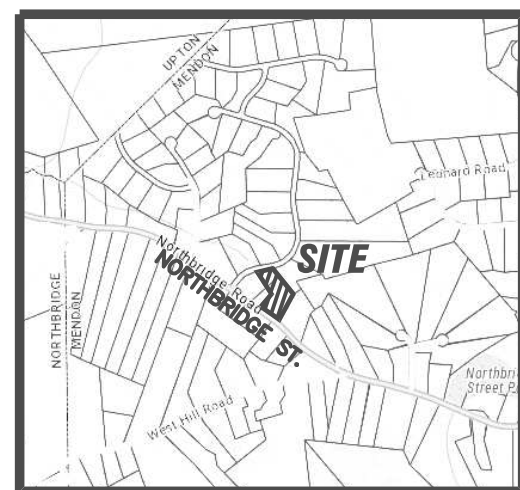
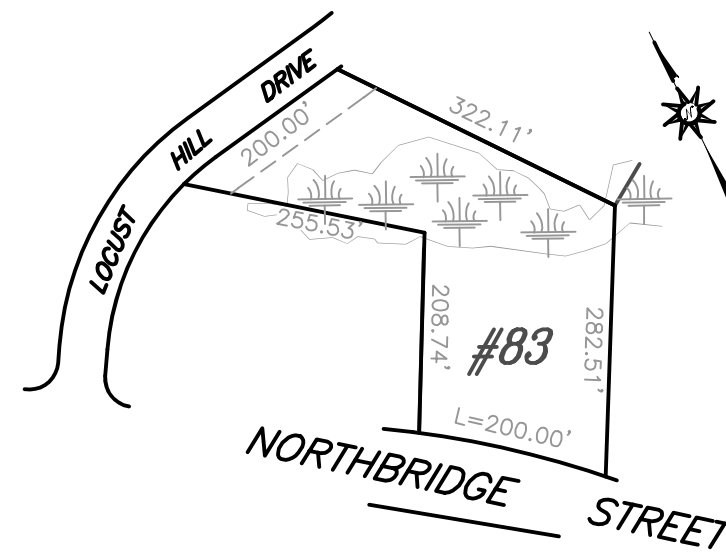


**ASSESS. MAP 4
PARCEL 83**
85,198 SQ. FT.
1.96 ACRES
61,100 S.F. +/- UPLAND

WETLANDS DELINEATION
MISCOE SPRINGS DEFINITIVE PLAN
SEE DEP FILE #218-745



LOCUS (N.T.S.)



CONSERVATION COMMISSION LEGEND

- EDGE OF BORDERING VEGETATED WETLAND
- EDGE OF 100' BUFFER ZONE
- STAKED SILTATION FENCE & STRAW WATTLES

I CERTIFY THAT I AM CURRENTLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PURSUANT TO 310 CMR 15.017 TO CONDUCT SOIL EVALUATIONS AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERIENCE, AND EXPERIENCE DESCRIBED IN 310 CMR 15.017. I FURTHER CERTIFY I CERTIFY THAT THE RESULTS OF MY SOIL EVALUATION, AS INDICATED ON THE ATTACHED SOIL EVALUATION FORM, ARE ACCURATE AND IN ACCORDANCE WITH 310CMR 15.100 THROUGH 15.107.

SIGNATURE _____ DATE _____

TEST HOLE	243	TEST HOLE	244
0"	402.3	0"	404.4
8"	401.6	8"	403.7
42"	398.8	34"	401.6
54"	397.8	42"	400.9
108"	393.3	90"	396.9
PERC - 5 M.P.I.		PERC - 5 M.P.I.	

Soil Evaluator - LENNY IZZO
Witness - STEVEN DONATELLI
Date of Test - AUGUST 30, 2016
Perc Application# - 11-04
Perc Rate - 5 M.P.I.,
Design G.W. - @ 42"
Mottling - @42"
Refusal - NONE

- SYSTEMS IN FILL -

- 1- EXCAVATION TO BE DRY AND SCARIFIED.
- 2- FILL TO BE STOCKPILED AT THE EDGE OF FOUNDATION AND PUSHED OR CAST INWARD OVER EXCAVATED AREA.
- 3- FILL SHALL NOT BE PLACED DURING RAIN OR SNOW STORMS.
- 4- DEWATERING REQUIRED IF FILL IS TO BE PLACED BELOW GROUND WATER.

- FILL SPECIFICATIONS -

THE FILL SHALL BE COMPRISED OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER AND DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT CLASSES OF SOIL SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS, USING A #4 SIEVE, SHALL BE PERFORMED ON REPRESENTATIVE SAMPLE OF THE FILL. UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED ON THE #4 SIEVE. SIEVE ANALYSIS ALSO SHALL BE PERFORMED ON THE FRACTION OF THE FILL SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSIS MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS.

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 mm	100%
#50	0.30 mm	10% - 100%
#100	0.15 mm	0% - 20%
#200	0.075 mm	0% - 5%

CULTEC CONTACTOR 100 NOTES

THE CONTRACTOR/INSTALLER SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT EQUIPMENT AND/OR VEHICLES DO NOT DRIVE OVER THE LEACH CHAMBERS ONCE INSTALLED.

INSTALLATION & MATERIALS TO BE IN COMPLIANCE WITH
CULTEC INSTALLATION INSTRUCTIONS & SPECIFICATIONS
AND D.E.P. CULTEC APPROVAL LETTER #9 DATED FEBRUARY 3, 2016.

IN ACCORDANCE WITH 310 CMR 15.211. GENERAL CONSTRUCTION REQUIREMENTS

SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED. MAGNETIC MARKING TAPE SHALL BE PLACED ABOVE THE OUTSIDE PERIMETER OF THE SEPTIC TANK, DISTRIBUTION BOX AND ABOVE ALL PIPING BEGINNING AT THE FOUNDATION THROUGH TO THE END OF EACH DISTRIBUTION LINE.

NOTES:

ANY UNDERGROUND UTILITIES TO BE ACCURATELY LOCATED PRIOR TO CONSTRUCTION BY CONTRACTOR

THERE ARE NO OTHER KNOWN WELLS WITHIN 200' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.

THERE ARE NO KNOWN SEWAGE DISPOSAL SYSTEMS WITHIN 100' OF THE PROPOSED WELL.

AN AS-BUILT PLAN WILL BE REQUIRED

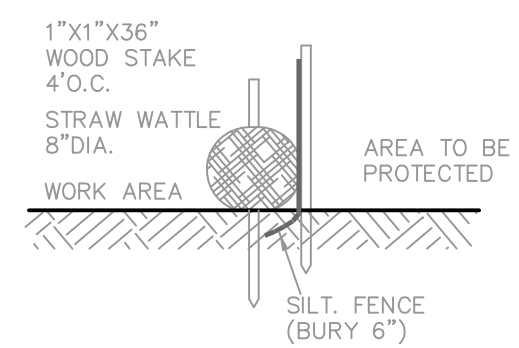
THERE WERE NO WETLANDS OBSERVED WITHIN 100' OF ANY PROPOSED CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT DIG SAFE AND LOCATE ALL UTILITIES BEFORE EXCAVATION. 1 800 DIG-SAFE

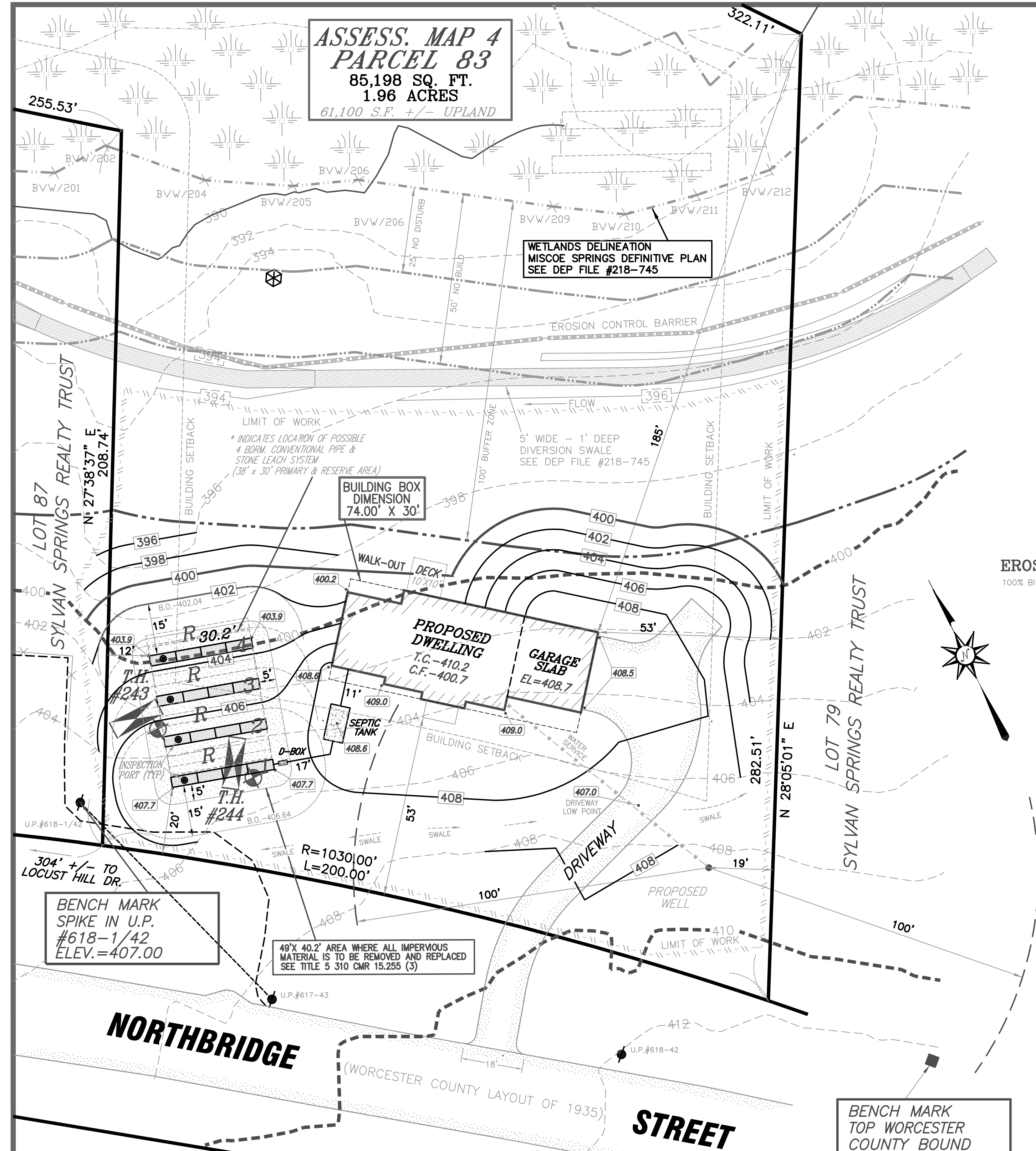
BUOYANCY CALCULATIONS

BOTTOM SETIC TANK ABOVE HIGH GROUND WATER
BUOYANCY - 1500 GAL. SEPTIC TANK
0.0' x 10' x 5.2' = 00 C.F.
00 C.F. x 62.4 P.C.F. = 0,000 LBS.
1500 GAL. H=20 SEPTIC TANK = 11,400 LBS.
+ SOIL WEIGHT (COVER)
+ SOIL FRICTION

5' WIDE - 1' DEEP
DIVERSION SWALE
SEE DEP FILE #218-745



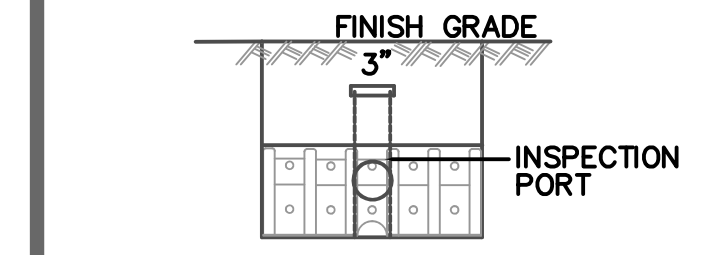
EROSION CONTROL BARRIER (ECB)
100% BIODEGRADABLE MATERIALS - NO SYNTHETIC MATERIALS



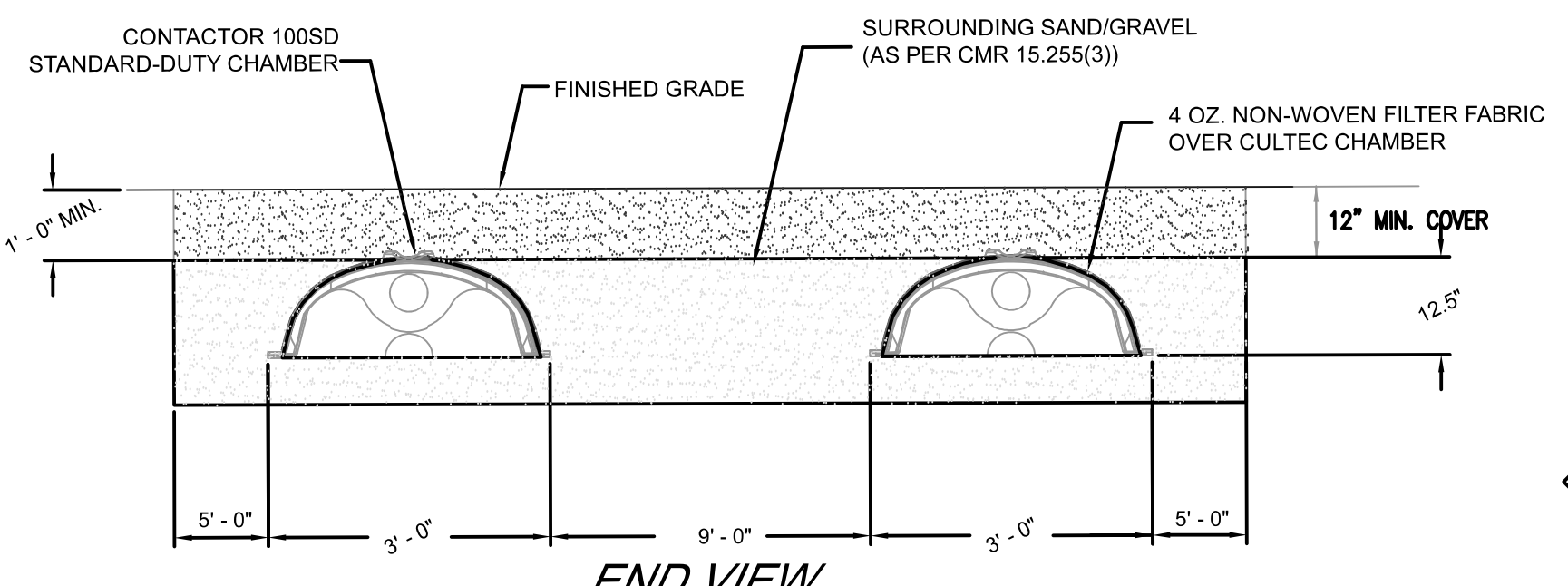
ZONING-RESIDENTIAL

- MIN. SETBACKS
- FRONT - 50'
- SIDE - 20'
- REAR - 20'

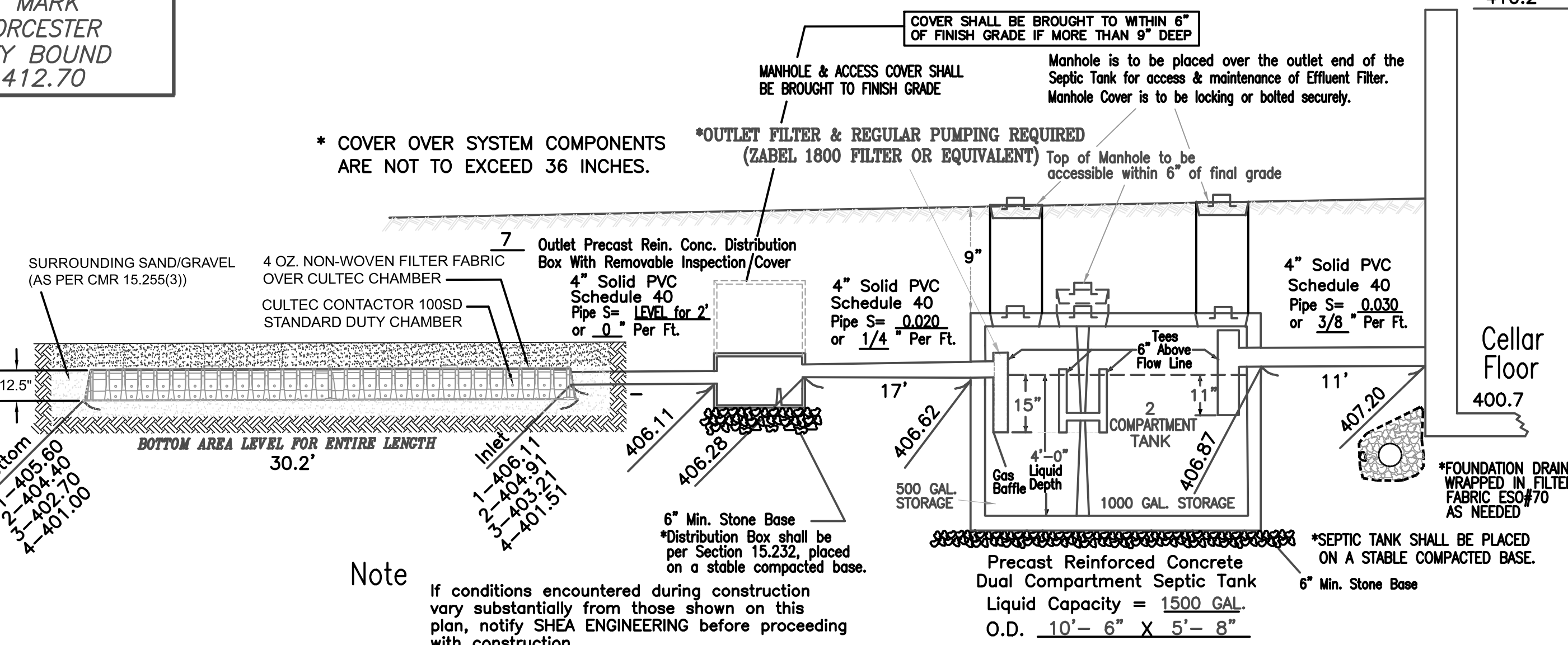
INSPECTION PORT DETAIL



310 CMR 15.240 (13) -
ALL SOIL ABSORPTION SYSTEMS SHALL HAVE A MINIMUM OF ONE INSPECTION PORT CONSISTING OF A PERFORATED FOUR 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 SCREEN TYPE CAP AND ACCESSIBLE TO WITHIN THREE INCHES OF FINISH GRADE.



GENERAL NOTES
CONTACTOR 100SD BY CULTEC, INC. OF BROOKFIELD, CT. STORAGE PROVIDED = 3.90 CF/FT PER DESIGN UNIT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
ALL CONTACTOR 100 CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.



Note

If conditions encountered during construction vary substantially from those shown on this plan, notify SHEA ENGINEERING before proceeding with construction.

CONSTRUCTION NOTES

ALL TOPSOIL AND SUBSOIL OR ANY OTHER IMPERVIOUS MATERIAL BELOW THE TOP OF THE PEASTONE AND FOR A DISTANCE OF 5' IN ALL DIRECTIONS FROM THE LEACHING FACILITY TO BE REMOVED AND REPLACED WITH CLEAN GRANULAR SAND & GRAVEL.

THE FOLLOWING INSPECTIONS IF CHECKED ARE REQUIRED BY THE BOARD OF HEALTH.

Health Agent	Design Engineer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

DESIGN CRITERIA

Total Daily Flow
4 Bdrms x 110 Gal/Bdrm/Day = 440 Gal/Day
No. of Leach Trenches 4 **Length** 30.2' **Width** 3'
Depth Below Inlet 6.1'
Effective Leaching Area is equal to 6.7 S.F. times Total Linear Feet.
121 L.F. x 6.7 S.F. = 809 S.F. Effective Leaching Area
809 S.F. x 0.80 = 486 Gal/Day
Total Leaching Area gpd/Sq.Ft. Total Leaching Capacity
* GARBAGE GRINDERS NOT ALLOWED

APPLICANT
SYLVAN SPRINGS REALTY TRUST
148 PARK ST
NORTH READING, MA.
SITE
LOT 83 / HSE.#83
NORTHBRIDGE ST.
MENDON, MA.

LEGEND
--- 100 --- LIMIT OF WORK
--- 100 --- EXISTING CONTOUR
--- 100.00 --- PROPOSED CONTOUR
100.00 EXISTING SPOT ELEVATION
100.00 PROPOSED SPOT ELEV.
⊕ DEEP HOLE
⊕ PERC HOLE

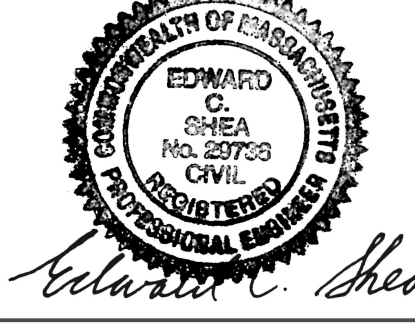
BENCH MARKS : USGS DATUM
SPIKE IN U.P. #618-1/42 TOP WORCESTER COUNTY BND. ELEV.=407.00
TOP WORCESTER COUNTY BND. ELEV.=412.70

**IA SYSTEM ~
SEWAGE DISPOSAL PLAN
IN
MENDON, MA**

SCALE 1" = 20' APRIL 25, 2020

I CERTIFY THAT THE SEWAGE DISPOSAL FACILITY IS DESIGNED IN ACCORDANCE WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND THE REGULATIONS OF THE MENDON BOARD OF HEALTH.
NOTE: THIS PLAN WAS MADE FROM A TAPED SURVEY AND NOT FROM AN INSTRUMENT PROPERTY LINE SURVEY AND IS DRAWN FOR SEWAGE DISPOSAL PURPOSES ONLY AND NOT FOR PROPERTY LINE DETERMINATION.

APPROVED _____
DISAPPROVED _____
DATE _____
SIGNED _____



Shea ENGINEERING & SURVEYING INC.
76 UXBRIDGE ROAD MENDON, MA. 01756
TEL (508) 473-1163