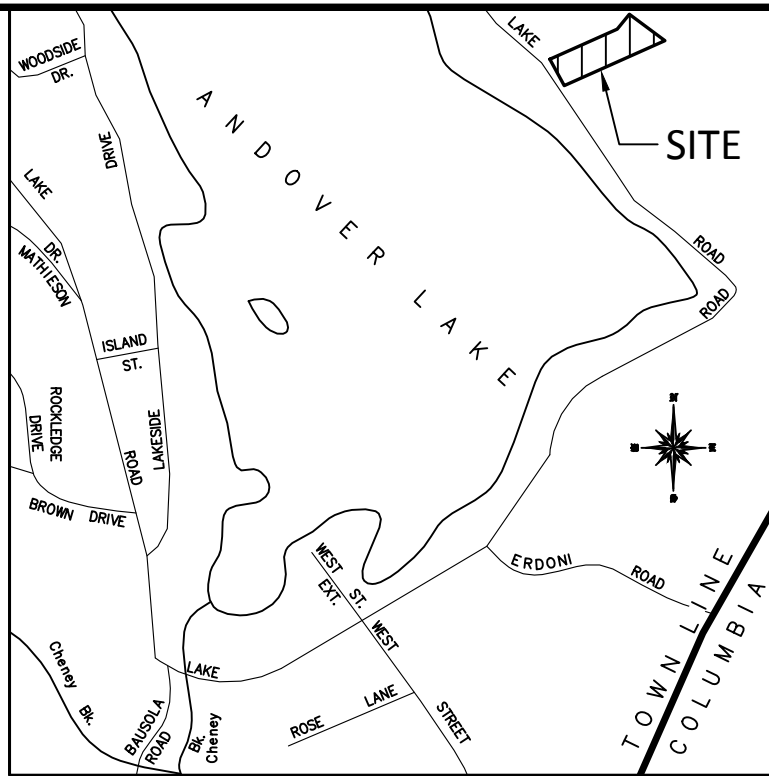
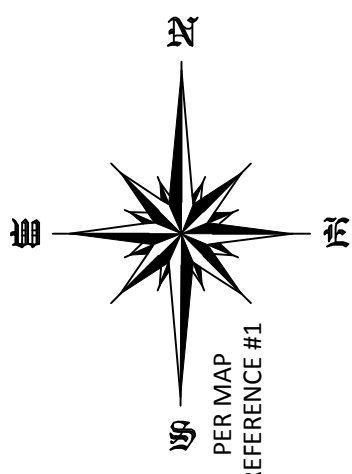
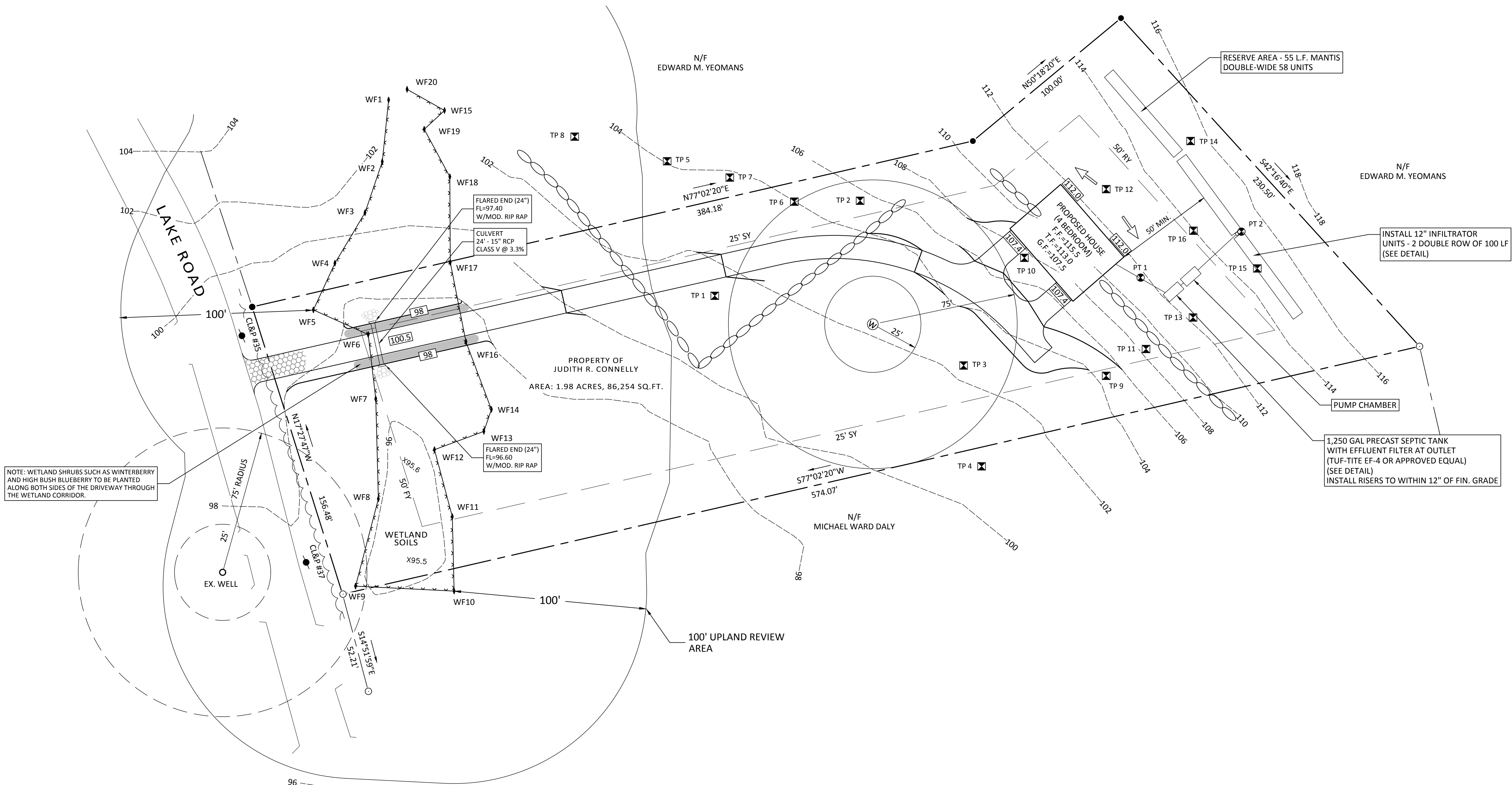


PROPERTY LINE
EXISTING CONTOUR
LIMIT OF WETLAND SOILS PER MAP REFERENCE #1
BUILDING SET BACK LINE
STONEWALL
ANGLE POINT
IRON PIN OR PIPE FOUND
IRON PIN TO BE SET 5/8" REBAR
EX. SPOT ELEVATION
PROPOSED UNDERGROUND UTILITIES
SILT FENCE
PROPOSED SPOT GRADE
GRADE TO DRAIN

- ① INVERT @ HOUSE - X MIN.
- ② INVERT IN @ SEPTIC TANK - X
- ③ INVERT OUT @ SEPTIC TANK - X
- ④ D-BOX / FLOWLINE @ UNITS - X
BOTTOM OF UNITS - X
EXISTING GRADE - X
FINISHED GRADE OVER UNITS - X MIN.



GENERAL LOCATION MAP
SCALE: 1" = 1000'



LOAM, SEED & MULCH ALL
DISTURBED AREAS

**CONTRACTOR TO PRESERVE &
PROTECT ALL EXISTING UTILITIES.
PRIOR TO THE START OF
CONSTRUCTION CONTACT
'CALL BEFORE YOU DIG'
1-800-922-4455**

THERE ARE NO WELLS LOCATED
WITHIN 75' OF THE PROPOSED
SEPTIC SYSTEM ON THIS LOT.

THIS PROPERTY IS NOT LOCATED
WITHIN A FLOOD ZONE.

BENCHMARK TO BE SET IN THE
FIELD AT TIME OF CONSTRUCTION.

NO TREES SHALL BE REMOVED
WITHIN 100 FEET OF THE
WETLANDS UNLESS APPROVED BY
THE TOWN OF ANDOVER
WETLANDS AGENT.

AREAS ALONG SIDES OF DRIVEWAY THROUGH WETLAND CORRIDOR TO BE PLANTED WITH THE FOLLOWING SPECIES.

ALL NON-NATIVE, INVASIVE PLANT SPECIES SHALL BE IDENTIFIED AND REMOVED FROM THIS AREA PRIOR TO PLANTING.

ALL WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE TOWN OF ANDOVER
WETLANDS AGENT.

<u>COMMON NAME</u>	<u>BOTANICAL NAME</u>	<u>SPACING</u>	<u>SIZE</u>
WINTERBERRY HOLLY	ILEX VERTICILLATA	5 FEET	18 - 24"
HIGHBUSH BLUEBERRY	VACCINIUM CORYMBOSOM	5 FEET	18 - 24"

1. THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.

TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY
BOUNDARY DETERMINATION CATEGORY: RESURVEY
HORIZONTAL ACCURACY CLASS: A-2
TOPOGRAPHIC ACCURACY CLASS: T-2
VERTICAL DATUM: ASSUMED
LAND ZONE: ANDOVER LAKE DISTRICT

RES

CIVIL ENGINEERING CONSULTANTS

63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033

Reynolds Engineering Services, LLC

To my knowledge and belief, this map is substantially correct as noted hereon


Mark A. Reynolds, P.E.

CT LIC.# 19789

Certification is not valid without live signature and embossed (impression) type seal

[illegible]

GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

SOILS INFORMATION

TP#1
DATE: 1996
DEPTH: 49"
Mottling: 20"
Groundwater: 12"
0-10" Topsoil
10-24" Silty Fine Sandy Loam
24-48" Glacial Till

TP#2
DATE: 1996
Depth: 24"
Mottling: 20"
Groundwater: 24"

TP#3
DATE: 1996
Depth: 18"
Mottling: ?
Groundwater: 12"
0-10" Topsoil (black)
Hardpan 18"

TP#4
DATE: 1996
Depth: 7"
Mottling: -"
Groundwater: 13"
0-8" Topsoil
8-26" Sandy Loam
26-7' G.T.

TP#5
Date: 1996
Depth: 8"
Mottling: 26" - 28"
Groundwater: 30"
0-8" Topsoil
8-29" Sandy Loam
29-8" Sandy Till - Firm

TP#6
Date: 1996
Depth: 52"
Mottling: 18"
Groundwater: 22"
0-11" Topsoil
11-22" Fine Sandy Loam
22-52" Glacial Till

TP#7
Date: 1996
Depth: 24"
Mottling: 22"
Groundwater: -
24" Hardpan
(Control Hole for Mottling)

TP#8
Date: 1996
Depth: 88"
Mottling: 26"
Groundwater: -
0-9" Topsoil
9-27" Fine Sandy Loam
27-88" Sandy Till - Firm

TP#9
Date: 3-1-05
Depth: 49"
Mottling: 32"
Groundwater: 39"
Ledge: 49"
Roots: 32"
0-10" Topsoil
10-32" Fine Sandy Loam
32-49" Sandy Till - Compact

TP#10
Date: 3-1-05
Depth: 57"
Mottling: 28"
Groundwater: 28"
Ledge: 57"
Roots: 28"
0-10" Topsoil
10-29" Fine Sandy Loam
29-57" Sandy Compact Till

TP#11
Date: 3-1-05
Depth: 58"
Mottling: 35"
Groundwater: 46"
Ledge: 58"
Roots: 42"
0-7" Topsoil
7-37" Sandy Loam
37-58" Sandy Till - Compact

TP#11
Date: 3-31-05
Depth: 58"
Mottling: 35"
Groundwater: 46"
Ledge: 58"
Roots: 42"
0-7" Topsoil
7-37" Sandy Loam
37-58" Sandy Till - Compact

TP#12
Date: 3-31-05
Depth: 62"
Mottling: 27"
Groundwater: 27"
Ledge: 62"
Roots: 27"
0-10" Topsoil
10-27" Fine Sandy Loam
27-62" Sandy Till

TP#13
Date: 3-31-05
Depth: 49"
Mottling: 25"
Groundwater: 28"
Ledge: 49"
Roots: 27"
0-8" Topsoil
8-27" Silt Loam
27-49" Sandy Till - Compact

TP#14
Date: 3-31-05
Depth: 68"
Mottling: 29"
Groundwater: 30"
Ledge: 68"
Roots: 29"
0-10" Topsoil
10-30" Fine Sandy Loam
30-68" Compact Sandy Till

TP#15
Date: 3-31-05
Depth: 87"
Mottling: 30"
Groundwater: 49"
Ledge: 87"
Roots: 36"
0-9" Topsoil
9-33" Brown Fine Sandy Loam
33-87" Compact Sandy Till
(Some Rotten Rock)

TP#16
Date: 3-31-05
Depth: 55"
Mottling: 28"
Groundwater: 28"
Ledge: 55"
Roots: 26"
0-6" Topsoil
6-28" Silt Loam
28-55" Compact Sandy Till

Perc. Hole 1
Date: 3-31-05
Depth: 22"
Rate: 1.0.0 min./in.

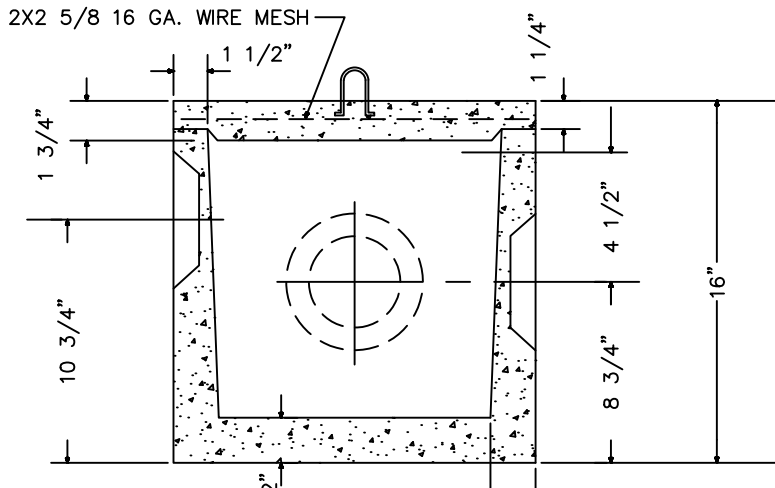
Perc. Hole 2
Date: 3-31-05
Depth: 22"
Rate: 1.0.0 min./in.

MINIMUM LEACHING SYSTEM SPREAD (MLSS)
CALCULATIONS:

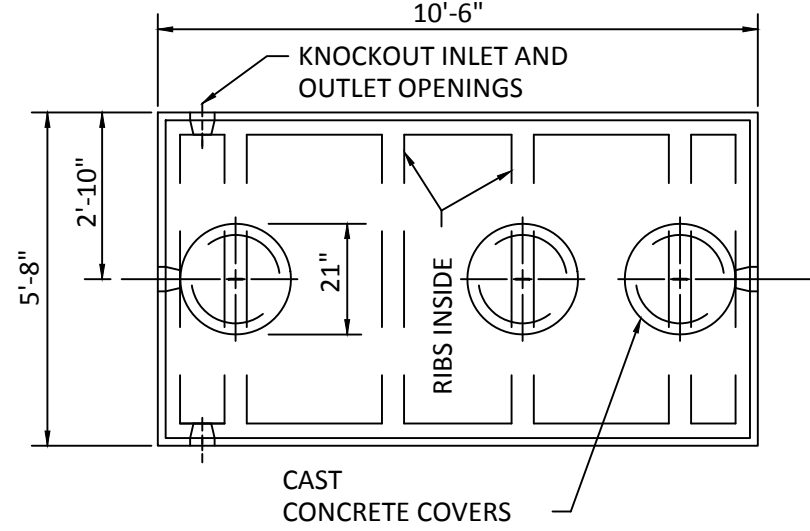
Receiving Soil Depth: 25"

Slope: 6:1 - 8%
Hydraulic Factor: 30
Flow Factor: 4 Bedrooms: 1.75
Percolation Factor: 1.0

MLSS: 30 x 1.75 x 1.0 = 52.5 LF

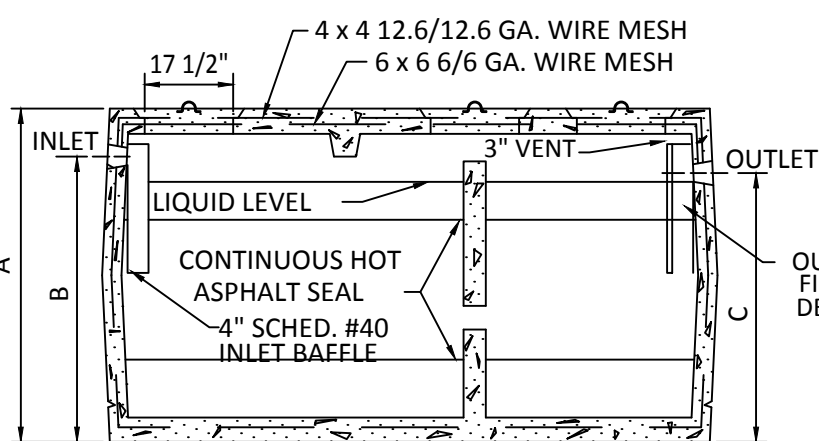


STANDARD D-BOX
NOT TO SCALE



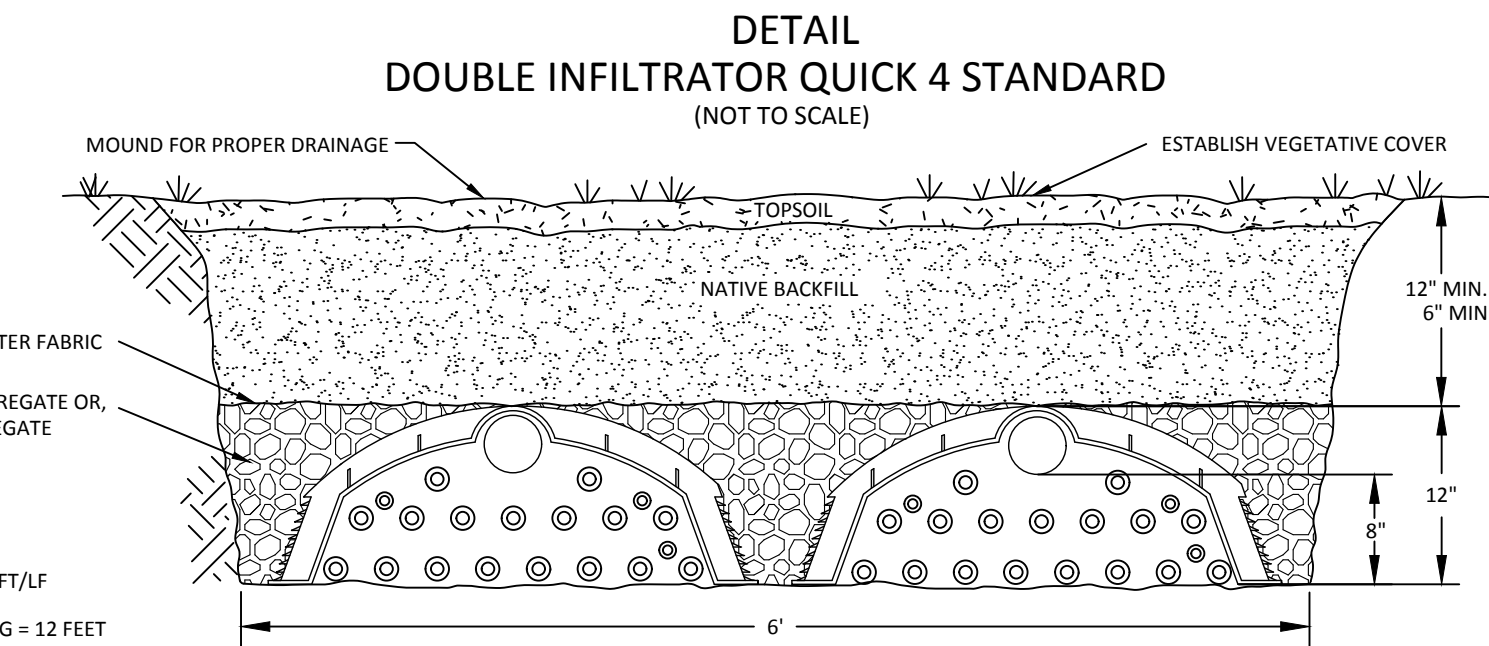
PLAN

CAPACITIES	A	B	C
1250 GAL	61"	51"	48"
1500 GAL	69"	59"	56"



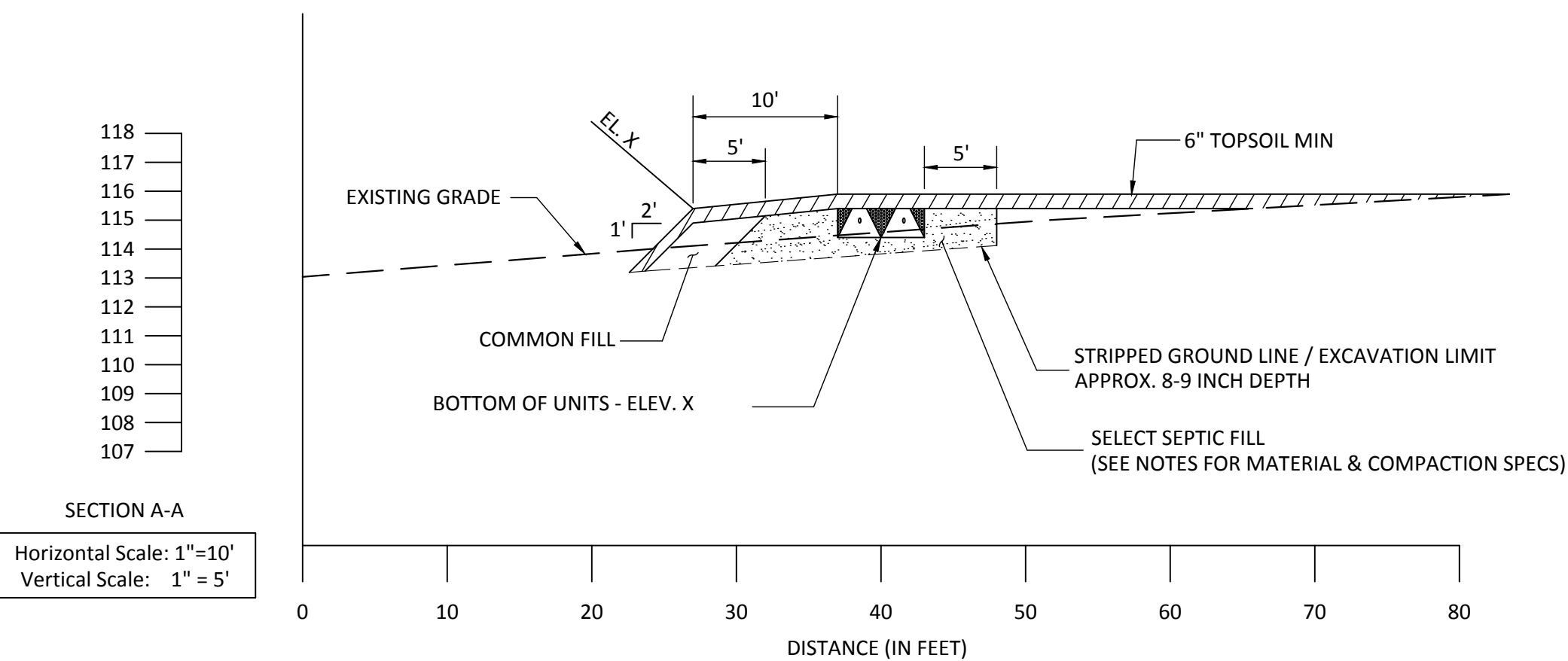
CROSS SECTION

1250/1500 GALLON
2 COMPARTMENT
SEPTIC TANK
NOT TO SCALE



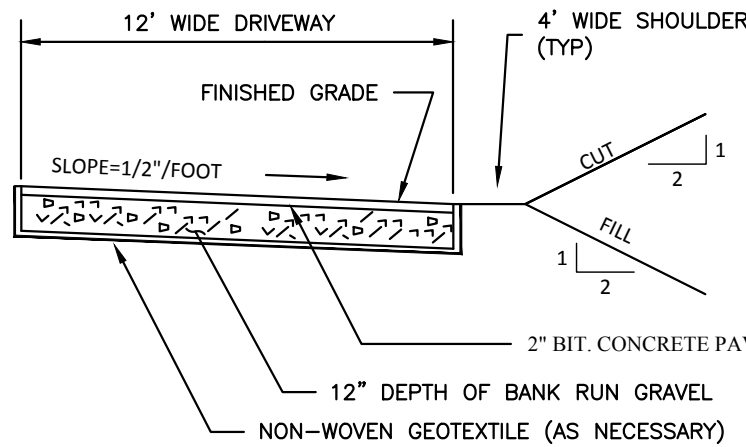
NOTES:

- EFFECTIVE LEACHING AREA = 5.9 SQ.FT./LF
- CENTER-TO-CENTER TRENCH SPACING = 12 FEET
- INSTALL INFILTRATORS ACCORDING TO MANUFACTURER'S CURRENT INSTALLATION INSTRUCTIONS



EROSION & SEDIMENT CONTROL NOTES:

- ALL EROSION & SEDIMENT CONTROL MEASURES TO BE CONSTRUCTED AS DETAILED AND SPECIFIED IN THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL JANUARY 2002 AS AMENDED.
- ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION, PROPERLY MAINTAINED DURING CONSTRUCTION AND REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN PROPERLY STABILIZED. AFTER INSTALLATION OF THE INITIALLY PRESCRIBED MEASURES, ADDITIONAL MEASURES MAY BE REQUIRED TO ADDRESS FIELD CONDITIONS AS ORDERED BY THE TOWN OF ANDOVER OR ITS DESIGNATED AGENT(S).
- THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED. THE EXPOSURE SHOULD BE THE SHORTEST PERIOD OF TIME. WHEN NECESSARY TEMPORARY VEGETATION AND OR MULCHING SHOULD BE USED TO PROTECT EXPOSED AREAS. FINAL VEGETATION SHOULD BE INSTALLED AS SOON AS POSSIBLE. WHEREVER FEASIBLE NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.
- THE STOCKPILING OF BUILDING MATERIALS SHALL BE WITHIN THE AREA OF DISTURBANCE.
- SEEDBED PREPARATION: FINE GRADE AND RAKE SOIL TO REMOVE ANY STONES LARGER THAN 2 INCHES. INSTALL ANY NEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS. APPLY LIMESTONE AT A RATE OF TWO TONS PER ACRE OR 90 POUNDS PER 1000 SQUARE FEET. FERTILIZE WITH 10-10-10 AT A RATE OF 11 POUNDS PER 100 SQUARE FEET. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF FOUR INCHES.
- SEED APPLICATION: APPLY SHADE TOLERANT GRASS MIXTURE BY HAND, CYCLONE SEEDER OR HYDROSEEDER. SEEDING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND SEPTEMBER 1. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE UNTIL SEED CAN BE DONE.
- ESTABLISH PERMANENT VEGETATION USING A SEED MIXTURE OF:
KENTUCKY BLUEGRASS 20 LBS/ACRE
CREEPING RED FESCUE 20 LBS/ACRE
PERENNIAL RYE GRASS 5 LBS/ACRE
TOTAL 45 LBS/ACRE
THE RECOMMENDED DATES FOR SEEDING ARE APRIL 1 THROUGH JUNE 1 AND AUGUST 15 THROUGH SEPTEMBER 1.
- MULCHING: IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDDED SURFACE WITH STRAW OR HAY AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH SHALL BE SPREAD BY HAND OR WITH A MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE APPROXIMATELY TWO TO THREE INCHES.



* NOTE: 2" BIT. CONCRETE PAVEMENT REQUIRED WHERE SLOPE EXCEEDS 10%

DRIVEWAY INSTALLATION DETAIL

NOT TO SCALE

DESIGN NOTES:

- ALL CONSTRUCTION TO CONFORM TO STANDARDS OF THE CONNECTICUT PUBLIC HEALTH CODE AND TO THE SATISFACTION OF THE TOWN SANITARIAN.
- PERCOLATION RATE FOR DESIGN: 10 min./inch
DEPTH TO RESTRICTIVE LAYER: 25"
- REQUIRED LEACHING AREA FOR 4 BEDROOM BUILDING = 577.5 SF ELA
- DESIGN: USE 100 LF OF 12" HIGH DOUBLE INFILTRATOR UNITS
ELA PROVIDED = 5.9 SF/LF x 100 LF = 590 SF ELA
- THIS SYSTEM HAS NOT BEEN DESIGNED FOR THE USE OF LARGE CAPACITY (+100 GALLONS), DISCHARGE TYPE BATHTUBS. RESIDENTIAL GARBAGE DISPOSALS ARE NOT ANTICIPATED FOR THIS DESIGN. IN THE EVENT THAT SUCH AN INSTALLATION IS CONTEMPLATED FOR THE PROPOSED HOUSE, A LARGER SEPTIC TANK AND INCREASED LEACHING FIELD CAPACITY WILL BE REQUIRED.
- THE DESIGN SHOWN HEREON CONFORMS TO ALL APPLICABLE STATE AND LOCAL HEALTH CODE REQUIREMENTS AND TO GOOD ENGINEERING PRACTICE. I CAN NOT GUARANTEE AGAINST FAILURE DUE TO IMPROPER INSTALLATION, IMPROPER MAINTENANCE OR TO NATURAL PHENOMENA BEYOND THE SCOPE OF NORMAL FIELD INVESTIGATION.

SEPTIC SYSTEM CONSTRUCTION NOTES:

- CONSTRUCTION SEQUENCE
A. STRIP & STOCKPILE TOPSOIL FROM LEACHING AREA.
B. CONSTRUCT LEACHING UNITS TO DESIGN LINE & GRADE.
D. LOAM, FINE GRADE TO FINISHED GRADE AND SEED. PROTECT DISTURBED AREAS WITH EROSION CONTROLS UNTIL FIRST MOWING.
- THE PIPE BETWEEN THE HOUSE AND SEPTIC TANK SHALL BE 4 IN. EXTRA HEAVY CAST IRON, DUCTILE IRON OR EXTRA STRENGTH PVC ASTM D1785 SCHD 40 OR APPROVED EQUAL.
- ALL DISTRIBUTION PIPE IS TO BE ASTM D3034 SDR 35 (4" PVC) OR APPROVED EQUAL UNLESS NOTED.
- SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF 6" OF PROCESSED GRAVEL OR BROKEN STONE ON COMPACTED SUBGRADE.
- THERE ARE NO APPARENT WELLS OR SEPTIC FIELDS WITHIN 75' OF THE PROPOSED WELL AND SEPTIC SYSTEM AS SHOWN ON THIS PLAN.
- APPROVED STONE AGGREGATE FOR LEACHING TRENCHES SHALL BROKEN STONE, CRUSHED STONE, OR SCREENED GRAVEL MEETING CT DOT FROM S14A SPECIFICATION FOR M.01.01 FOR NO. 4 STONE:

SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
2-INCH	100
1-1/2-INCH	90-100
1-INCH	20-55
3/4-INCH	0-10
3/8-INCH	0-5
#40	0-3
#200	0-1.5

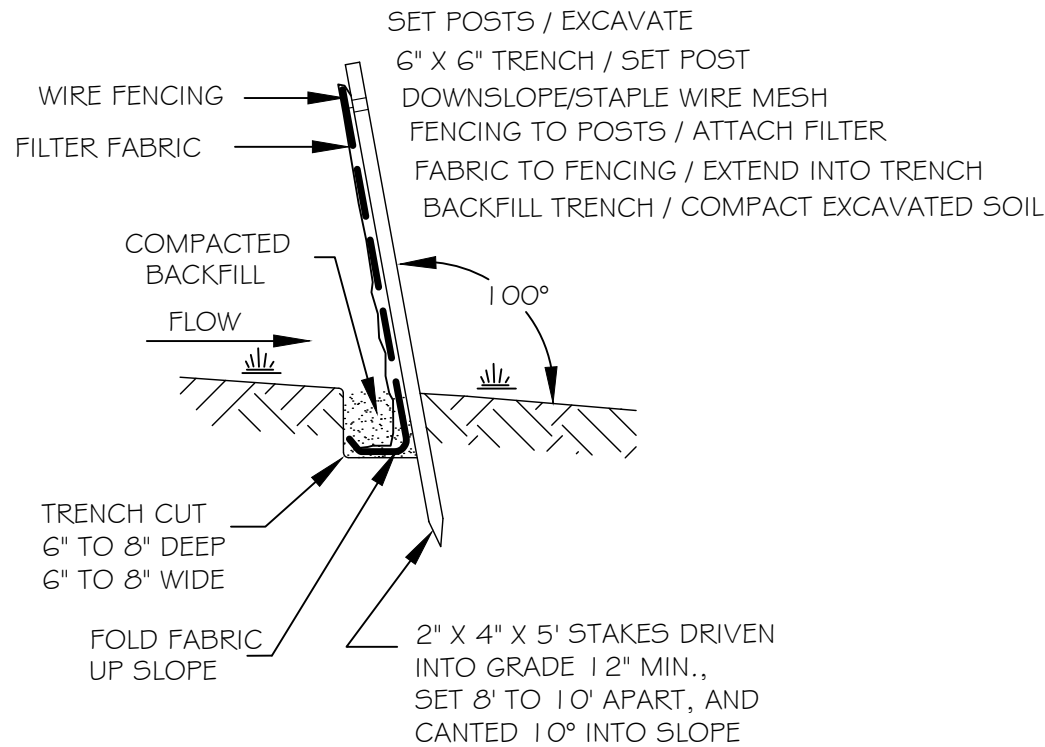
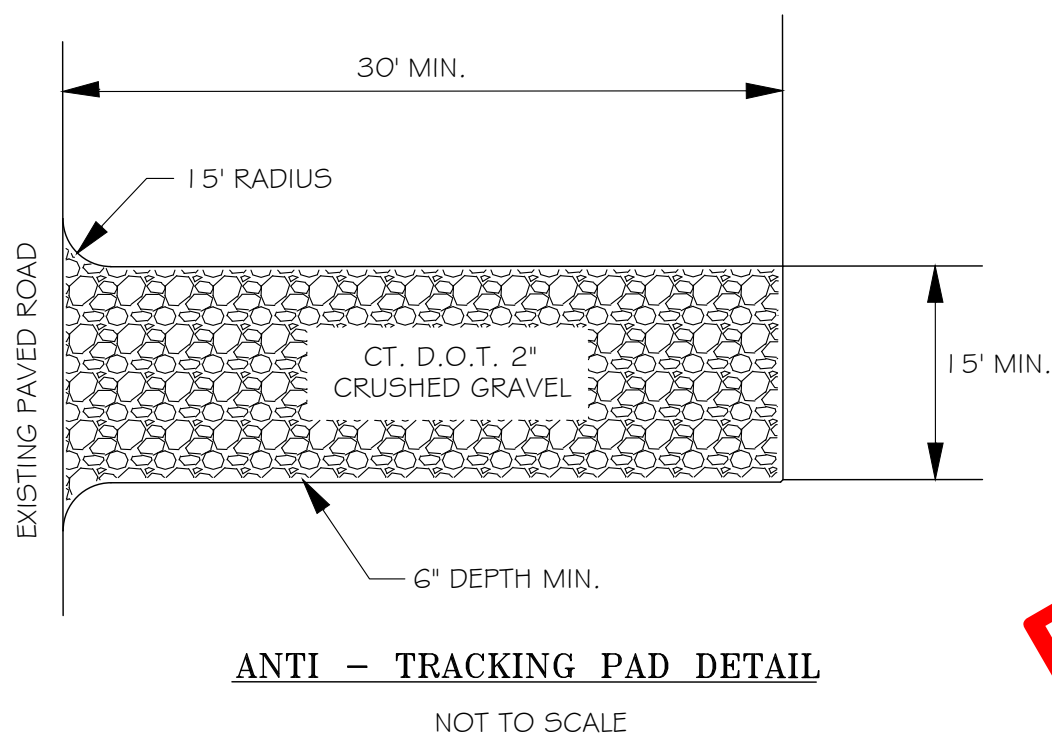
- THE DEPTH OF THE LEACHING UNITS SHALL NOT EXCEED 7" INTO ORIGINAL GRADE.
- THE LOCATION AND ELEVATION OF THE PROPOSED SEPTIC SYSTEM SHALL BE STAKED IN THE FIELD BY A LICENSED LAND SURVEYOR. BENCHMARK TO BE SET IN THE VICINITY OF THE LEACH FIELD AT THE TIME OF STAKEOUT.

LEACHING SYSTEM CONSTRUCTION NOTES:

- TOPSOIL TO BE STRIPPED OFF PRIOR TO FILLING. FILL MATERIAL BETWEEN AND BEYOND TRENCHES TO BE PERVIOUS, GOOD QUALITY AND CLEAN MEDIUM SAND (SELECT FILL) PLACED AND COMPACTED IN 6" LIFTS. SELECT FILL SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
A. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3 INCHES.
B. THE FILL SHALL NOT CONTAIN MORE THAN 45 PERCENT GRAVEL (GRAVEL IS BETWEEN NO. 4 & 3" SIEVES) NO MORE THAN 45 PERCENT OF THE MATERIAL CAN BE RETAINED ON THE NO. 4 SIEVE.
C. THE FILL LESS THE GRAVEL SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE:	#4	#10	#40	#100	#200
% PASSING: WET SIEVE	100	70-100	**10-50	0-20	0-5
% PASSING: DRY SIEVE	100	70-100	10-75	0-5	0-2.5

** PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.
- DOCUMENTATION OF TEST RESULTS ARE TO BE PROVIDED TO THE HEALTH DISTRICT.
- FILL MATERIAL TO BE PLACED PRIOR TO TRENCH EXCAVATION. NO TRAFFIC OTHER THAN TRACK-DRIVEN EQUIPMENT IS TO CROSS, DUMP, UNLOAD OR OTHERWISE COMPACT THE FILL AREA AFTER TOPSOIL REMOVAL. FILL MATERIAL TO BE DUMPED AT THE EDGE OF THE STRIPPED AREA AND SPREAD AND COMPACTED WITH TRACK-DRIVEN VEHICLES. STOCKPILING IS TO TAKE PLACE UPGRADIENT OF THE LEACHING AREA. THE AREA DOWN GRADIENT OF THE LEACHING AREA IS NOT TO BE DISTURBED.



SILT FENCE DETAIL
(NOT TO SCALE)

ROB HELLSSTROM
LAND SURVEYING LLC

32 MAIN STREET
HEBRON, CONNECTICUT
(860) -228-9853

Mailing Address:
P.O. BOX 378
HEBRON, CT 06248

www.rhlsct.com
Email: hellsstromsurveying@yahoo.com

IMPROVEMENT LOCATION SURVEY

- PREPARED FOR-

CLASSIC COLONIALS, LLC

ASSESSOR'S LOT #44-41-22, LAKE ROAD

CONNECTICUT

22-157_ILS

1 OF 1

JOB NO.:

2022-157

FILE NO.:

AS NOTED

SCALE:

AGS

BY:

DATE:

JULY 29, 2022

DESCRIPTION

NO.

DATE

REVISIONS

RES

CIVIL ENGINEERING CONSULTANTS
63 NORWICH AVENUE
COLCHESTER, CT
(860) 516-0033

Reynolds Engineering Services, LLC

To my knowledge and belief, this map is substantially correct as noted hereon.

Mark A. Reynolds, P.E.

CT LIC.# 19789

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