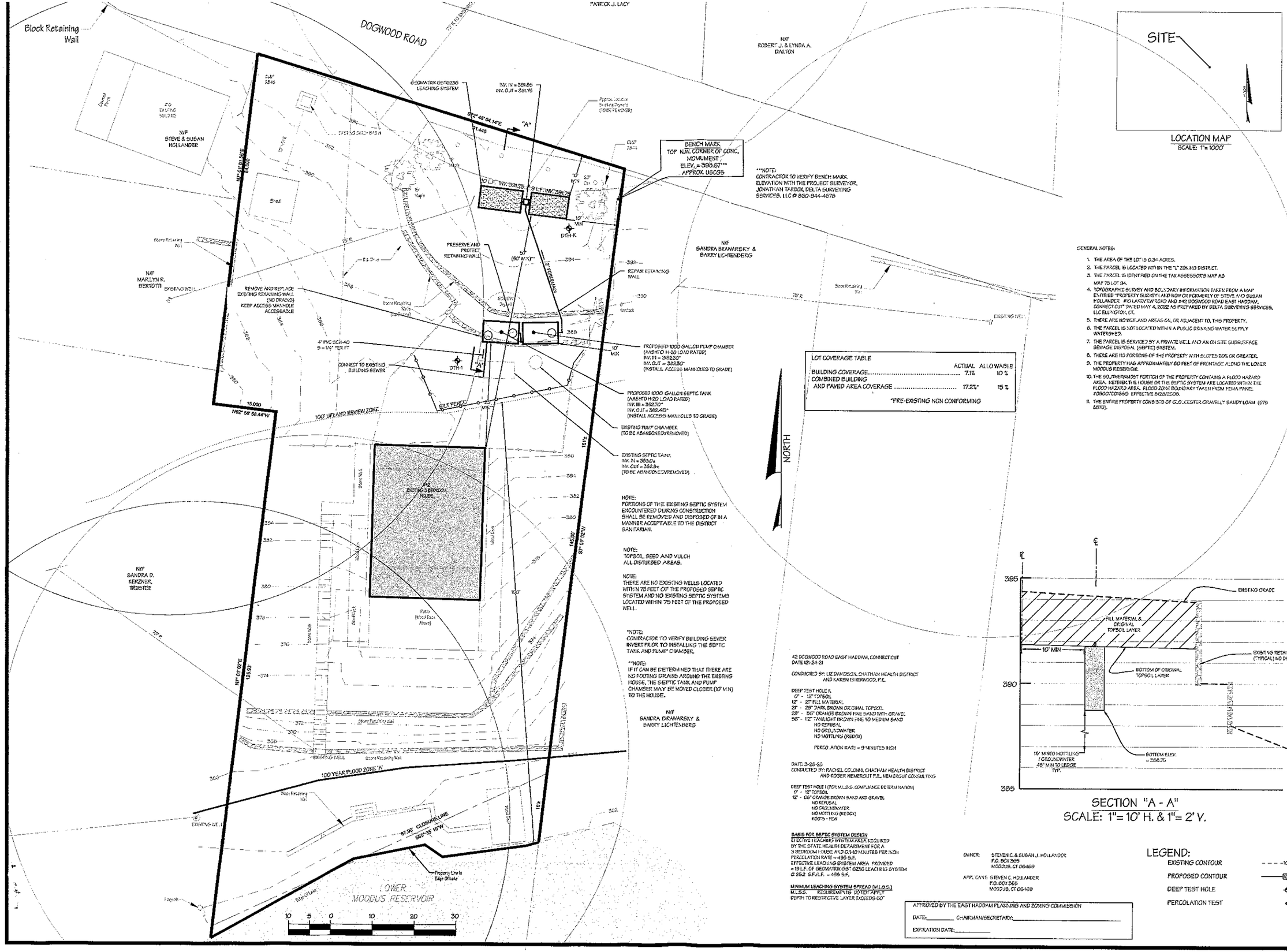


GENERAL NOTES:

1. THE AREA OF THE LOT IS 0.34 ACRES.
2. THE PARCEL IS LOCATED WITHIN THE "L" ZONING DISTRICT.
3. THE PARCEL IS IDENTIFIED ON THE TAX ASSESSOR'S MAP AS MAP 75 LOT 84.
4. TOPOGRAPHIC SURVEY AND BOUNDARY INFORMATION TAKEN FROM A MAP ENTITLED "PROPERTY SURVEY LAND NOW OR FORMERLY OF STEVE AND SUSAN HOLLANDER #40 LAKEVIEW ROAD AND #42 DOGWOOD ROAD EAST HADDAM, CONNECTICUT" DATED MAY 4, 2022 AS PREPARED BY DELTA SURVEYING SERVICES, LLC ELLINGTON, CT.
5. THERE ARE NO WETLAND AREAS ON, OR ADJACENT TO, THIS PROPERTY.
6. THE PARCEL IS NOT LOCATED WITHIN A PUBLIC DRINKING WATER SUPPLY WATERSHED.
7. THE PARCEL IS SERVICED BY A PRIVATE WELL AND AN ON SITE SUBSURFACE SEWAGE DISPOSAL (SEPTIC) SYSTEM.
8. THERE ARE NO PORTIONS OF THE PROPERTY WITH SLOPES 30% OR GREATER.
9. THE PROPERTY HAS APPROXIMATELY 80 FEET OF FRONTAGE ALONG THE LOWER MOODUS RESERVOIR.
10. THE SOUTHERNMOST PORTION OF THE PROPERTY CONTAINS A FLOOD HAZARD AREA. NEITHER THE HOUSE OR THE SEPTIC SYSTEM ARE LOCATED WITHIN THE FLOOD HAZARD AREA. FLOOD ZONE BOUNDARY TAKEN FROM FEMA PANEL #09011C0159G EFFECTIVE 9/26/2008.
11. THE ENTIRE PROPERTY CONSISTS OF GLOUCESTER GRAVELLY SANDY LOAM (GTB & GTD).

LOT COVERAGE TABLE

	ACTUAL	ALLOWABLE
BUILDING COVERAGE	7.1%	10 %
COMBINED BUILDING AND PAVED AREA COVERAGE	17.2%*	15 %

*PRE-EXISTING NON CONFORMING

NORTH

42 DOGWOOD ROAD EAST HADDAM, CONNECTICUT
DATE 121-24-21

CONDUCTED BY: LIZ DAVIDSON, CHATHAM HEALTH DISTRICT AND KAREN ISBERWOOD, P.E.

DEEP TEST HOLE 1
0" - 12" TOPSOIL
12" - 27" FILL MATERIAL
27" - 29" DARK BROWN ORIGINAL TOPSOIL
29" - 56" ORANGE BROWN FINE SAND WITH GRAVEL
56" - 112" TAN/LIGHT BROWN FINE TO MEDIUM SAND
NO REFUSAL
NO GROUNDWATER
NO MOTTLING (REDOX)

PERCOLATION RATE = 9 MINUTES INCH

DATE 3-28-22
CONDUCTED BY: RACHEL COLONNI, CHATHAM HEALTH DISTRICT AND ROGER NEMERGUT P.E., NEMERGUT CONSULTING

DEEP TEST HOLE 1 (FOR M.L.&S. COMPLIANCE DETERMINATION)
0" - 12" TOPSOIL
12" - 66" ORANGE BROWN SAND AND GRAVEL
NO REFUSAL
NO GROUNDWATER
NO MOTTLING (REDOX)
ROOTS - FEW

BASIS FOR SEPTIC SYSTEM DESIGN
EFFECTIVE LEACHING SYSTEM AREA REQUIRED BY THE STATE HEALTH DEPARTMENT FOR A 3 BEDROOM HOUSE AND 0-10 MINUTES PER INCH PERCOLATION RATE = 495 S.F.
EFFECTIVE LEACHING SYSTEM AREA PROVIDED = 19 L.F. OF GEOMATRIX GS7 (GZG) LEACHING SYSTEM @ 26.2 S.F./L.F. = 499 S.F.

MINIMUM LEACHING SYSTEM SPREAD (M.L.&S.)
M.L.&S. REQUIREMENTS: 20'X50' APPLY
DEPTH TO RESTRICTIVE LAYER EXCEEDS 60"

SECTION "A - A"
SCALE: 1"= 10' H. & 1"= 2' V.

OWNER: STEVEN C. & SUSAN J. HOLLANDER
P.O. BOX 365
MOODUS, CT 06469

APPL. CANT: STEVEN C. HOLLANDER
P.O. BOX 365
MOODUS, CT 06469

LEGEND:
EXISTING CONTOUR ---100---
PROPOSED CONTOUR 100
DEEP TEST HOLE
PERCOLATION TEST P

APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
DATE:_____ CHAIRMAN/SECRETARY:_____
EXPIRATION DATE:_____

NEMERGUT CONSULTING
235 ROUTE 80 - P.O. BOX 66
KILLINGWORTH, CONNECTICUT 06419
PHONE: 860.663.2384
NEMERGUTCONSULTING.COM

STATE OF CONNECTICUT ROGER D. NEMERGUT NO. 18008 REGISTERED PROFESSIONAL ENGINEER

ROGER D. NEMERGUT
PROFESSIONAL ENGINEER
LIC. NO. 18008

JASON A. NEMERGUT
PROFESSIONAL ENGINEER
LIC. NO. 26068

COPYRIGHT © 2023 NEMERGUT CONSULTING
NEMERGUT CONSULTING RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE DOCUMENTS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESSED WRITTEN PERMISSION OF NEMERGUT CONSULTING

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS THE DESIGN ENGINEER'S RAISED PROFESSIONAL SEAL APPEARS ON THE PLANS AND THE OWNER/CONTRACTOR HAS CONTACTED THE DESIGN ENGINEER TO VERIFY THAT THEY ARE IN POSSESSION OF THE LATEST APPROVED DESIGN PLANS.

YEAR-ROUND CONVERSION PLAN

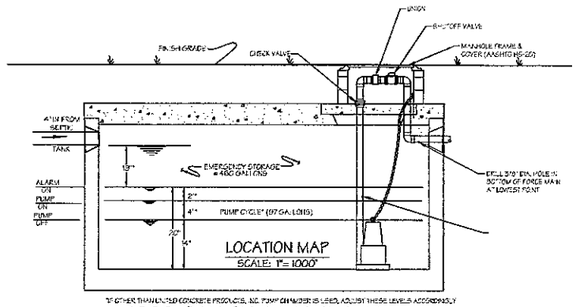
STEVE AND SUSAN HOLLANDER
42 DOGWOOD ROAD
EAST HADDAM CONNECTICUT

DATE: 6-18-25
DESIGNED BY: J.
CHECKED BY: R.D
SCALE: 1" = 10'

NO.	DATE	REVISIO

SHEET

1 OF 2

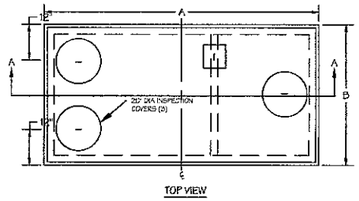


1000 GALLON PUMP CHAMBER
(AASHTO H-20 LOAD RATED)

5'-2 ¾" HIGH X 6'-2" WIDE X 8'-5" LONG PRECAST CONCRETE (MONOLITHIC) PUMP CHAMBER WITH BUTYL RUBBER MASTIC TYPE SEAL (AASHTO M-198) AND POLYLOCK II PIPE SEALS AS MANUFACTURED BY UNITED CONCRETE PRODUCTS, INC. YALESVILLE, CT (203-269-3119)

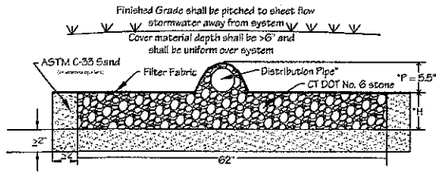
PUMP CHAMBER NOTES:

1. SEPTIC EFFLUENT PUMP SHALL BE SIMPLEX SUBMERSIBLE EFFLUENT PUMP, MODEL WEG3/2, 1/3 HP, 230 VOLT SINGLE PHASE PUMP AS MANUFACTURED BY GOULD PUMPS INC., SENECA, NEW YORK OR APPROVED EQUAL.
2. FORCE MAIN SHALL BE 2" DIAMETER P.E. PRESSURE PIPE (ASTM D2239) 200 P.S.I. RATED (UNLESS NOTED OTHERWISE ON THE PLAN). MINIMUM COVER OVER FORCE MAIN SHALL BE 48".
3. MERCURY-FREE LEVEL CONTROL SWITCHES, HIGH LEVEL LIQUID ALARM AND CHECK VALVE SHALL BE AS MANUFACTURED BY GOULD PUMPS, INC. OR APPROVED EQUAL.
4. PUMP ALARM SHALL BE WIRED ON A SEPARATE BRANCH CIRCUIT FROM THE PUMP CIRCUIT. THE PUMP CIRCUIT SHALL BE PROTECTED WITH A GROUND FAULT CIRCUIT INTERRUPTOR (G.F.C.I.). ELECTRICAL WORK RELATING TO PUMP INSTALLATION SHALL REQUIRE A SEPARATE BUILDING (ELECTRICAL) PERMIT.
5. PUMP CHAMBER AND SEPTIC TANK SHALL BE PRECAST CONCRETE UNITS OF THE SIZE INDICATED ON THE DESIGN PLANS AND SHALL BE TESTED FOR WATER TIGHTNESS OF JOINTS AND OTHER OPENINGS PRIOR TO BACKFILLING.
6. THE MANUFACTURER SHALL SEAL ALL CHAMBERS/TANKS JOINTS WITH A BUTYL JOINT SEALER. PIPE FITTINGS THROUGH THE UNITS SHALL BE RUBBER BOOT PIPE SEALS SECURED WITH STAINLESS STEEL CLAMPS.
7. IT SHALL BE THE INSTALLER'S RESPONSIBILITY TO PROVIDE A WATER TIGHT INSTALLATION TO ENSURE THAT GROUNDWATER INFILTRATION DOES NOT GET PUMPED INTO THE LEACHING SYSTEM.
8. LIMIT DOSING VOLUME TO 20% OR LESS OF TOTAL LEACHING SYSTEM STORAGE VOLUME = 105 GALLONS (MAX. ALLOWABLE = 19 L.F. X 27.68 GAL./L.F. X 20% = 105 GALLONS)
9. THROTTLE PUMP DISCHARGE TO ALLOW FOR 2 MIN/CYCLE RUN TIME MINIMUM.



SEPTIC TANK DETAIL
UNITED CONCRETE PRODUCTS, INC.
NOT TO SCALE

LIQUID CAPACITY	A LENGTH	B WIDTH	C INVERT	D HEIGHT
1000 Gal.	8'-2"	4'-6"	5'-2"	5'-11"
1000 Gal. Low Boy	9'-5 3/4"	5'-5 1/2"	3'-9 1/2"	4'-6"
1250 Gal.	9'-6 1/2"	5'-6 1/2"	4'-7"	5'-5"
1250 Gal. Heavy Duty	10'-1"	7'-7"	3'-5"	4'-7"
1500 Gal.	9'-7"	5'-6 3/4"	5'-5 3/8"	6'-3"
1500 Gal. Heavy Duty	10'-1"	7'-7"	4'-2"	5'-4"



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

*P= 5.5"

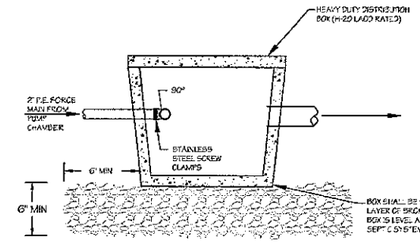
*2" min. I.D., ASTM D-3034, SDR 35 pipe for gravity applications

GEOMATRIX CONTACT INFORMATION:
DAVID POTTS (GEOMATRIX.LLC@COM)
860-227-0636

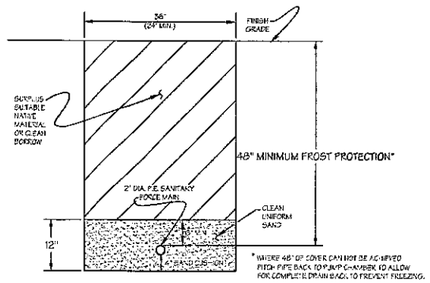
GEOMATRIX GST LEACHING SYSTEM
B-B' CROSS SECTION

ASTM C-33 SAND SPECIFICATIONS

SIEVE SIZE	SPECIFICATION PERCENT PASSING DRY SIEVE
0.375"	100.0 - 100.0
#4	95.0 - 100.0
#8	80.0 - 100.0
#16	50.0 - 85.0
#30	25.0 - 60.0
#50	5.0 - 30.0
#100	< 10.0
#200	< 3.0



DISTRIBUTION BOX DETAIL (FORCE MAIN)
NOT TO SCALE



SANITARY SEWER FORCEMAIN TYPICAL TRENCH DETAIL
NOT TO SCALE

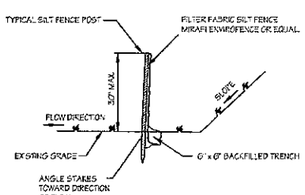
APPROVED BY THE EAST HADDAM PLANNING AND ZONING COMMISSION
DATE:_____ CHAIRMAN/SECRETARY:_____
EXPIRATION DATE:_____

1. ALL SEPTIC SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE PUBLIC HEALTH CODE AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL AS AMENDED.
2. ELEVATIONS AND CONTOURS ARE BASED ON AN ASSUMED DATUM.
3. ELEVATIONS SHOWN REFER TO THE INVERT (FLOW LINE) OF THE PROPOSED LEACHING SYSTEM UNLESS NOTED OTHERWISE.
4. PERCOLATION RATE FOR DESIGN = 0-10.0 MINUTES PER INCH.
5. THE MINIMUM DISTANCE FROM WELL TO SEPTIC IS 75 FEET.
6. LEACHING SYSTEM AREA SHALL BE LIMED, FERTILIZED, SEEDED AND MULCHED UPON COMPLETION OF THE PROJECT.
7. SEPTIC TANK CONSTRUCTION JOINTS SHALL BE SEALED WITH ASPHALT CEMENT. ALL PIPE CONNECTIONS TO THE SEPTIC TANK AND AND DISTRIBUTION BOXES SHALL BE SEALED WITH A POLYETHYLENE GASKET "POLY-LOK" OR APPROVED EQUAL.
8. SEPTIC TANK BAFFLES SHALL CONFORM TO SECTION VA-1 TECHNICAL STANDARDS OF THE STATE HEALTH CODE.
9. IF FIELD CONDITIONS, (LEDGE, GROUNDWATER, WETLANDS) ARE ENCOUNTERED AT AT SHALLOWER DEPTHS THAN SHOWN IN THE DEEP TEST HOLE RESULTS, CONSTRUCTION SHALL BE HALTED AND THE ENGINEER CONTACTED IMMEDIATELY.
10. SOIL TEST RESULTS SERVING AS THE BASIS FOR THIS DESIGN WERE CONDUCTED BY THE CHATHAM HEALTH DISTRICT AND NEMERGUT CONSULTING.
11. NO DEVIATIONS FROM THE APPROVED DESIGN PLAN SHALL BE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE SANITARIAN OR THE DESIGN ENGINEER.
12. EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO FIELD MODIFICATION, AS NECESSARY, AS REQUIRED BY THE DESIGN ENGINEER OR TOWN OFFICIALS.
13. STRIP AND STOCKPILE EXISTING TOPSOIL LAYER FROM WITHIN THE PROPOSED LEACHING SYSTEM IN THOSE AREAS WHERE THE BOTTOM OF THE PROPOSED LEACHING SYSTEM IS AT, OR ABOVE, THE BOTTOM OF THE EXISTING TOPSOIL LAYER OR IN THOSE AREAS WHERE SEPTIC SYSTEM FILL IS REQUIRED.
14. SELECT FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
    A. THE FILL MATERIAL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
    B. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
    C. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
    D. THE REMAINING SAMPLES SHALL MEET THE FOLLOWING GRADATION CRITERIA:

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

    * PERCENT PASSING THE #40 SIEVE MAY 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%.

    THE FILL SHALL BE PLACED IN 12" MAXIMUM LIFTS AFTER THE STRIPPED LEACHING SYSTEM AREA HAS BEEN SCARIFIED. TRUCKS OR OTHER CONSTRUCTION EQUIPMENT SHALL NOT BE DRIVEN OVER THE SCARIFIED AREA PRIOR TO FILL PLACEMENT. PRIOR TO FILL PLACEMENT ANY SMEARED FILL AREAS SHALL BE RE-SCARIFIED.
15. PRIOR TO PLACEMENT, FILL MATERIAL SHALL BE INSPECTED AND APPROVED BY THE HEALTH DISTRICT AND THE DESIGN ENGINEER.
16. SEPTIC TANKS SHALL BE TWO COMPARTMENT TANKS WITH HEAVY DUTY STEEL HANDLES FOR MANHOLE ACCESS COVERS AND EFFLUENT FILTERS INSTALLED ON OUTLET BAFFLES.
17. ALL PIPE DOWNSTREAM OF THE OF THE SEPTIC TANK (EXCEPT FOR LEACHING TRENCHES) SHALL BE 4" DIAMETER PVC. ASTM D3034 SDR 35 OR APPROVED EQUAL.
18. THE SITE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 1-800-922-4455 PRIOR TO CONSTRUCTION TO VERIFY THE EXTENT AND LOCATION OF EXISTING UNDERGROUND UTILITIES.
19. THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DISTRICTS FINAL INSPECTION AND APPROVAL.
20. IMMEDIATELY UPON COMPLETION OF THE SEPTIC SYSTEM INSTALLATION AND FINAL APPROVAL BY THE HEALTH DISTRICT, THE SEPTIC SYSTEM SHALL BE BACKFILLED, TOPSOILED, SEEDED AND MULCHED. THE FINAL GRADING SHALL CONFORM TO THE DESIGN PLAN AND SHALL ENSURE THAT SURFACE RUNOFF IS DIRECTED AWAY FROM THE THE LEACHING SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED IN DISTURBED AREAS.
21. THE DESIGN ENGINEER SHALL BE CONTACTED PRIOR TO BACKFILLING THE SEPTIC SYSTEM TO ALLOW FOR TAKING THE NECESSARY FIELD MEASUREMENTS FOR THE PREPARATION OF AN "AS-BUILT" SEPTIC SYSTEM PLAN AS REQUIRED BY THE HEALTH DISTRICT PRIOR TO THE ISSUANCE OF A PERMIT TO DISCHARGE OR A CERTIFICATE OF OCCUPANCY.
22. NO GRADING OR OTHER DISTURBANCE OF THE AREA OF THE PROPOSED SEPTIC SYSTEM WILL BE ALLOWED PRIOR TO THE INSTALLATION. NO PARKING, EQUIPMENT STORAGE OR TRAFFIC IN THE AREA OF THE SEPTIC SYSTEM WILL BE ALLOWED.
23. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, THE SEPTIC SYSTEM SHALL BE STAKED OUT BY THE PROJECT SURVEYOR.
24. THE DISTRICT SANITARIAN AND THE ENGINEER SHALL BE CONTACTED AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. NO PORTION OF THE SYSTEM SHALL BE COVERED WITHOUT INSPECTION AND APPROVAL OF THE SANITARIAN AND THE ENGINEER.
25. THE MINIMUM DISTANCE FROM UTILITY TRENCH (GAS/ELECTRIC/CABLE TV/TELEPHONE) TO SEPTIC SYSTEM IS 5 FEET.
26. CONSTRUCT STORM WATER SWALES, AS REQUIRED, TO DIRECT SURFACE RUNOFF AWAY FROM THE SEPTIC SYSTEM.
27. IF A LARGE CAPACITY BATHTUB IS INSTALLED THE SEPTIC TANK SHALL BE INCREASED AS FOLLOWS:
    - 100 - 200 GALLON TUB CAPACITY - ADD 250 GALLONS TO SEPTIC TANK CAPACITY
    - OVER 200 GALLON TUB CAPACITY - ADD 500 GALLONS TO SEPTIC TANK CAPACITY
28. IF A GARBAGE DISPOSAL IS INSTALLED, THE SEPTIC TANK SHALL BE INCREASED INSTALLED BY 250 GALLONS. GARBAGE DISPOSALS ARE NOT RECOMMENDED SINCE THEY INCREASE THE SOLIDS LOADING ON THE SEPTIC TANK AND MAY PREMATURELY CLOG EFFLUENT FILTERS.
29. ALL SEPTIC TANKS AND PUMP CHAMBERS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 100 LBS. OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO A TANK.
30. ALL BELOW GRADE TANK OR COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.



SILT FENCE DETAIL
NOT TO SCALE

NEMERGUT CONSULTING
235 ROUTE 80 - P.O. BOX 666
KILLINGWORTH, CONNECTICUT 06419
PHONE: 860.663.2384
NEMERGUTCONSULTING.COM

ROGER D. NEMERGUT
PROFESSIONAL ENGINEER
LIC. NO. 10008

JASON A. NEMERGUT
PROFESSIONAL ENGINEER
LIC. NO. 26088

COPYRIGHT © 2025 NEMERGUT CONSULTING
NEMERGUT CONSULTING RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE DOCUMENTS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESSED WRITTEN PERMISSION OF NEMERGUT CONSULTING

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS THE DESIGN ENGINEERS RAISED PROFESSIONAL SEAL APPEARS ON THE PLAN; AND THE OWNER/CONTRACTOR HAS CONTACTED THE DESIGN ENGINEER TO VERIFY THAT THEY ARE IN POSSESSION OF THE LATEST APPROVED DESIGN PLANS.

DETAILS & NOTES

STEVE AND SUSAN HOLLANDER
10 LAKEVIEW ROAD & 42 DOGWOOD ROAD
EAST HADDAM CONNECTICUT
MAP: 87 LOT: 65

DATE: 6-18-25
DESIGNED BY: J.A.N.
CHECKED ED BY: R.D.N.
SCALE: AS NOTED

NO.	DATE	REVISIONS

SHEET
2 OF 2