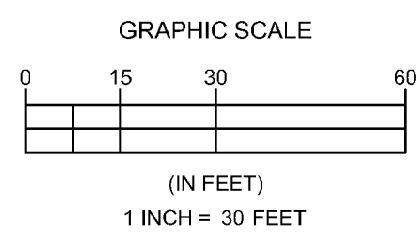


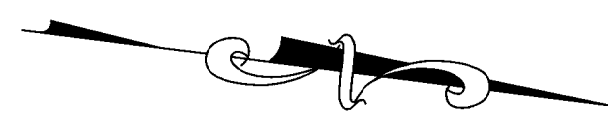
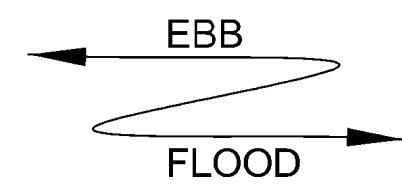
DATUM OFFSETS

MLLW	NAVD88
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3.75	1.74
	MHW
2.01	0
0.15	-1.86
0	-2.01
	MLLW

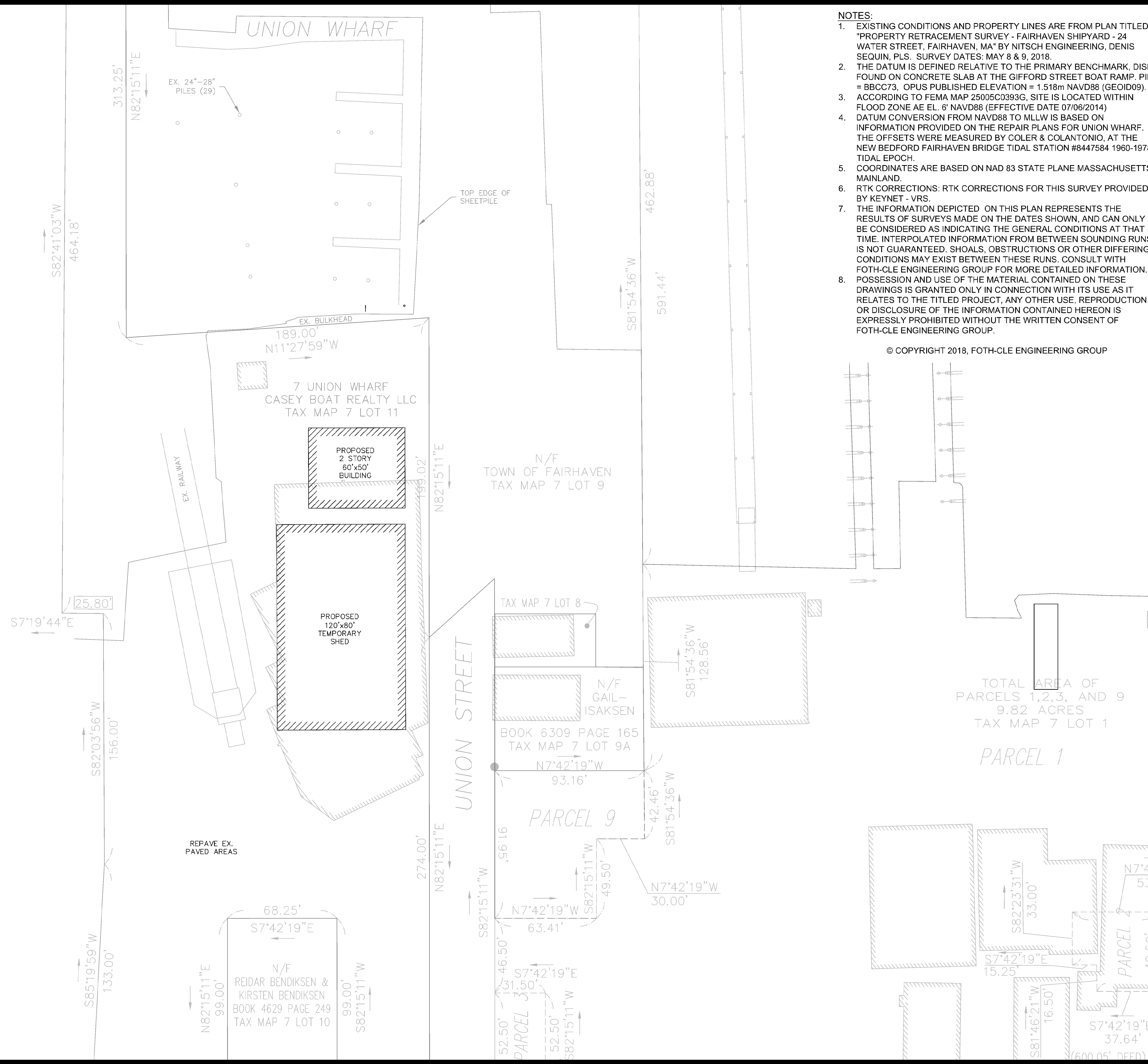
OFFSETS PROVIDED BY VDATUM V:3.4
N=817646
E=2692533



FAIRHAVEN HARBOR



N/F
WJA PROPERTIES LLC
BOOK 106 PAGE 58
TAX MAP 7 LOT 12



- NOTES:
- EXISTING CONDITIONS AND PROPERTY LINES ARE FROM PLAN TITLED "PROPERTY RETRACEMENT SURVEY - FAIRHAVEN SHIPYARD - 24 WATER STREET, FAIRHAVEN, MA" BY NITSCH ENGINEERING, DENIS SEQUIN, PLS. SURVEY DATES: MAY 8 & 9, 2018.
 - THE DATUM IS DEFINED RELATIVE TO THE PRIMARY BENCHMARK, DISK FOUND ON CONCRETE SLAB AT THE GIFFORD STREET BOAT RAMP. PID = BBCC73. OPUS PUBLISHED ELEVATION = 1.518m NAVD88 (GEOID09).
 - ACCORDING TO FEMA MAP 25005C0393G, SITE IS LOCATED WITHIN FLOOD ZONE AE EL. 6' NAVD88 (EFFECTIVE DATE 07/06/2014)
 - DATUM CONVERSION FROM NAVD88 TO MLLW IS BASED ON INFORMATION PROVIDED ON THE REPAIR PLANS FOR UNION WHARF. THE OFFSETS WERE MEASURED BY COLER & COLANTONIO, AT THE NEW BEDFORD FAIRHAVEN BRIDGE TIDAL STATION #8447584 1960-1978 TIDAL EPOCH.
 - COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS MAINLAND.
 - RTK CORRECTIONS: RTK CORRECTIONS FOR THIS SURVEY PROVIDED BY KEYNET - VRS.
 - THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH FOTH-CLE ENGINEERING GROUP FOR MORE DETAILED INFORMATION.
 - POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT, ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF FOTH-CLE ENGINEERING GROUP.

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This drawing was prepared at the scale indicated in the title block. Inaccuracies in the stated scale may be introduced when drawings are reproduced by any means. (Use the graphic scale bar to determine the actual scale of this drawing)

CONSULTANT

15 Creek Road | Marion, Massachusetts 02738
t: 508.748.0937 | www.foth-cleengineering.com

CASEY BOAT REALTY, LLC
PROPOSED BUILDING
DEMOLITION AND CONSTRUCTION

7 UNION WHARF
FAIRHAVEN, MA

CASEY BOAT REALTY, LLC

SEAL AND SIGNATURE

REVISIONS

1	Floot system removed 02/27/19

SHEET TITLE

**NOTICE OF INTENT
SITE PLAN**

ISSUANCE

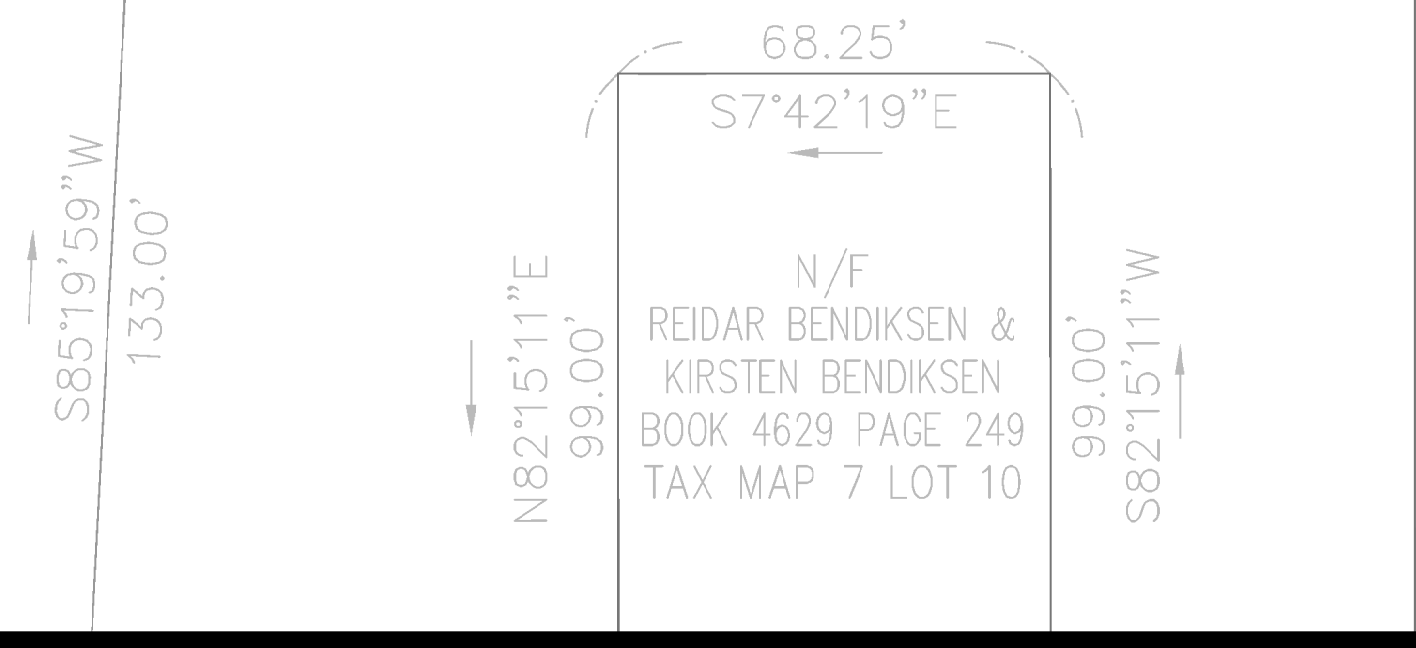
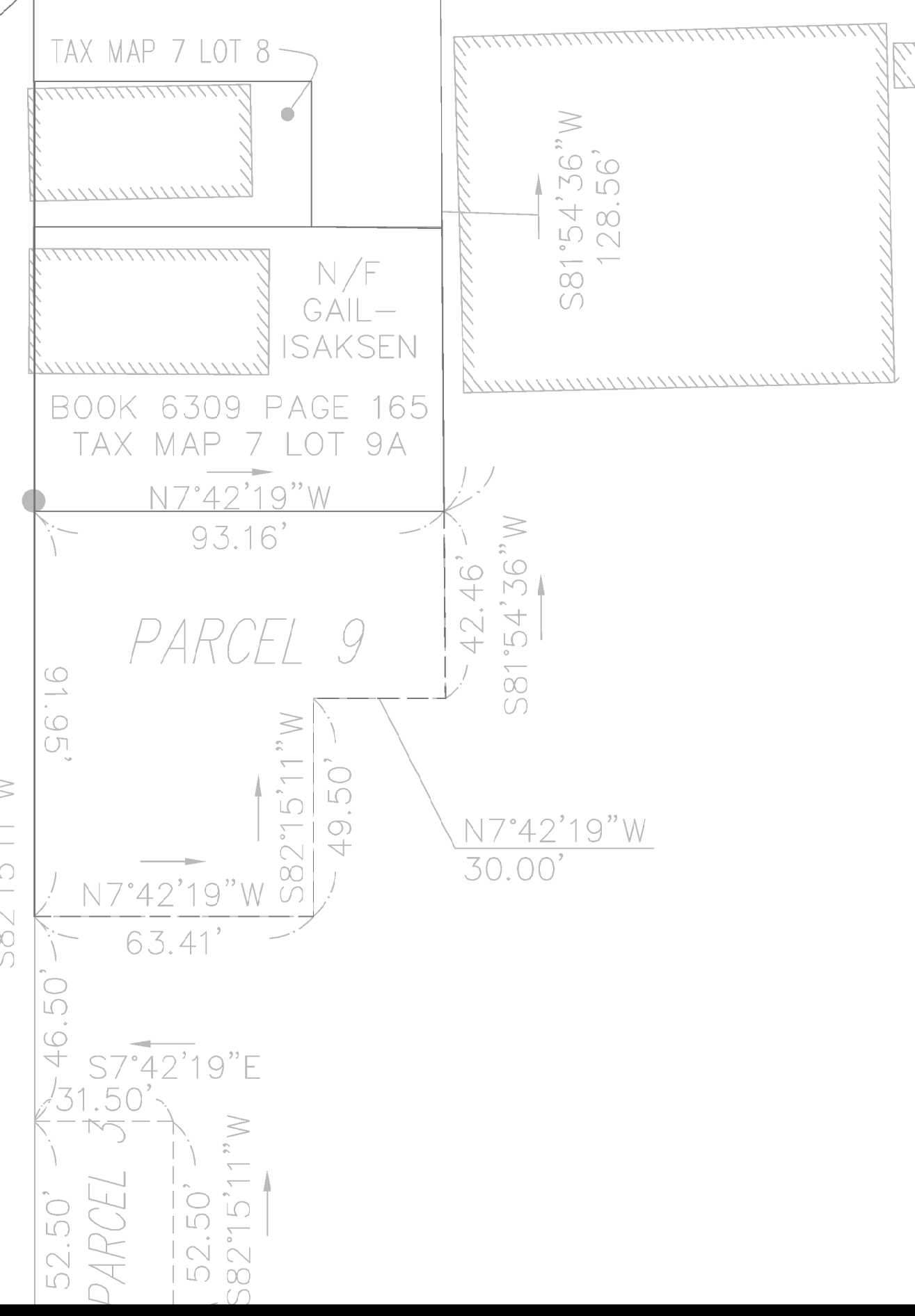
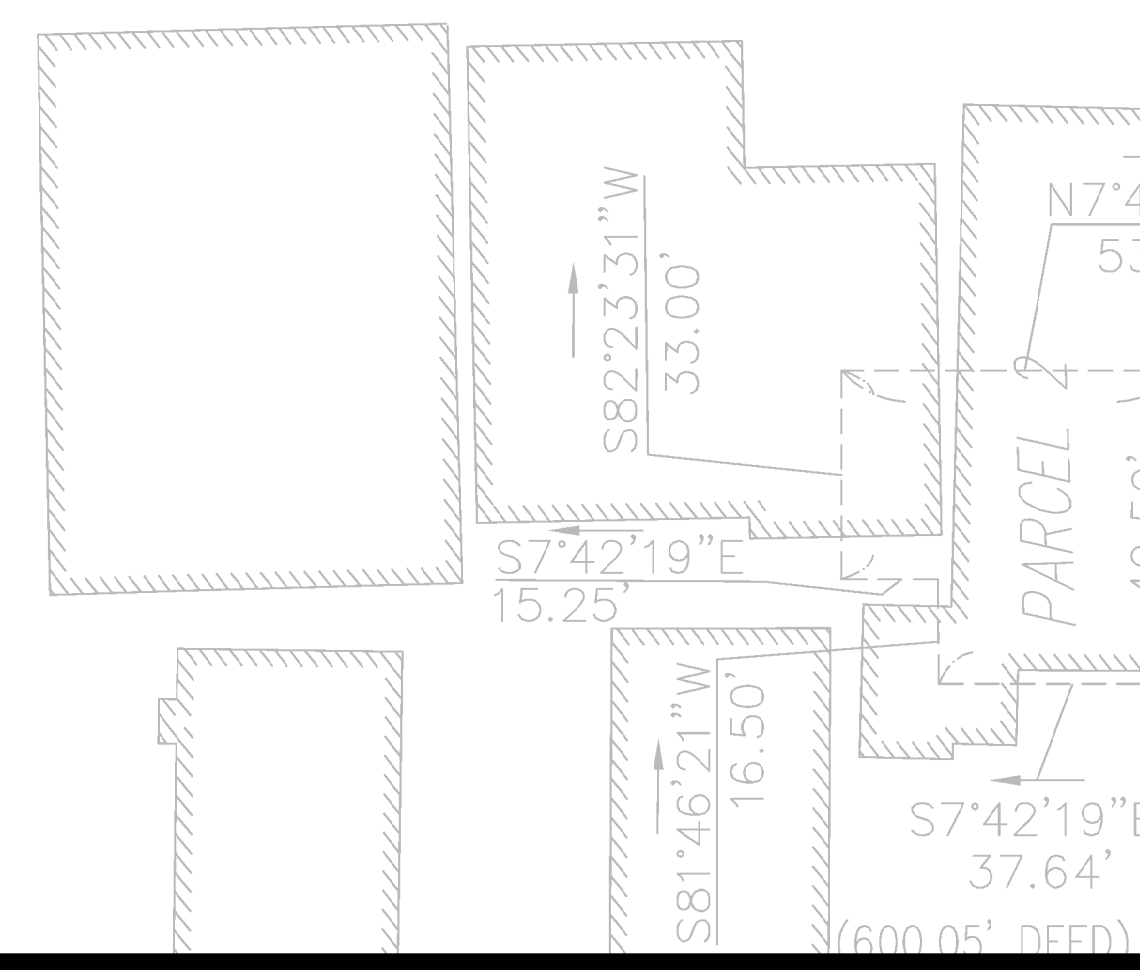
SCALE
AS NOTED

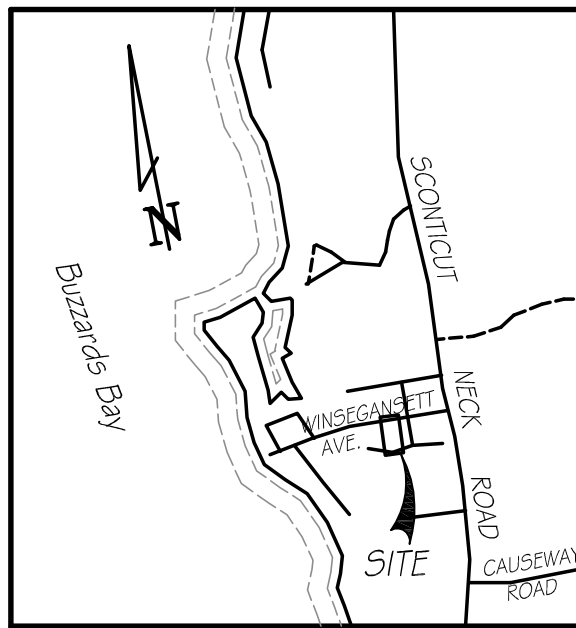
DRAWN BY TJM	SHEET NUMBER 1
CHECKED BY SN	
PROJECT NO 06007.100	
DATE 11/20/2018	

SHEET 1 OF 1

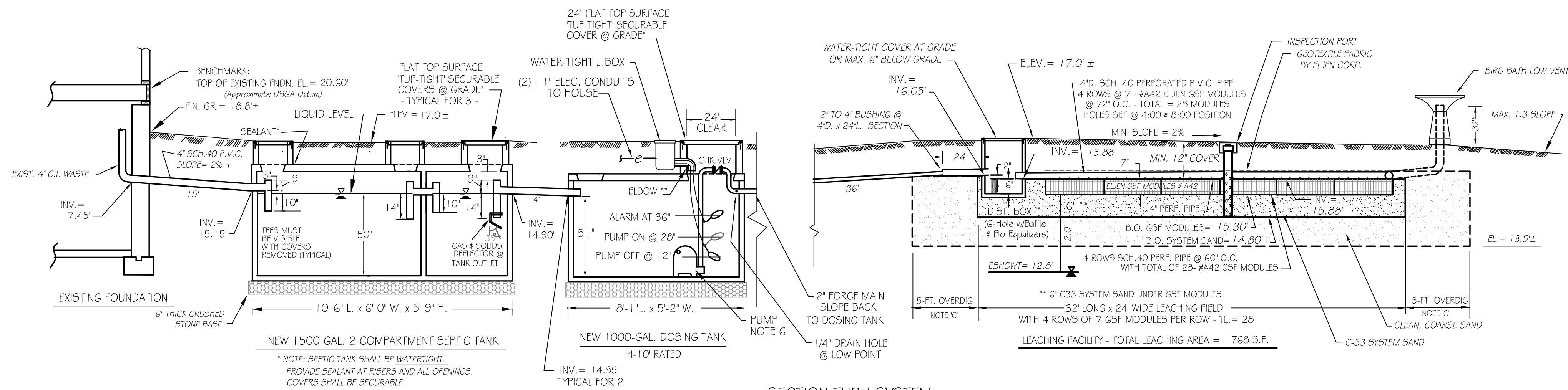
TOTAL AREA OF
PARCELS 1,2,3, AND 9
9.82 ACRES
TAX MAP 7 LOT 1

PARCEL 1

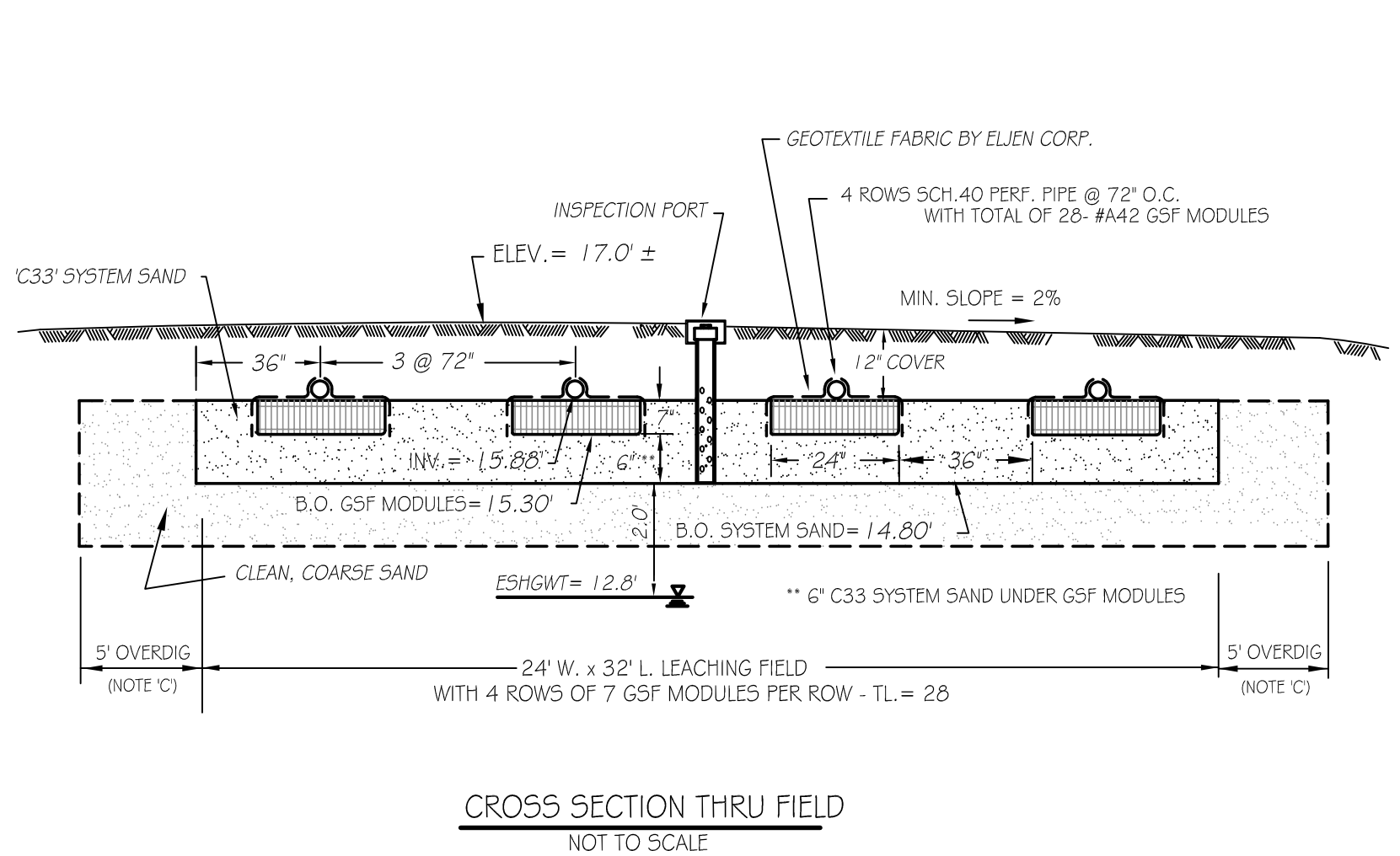




LOCUS PLAN
SCALE: 1" = 2000'+

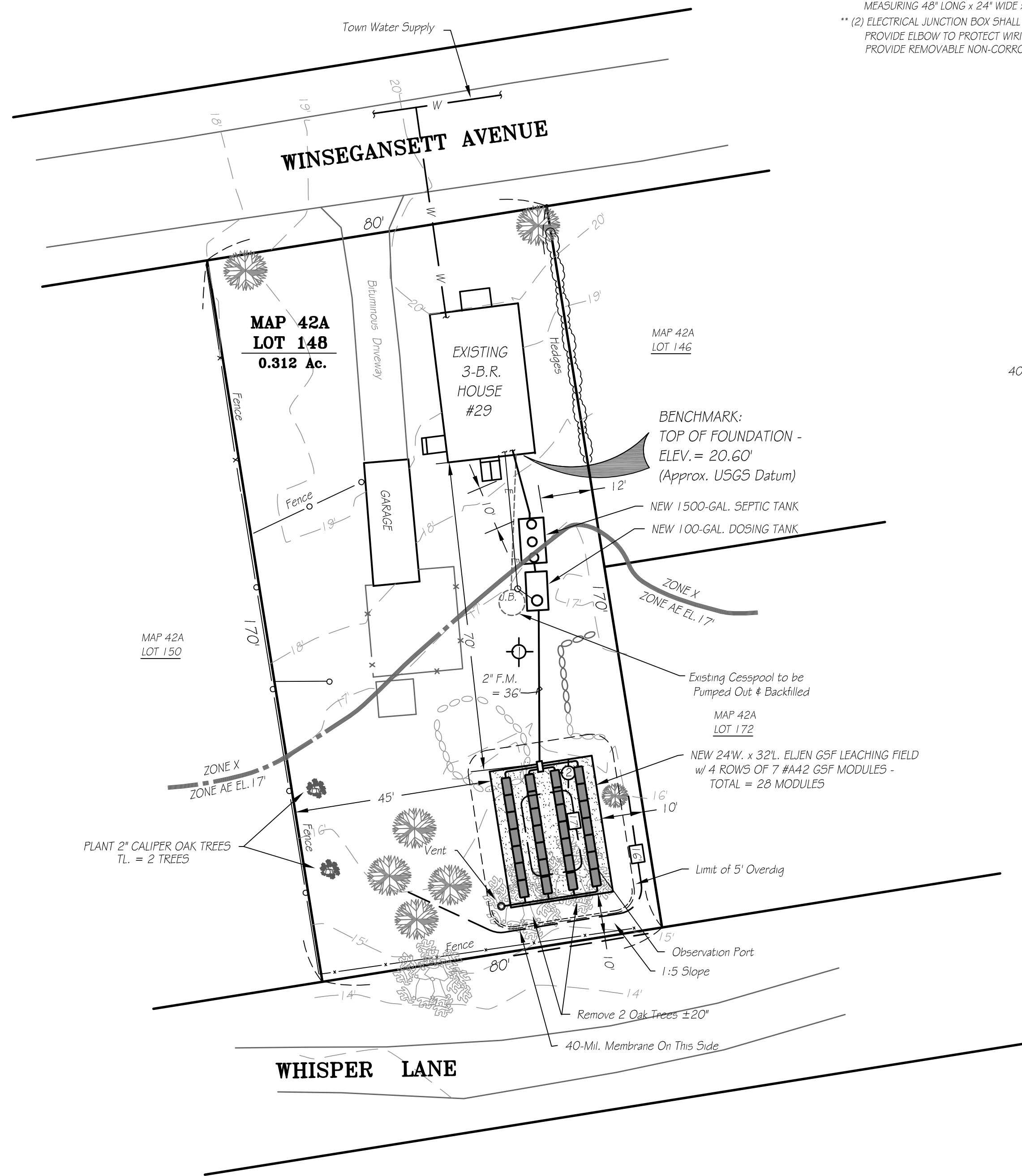


SECTION THRU SYSTEM
NOT TO SCALE

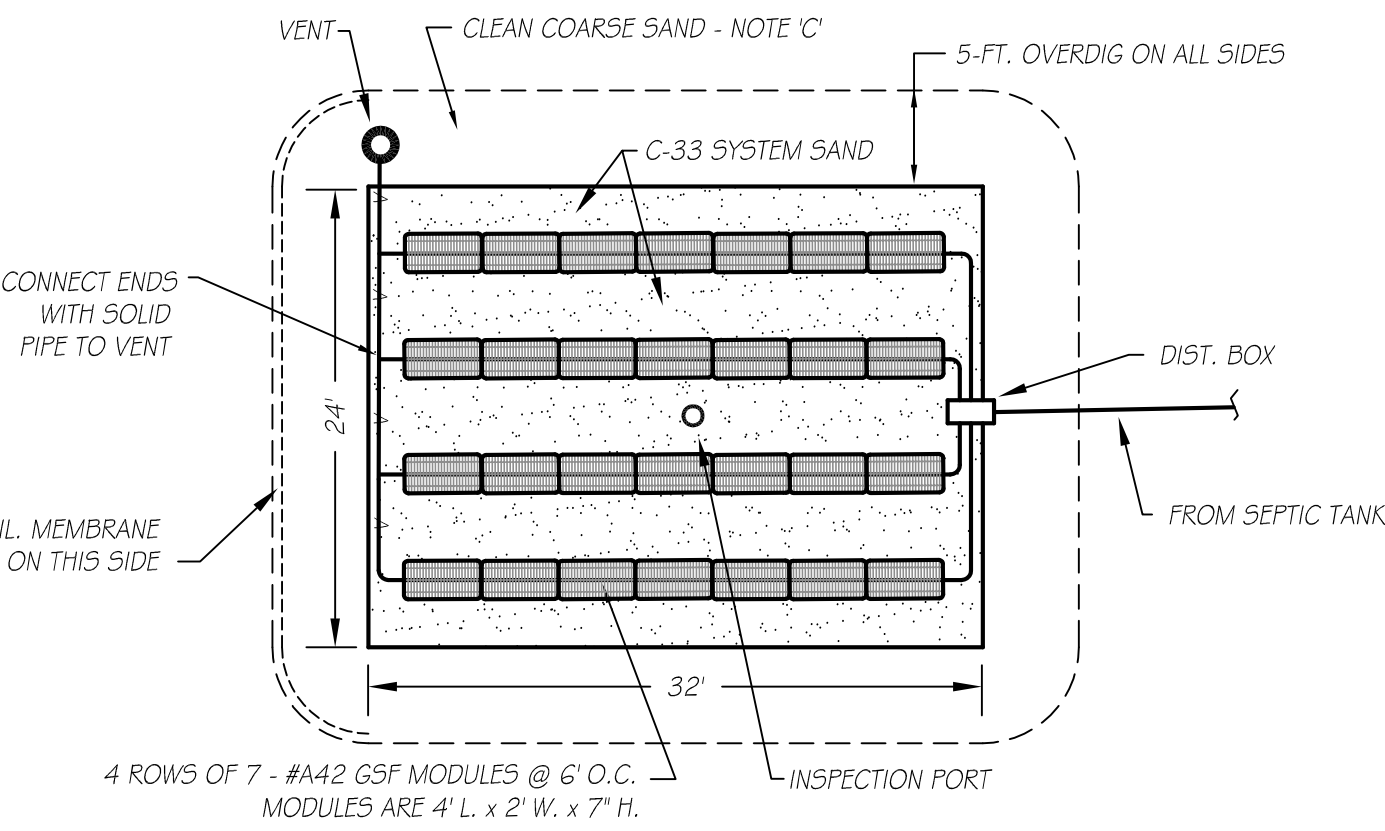
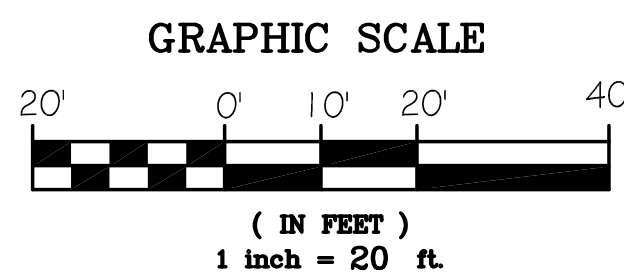


CROSS SECTION THRU FIELD
NOT TO SCALE

- NOTES: (1) GSF MODULES SHALL BE ELJEN GEOTEXTILE SAND FILTER MODEL #A42, MEASURING 48" LONG x 24" WIDE x 7" DEEP.
 (2) ELECTRICAL JUNCTION BOX SHALL CONFORM TO NEMA 6P. PROVIDE ELBOW TO PROTECT WIRING AT ENTRY TO TANK RISER. PROVIDE REMOVABLE NON-CORROSIIVE FLOAT TREE.
 (3) PUMP CHAMBER & SEPTIC TANK SHALL BE WATERTIGHT MONOLITHIC TANKS. TANKS SHALL BE INSPECTED FOR LEAKS PRIOR TO PLACEMENT INTO SERVICE. PROVIDE SEALANT AT RISERS AND ALL OPENINGS. COVERS SHALL BE SECURABLE.
 (4) SPECIFIED TANKS ARE 110-RATED 1500-GAL SEPTIC TANK AND 1000-GAL DOSING TANK.



SITE PLAN
SCALE: 1" = 20 FEET



PLAN VIEW - LEACHING FIELD
1" = 10 FEET

SYSTEM DESIGN DATA:

PERCOLATION RATE = 30 MIN./INCH
 L.T.A.R. = 0.33 GAL./S.F.-DAY
 DESIGN FLOW RATE: 3 B.R.'s @ 110 GPD = 330 GPD
 3 B.R.'s @ 9' - #A42 GSF MODULES PER B.R. = 27 GSF MODULES (MIN.)
 USE 4 ROWS WITH 7 #A42 GSF MODULES PER ROW = 28 GSF MODULES
 MINIMUM LEACHING FIELD AREA PER TITLE 5, A = 330 GPD / 0.33 = 1000 S.F.
 MINIMUM LEACHING FIELD AREA FOR ELJEN G.S.F. SYSTEM = 60% x 1000 S.F. = 600 S.F.
 USE: BOTTOM AREA = 24' W. x 32' L. = 768 S.F.
 SIDE AREA = N/A = 0 S.F.
 TOTAL LEACHING AREA = 768 S.F.
 SYSTEM CAPACITY = 768 S.F. / 0.60 x 0.33 GPD/S.F. = 422 GPD > 330 GPD (O.K.)

DOSING CALCULATION:

1 DOSE PER DAY FOR SANDY LOAM:
 VOLUME PER DOSE = 330 GPD / 1 = 330 GALS. PER DOSE
 VOLUME / FT FOR 1,000 GAL. TANK = 250 GALS./FT.
 330 GAL / (250 GAL/FT) = 1.33 FT. = 16"

EMERGENCY STORAGE CALCULATION:

HEIGHT OF TANK = 60" AVAILABLE STORAGE: 60" - 30" = 24"
 VOLUME PER FOOT OF TANK = 250 GAL./FT. = 20.8 GAL./IN.
 AVAILABLE STORAGE = 24 IN. x 20.8 GAL./IN. = 500 GALS.
 SPECIFIED TANK PROVIDES AT LEAST 24 HOURS OF EMERGENCY STORAGE

GENERAL NOTES:

- THIS SYSTEM DOES NOT MAKE PROVISION FOR A GARBAGE GRINDER NOR THE BACKFLUSH EFFLUENT FROM A WATER TREATMENT SYSTEM, NOR THE DISPOSAL OF PRESCRIPTION MEDICATIONS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH MASS. TITLE 5 AND LOCAL BOARD OF HEALTH REGULATIONS EXCEPT AS PERMITTED BY VARIANCES AS NOTED HEREON. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH D.E.P. REMEDIAL USE APPROVAL AND PRODUCT DESIGN AND INSTALLATION MANUAL FOR "ELJEN GSF GEOTEXTILE SAND FILTER" BY ELJEN CORPORATION, 125 MCKEE ST., EAST HARTFORD CT 06108, BY AN INSTALLER WHO HAS BEEN CERTIFIED BY THE MANUFACTURER.
- ALL COMPONENTS SHALL BE INSTALLED ON A LEVEL, STABLE BASE THAT WILL NOT SETTLE. PIPE SHALL BE LAID ON A FIRM BASE, FREE OF STONES. PRE-CAST CONCRETE TANKS SHALL BE 110 RATED RATING TANK, CONSTRUCTED IN CONFORMANCE WITH TITLE 5 SECTION 15.226. DISTRIBUTION BOX SHALL HAVE COVER NOT MORE THAN 6" BELOW GRADE.
- BUILDING SEWER SHALL BE CAST IRON OR SCH.40 P.V.C. PIPE. GRAVITY EFFLUENT PIPES SHALL BE SCH.40 P.V.C. PIPE. PUMPED EFFLUENT PIPE SHALL BE SCH.40 P.V.C. PIPE WITH EXTENDED COUPLINGS FOR PRESSURE USE.
- SYSTEM SAND SHALL MEET ASTM C-33 REQUIREMENTS WITH 40% - 80% OF TOTAL TO BE COARSE AND VERY COARSE SAND, WITH NO MORE THAN 2% OF SAND PASSING A #200 SIEVE. THE INSTALLER SHALL SUPPLY A TEST REPORT TO THE ENGINEER SHOWING CONFORMANCE WITH ASTM C-33 STANDARD. THE ENGINEER MAY REQUIRE THAT SAND IN PLACE BE TESTED FOR ASTM C-33 STANDARD AND SAND THAT FAILS CERTIFICATION SHALL BE REPLACED AT NO EXPENSE TO THE OWNER. A MINIMUM OF 6 INCHES OF SYSTEM SAND SHALL BE PLACED AROUND THE CIRCUMFERENCE OF THE GSF MODULES.
- DOSING TANK SHALL BE EQUIPPED WITH A SUBMERSIBLE SEWAGE PUMP PACKAGE RATED FOR 40 GPM AT 12-FT. HEAD, BARNES SE412 OR EQUAL, EQUIPPED WITH ON-OFF FLOAT CONTROL, UNION CHECK VALVE IN RISER, AND HIGH LEVEL FLOAT WITH INDOOR ALARM ON DEDICATED ELECTRIC CIRCUIT. THE PUMP & FLOAT TREE ASSEMBLY SHALL BE CAPABLE OF BEING INSTALLED AND REMOVED FROM THE DOSING TANK WITHOUT THE NEED FOR TANK PUMP-OUT AND/OR CONFINED SPACE ENTRY. INSTALL A 1/4" DIA. HOLE IN LOW POINT OF DISCHARGE PIPE AFTER CHECK VALVE TO ALLOW DRAIN BACK OF EFFLUENT TO THE DOSING TANK AFTER PUMP CYCLE. EFFLUENT PIPING SHALL BE PITCHED BACK TO THE DOSING TANK TO PREVENT FREEZING.
- DO NOT INSTALL THE SYSTEM ON FROZEN GROUND OR LEAVE SYSTEM UNCOVERED FOR EXTENDED PERIOD OF TIME.
- THE INSTALLER SHALL NOTIFY THE ENGINEER IF SOIL CONDITIONS ARE FOUND DIFFERENT THAN SHOWN ON SOIL LOG.
- PRIOR TO FINAL COVER OF SYSTEM, THE INSTALLER SHALL NOTIFY THE ENGINEER TO MAKE AN "AS-BUILT" INSPECTION. FINAL COVER SHALL NOT BE PLACED UNTIL SYSTEM IS APPROVED BY THE ENGINEER AND THE BOARD OF HEALTH.
- THE CONTRACTOR SHALL LOAM & SEED ALL DISTURBED AREAS.

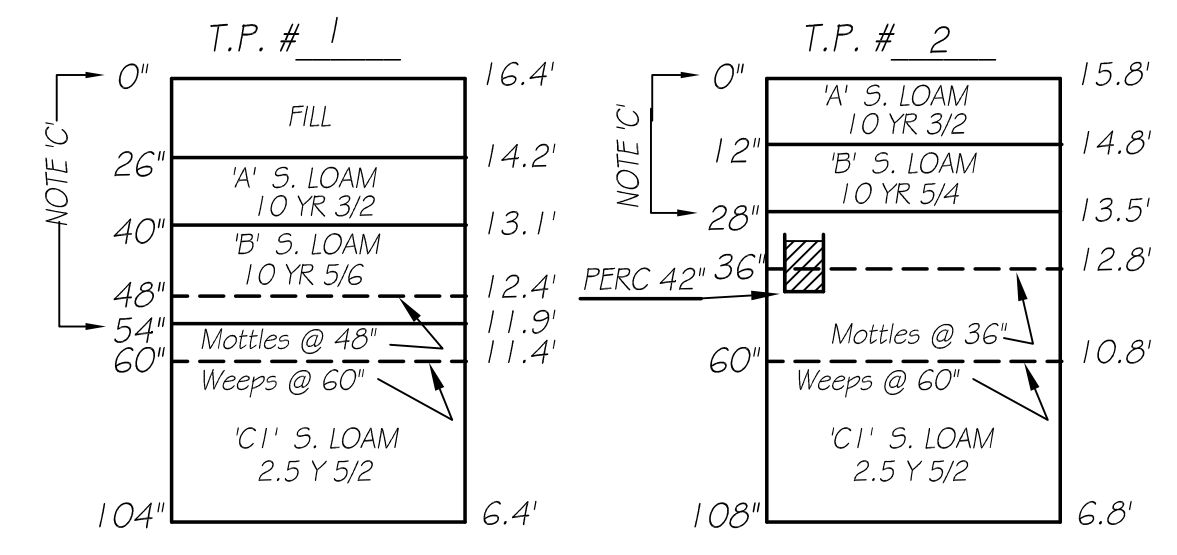
MAINTENANCE:

- SEPTIC TANK SHOULD BE PUMPED OUT EVERY 2 YEARS OR WHEN THICKNESS OF FLOATING SCUM LAYER EXCEEDS 6 INCHES. FAILURE TO PUMP OUT TANK WILL RESULT IN PREMATURE SYSTEM FAILURE.
- THE ZABEL FILTER SHOULD BE CLEANED EVERY 12 MONTHS AND WHEN THE SEPTIC TANK IS PUMPED OUT. FAILURE TO CLEAN THE FILTER WILL RESULT IN CLOGGING OF THE OUTLET TEE AND SEPTIC TANK BACKUP TO HOUSE.
- THE SEPTIC TANK AND LEACHING FIELD REQUIRE BACTERIAL PROCESSES TO DIGEST WASTES, AVOID EXCESSIVE USE OF BLEACH AND ANTI-BACTERIAL PRODUCTS TO ENSURE HEALTHY BIOLOGICAL ACTIVITY IN THE SEPTIC SYSTEM.

NOTES:

- NOTE A: THIS PARCEL IS SHOWN AS LOT 148 OF ASSESSORS MAP 42A.
 NOTE B: A PORTION OF THE PARCEL SHOWN HEREON LIES WITHIN A SPECIAL HAZARD AREA (F.E.M.A. ZONE AE, EL. 17) AS DELINEATED ON F.E.M.A. COMMUNITY PANEL NO. 250050501 F, DATED JULY 7, 2009.
 NOTE C: REMOVE UNSUITABLE SOILS BENEATH THE LEACHING FIELD AND TO A 5-FOOT DISTANCE ON SIDES WHERE SHOWN, AND REPLACE WITH CLEAN, COARSE SAND UP TO LEVEL OF PEASTONE COVER. THE BOTTOM & SIDES OF THE OVERDIG EXCAVATION SHALL BE SCARIFIED AND EQUIPMENT SHALL NOT BE OPERATED ON THE SCARIFIED SURFACES PRIOR TO BACKFILLING.
 NOTE D: INSTALLER SHALL CONSTRUCT THE SYSTEM USING A PLAN BEARING THE APPROVAL OF THE LOCAL BOARD OF HEALTH.
 NOTE E: NOTIFY DIG-SAFE AND LOCAL UTILITIES PRIOR TO ANY EXCAVATION.
 NOTE F: THIS PARCEL LIES WITHIN THE MCKETUCKET RIVER BASIN.
 NOTE G: THIS DESIGN REQUIRES A VARIANCE FROM MASS. TITLE 5 & LOCAL REGULATIONS:
 (1) TITLE 5 SEC. 15.212 TO ALLOW DEPTH TO GROUND WATER LESS THAN 4 FT. IN ACCORDANCE WITH MASS. D.E.P. APPROVAL FOR ELJEN GSF SYSTEM FOR REMEDIAL USE.

SOIL LOG



* PERCOLATION TEST LOCATION: T.P. # 1; BOTTOM OF TEST HOLE = 42"; PERCOLATION RATE & DETERMINATION OF SUB-SOIL CONDITIONS WERE DONE ON MARCH 31, 2021 AS WITNESSED BY DAVID FLAHERTY, BOARD OF HEALTH AGENT.

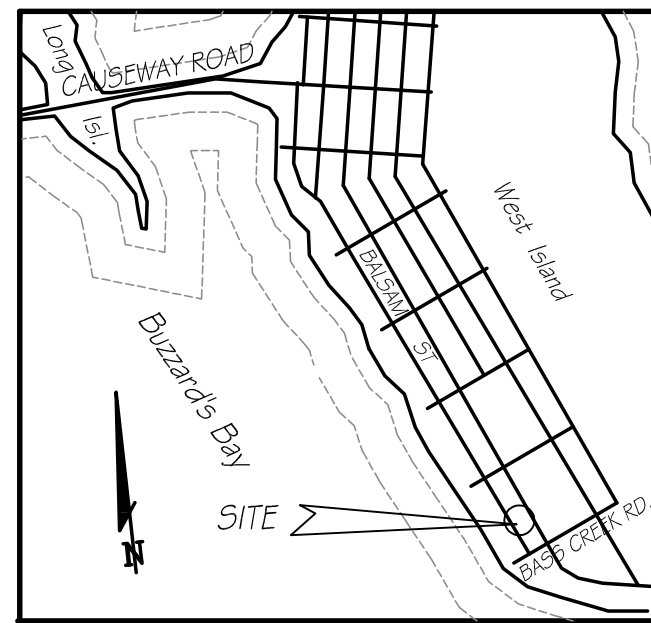
- LEGEND:
- EXISTING CONTOURS: [Symbol]
 - PROPOSED CONTOURS: [Symbol]
 - EDGE OF WETLANDS: [Symbol]
 - LIMIT OF BUFFER ZONE: [Symbol]
 - LIMITS OF F.E.M.A. ZONES: [Symbol]
 - SPOT ELEVATIONS: x 53.9
 - TEST PIT LOCATION: [Symbol]
 - SEPTIC TANK: [Symbol]
 - DELINEATION FLAG: #6

PLAN OF SITE & REPAIR OF SUBSURFACE SEWAGE DISPOSAL PREPARED FOR NORA M. BRADFORD & HENRY C. BRADFORD III 29 WINSEGANSETT AVENUE FAIRHAVEN, MASS.

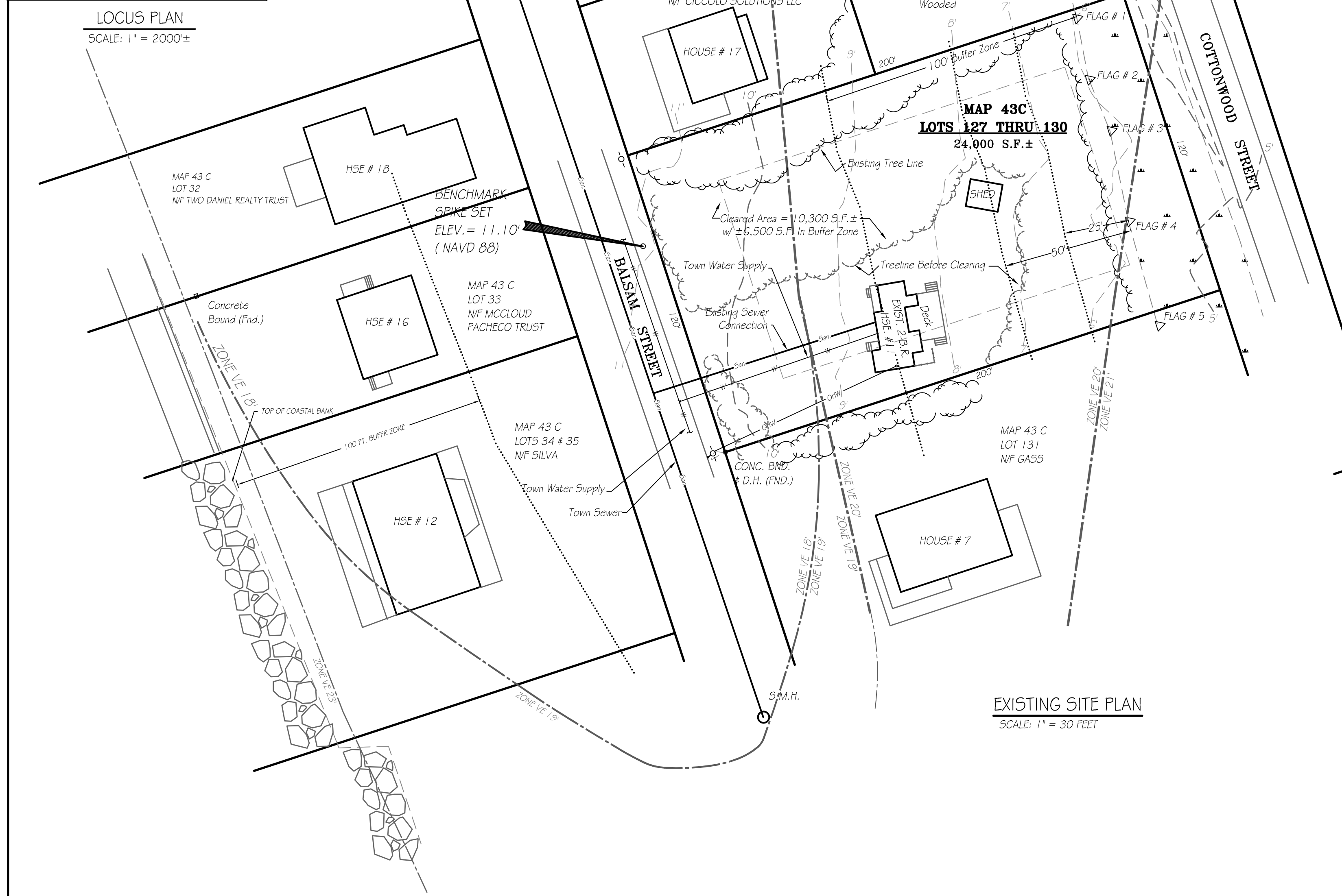
CAI Charon Associates, Inc. Consulting Engineers 323 Neck Road - Rochester, MA 02770 Tel: 508-763-8362 Fax: 508-763-9582

SCALE: AS NOTED DATE: JULY 21, 2021

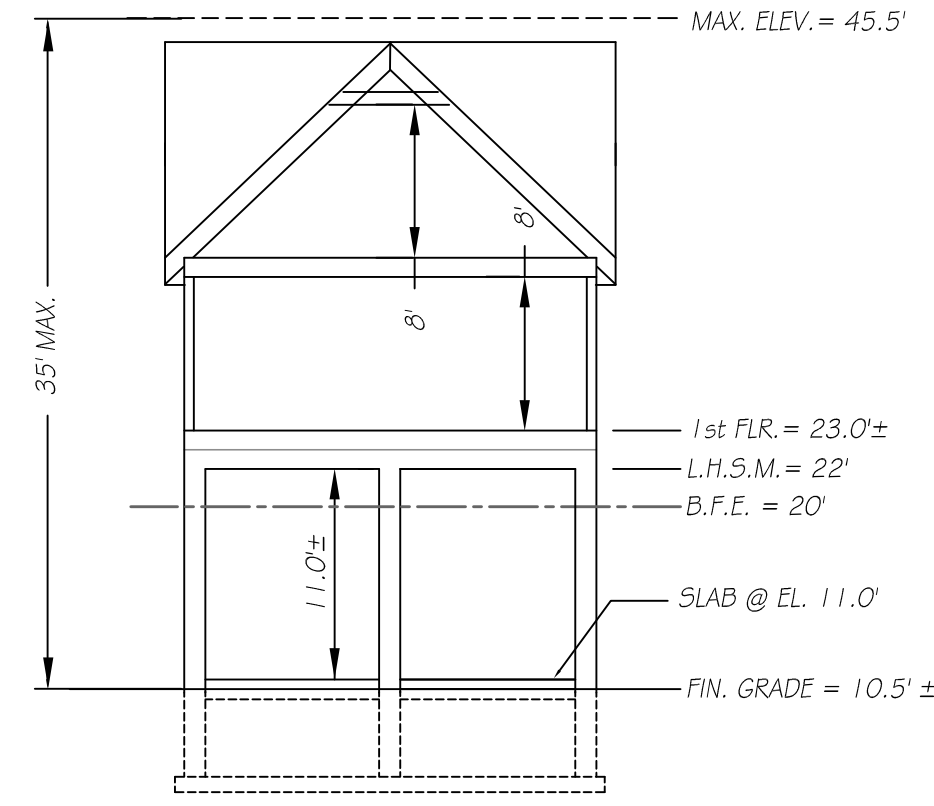
DWG. NO. SD-1



LOCUS PLAN
SCALE: 1" = 2000±



EXISTING SITE PLAN
SCALE: 1" = 30 FEET



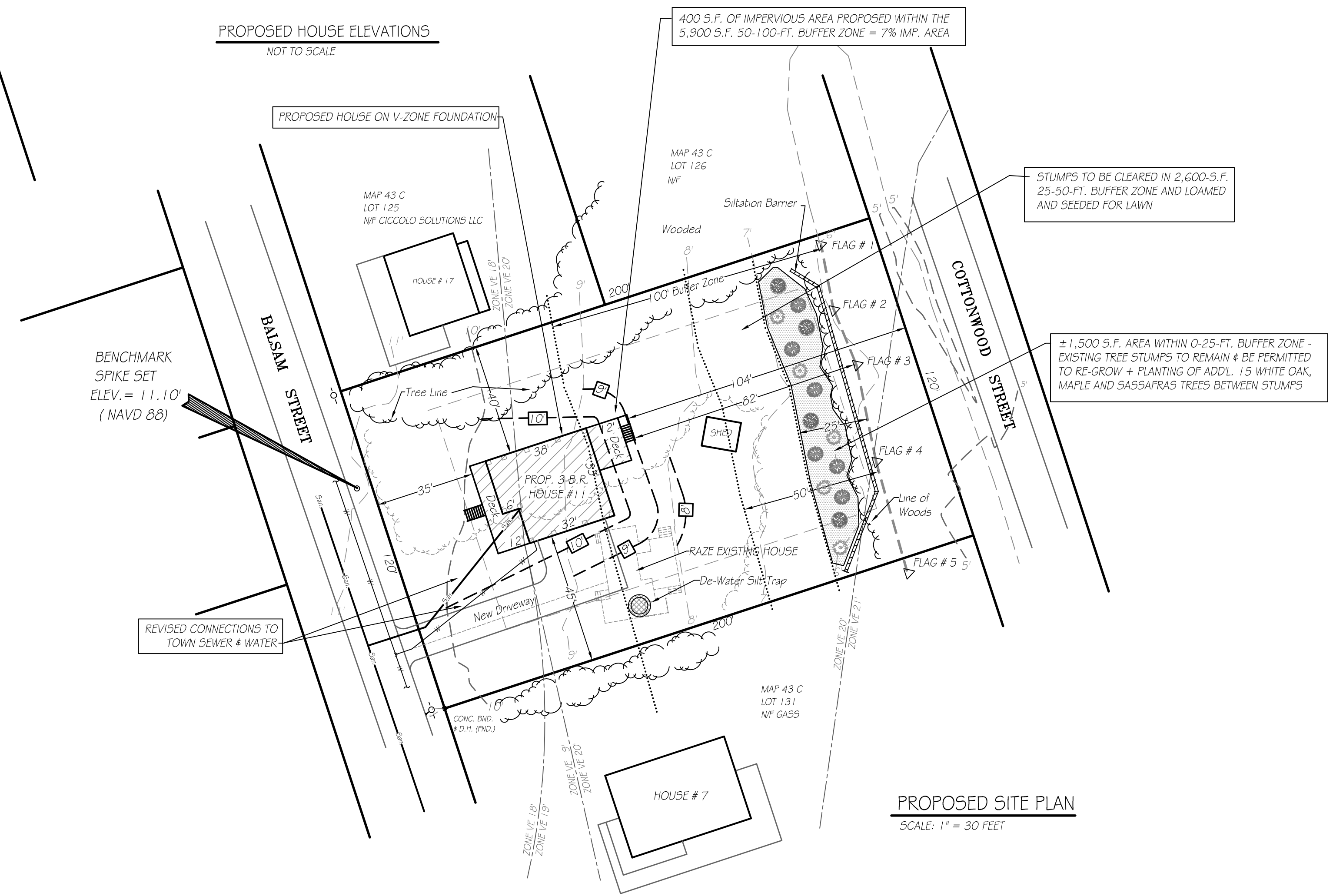
PROPOSED HOUSE ELEVATIONS
NOT TO SCALE

GENERAL NOTES:

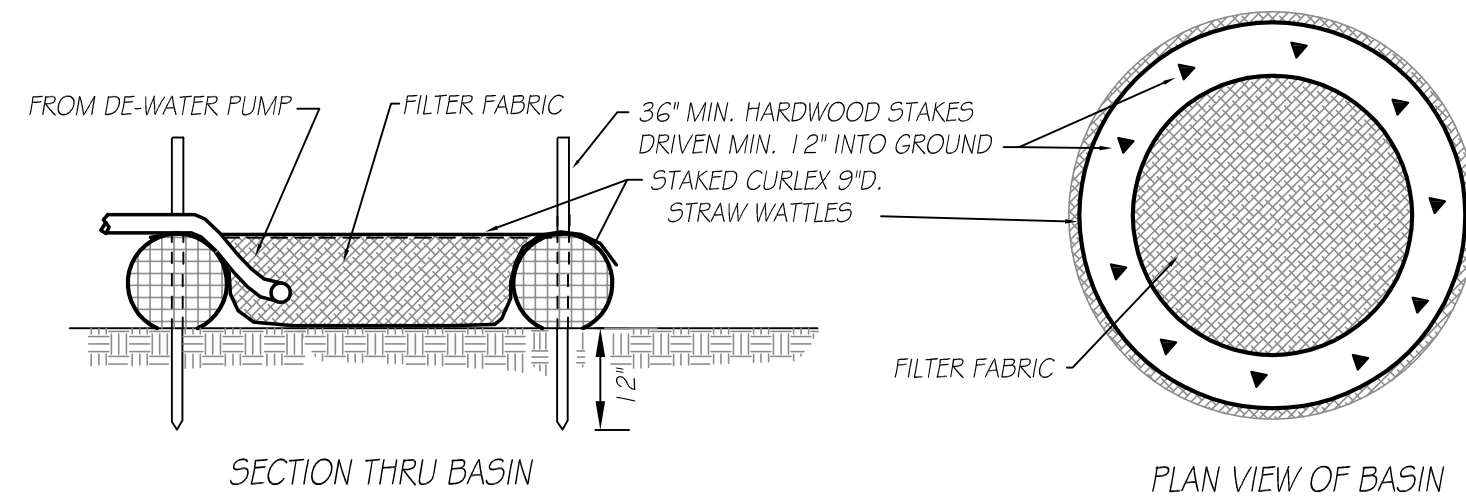
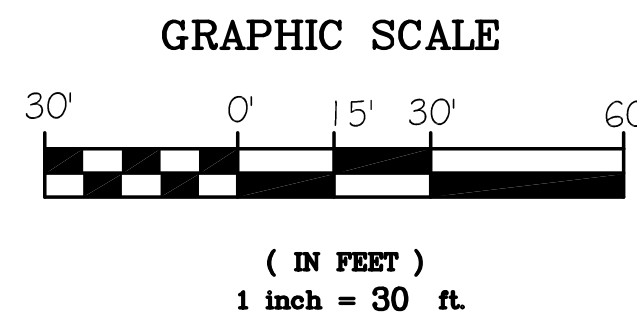
1. THIS PARCEL IS SHOWN AS LOTS 127-130 OF ASSESSORS MAP 43C.
2. THE DWELLING SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA, F.E.M.A. ZONE VE, EL. 20 AS DELINEATED ON F.E.M.A. COMMUNITY PANEL 25005C0504F DATED JULY 7, 2009.
3. DEED REFERENCE: L.C. CERT. 22937.
4. ZONING DISTRICT: RURAL RESIDENCE WITH MIN. 30,000 S.F. AREA, 140' FRONTAGE
 MINIMUM BUILDING SETBACKS: FRONT = 30', SIDE = 20', REAR = 30'; MAX. BLDG. COVERAGE = 15%; MAX. LOT COVERAGE = 25%
 EXISTING BLDG. COVERAGE = (HOUSE @ 743 S.F.) + (SHED @ 130 S.F.) / 24,000 S.F. = 872 S.F. / 24,000 S.F. = 3.6%
 EXISTING LOT COVERAGE = (BLDG. @ 872 S.F.) / 24,000 S.F. = 3.6%
 PROPOSED BUILDING COVERAGE = (HOUSE @ 1,762 S.F. + SHED @ 130 S.F.) / 24,000 S.F. = 1,892 S.F. / 24,000 S.F. = 7.9%
 PROPOSED LOT COVERAGE = (BLDG. @ 1,892 S.F.) + (DRIVEWAY @ 1,275 S.F.) = 3,167 S.F. / 24,000 S.F. = 13.2%

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 PLANTING OF TREES WHERE NOTED.

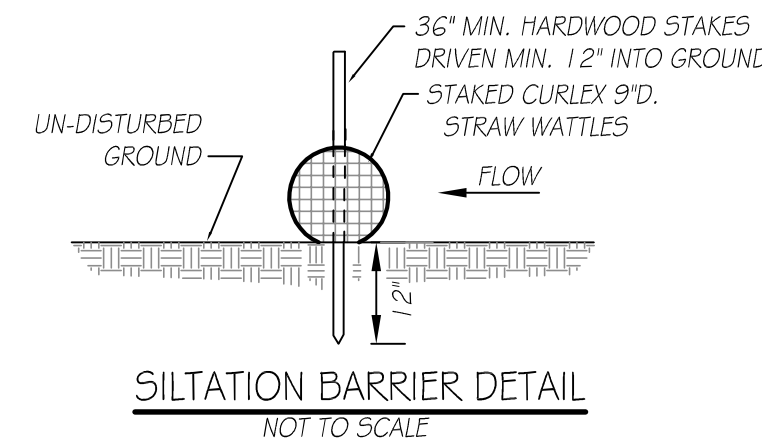


PROPOSED SITE PLAN
SCALE: 1" = 30 FEET



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.



SILTATION BARRIER DETAIL
NOT TO SCALE

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

LEGEND:

- EXISTING CONTOURS:
- PROPOSED CONTOURS:
- EDGE OF WETLANDS:
- LIMIT OF BUFFER ZONE:
- LIMITS OF F.E.M.A. ZONES:
- SPOT ELEVATIONS: 53.9
- TEST PIT LOCATION:
- SEPTIC TANK: #6
- DELINEATION FLAG:

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

PLAN OF SITE, UTILITIES & PROPOSED RESIDENCE
PREPARED FOR
NORA & HENRY C. BRADFORD, III
11 BALSAM 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: JULY 22, 2021

DWG. NO.
L-1