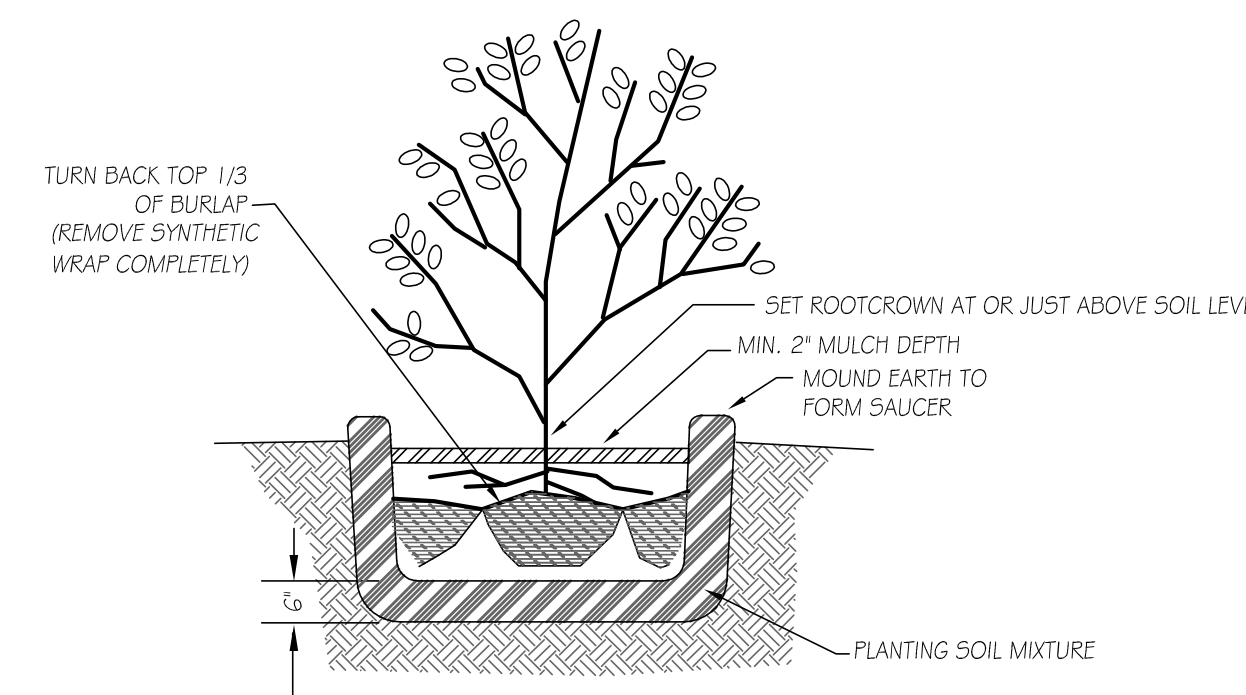


(IN FEET)
1 inch = 30 ft.



SHRUB CLUSTER PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE

SPECIFICATIONS:

- SEWER PIPE SHALL BE ENDOPLURE S.D.R. 9 POLYETHYLENE PIPE RATED FOR 200 PSI, LAID TRUE TO GRADE. PIPE SHALL BE BEDDED IN COMPACTED SAND AS SHOWN ON BEDDING DETAIL. PIPE SHALL BE INSPECTED IN PLACE BY THE ENGINEER AND THE FAIRHAVEN B.P.W. REPRESENTATIVE PRIOR TO FINAL COVER.
- NEW GRINDER PUMP PACKAGE SHALL BE "E-ONE" PUMP BY ENVIRONMENT ONE CORPORATION WITH PROGRESSIVE CAVITY PUMP WITH STAINLESS STEEL ROTOR AND 1-HP 1725 RPM MOTOR; SELF-CLEANING STATIC LEVEL SENSORS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE BETWEEN NEW SEWER SERVICE AND EXISTING UNDERGROUND UTILITIES OF AT LEAST 2 FEET, WHERE NEW SEWER CROSSES OTHER UTILITIES WITHIN 2 FEET, BACKFILL WITH CRUSHED STONE BETWEEN THE PIPES.

GENERAL NOTES:

- NOTE A: SUBJECT LOCATION IS SHOWN AS LOT 19 OF ASSESSORS MAP 19. ZONING IS GENERAL RESIDENCE - RB. MIN. LOT AREA = 15,000 S.F.; MIN. FRONTAGE = 100 FT. SETBACKS: 20-FT. FRONT, 10-FT. SIDE & 30-FT. REAR. MAX. BLDG. COVERAGE = 30%; MAX. LOT COVERAGE = 50%. PROPOSED BUILDING COVERAGE = (HOUSE @ 2,280 SF) / 35,025 SF = 6.5%. PROPOSED LOT COVERAGE = (HOUSE + DRIVEWAY & WALKS @ 4,180 SF) / 35,025 SF = 11.9%.
- NOTE B: THE DWELLING SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA (ZONE AE, EL.6) AS DELINEATED ON F.E.M.A. COMMUNITY PANEL NO. 25005C0391G DATED JULY 16, 2014.
- NOTE C: THE OWNERS PROPOSE TO PLACE FILL WITHIN THE FLOOD ZONE SUBJECT TO APPROVAL OF A CONDITIONAL LETTER OF MAP REVISION BASED ON FILL (GLCMR-F) TO BE REQUESTED FROM F.E.M.A. UPON THE ISSUANCE OF AN ORDER OF CONDITIONS FROM THE FAIRHAVEN CONSERVATION COMMISSION. ESTIMATED FILL QUANTITY = 300 CU. YDS.
- NOTE D: THE SUBJECT PARCEL LIES WITHIN THE RIVER FRONT AREA (RFA) OF THE ACUSHNET RIVER. RFA = 32.110 S.F. FOR LOT RECORDED PRIOR TO 10/6/1997. MAX. ALTERATION WITHIN RFA = 5,000 S.F. DEED REFERENCE FOR SUBJECT PARCEL: BOOK 10950 PAGE 167 (11/08/2013) FOR LOT NOS. 318, 319, 320, 321, 322, 334, 335, 336, 337 & 338 AS SHOWN ON PLAN OF OXFORD TERRACE DATED MAY 20, 1904, AND RECORDED IN PLAN BOOK # PAGE 61.
- NOTE E: NOTIFY DIG-SAFE CENTER, LOCAL UTILITIES AND FAIRHAVEN B.P.W. 72 HOURS PRIOR TO START OF WORK!

D.E.P. FILE NO.: 023-1310

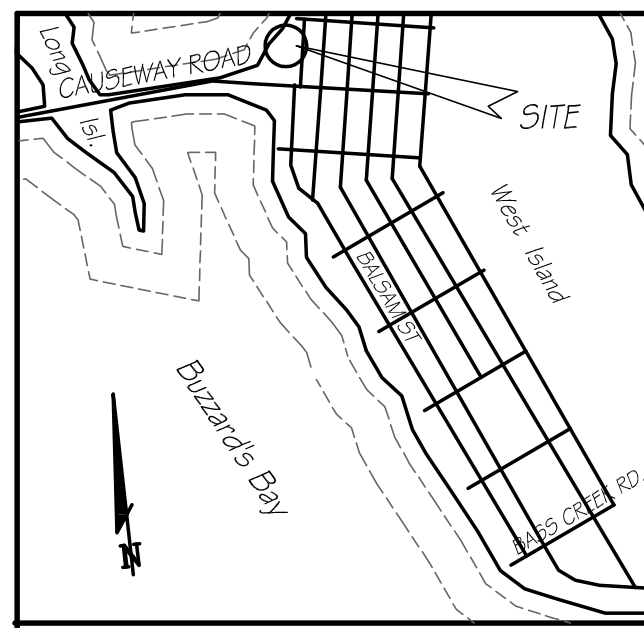
PLAN OF SITE, PROPOSED HOUSE & UTILITY CONNECTIONS
PREPARED FOR
DANIEL E. & PAMELA J. CORCORAN
MAP 19 LOT 19 - BEACH STREET
FAIRHAVEN, MASS.

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

DATE: DECEMBER 30, 2019 SCALE: AS NOTED
REV. 1: JANUARY 21, 2020 Limit Of Siltation Barrier And Concrete Wash-Out
REV. 2: FEBRUARY 3, 2020, Plantings, # D.P.W. Water Line/ Hydrant And Access Road Requirements
REV. 3: FEB. 19, 2020, Silt Trap # R.V. Parking

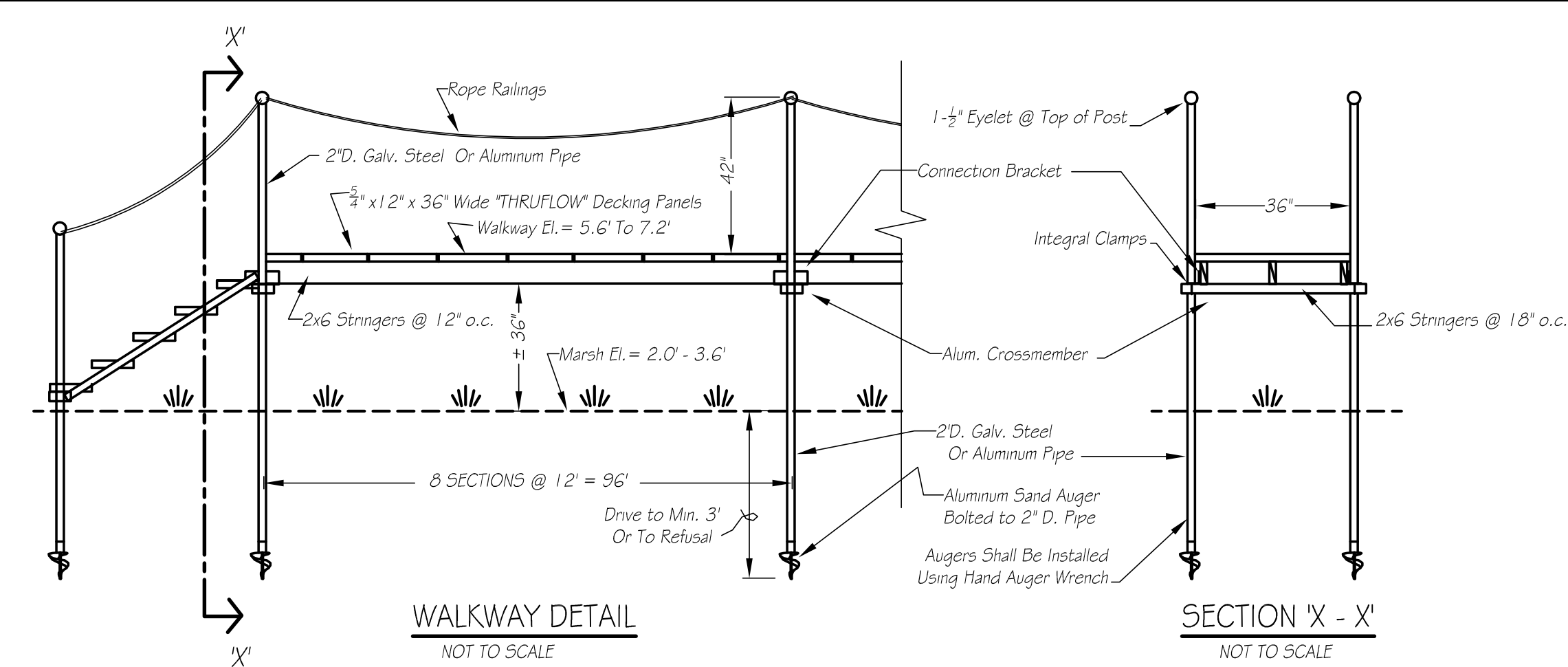
DWG. NO.
L-1





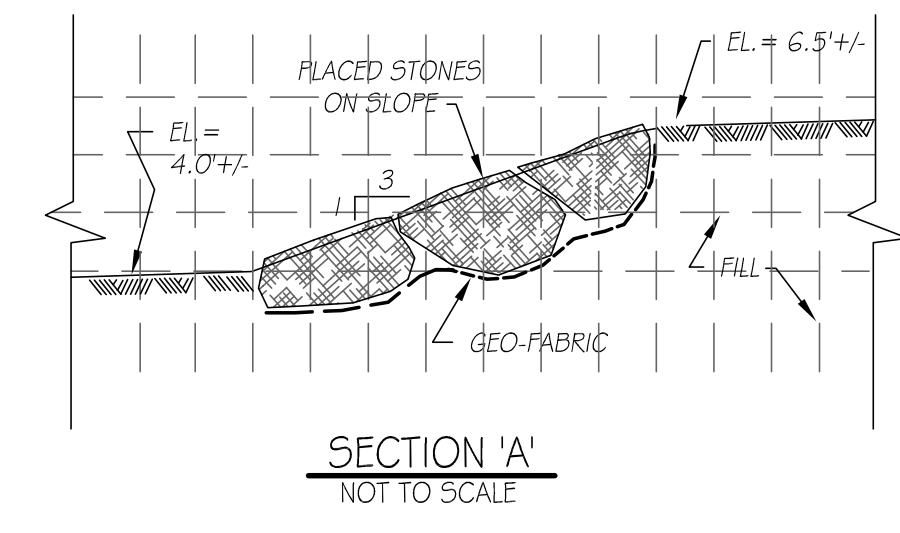
LOCUS PLAN
SCALE: 1" = 2000'

BUZZARDS BAY DATA FOR:
 LONGITUDE -70.837644
 LATITUDE 41.538249
 MEAN HIGH WATER 1.801 FT.
 MEAN LOW WATER -1.361 FT.



WALKWAY DETAIL
NOT TO SCALE

SECTION 'X' - 'X'
NOT TO SCALE



SECTION 'A'
NOT TO SCALE

GENERAL NOTES:

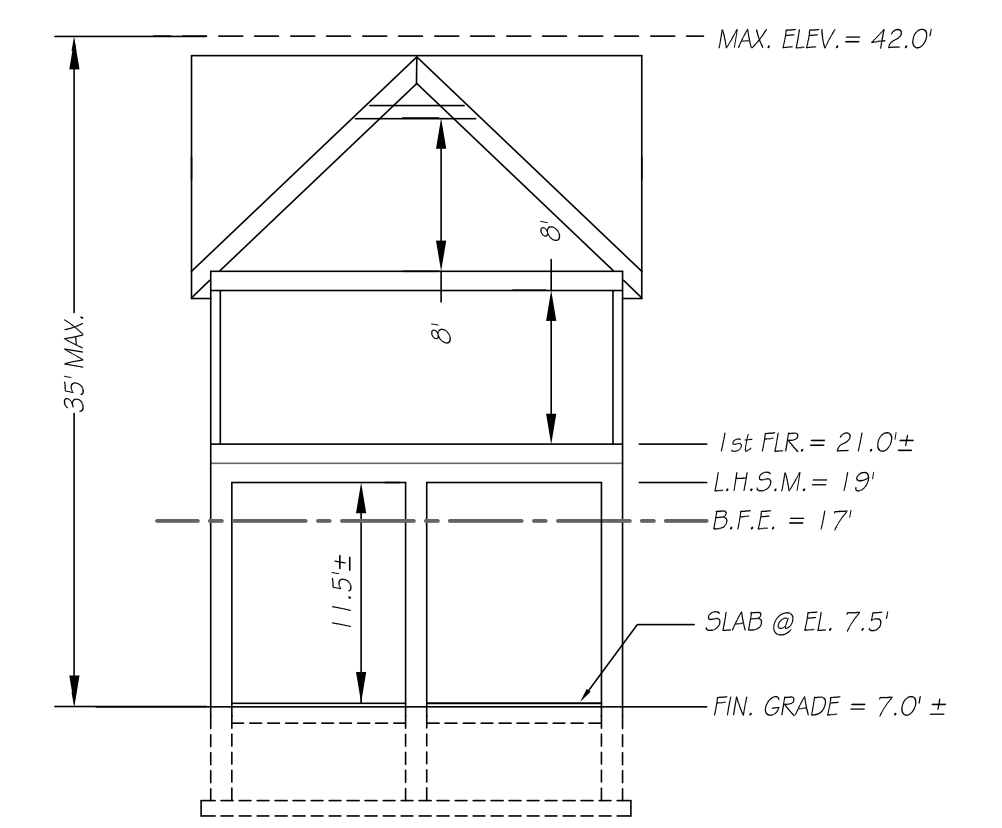
1. THIS PARCEL IS SHOWN AS LOT 8 OF ASSESSORS MAP 43B.
2. THE DWELLING SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA, F.E.M.A. ZONE VE, EL. 17 AS DELINEATED ON F.E.M.A. COMMUNITY PANEL 25005C0502P DATED JULY 7, 2009.
3. DEED REFERENCE: L.C. CERT. 12109.
4. ZONING DISTRICT: RURAL RESIDENCE WITH MIN. 30,000 S.F. AREA, 140' FRONTAGE
 CURRENT BUILDING SETBACKS: FRONT = 30', SIDE = 20', REAR = 30'; MAX. BLDG. COVERAGE = 15%; MAX. LOT COVERAGE = 25%
 EXISTING BLDG. COVERAGE = (HOUSE @ 722 S.F.) = 722 S.F. / 47,570 S.F. = 1.5% ±
 EXISTING LOT COVERAGE = (BLDG. @ 722 S.F.) = 722 S.F. / 47,570 S.F. = 1.5% ±
 PROPOSED HOUSE COVERAGE = 2,270 S.F. / 47,570 S.F. = 4.8%
 PROPOSED DRIVEWAY COVERAGE = 1,550 S.F. / 47,570 S.F. = 3.3%
 PROPOSED BLDG. COVERAGE = (NEW HOUSE @ 2,270 S.F.) + (SHED @ 80 S.F.) = 2,350 S.F. / 47,570 S.F. = 4.9%
 PROPOSED LOT COVERAGE = (BLDG. @ 2,350 S.F.) + (DRIVEWAY @ 1,550 S.F.) = 3,900 S.F. / 47,570 S.F. = 8.2%
 6. WETLANDS DELINEATION PERFORMED BY THE GARRETT GROUP 280 BLACK CAT ROAD, PLYMOUTH, MA. 02360

SCOPE OF WORK:

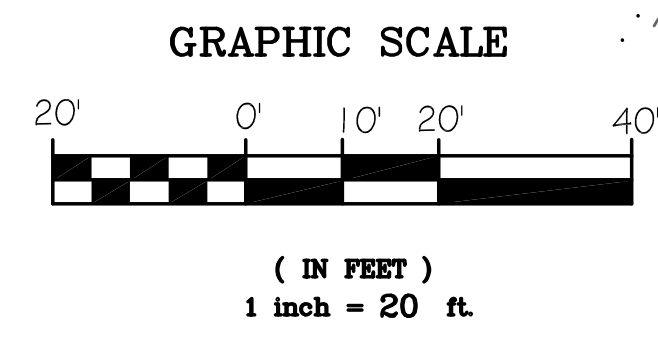
THE SCOPE OF WORK INCLUDES REMOVAL OF EXISTING HOUSE & FOUNDATION, CONSTRUCTION OF NEW RESIDENCE ON FLOOD ZONE-COMPLIANT FOUNDATION PER MASS. STATE BUILDING CODE 9TH. EDITION; INCLUDING SITE WORK AND CONNECTIONS TO TOWN SEWER AND WATER & OTHER UTILITIES; AND CONSTRUCTION OF NEW ELEVATED WALKWAY OVER MARSH.



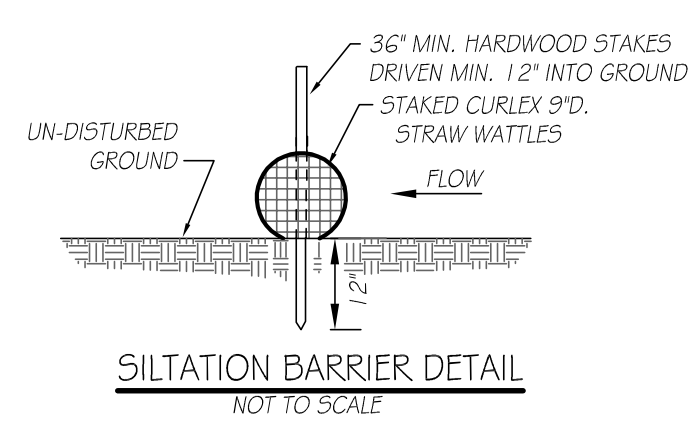
SITE PLAN
SCALE: 1" = 20 FEET



PROPOSED HOUSE ELEVATIONS
NOT TO SCALE

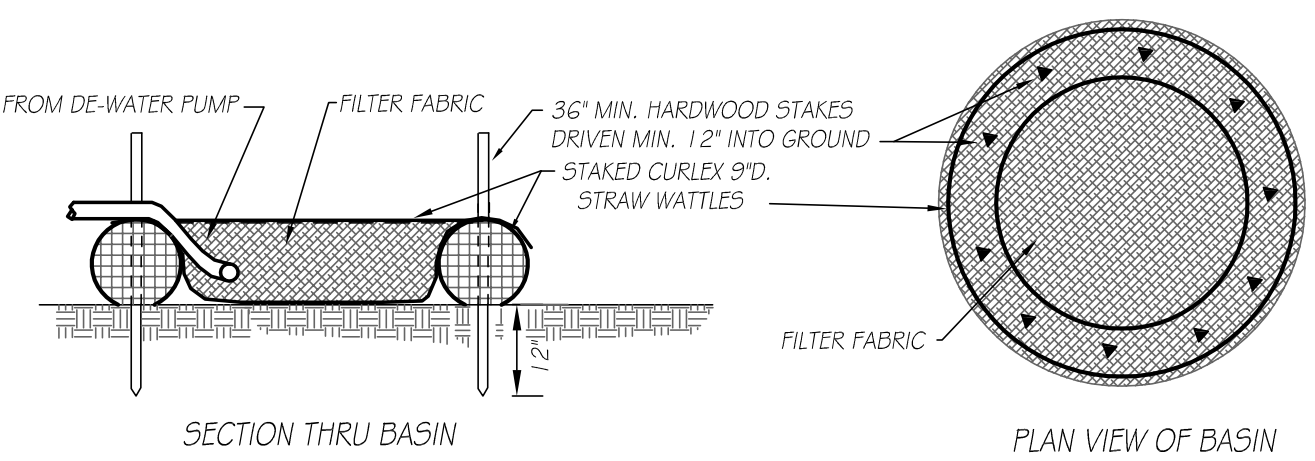


- LEGEND:**
- EXISTING CONTOURS: (dashed line)
 - PROPOSED CONTOURS: (solid line)
 - EDGE OF WETLANDS: (dotted line)
 - LIMIT OF BUFFER ZONE: (dash-dot line)
 - LIMITS OF F.E.M.A. ZONES: (long-dashed line)
 - SPOT ELEVATIONS: (circle with number)
 - TEST PIT LOCATION: (circle with 'T')
 - SEPTIC TANK: (rectangle with 'S')
 - DELINEATION FLAG: (triangle with number)



SILTATION BARRIER DETAIL
NOT TO SCALE

NOTE: STRAW WATTLES SHALL BE COMPOSED OF STRAW FIBERS ENCASED IN DURABLE BIODEGRADABLE NETTING.



SECTION THRU BASIN

PLAN VIEW OF BASIN

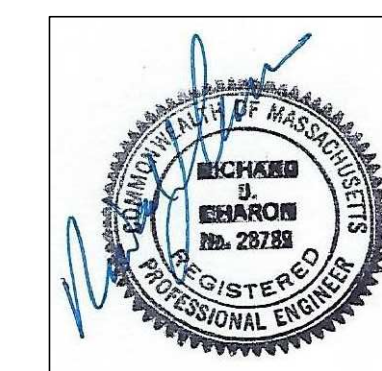
DE-WATERING SILT TRAP
NOT TO SCALE

NOTE:
1. ALL EXCAVATION BELOW THE GROUND WATER TABLE SHALL BE DE-WATERED WITH PUMP DISCHARGE TO DE-WATERING SILT TRAP.

D.E.P. FILE NO.: 023-1312

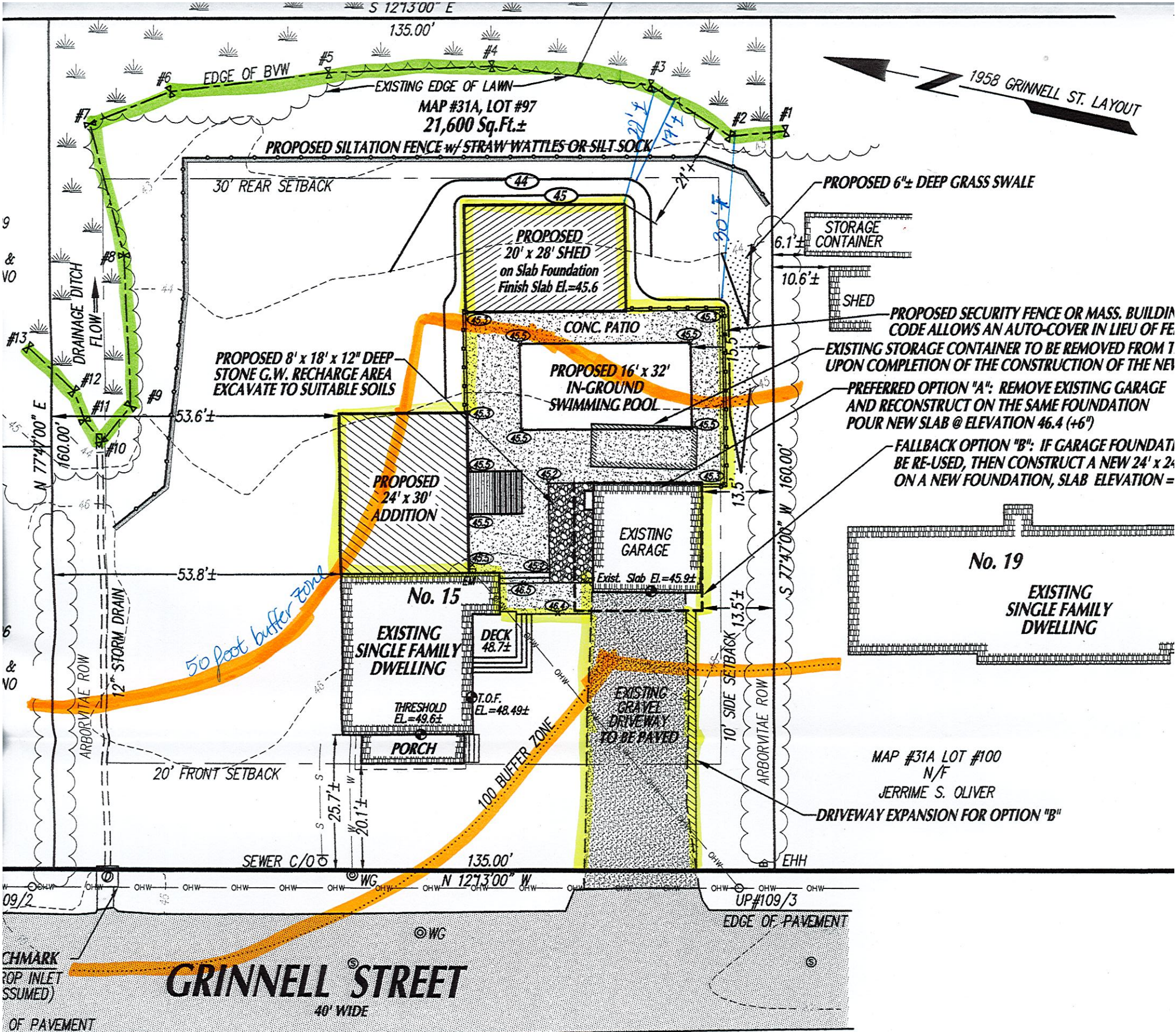
PLAN OF SITE, ELEVATED WALKWAY & PROPOSED RESIDENCE
 PREPARED FOR
PAUL R. & DEBORAH A. CASEY
 12 ALMOND STREET
 FAIRHAVEN, MASS.

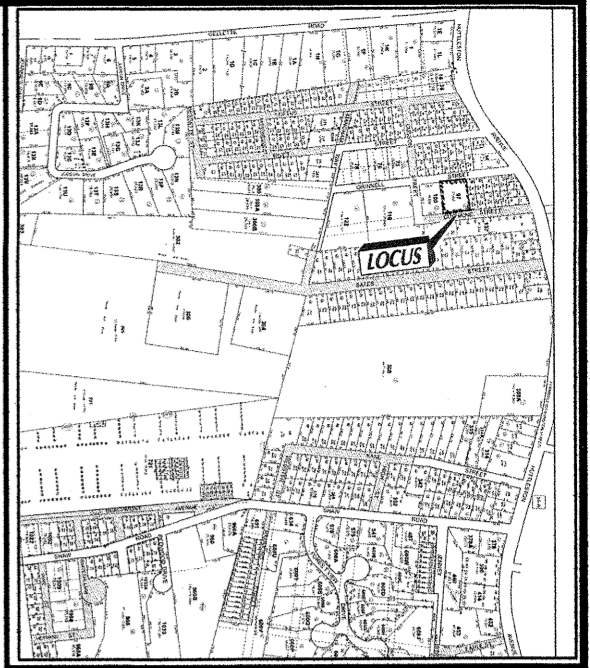
CAI Charon Associates, Inc.
 Consulting Engineers
 323 Neck Road - Rochester, MA 02770
 Tel: 508-763-8362 Fax: 508-763-9582



SCALE: AS NOTED
 DATE: DECEMBER 24, 2019
 REV. 1: JAN. 21, 2020
 REV. 2: JAN. 27, 2020 Walkway Height and Decking
 REV. 3: FEB. 3, 2020 Walkway Steps & Plantings
 REV. 4: FEB. 19, 2020 Silt Trap & LP Tank Pad

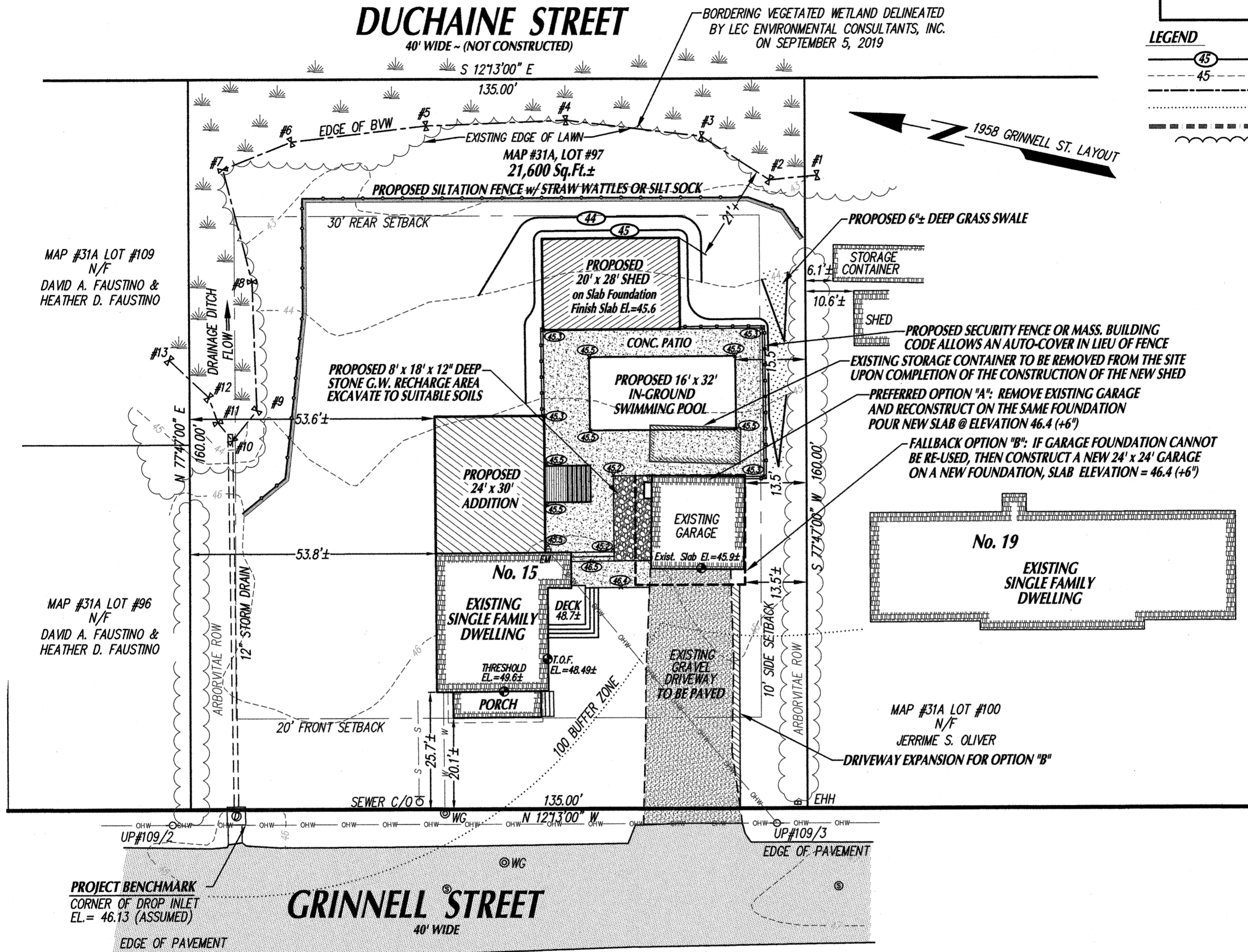
DWG. NO.
L-1



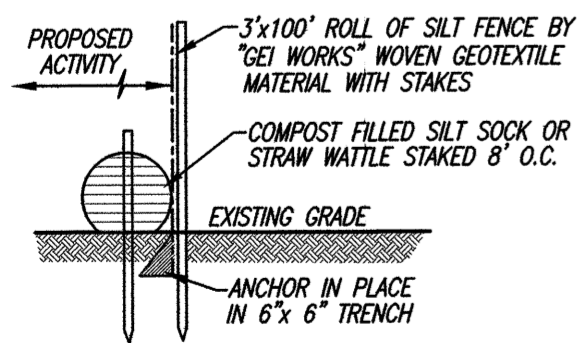


LOCUS PLAN
NOT TO SCALE

- LEGEND**
- PROPOSED CONTOURS
 - EXISTING CONTOURS
 - EDGE OF WETLAND
 - 100 FT. BUFFER ZONE
 - FLOOD ZONE LINES
 - TREELINE - EDGE OF LAWN



David M. Davignon 2-18-2020



EROSION CONTROL DETAIL
Not to Scale

GENERAL NOTES:

- 1.) THE GENERAL CONTRACTOR AND/OR EXCAVATING CONTRACTOR SHALL REFER TO SEWER NOTE.
- 2.) CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION THROUGH "DIG SAFE" AND OTHER APPROPRIATE AGENCIES, AND REPORT ANY DISCREPANCIES TO THIS OFFICE.
- 3.) 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.
- 4.) ANY AND ALL CHANGES FROM THE SITE DESIGN LAYOUT SHOWN MUST BE APPROVED BY THIS OFFICE, AND OTHER APPROPRIATE LOCAL OFFICIALS.
- 5.) CONCRETE WASHOUT SHALL OCCUR WITHIN FOOTPRINT OF ADDITION, GARAGE OR PATIO AREAS.
- 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:

SITE ADDRESS: 15 GRINNELL STREET
ASSESSORS MAP # 31A
ASSESSORS LOT # 97

FEMA FLOOD ZONE: X EL. n/a
F.I.R.M. PANEL NO. 25023C0413F

CURRENT ZONING DISTRICT:
SINGLE RESIDENCE A (RA)
RA BUILDING SETBACKS:
FRONT: 20' REAR: 30'
SIDE: 10'

PROPOSED BUILDING COVERAGE = 12.5% < 25%
(HOUSE, PORCH, ADDITION, GARAGE, SHEDS)
PROPOSED LOT COVERAGE = 27.0% < 50%
(BUILDING COVERAGE + CONC. PATIO, PAVED DRIVEWAY AND INGROUND SWIMMING POOL)

OWNER/APPLICANT:
DAVID R. TOMASIA, JR.
15 GRINNELL STREET
FAIRHAVEN, MA 02719
SEE DEED BOOK 8962, PAGE 345

Rev. #	DATE	BY	DESCRIPTION
2	2-18-20	D.M.D.	MOVE 24'x24' NEW GARAGE LOCATION 2.5 NORTHERLY
1	2-13-20	D.M.D.	SUBSTITUTE 1-LARGE SHED FOR 2-SMALLER SHEDS UPDATE EROSION CONTROL, ADD SWALE

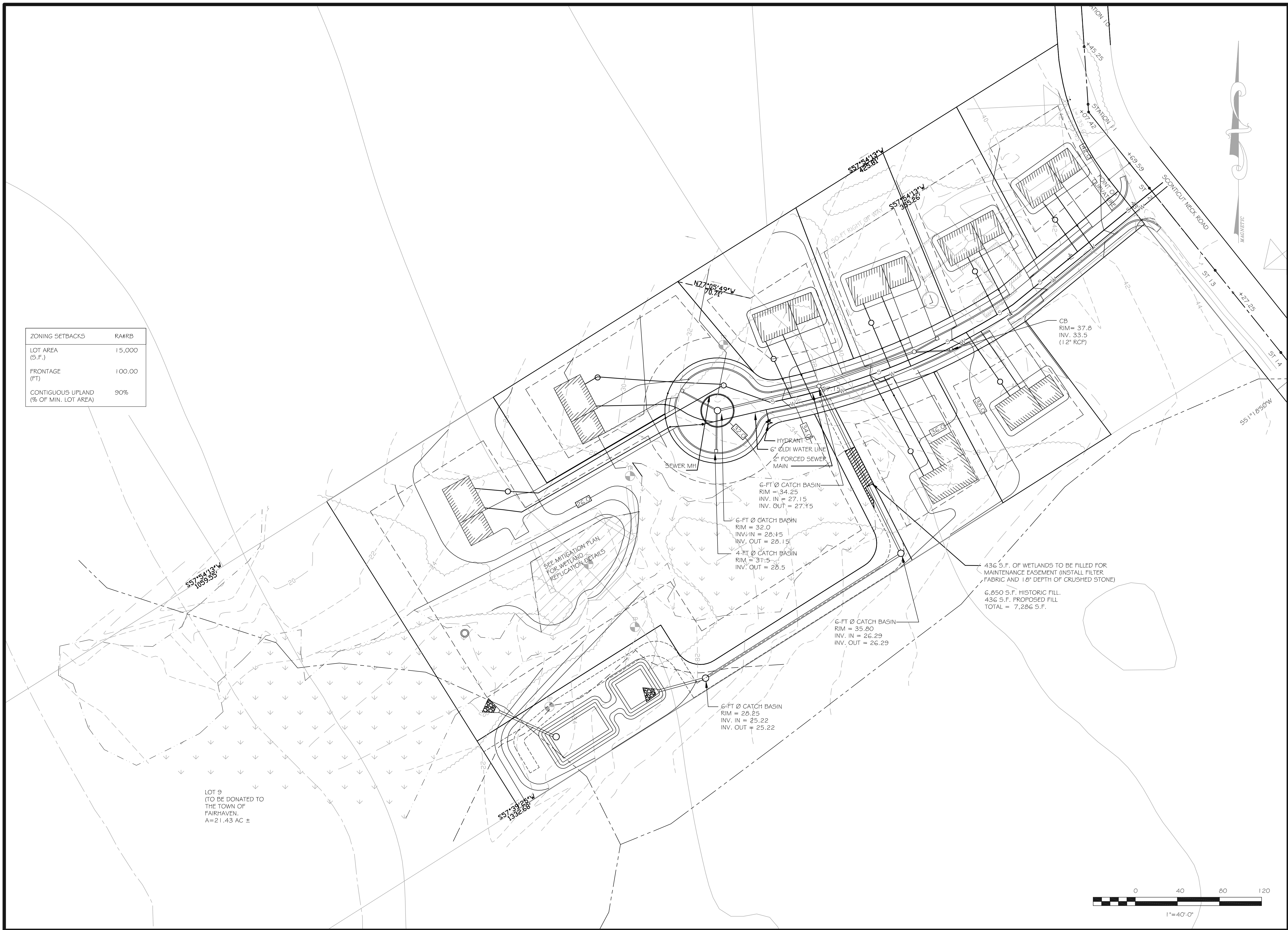
SITE PLAN
FOR PROPERTY LOCATED
at 15 GRINNELL STREET in
FAIRHAVEN, MA
PREPARED FOR THE
DAVID R. TOMASIA, JR.

SCALE: 1"=20' DATE: JANUARY 6, 2020

SCHNEIDER, DAVIGNON & LEONE, INC.
PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS
1 COUNTY RD, P.O. BOX 480, MATTAPOISETT, MA 02739
1-508-758-7866

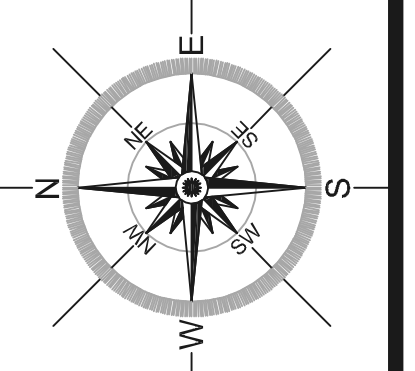
Drawn By: D.M.D. Check By: N.D.S. Job No. 1064

ZONING SETBACKS	RA4RB
LOT AREA (S.F.)	15,000
FRONTAGE (FT)	100.00
CONTIGUOUS UPLAND (% OF MIN. LOT AREA)	90%



**NESRA
ENGINEERING, LLC**

170 BUNGAY ROAD
N. ATTLEBORO, MA 02760
(508) 221 - 7174
WWW.NESRAENG.COM



Project

Subdivision of Land
46 Scoticut Neck Road
Fairhaven, Ma 02719

Client

Alexander Gray
Development, LLC
28 Tracy Street
Acushnet, MA 02741

4.	REVISE WETLAND FILL AREA AT LOT 7	1/26/20
3.	REVISIONS PER SECOND ROUND OF PEER REVIEW COMMENTS.	9/18/19
2.	REVISIONS PER PEER REVIEW COMMENTS.	8/10/19
1.	REVISED LOT 6. ADD LOT 7 BEING DONATED TO THE TOWN OF FAIRHAVEN FILL 2,380 S.F. OF WETLAND (TO BE RESTORED ON SITE)	6/10/19

No.	Revision	Date
-----	----------	------

Scale: 1"=40'-0"
Date: 4/10/19
Professional Seal

UTILITY PLAN

C-6



February 13, 2020

Email [wmcclees@fairhaven-ma.gov]

Ms. Whitney McClees, Agent
Fairhaven Conservation Commission
40 Center Street
Fairhaven, MA 02179

Re: Preliminary Peer Review Report
DEP File No. SE 23-1309, 23-1101, 23-1127, & 23-1161
1 Bella Vista Island
Fairhaven, Massachusetts

[LEC File #: TOFai\20-018.01]

Dear Members of the Commission:

LEC Environmental Consultants, Inc., (LEC) is pleased to submit this initial Preliminary Peer Review Report associated with the Notice of Intent (NOI) Application and Request for Certificate of Compliance (COC) filed for the above-referenced site in Fairhaven, Massachusetts. LEC has been retained by the Commission to review the filings for compliance with the Massachusetts Wetlands Protection Act (M.G.L., Ch. 131, s. 40), and its implementing Regulations (310 CMR 10.00) and the Town of Fairhaven Wetlands Bylaw (Chapter 192).

LEC reviewed the NOI and COC submittals and relevant documents in the project file, and attended an on-site meeting and site walk with the Commission on February 9, 2020. Due to the complicated and extensive history of enforcement actions and Conservation filings dating back to the Applicant's purchase of the property in 2009, this letter is intended to be a preliminary review report outlining our initial comments and requests for information. Once the comments provided below are addressed, we will provide a more specific review of the project under the above-referenced state and local Regulations.

Permitting Overview and Background

The current NOI has been filed to permit activities referenced in an Administrative Consent Order with Penalty (ACOP) and Notice of Noncompliance (#00004701) issued by Massachusetts Department of Environmental Protection (MassDEP), dated June 25, 2019 for violations of the State Act and Regulations. The ACOP provides a detailed procedural history for the property dating back to 1970 when the existing driveway bridge was permitted through a DEP Waterways License, with a focus on Conservation Commission filings, enforcement actions, and other environmental permit applications which have occurred since 2009.

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Rindge, NH 03461
603-899-6726
603-899-6726 (Fax)

PLYMOUTH, MA

WAKEFIELD, MA

WORCESTER, MA

RINDGE, NH



The Applicant purchased the property in 2009 and in 2010 the Commission issued the first of three Enforcement Orders (EO) for unpermitted activity. MassDEP also issued EOs in 2010 and 2013. In response to the EOs, the Applicant filed multiple NOIs, documented under DEP File No. SE 23-1101, 23-1127, and 23-1161. Based on our preliminary review, it appears that only certain aspects of the work permitted under these file numbers were completed as reviewed below:

Previous Conservation Filings

As noted above, there are three DEP file numbers associated with the property, each of which informs the current filing (DEP SE #23-1309) in some manner.

DEP File No. SE 23-1101

The Commission issued an Order of Conditions (OOC) dated February 7, 2011, approving the project, including improvements to the stone revetment and various landscaping activities including wetland restoration, as depicted on the *Plan of Site and Proposed Improvements*, prepared by Charon Associates, Inc., dated January 21, 2011. There is no record of a COC for this project and while the current NOI provides a list of activities permitted under the OOC, it states that “most of the items were completed” without specifying which items were not completed.

DEP File No. SE 23-1127

According to the current NOI, the NOI filed under this file number included a request for an access drive to the beach, beach nourishment, elimination of the wetland restoration stipulated in File No. SE 23-1101, *Phragmites* removal, and installation of a floating pier. The filing was significantly modified during the review process and the Commission ultimately issued an OOC dated February 13, 2012, which permitted general invasive species control for the island, dune restoration, restoration plantings, *Phragmites* removal from the “non-jurisdictional wetlands.” In addition, the Applicant was required to pay for wetland restoration at the Fairhaven DPW site as mitigation for filling the non-jurisdictional wetlands and converting them to rain gardens. The restoration plantings were detailed on a *Proposed Planting Plan*, prepared by Prime Engineering with consultation from G. Bourne Knowles & Company, Inc. The Applicant has requested a COC for this permit; however, it appears that the rain gardens were never created and the proposed plantings were never installed.

DEP File No. SE 23-1161

According to the current application, this NOI from 2013 sought permission to construct an access drive to the beach, a groin expansion, and installation of a pier, ramp and float. During review by the Commission, it was determined that some groin expansion had already occurred and that groin expansion was not supported by DMF. The subsequent chronology of events is uncertain, but according to the current NOI, no decision was issued, and the Applicant is requesting this file to be reopened so that the groin work and pier can be reviewed. It is our understanding that the Conservation file for this filing is missing, but that



MassDEP has indicated a denial was issued February 11, 2014. Since the hearing was closed and a denial issued, we recommend a new NOI filing for pier, ramp, and float.

Current NOI Filing DEP No. SE 023-1309

The current NOI filing scope of work includes items stipulated in the ACOP issued by MassDEP, including removal and reconstruction of 70 feet of seawall, dredging beneath the bridge, nourishment of the beach with the dredge spoils, beachgrass plantings, coastal dune fencing and construction of a coastal dune. The scope of work was approved by MassDEP pending approval by the Commission. The Commission is not mandated to approve the project because the MassDEP-ordered NOI filing resulting from the ACOP negotiations is based on MassDEP's view that the activities proposed generally meet the performance standards under the state *Act*. The Commission may review and comment on all aspects of this filing under the Act and Bylaw regardless of the ACOP. As noted above and further detailed below, the complexity of the filing and the need for additional details on the plans prevents a comprehensive review of the NOI at this time. Once the comments below are addressed we will provide a more thorough review of the current NOI.

Preliminary Findings and Recommendations

Based on our review of the site and the previous and current NOI filings, we have the following Preliminary Findings and Recommendations for the Commission to consider:

- The site plans submitted with the NOI are lacking information and should be updated to reflect existing conditions and clarify the scope of work proposed. The plans are lacking a current wetland delineation, including the boundaries of Salt Marsh, any Freshwater Wetlands (IVWs or BVWs), Coastal Dune, Coastal Beach, and Coastal Bank. These boundaries should be delineated by a qualified professional and depicted clearly on an Existing Conditions Plan, which should be a separate sheet in the plan set. Other resource areas should also be shown on the Existing Conditions Plan including Land Containing Shellfish, Land Subject to Coastal Storm Flowage, Rocky Intertidal Shore (if present), Land Subject to Tidal Action and any eelgrass beds in the vicinity of the island.
- The Existing Conditions Plan should be based on a current land survey that includes topography, all existing landscaping features, seawalls and toe plates, plantings specified under previous orders, the limit of lawn, mulch planting beds (identify species planted), lighting and benches along the perimeter of the island, and utilities (including perimeter electric). The Existing Conditions Plan should clearly label all features which are the subject to the ACOP and current NOI. No proposed features or activities should be depicted on the Existing Conditions Plan.
- The Applicant should clarify which activities have been completed and which activities have not been completed under DEP File No. SE 23-1101 and File No. SE 23-1127. It appears that the plantings depicted on the *Proposed Planting Plan* under File No. 23-1127 were not planted, and the area that was supposed to be mowed to no less than four inches twice per year is at least partially



manicured lawn. The isolated wetlands, also referenced as “isolated depressions,” that were to become rain gardens under File No. SE 23-1127 are now part of the lawn. If any incomplete work permitted under File No. SE 23-1101 or No. SE 23-1127 are included in this filing, they should be clearly identified on the plans and in writing.

- It is our understanding that the NOI filing under DEP File No. SE 23-1161 was denied by the Commission; therefore, we recommend the Applicant submit a new NOI for those activities, including the pier, ramp and float after the current NOI review is completed.
- We recommend the Commission seek additional clarification of the permitting status of the “toe plate” located at the base of the seawall. While we understand the purpose of the toe plate, it appears that it extends further seaward and includes two rows of flat stones which function more as a walking path than as support for the seawall. Consultation with MassDEP Waterways and DMF may also be advisable.
- Numerous items should be removed from resource areas as soon as possible, including booms, anchors, and associated wires, the wooden float, and the 6” x 6” wooden posts along the property line near the entrance.
- The Commission should not issue a COC for File No. SE 23-1127 since the landscaping activities have not been completed as noted above.
- The Applicant should address the comments provided in DMF’s letter in response to the NOI dated January 7, 2020.

Thank you for the opportunity to assist you with this project. If you have any questions or require additional information regarding this review, please don’t hesitate to contact me.

Sincerely,

LEC Environmental Consultants, Inc.

Mark L. Manganello

Assistant Director of Ecological Services

cc: Dave Hill, MassDEP Waterways
Shaun Walsh, MassDEP
Eileen Feeney, Division of Marine Fisheries