LEGEND

- PROPERTY LINE
- SETBACK LINES: PER SU DISTRICT
- SILT FENCE
- EXISTING CONTOUR
- LIMIT OF CLEARING
- PROPOSED OVERHEAD POWER
- EXISTING OVERHEAD POWER
- CHD MONUMENT FOUND
- IRON PIN OR PIPE FOUND
- ANGLE POINT
- UTILITY POLE
- TEST PIT LOCATION
- PERCOLATION TEST LOCATION
- 200x00 EXISTING SPOT GRADE
- 603.5 PROPOSED SPOT GRADE
- GRADE TO DRAIN

SEPTIC SYSTEM INVERTS

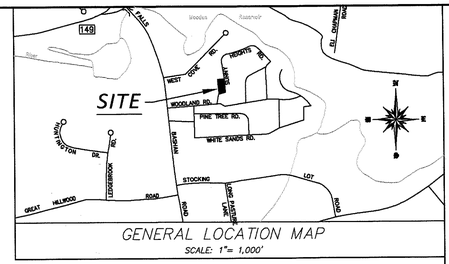
① INVERT @ BUILDING - 98.75 MIN.
② INVERT IN @ SEPTIC TANK - 98.5
③ INVERT OUT @ SEPTIC TANK - 98.25
④ INV. @ D-BOX /FLOWLINE @ UNITS - 98.0
BOTOM OF UNITS - 96.0
EXISTING GRADE - 100.0
FINISHED GRADE OVER UNITS - 100.0 MIN.

ZONING COMPLIANCE CHART

ZONE – LAKE	*REQUIRED*	*PARCEL*
MIN. LOT AREA	43,560 SF	15,309 SF*
MINIMUM LOT WIDTH	150'	177.3'
MAX. IMPERVIOUS COVER	15%	14.1%
MAX. LOT COVERAGE	10%	8.23%
MINNIMUM FRONT SETBACK	25'	28'
MINNIMUM SIDE SETBACK	25'	34.5'
MINNIMUM REAR SETBACK	25'	28'
MAX. BUILDING HEIGHT	24'	<24'

*EXISTING NON-CONFORMING

PER MAP REFERENCE #1



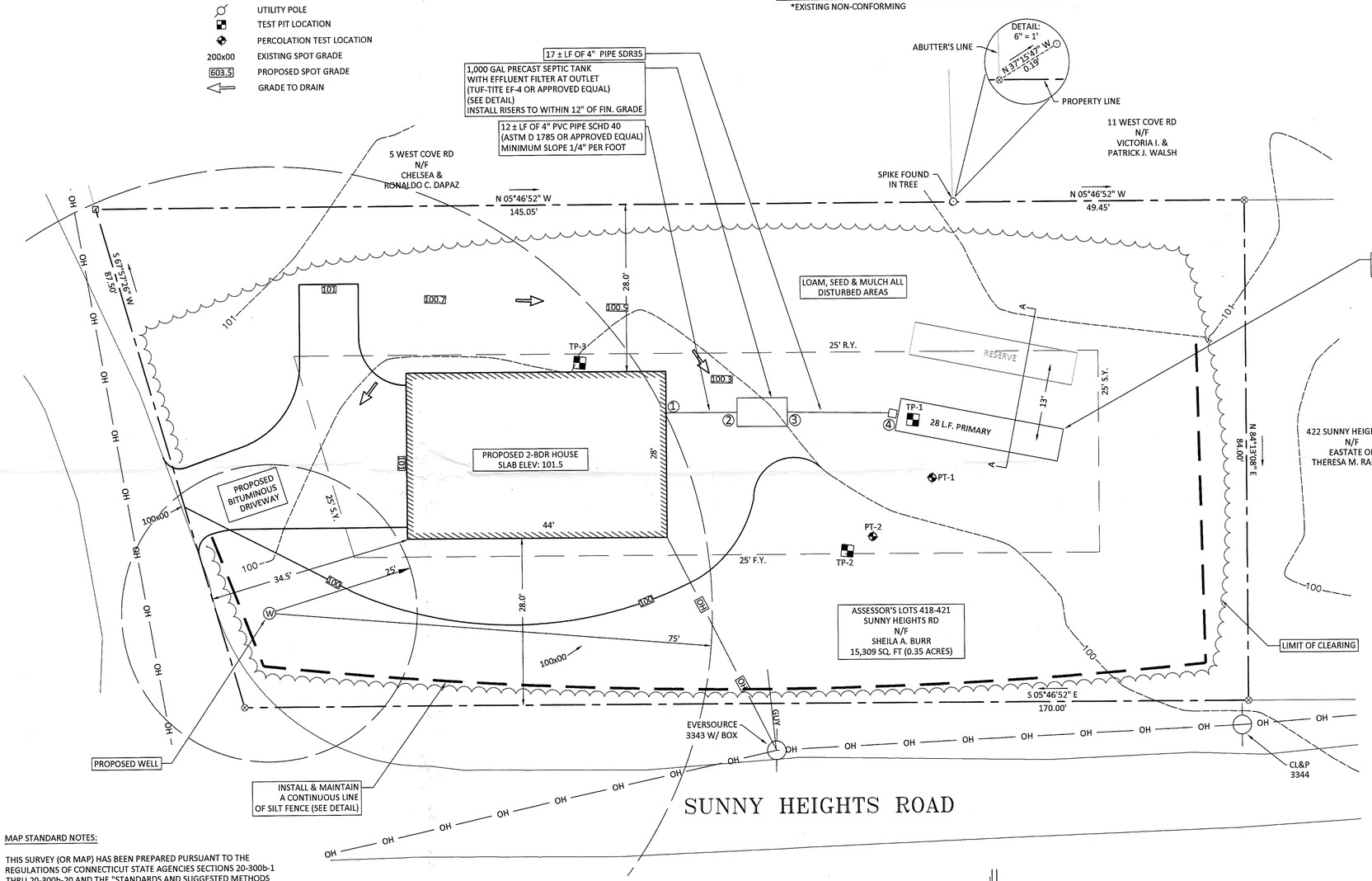
GENERAL LOCATION MAP
SCALE: 1"= 1,000'

THIS PROPERTY IS NOT LOCATED WITHIN A FLOOD ZONE.

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

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

BENCHMARK TO BE SET IN THE FIELD AT TIME OF CONSTRUCTION



EROSION & SEDIMENT CONTROL NOTES:

1. ALL EROSION & SEDIMENT CONTROL MEASURES TO BE CONSTRUCTED AS DETAILED AND SPECIFIED IN THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL SEPTEMBER 2023 AS AMENDED.
2. 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 EAST HADDAM OR ITS DESIGNATED AGENT(S).
3. 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.
4. THE STOCKPILING OF BUILDING MATERIALS SHALL BE WITHIN THE AREA OF DISTURBANCE.
5. 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.
6. 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.
7. 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.
8. MULCHING: IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDED 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.

MAP STANDARD NOTES:

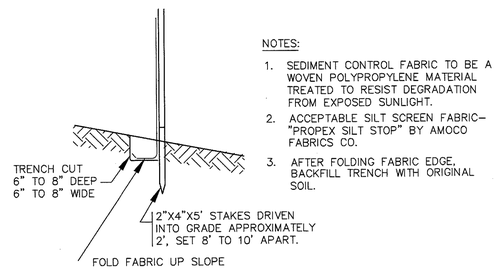
THIS SURVEY (OR MAP) HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.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

THERE ARE NO APPARENT EASEMENTS ON THIS PARCEL.

MAP REFERENCES:

1. "'WEST COVE' SUBDIVISION OF LAND MYRON R. BERNSTEIN EAST HADDAM CONNECTICUT, SCALE: 1" = 50', DATE: JUNE 13, 1989, SHEETS 2 & 3 OF 9, BY: METCALF & SANBORN CONSULTING ENGINEERS & LAND SURVEYORS"
2. "MAP OF SECTION NO.2 MOODUS ESTATES MOODUS LAKE EAST HADDAM, CONN. OWNED & DEVELOPED BY EL PARKER, SCALE: 1" = 100', DATE: AUG. 1947, BY: MOLLOY & MOZZOCHI ENGINEERS HARTFORD CONN."



NOTES:

1. SEDIMENT CONTROL FABRIC TO BE A WOVEN POLYPROPYLENE MATERIAL TREATED TO RESIST DEGRADATION FROM EXPOSED SUNLIGHT.
2. ACCEPTABLE SILT SCREEN FABRIC– "PROPEX SILT STOP" BY AMOCO FABRICS CO.
3. AFTER FOLDING FABRIC EDGE, BACKFILL TRENCH WITH ORIGINAL SOIL.

SILT FENCE INSTALLATION

NOT TO SCALE

PERMIT PLAN SET
NOT FOR CONSTRUCTION

SITE LAYOUT PLAN
- PREPARED FOR -
DAVID GARDNER
ASSESSOR'S LOTS 418-421 SUNNY HEIGHTS ROAD
EAST HADDAM CONNECTICUT

SHEET NO.:	1 OF 2	JOB NO.:	25-197
SCALE:	1" = 10'	FILE NO.:	25-197_SITEPLAN
BY:	TCW		
DATE:	JULY 31, 2026		

ROB HELLSTROM
LAND SURVEYING LLC
27 MAIN STREET
HEBRON, CONNECTICUT
(860)-228-9853
Mailing Address:
P.O. BOX 378
HEBRON, CT 06248
www.rhlsct.com
Email: hellstromsurveying@yahoo.com

NO.	DATE	DESCRIPTION
		REVISIONS

ALL RIGHTS RESERVED
ANY REPRODUCTION, POSSESSION OR USE OF THIS DRAWING OR ANY PART THEREOF, WITHOUT THE WRITTEN PERMISSION OF ROBERT W. HELLSTROM, L.S. (THE SURVEYOR NAMED HEREIN) IS VIOLATORS WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS DRAWING IS NOT VALID UNLESS IT BEARS AN ORIGINAL INK SIGNATURE AND EMBOSSED SEAL

ROBERT W. HELLSTROM, L.S. #13626

RES
CIVIL ENGINEERING CONSULTANTS
27 MAIN STREET
HEBRON, CT
(860) 516-0033
Reynolds Engineering Services, LLC

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

Mark A. Reynolds, PE CT LIC.# 19789

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

GRAPHIC SCALE
0' 10' 20' 30'
(IN FEET)
1 inch = 10 ft.

SOILS INFORMATION

TEST PIT DATA - 7/8/2026
By Rachel Colonni, RS, Chatham Health Department
Others Present:
Mark Reynolds, Reynolds Engineering Services

TEST PIT #1
0-5" Topsoil
5-28" Brown Sandy Loam
28-44" Light Grey Very Fine Sand
44-104" Yellow Brown Sandy Loam and Gravel
No Mottling Observed
No Groundwater Observed
Roots to 48"
No Ledge Observed

TEST PIT #2
0-4" Topsoil
4-30" Brown Sandy Loam
30-108" Yellow Brown Sandy Loam and Gravel
No Mottling Observed
No Groundwater Observed
Roots to 60"
No Ledge Observed

TEST PIT #3
0-2" Topsoil
2-27" Brown Sandy Loam
27-43" Light Grey Very Fine Sand
43-67" Yellow Brown Sandy Loam and Gravel
No Mottling Observed
No Groundwater Observed
Roots to 51"
No Ledge Observed

PERCOLATION TESTS
7/8/2026
Tyler Warren, Reynolds Engineering Services

PT "A" (PRIMARY)
HOLE DEPTH: 33.0"

TIME	DEPTH
9:26	21.0" PRESOAK
9:40	32.5" DRY
9:45	20.0" REFILL
9:50	25.0"
9:55	27.875"
10:00	29.0"
10:05	30.5"
10:10	32.0" END

PERC RATE: 3.33 min./inch

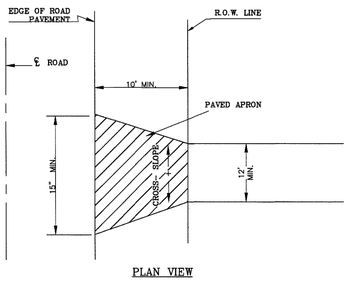
PT "B" (RESERVE)
HOLE DEPTH: 28.0"

TIME	DEPTH
9:41	16.0" PRESOAK
9:56	28.0" DRY
9:57	16.0" REFILL
10:02	21.5"
10:07	24.75"
10:12	26.75"
10:15	28.0" DRY

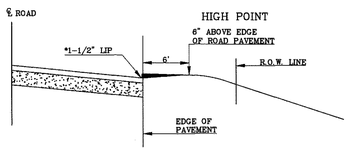
PERC RATE: 2.5 min./inch

MINIMUM LEACHING SYSTEM SPREAD (MLSS) CALCULATIONS:

MLSS NEED NOT BE CONSIDERED



PLAN VIEW



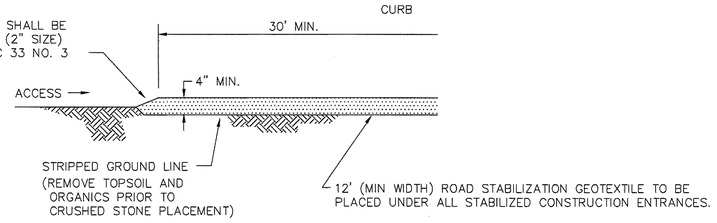
CREST CURVE IN DRIVE

TYPICAL DRIVEWAY ENTRANCE DETAIL

NOT TO SCALE

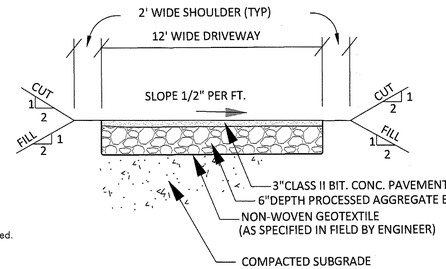
NOTES:

1.) Saw cut irregular pavement edge to match drive apron.
*2.) Provided 1-1/2 inch lip only edge on aprons that abut roads that are curbed.
3.) Driveways must be greater than or equal to 12'.
4.) Driveway aprons must be no greater than 30'.
5.) The first 30' of all driveways may not exceed a grade of 3%.
6.) Any driveway that exceeds a grade of 10% must be paved.



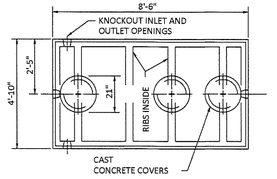
TYPICAL STABILIZED CONSTRUCTION ENTRANCE

(NOT TO SCALE)



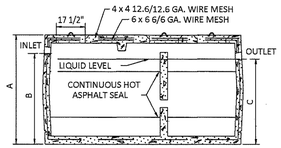
DRIVEWAY X-SECTION 'BITUMINOUS'

NOT TO SCALE



PLAN

CAPACITIES	A	B	C
1000 GAL	66.5"	57"	53.75"



CROSS SECTION

1000 GALLON
2 COMPARTMENT
SEPTIC TANK

NOT TO SCALE

DESIGN NOTES:

1. ALL CONSTRUCTION TO CONFORM TO STANDARDS OF THE CONNECTICUT PUBLIC HEALTH CODE AND TO THE SATISFACTION OF THE TOWN SANITARIAN.
2. PERCOLATION RATE FOR DESIGN: 2.0-5.0 min./inch
   DEPTH TO RESTRICTIVE LAYER: >104"
3. REQUIRED LEACHING AREA FOR 3 BEDROOM HOUSE = 495 SF ELA REQUIRED
4. DESIGN: USE 28 LF OF GEOMATRIX GST 6224.
   ELA PROVIDED = 18.1 SF/LF x 28 LF = 506.8 SF ELA PROVIDED
5. 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.
6. 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:

1. 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.
2. 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.
3. ALL DISTRIBUTION PIPE IS TO BE ASTM D3034 SDR 35 (4"PVC) OR APPROVED EQUAL UNLESS NOTED.
4. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF 6" OF PROCESSED GRAVEL OR BROKEN STONE ON COMPACTED SUBGRADE.
5. THERE ARE NO APPARENT WELLS OR SEPTIC FIELDS WITHIN 75' OF THE PROPOSED WELL AND SEPTIC SYSTEM AS SHOWN ON THIS PLAN.
6. APPROVED STONE AGGREGATE FOR LEACHING TRENCHES SHALL BROKEN STONE, CRUSHED STONE, OR SCREENED GRAVEL MEETING CT DOT FROM 814A 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

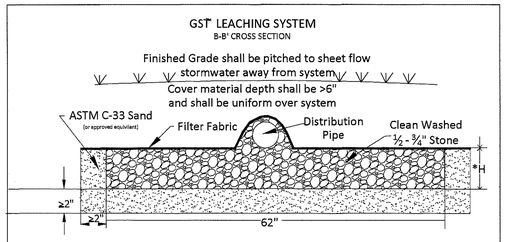
7. THE BOTTOM OF THE LEACHING UNITS SHALL NOT BE SET LOWER THAN 54" BELOW ORIGINAL GRADE.
8. THE LOCATION AND ELEVATION OF THE PROPOSED SEPTIC SYSTEM SHALL BE STAKED IN THE FIELD BY A LICENSED LAND SURVEYOR. BENCHMARK TO BE SET IN THE VICINITY OF THE LEACH FIELD AT THE TIME OF STAKEOUT.

LEACHING SYSTEM CONSTRUCTION NOTES:

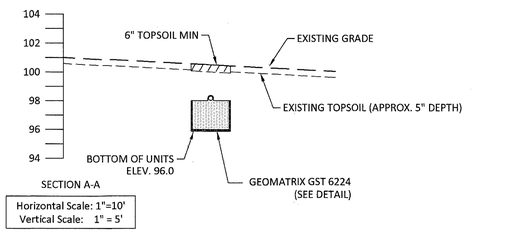
1. TOPSOIL TO BE STRIPPED OFF PRIOR TO FILLING. FILL MATERIAL BETWEEN AND BEYOND TRENCHES TO BE PERVIOUS, GOOD QUALITY AND CLEAN MEDIUM SAND (SELECT FILL) PLACED AND COMPACTED IN 6" LIFTS. SELECT FILL SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   A. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER 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:

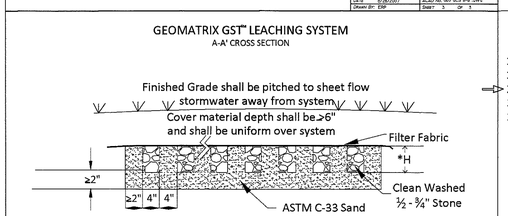
SIEVE SIZE:	#4	#10	#40	#100	#200
% PASSING: WET SEIVE	100	70-100	**10-50	0-20	0-5
% PASSING: DRY SEIVE	100	70-100	10-75	0-5	0-2.5

   ** 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%.
2. DOCUMENTATION OF TEST RESULTS ARE TO BE PROVIDED TO THE HEALTH DISTRICT.
3. 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.

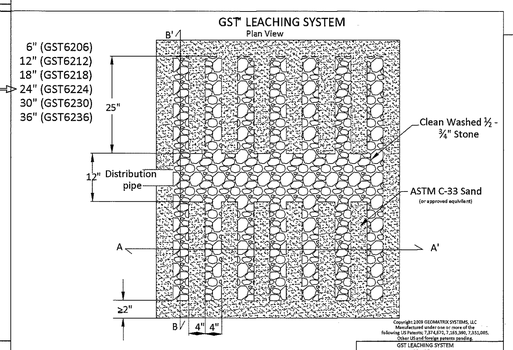


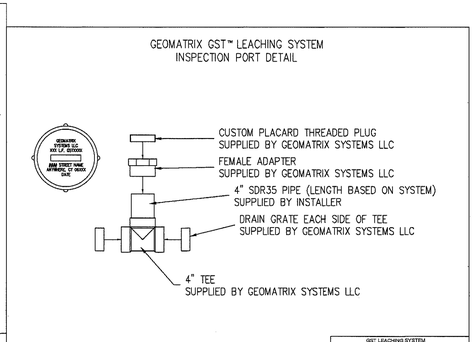
*H= 6" (GST6206)
12" (GST6212)
18" (GST6218)
24" (GST6224)
30" (GST6230)
36" (GST6236)

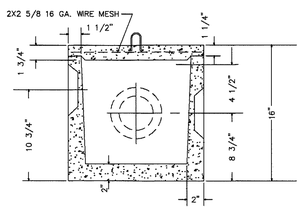




*H= 6" (GST6206)
12" (GST6212)
18" (GST6218)
24" (GST6224)
30" (GST6230)
36" (GST6236)







STANDARD D-BOX

NOT TO SCALE

PERMIT PLAN SET
NOT FOR CONSTRUCTION

SITE DETAILS
- PREPARED FOR -
DAVE GARDNER
ASSESSOR'S LOTS 418-421 SUNNY HEIGHTS ROAD
EAST HADDAM CONNECTICUT

SHEET NO.: 2 OF 2 | JOB NO.: 25-197
SCALE: AS NOTED | FILE NO.: 25-197_SITEPLAN
BY: TCW
DATE: JULY 31, 2026

ROB HELLSTROM
LAND SURVEYING LLC
61 MAIN STREET-SUITE G
HEBRON, CONNECTICUT
(860)-228-9853
Mailing Address:
P.O. BOX 378
HEBRON, CT 06248
www.rhlsct.com
Email: hellstromsurveying@yahoo.com

NO.	DATE	DESCRIPTION
		REVISIONS

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

THIS SURVEY AND MAP CONFORMS TO THE REQUIREMENTS OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES AS AMENDED. IT IS A CLASS A-2 SURVEY. THE FIELD DATA UPON WHICH THIS MAP IS BASED HAS A HORIZONTAL ACCURACY OF 1:10,000 AND A VERTICAL ACCURACY OF 2 FEET. THIS MAP CONFORMS TO THE REQUIREMENTS OF SECTION 20-300b-20 OF THE CONNECTICUT GENERAL STATUTES. IT BEARS AN EMBOSSED SEAL AND A WET SIGNATURE.

MARK A. REYNOLDS #15769

ALL RIGHTS RESERVED
ANY REPRODUCTION, POSSESSION OR USE OF THIS DRAWING OR ANY PART THEREOF WITHOUT THE EXPRESS WRITTEN PERMISSION OF ROB HELLSTROM LAND SURVEYING LLC IS PROHIBITED. VIOLATIONS WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.