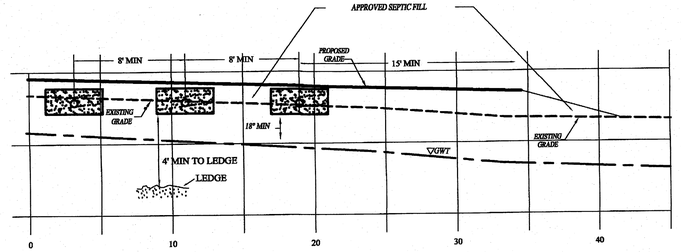
SOIL EROSION & SEDIMENT CONTROL NARRATIVE

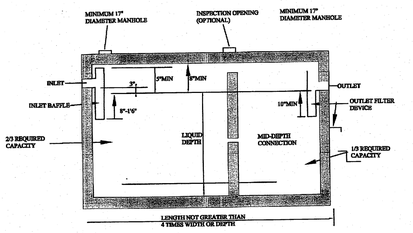
PROJECT DESCRIPTION:
SITE WORK TO INCLUDE A PROPOSED HOUSE, WELL AND SEPTIC SYSTEM INSTALLATION
SITE GRADING AND LANDSCAPING.

GENERAL SEQUENCE:
1. INSTALLATION OF EROSION & SEDIMENT CONTROL MEASURES AS SHOWN ON PLAN FOR INDIVIDUAL HOUSE CONSTRUCTION.
2. CLEARING AND GRUBBING AS REQUIRED.
3. STRIP AND STOCKPILE TOPSOIL WITHIN LIMITS OF DISTURBED AREA AND RING WITH STAKED HAYBALES OR SILT FENCE.
4. CONSTRUCTION OF HOUSE, DRIVEWAY AND SEPTIC SYSTEM.
5. FINAL GRADING AND LANDSCAPING.

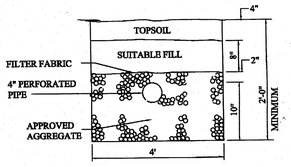
GENERAL NOTES:
1. ALL PROPOSED WORK SHALL CONFORM TO STANDARDS SET FORTH IN THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL". REVISED 2002.
2. PRIOR TO CONSTRUCTION OR EXCAVATION, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN LOCATIONS AS SHOWN ON PLAN AS REQUIRED AND MAINTAINED THROUGHOUT CONSTRUCTION.
3. SEDIMENT SHALL BE PERIODICALLY REMOVED FROM UPHILL SIDE OF HAYBALE BARRIERS AND RESPREAD OVER SLOPE. DAILY INSPECTIONS SHALL BE MADE OF EROSION AND SEDIMENT CONTROLS. INSPECTIONS TO INSURE EFFECTIVENESS AND IMMEDIATE CORRECTIVE ACTION SHALL BE TAKEN IF FAILURE OCCURS.
4. EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN STABILIZED AND VEGETATION COVER HAS BEEN ESTABLISHED.
5. DISTURBED AREAS SHALL BE FINAL GRADED AS SOON AS POSSIBLE AFTER EXCAVATION. FINAL GRADING SHALL INCLUDE REMOVAL OF LARGE ROCKS, STUMPS AND OTHER DEBRIS FROM THE FINISHED SURFACE. UPON FINAL GRADING, DISTURBED AREAS SHALL BE LOAMED WITH PREVIOUSLY STOCKPILED MATERIAL AND SEED.
6. PRIOR TO SEEDING, APPLY LIMESTONE AT THE RATE OF 90 LBS. PER 1000 SF AND FERTILIZE WITH 10-10-10 AT THE RATE OF 7.5 LBS PER 1000 SF AND WORK INTO SOIL TO A DEPTH OF 4".
7. APPLY GRASS SEED MIXTURE BY HAND, CYCLONE SEEDER OR HYDRO SEED. SEEDING SHOULD BE SOWN BETWEEN APRIL 1 AND JUNE 1 OR AUGUST 15 AND SEPTEMBER 15. IF SEEDING CANNOT TAKE PLACE BETWEEN THESE DATES, IMPLEMENT MULCHING PROCEDURES UNTIL SUCH TIME AS SEEDING CAN TAKE PLACE.
8. IMMEDIATELY AFTER SEEDING, MULCH THE SEEDBED AREA WITH HAY OR STRAW AT THE RATE OF 1.5 TO 2 TONS PER ACRE. MULCH SHALL BE ANCHORED BY TRACK MACHINE OR MULCH ANCHORING MACHINE.
9. IT SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY TO IMPLEMENT THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVE OF THIS PLAN.



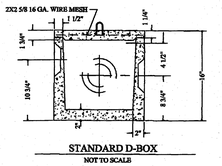
CROSS SECTION "A-A"



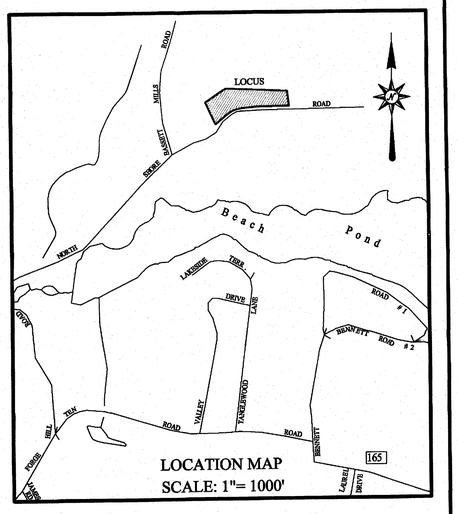
TYPICAL SEPTIC TANK



TRENCH CROSS SECTION
NOT TO SCALE



STANDARD D-BOX
NOT TO SCALE



LOCATION MAP
SCALE: 1"= 1000'

SEPTIC NOTES

1. ALL DISTURBED AREAS TO BE STABILIZED (SEE EROSION & SEDIMENT CONTROL NOTES).
2. IT IS THE RESPONSIBILITY OF THE INSTALLER (LIC. SEPTIC CONTRACTOR) TO CONSTRUCT THE SANITARY SYSTEM AS SHOWN ON THE FINAL APPROVED PLAN WITHOUT REVISIONS UNLESS PRIOR APPROVAL IS OBTAINED FROM BOTH THE DESIGNING ENGINEER AND THE HEALTH DEPARTMENT.
3. IF THE INSTALLER FINDS CONDITIONS WORSE THAN THOSE SHOWN ON THE PLAN, ALL WORK SHALL BE STOPPED IMMEDIATELY AND THE ENGINEER AND THE HEALTH DEPARTMENT NOTIFIED.
4. THE CONSTRUCTION OF THE SANITARY DISPOSAL SYSTEM AND ITS COMPONENTS SHALL COMPLY IN ALL RESPECTS WITH THE LATEST REVISION OF SECTION 19-13-B103a THROUGH 19-13-B103p OF THE PUBLIC HEALTH CODE OF THE STATE OF CONNECTICUT AND OTHER TECHNICAL STANDARDS FOR THE DESIGN AND CONSTRUCTION OF SUBSURFACE SEWAGE DISPOSAL SYSTEMS.
5. PIPE FROM THE HOUSE TO THE SEPTIC TANK AND PIPE WITHIN 25 FEET OF ANY UNDERDRAIN OR FOOTING DRAIN SHALL BE EXTRA HEAVY CAST IRON OR EQUAL. DISTRIBUTION PIPES TO BE SDR-35 3033, 3034 OR EQUAL.
6. THE AREA OF THE LEACHING SYSTEM SHALL BE STRIPPED OF ALL TOPSOIL AND REPLACED WITH CLEAN BANK RUN SAND OR GRAVEL COMPACTED IN 6" LIFTS. REMOVAL OF TOPSOIL AND PLACEMENT OF FILL SHALL EXTEND A MINIMUM OF 10 FEET BEYOND THE LEACHING FIELD LIMITS.
   A MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED OVER THE SYSTEM.
7. FILL SHALL MEET THE REQUIREMENTS OF THE PUBLIC HEALTH CODE INCLUDING 45% MAX.

SIEVE SIZE	% PASSING	
	WET	DRY
#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 CAN BE INCREASED NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

8. SEPTIC TANK IS REQUIRED TO HAVE AN APPROVED OUTLET FILTER INSTALLED ON THE OUTLET BAFFLE. SEPTIC TANK TO CONFORM TO SECTION 5 OF THE TECHNICAL STANDARDS OF SECTION 19-13-B103 OF THE CONNECTICUT PUBLIC HEALTH CODE.
9. HOUSE, WELL AND SEPTIC SYSTEM TO BE FIELD STAKED BY A CONNECTICUT LICENSED LAND SURVEYOR PRIOR TO CONSTRUCTION.
10. COMPLIANCE BY CONTRACTORS WITH OSHA REQUIREMENTS REQUIRED FOR CONFINED SPACES AND EXCAVATION FOR HOUSE AND ALL EXCAVATION AND EARTHWORK.
11. ADDITIONAL SOIL TESTING REQUIRED IN SEPTIC AREA AT TIME OF INSTALLATION OF PRIMARY SEPTIC AREA.

INVERT ELEVATIONS

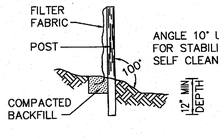
TOP FOUNDATION = 350.50 (MIN.)
INVERT @ FOUNDATION = 448.50 (MIN.)
INVERT TANK IN = 347.75
INVERT TANK OUT = 347.50

D-1 (LEVEL)
INV. IN = 347.00
INV. OUT TO TRENCH = 347.00
INV. TRENCH = 347.00
BOTTOM TRENCH ROW 1 = 346.50

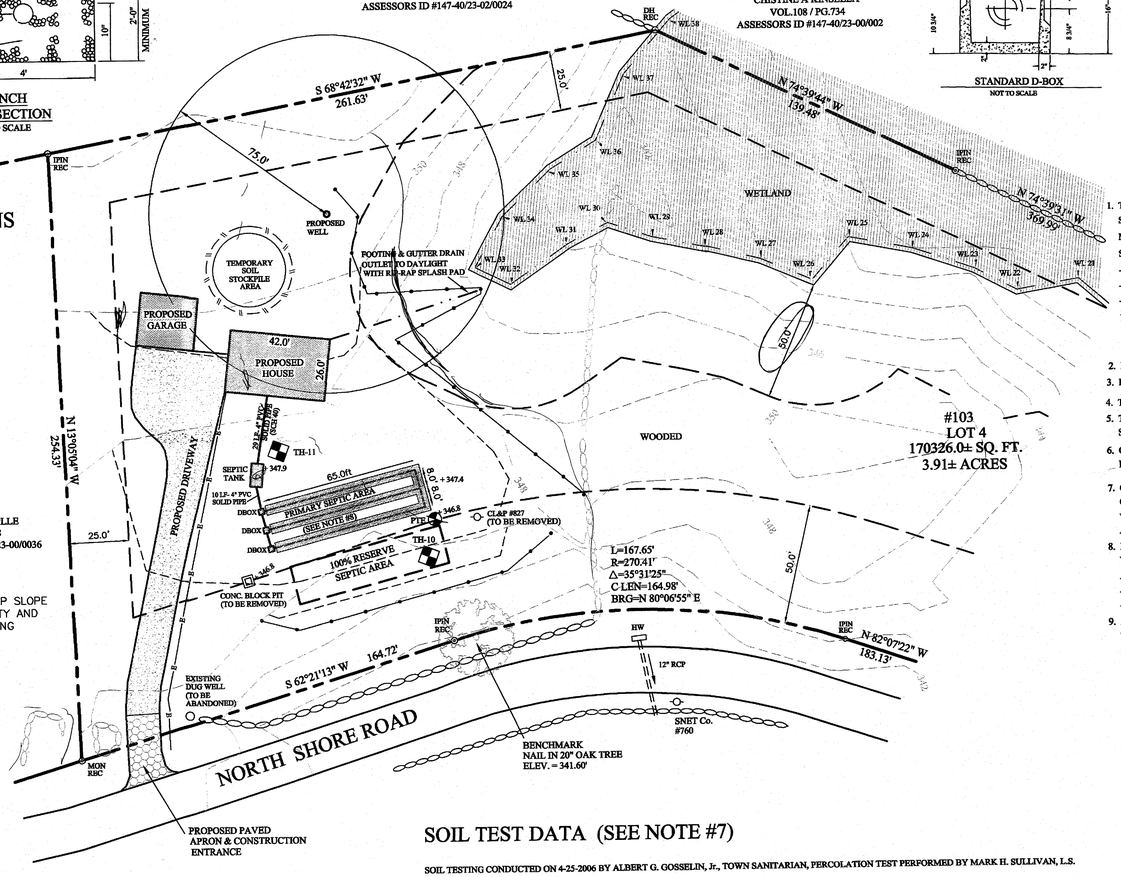
D-2 (LEVEL)
INV. IN = 347.00
INV. OUT TO TRENCH = 347.00
INV. TRENCH = 347.00
BOTTOM TRENCH ROW 2 = 346.50'

D-3 (LEVEL)
INV. IN = 347.00
INV. OUT TO TRENCH = 347.00
INV. TRENCH = 347.00
BOTTOM TRENCH ROW 2 = 346.50'

DEPTH OF RESTRICTIVE LAYER = 27"
THE BOTTOM OF THE LEACHING TRENCH NOT TO BE INSTALLED MORE THAN 9" INTO EXISTING GRADE



SILT FENCE
NOT TO SCALE



NOTES

1. THIS SURVEY AND MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTION 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996, AS REVISED NOVEMBER 26, 2018.
   - THE TYPE OF SURVEY IS A ZONING LOCATION SURVEY.
   - THE BOUNDARY DETERMINATION CATEGORY IS A RESURVEY.
   - THE HORIZONTAL ACCURACY CONFORMS TO CLASS A-2 STANDARDS.
   NO DECLARATION IS EXPRESSED OR IMPLIED BY THIS MAP OR COPIES THEREOF UNLESS THE PRINT BEARS THE IMPRESSION TYPE SEAL AND THE ORIGINAL LIVE SIGNATURE OF THE SURVEYOR WHOSE NAME AND REGISTRATION NUMBER APPEARS BELOW OR THEREON.
2. REFERENCE IS MADE TO THE TOWN OF VOLUNTOWN LAND RECORDS VOL. 94 PG. 270.
3. PROPERTY LOCATED IN A RURAL ZONING DISTRICT.
4. THE PROPERTY IS SHOWN ON THE TOWN OF VOLUNTOWN TAX ASSESSORS ID# 147-035/023-04/0103
5. THIS SURVEY AND MAP DOES NOT INCLUDE THE LOCATION OF UNDERGROUND UTILITIES AND / OR STRUCTURES.
6. CONTOUR ARE AT TWO FOOT INTERVALS AND ARE BASED ON APPROXIMATE U.S.G.S. VERTICAL DATUM. TOPOGRAPHIC INFORMATION IS TO T-2 STANDARDS AND IS BASE ON ACTUAL GROUND SURVEY.
7. CONFIRMATION TEST PITS AND PERCOLATION TEST TO BE PERFORMED PRIOR TO COMMENCEMENT OF ANY EXCAVATION OR CONSTRUCTION ON SITE. IF RESULTS OF THE CONFIRMATION TEST PITS WARRANT A CHANGE IN DESIGN, A REVISED PLAN WILL BE REQUIRED PRIOR TO THE ISSUANCE OF A SEPTIC PERMIT.
8. INSTALLER TO SUBMIT SCALED AND / OR TIED AS-BUILT TO UHD UPON 30 DAYS OF COMPLETION WITH DISTANCES TO FLOW LINE AT HOUSE, INLET AND OUTLET COVER OF TANK, D-BOXES, CLEANOUTS AND ENDS OF LEACHING ROWS, WELLS, FOOTING / CURTAIN DRAINS AND BETWEEN TIE POINTS. IN ADDITION, PROVIDE THE NAME OF INSTALLER, DATE, HOUSE LOCATION AND STREET / DIRECTIONAL ARROW.
9. ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE COVERS THAT WEIGHT AT LEAST 59 LBS. AND / OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO THE TANK. ALL BELOW GRADE TANK OR TANK RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BB LOCATED WITH A METAL DETECTOR.

MAP REFERENCES

1. MAP ENTITLED " SUBDIVISION PLAN, PROPERTY / BOUNDARY SURVEY PREPARED FOR BRUNO & ANNELI LONNBERG, NORTH SHORE ROAD & BASSETT MILL ROAD, VOLUNTOWN, CONNECTICUT". SCALE: 1" = 60', DATED: 6-2-2006, SHEET 1 OF 3, REVISED THROUGH 9-27-2006. PREPARED BY: MARK H. SULLIVAN, L.S., C.P.S.S., LAND SURVEYING AND ENVIRONMENTAL CONSULTING, LLC, LISBON, CT.

SOIL TEST DATA (SEE NOTE #7)

SOIL TESTING CONDUCTED ON 4-25-2006 BY ALBERT G. GOSSELIN, Jr., TOWN SANITARIAN, PERCOLATION TEST PERFORMED BY MARK H. SULLIVAN, L.S.

PT-E (TH'S 10 & 11) MIN/INCH 10.0"
PRE-SOAK - 1:50

TIME	READING
2:20	3.5
2:25	4.5
2:30	5.5
2:35	6.5
2:40	7.5
2:45	8.25
2:50	9.25
2:55	10.0
3:00	10.5
3:05	11.0
3:10	11.75
3:15	12.25
3:20	12.75

TH -10
0-4" TOPSOIL
4-32" BROWN MEDIUM SANDY LOAM
32-66" GRAY MEDIUM SAND
NO GROUNDWATER, REFUSAL @ 66"
MOTTLING @ 36"

TH -11
0-10" TOPSOIL
10-31" BROWN MEDIUM SANDY LOAM
31-75" GRAY FINE SILTY SAND
NO GROUNDWATER, NO LEDGE
MOTTLING @ 27"

MLSS CALCULATIONS

MLSS = HYDRAULIC FACTOR (HF) x PERCOLATION FACTOR (PF) x FLOW FACTOR (FF)
HF = (RESTRICTIVE LAYER @ 27", SLOPE 3.1 - 4% = 34, PF = 1.0, FF = (4 BEDROOM HOUSE)) = 1.75
MLSS REQUIRED = 34 x 1.0 x 1.75 = 59.5'
MLSS PROVIDED = 65.0'
LEACHING AREA REQUIRED FOR 10 MIN. PERC = 577.5 S.F.
LEACHING AREA PROVIDED = 585 S.F.

RESERVE SEPTIC AREA (SAME SIZE AND DESIGN)

MAXIMUM DEPTH INTO EXISTING GRADE = 9"

BASIS OF DESIGN

4 BEDROOM HOUSE, PERC RATE 5.1 -10 MIN./IN. = 577.5 SQ. FT. OF EFFECTIVE LEACHING AREA.
RESTRICTIVE LAYER - MOTTLING @ 27", 1500 GALLON SEPTIC TANK, CONSTRUCT 195 L. F. OF 4' WIDE X 1' HIGH STONE AND PIPE LEACHING TRENCHES WITH ENDS TIE TOGETHER AS SHOWN NO TUBS GREATER THAN 100 GALLONS NOR ANY GARBAGE DISPOSAL SHALL BE INSTALLED.
MAXIMUM DEPTH INTO EXISTING GRADE = 9"

CERTIFIED SUBSTANTIALLY CORRECT

FRANKLIN G. GRUSSY, P.E. #11654
FRANKLIN G. GRUSSY, P. E. & ASSOCIATES

9/10/20
DATE

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

MARK H. SULLIVAN, L.S. #70051
THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL

8-10-2020
DATE

LEGEND

PROPERTY LINE	IPIN IRON PIN
BUILDING SETBACK LINE	DH DRILL HOLE
STONEWALL	IP IRON PIPE
EXISTING CONTOUR LINE	RB REBAR
PROPOSED CONTOUR LINE	REC. RECOVERED
ANGLE POINT	E—E PROPOSED UTILITY ROUTE
VOL. VOLUME	TH-1 SOIL TEST HOLE LOCATION
PG. PAGE	PT-A SOIL PERCOLATION TEST LOCATION
N/F NOW OR FORMERLY	EXISTING TREE LINE
S.F. SQUARE FEET	CL&P CONNECTICUT LIGHT & POWER
SILT FENCE OR HAYBALES	
W—W PROPOSED WATER ROUTE	

BAR SCALE
0' 30' 60' 90'
SCALE: 1" = 30'

"CALL BEFORE YOU DIG" -1-800-922-4455

DATE	REVISION

SEPTIC DESIGN PLAN

PREPARED FOR
CHRIS & AMILIA SODERQUI

#103 NORTH SHORE ROAD
VOLUNTOWN, CONNECTICUT

DATE: 7-17-2020
DRAWN BY: MHS
SCALE: 1"= 30'
PROJECT NO. 20-116
SHEET 1 OF 1

PREPARED BY
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20-116 SP DWG.