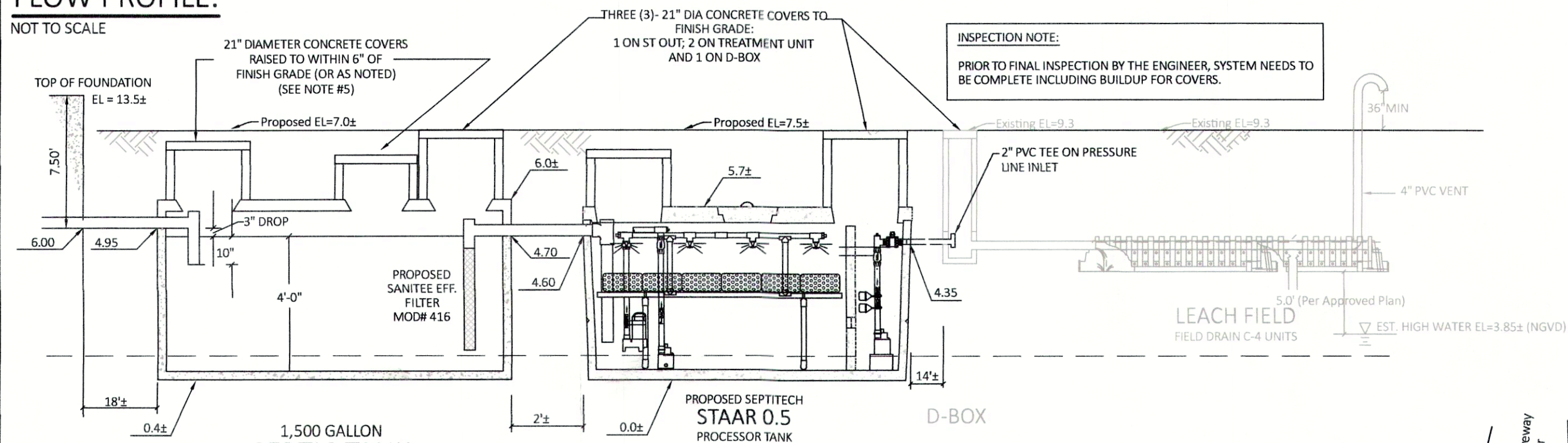


FLOW PROFILE:

NOT TO SCALE



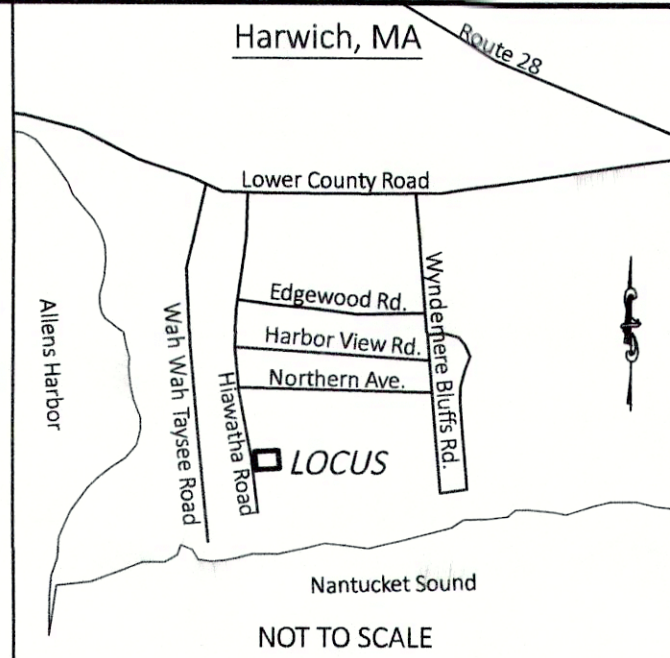
BOUANCY NOTE:
1,500 GAL MONO TANK (ST15MH) = 13,000 POUNDS
COVER MATERIAL = 3,860 POUNDS
BOUANT FORCE = 13,512 POUNDS < 16,860 POUNDS

BOUANCY NOTE:
1,000 GAL MONO TANK (STAAR.5) = 9,880 POUNDS
COVER MATERIAL = 5,025 POUNDS
BOUANT FORCE = 10,882 POUNDS < 14,905 POUNDS

INSPECTION NOTE:
PRIOR TO FINAL INSPECTION BY THE ENGINEER, SYSTEM NEEDS TO BE COMPLETE INCLUDING BUILDUP FOR COVERS.

CONSTRUCTION NOTES:

- 1.) NEITHER DRIVEWAYS NOR PARKING ARE ALLOWED OVER SEPTIC SYSTEM UNLESS H-20 COMPONENTS ARE USED.
- 2.) THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE SYSTEM AS DESIGNED UNLESS CONSTRUCTED AS SHOWN. ANY CHANGES SHALL BE APPROVED IN WRITING.
- 3.) CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCEMENT OF WORK.
- 4.) ALL CONSTRUCTION SHALL CONFORM TO THE STATE ENVIRONMENTAL CODE, TITLE 5, AND THE REQUIREMENTS OF THE LOCAL BOARD OF HEALTH.
- 5.) SEPTIC TANK AND TREATMENT TANK SHALL BE SET ON A LEVEL STABLE BASE WHICH HAS BEEN MECHANICALLY COMPACTED, OR ON A 6 INCH CRUSHED STONE BASE.
- 6.) SEPTIC TANK(S) SHALL MEET ASTM STANDARD C1127-93 AND SHALL HAVE AT LEAST THREE 20" DIAMETER MANHOLES. THE MINIMUM DEPTH FROM THE BOTTOM OF THE SEPTIC TANK TO THE FLOW LINE SHALL BE 48".
- 7.) SCHEDULE 40 PVC INLET AND OUTLET TEES SHALL EXTEND A MINIMUM OF 6" ABOVE THE FLOW LINE OF THE SEPTIC TANK AND SHALL BE INSTALLED ON THE CENTERLINE OF THE TANK DIRECTLY UNDER THE CLEANOUT MANHOLE.
- 8.) PIPING SHALL CONSIST OF 4" SCHEDULE 40 PVC OR EQUIVALENT. PIPE SHALL BE LAID ON A MINIMUM CONTINUOUS GRADE OF NOT LESS THAN 1%.
- 9.) THE TREATMENT UNIT S.T.A.A.R. 0.5 SHALL BE INSTALLED PER MFG. SPECIFICATIONS. INCLUDING ALL WIRING, VENTING AND PLUMBING COMPONENTS OF THE TREATMENT WORKS.



PLAN BOOK 173
DEED BOOK 33251
ASSESSORS' MAP 6

PAGE 7
PAGE 290
PARCEL G5-1

LEGEND

- 32 EXISTING CONTOUR
- 32 PROPOSED CONTOUR
- x12.34 EXISTING SPOT GRADE
- 24x5 PROPOSED SPOT GRADE
- W WATER SERVICE LINE
- OH OVERHEAD UTILITY SERVICE
- E ELECTRIC / COMM. SERVICE LINE
- G GAS SERVICE LINE
- TEST HOLE / BORING LOCATION
- ST SEPTIC TANK
- PC PUMP CHAMBER
- DB DISTRIBUTION BOX
- SAS SOIL ABSORPTION SYSTEM
- Reserve RESERVED FOR FUTURE
- UTILITY POLE
- CATCH BASIN
- FIRE HYDRANT
- WELL
- DRAINAGE MANHOLE
- CONCRETE BOUND, FOUND
- LIMIT OF WORK
- FENCE
- EDGE OF CLEARING

VARIANCES REQUESTED

- 310 CMR 15.000 & HARWICH REGULATIONS
- 310 CMR 15.211 Setbacks & Local Regulations
- 1.) Septic Tank Not 10' From Property Line
8' Held 2' Variance
 - 2.) Septic Tank Not 10' From Cellar Wall
6' Held 4' Variance
 - 3.) STAAR TANK Not 10' From Cellar Wall
8' Held 2' Variance
 - 4.) STAAR TANK Not 10' From Property Line
4' Held 6' Variance

LEACHING FACILITY NOTE:
REFER TO BOARD HEALTH APPROVAL LETTER FROM 2020 FOR THE VARIANCES GRANTED TO ALLOW THE INSTALLATION OF THE LEACH FIELD.

NO ALTERATION IS PROPOSED FOR THE EXISTING FIELD.

SYSTEM DESIGN CALCULATIONS:

SEWAGE DESIGN FLOW:
3 BEDROOM DWELLING @ 110 GPD = 330 GPD

LEACHING CAPACITY REQUIRED:
3 BEDROOMS (MAX) @ 110 GPD = 330 GPD REQUIRED

LEACHING CAPACITY PROVIDED:
EXISTING LEACH FIELD (CONTRACTOR FIELD DRAIN C-4 UNITS) SHALL REMAIN

SEPTIC TANK CAPACITY REQUIRED:
TANK SIZE: 330 GPD @ 200% = 660 GAL. REQUIRED

INSTALL:
ONE (1) - 1,500 GALLON SEPTIC TANK
ONE (1) - 1,000 GALLON S.T.A.A.R. TREATMENT UNIT 0.5- MFG BIO-MICROBICS- PROVISIONAL PERMIT

NOTE: A GARBAGE DISPOSAL IS NOT PERMITTED WITH THIS DESIGN.

FLOOD ZONE NOTE:

- 1.) THE LOCUS PROPERTY IS ENTIRELY WITHIN THE 100 YEAR FLOOD BOUNDARY, ZONE AE, BFE=12. AS SHOWN ON COMMUNITY PANEL 25001C0612J, DATED 7-16-2014.
- 2.) THE HIGHEST EXISTING GROUND ELEVATION WAS FOUND TO BE ELEVATION 9.8, ADJACENT TO THE FRONT STEP OF THE DWELLING.
- 3.) FOUNDATION SHALL BE DESIGNED IN ACCORDANCE WITH THE FEMA AND MASSACHUSETTS BUILDING CODE REQUIREMENTS FOR AREA OF FLOODING.

GROUNDWATER NOTE:

- 1.) HIGH GROUNDWATER WAS FOUND AT ELEVATION 3.85±, AS SHOWN ON SEWAGE SYSTEM PLAN BY SPEAKMAN, DATED 10-8-2020.

BENCHMARK
TOP OF CONCRETE BOUND
EL=5.4± (NAVD88 Datum)

Existing Catch Basin,
Rim EL=4.0
TO BE RELOCATED

PROPOSED SIX (6) CULTEC FIELD
DRAIN C-4HD
BOTTOM OF GALLEY EL=3.5
TOP OF CULTEC UNIT EL=4.2

CLIFFORD & REBECCA WILLY
961 SWEETTRUM VALLEY PLACE, LAKE MARY, FLORIDA 32745

PROPOSED SEWAGE UPGRADE SITE PLAN- BOH
9 HIAWATHA ROAD, HARWICHPORT, MA

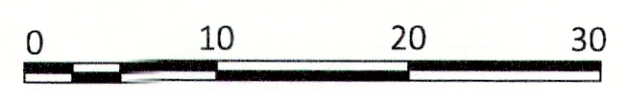
J.M. O'REILLY & ASSOCIATES, INC.
Professional Engineering & Land Surveying Services

1573 Main Street - Route 6A
P.O. Box 1773
(508)896-6601 Office Brewster, MA 02631 (508)896-6602 Fax

DATE: 2-2-2024 SCALE: As Noted BY: GMB CHECK: JMO JOB NUMBER: JMO-9360



LEACH FIELD AND SOIL NOTE:
REFER TO SEWAGE SYSTEM PLAN AS PREPARED BY DAN A. SPEAKMAN CONSTRUCTION, LAST REVISED 10-8-2020. FOR SOIL TEST RESULTS AND SIZING OF THE LEACHING FACILITY. NO CHANGE IN THE LEACH FIELD IS PROPOSED. PLAN ON FILE WITH THE HARWICH BOARD OF HEALTH.



SCALE 1"=10'