

PROJECT DESCRIPTION:

THE EXISTING BARN IS TO BE CONVERTED TO A TWO-BEDROOM GUEST HOUSE. A NEW SEPTIC TANK AND PUMP CHAMBER WAS INSTALLED IN MAY 2021 AND CONNECTED TO THE EXISTING SEPTIC SYSTEM. THE EXISTING SEPTIC SYSTEM (3 BEDROOM DESIGN) IS CODE COMPLIANT FOR THE PROPOSED USE (2 BEDROOMS).

DESIGN CRITERIA FOR POOL HOUSE/BARN

- 3 NUMBER OF BEDROOMS IN ORIGINAL 2007 DESIGN
- 2 NUMBER PROPOSED BEDROOMS
- 40 PERCOLATION RATE (MINUTES PER INCH) (SEPTIC FILL PERC RATE = 2.2 MINS. PER INCH)
- 13.5 HYDRAULIC GRADIENT (%)

MLSS ANALYSIS:

- 26 HYDRAULIC FACTOR (HF)
- 1.0 FLOW FACTOR (FF)
- 2.0 PERCOLATION FACTOR (PF)
- MLSS = HF x FF x PF
- 52 LF LEACHING SYSTEM SPREAD REQUIRED
- 100% OF MINIMUM LEACHING SYSTEM SPREAD PROVIDED

EXISTING SEPTIC SYSTEM DESIGN:

- 159.08 LINEAL FEET OF 4 FEET WIDE BY 1 FOOT HIGH PLASTIC GALLERIES, 1 FOOT OF STONE HAS BEEN PLACED ON THE SIDES OF THE GALLERIES AND ON THE ENDS OF THE GALLERY ROWS.
- 675 EFFECTIVE LEACHING AREA REQUIRED (SQUARE FEET)
- 938 EFFECTIVE LEACHING AREA PROVIDED (SQUARE FEET) (159.08 LF x 5.9 SF/LF = 938.5 SF PROVIDED)
- 1,000 EXISTING SEPTIC TANK VOLUME (GALLONS)
- 1,000 EXISTING PUMP CHAMBER VOLUME (GALLONS)

GENERAL NOTES:

1. GRASS, ORGANICS, FILL AND ALL TOPSOIL IN THE PRIMARY LEACHING AREA ARE TO BE REMOVED PRIOR TO PLACEMENT OF SELECT FILL. AREA IS TO BE SCARIFIED AFTER STRIPPING TOPSOIL. HEAVY EQUIPMENT IS TO BE KEPT OUT OF THE PROPOSED SANITARY DISPOSAL SYSTEM AREAS.
2. USE APPROVED 2 COMPARTMENT SEPTIC TANK PLACED LEVEL WITH A MINIMUM OF 6 INCHES OF COVER. (H-20 LOADING IF PLACED UNDER DRIVE OR PARKING AREA.) TANK COVERS ARE TO BE EXTENDED TO GRADE AS REQUIRED. ALL NEWLY INSTALLED TANKS SHALL HAVE AN APPROVED NON-BYPASS EFFLUENT FILTER AT THE OUTLET.
3. LARGE TUBS AND GARBAGE GRINDERS REQUIRE ADDITIONAL SEPTIC TANK LIQUID CAPACITY AND SHOULD BE SIZED ACCORDINGLY. GARBAGE GRINDERS ARE NOT RECOMMENDED.
4. SET ALL DISTRIBUTION BOXES ON MINIMUM 12 INCH TRENCH STONE BASE.
5. NO AIR CONDITIONING, REFRIGERATION, WATER SOFTENER RESIDUES, SURFACE OR SUBSURFACE DRAINS ARE TO BE CONNECTED TO THE SANITARY DISPOSAL SYSTEM.
6. FOOTING DRAINS AND OUTLETS ARE TO BE A MINIMUM OF 25' FROM THE SANITARY DISPOSAL SYSTEM.
7. IF CURTAIN DRAIN IS SPECIFIED, IT SHALL BE INSTALLED PER TYPICAL DETAIL AND DESIGN PLANS.
8. THERE ARE NO KNOWN OR PROPOSED WELLS WITHIN 75' OF THE PROPOSED SANITARY DISPOSAL SYSTEM LEACHING FIELDS.
9. SELECT FILL SHALL BE COMPRISED OF CLEAN SAND & GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING CONNECTICUT PUBLIC HEALTH CODE REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:
 1. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
 2. 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).
 3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
 4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING(WET)	PERCENT PASSING(DRY)
#4	100%	100%
#10	70%-100%	70%-100%
#40	10%-50%(SEE NOTE BELOW)	10%-75%
#100	0%-20%	0%-5%
#200	0%-5%	0%-2.5%

NOTE: 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%.
10. THE LICENSED INSTALLER IS RESPONSIBLE FOR PREPARING THE LEACHING AREA WITH NECESSARY SELECT FILL. THE TOPSOIL IN THE LEACHING SYSTEM AREA MUST BE REMOVED AND THE SUBSOIL SCARIFIED PRIOR TO SELECT FILL PLACEMENT UNLESS OTHERWISE DIRECTED BY THE DESIGN ENGINEER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOIL FROM OVER COMPACTION OR DAMAGE. SELECT FILL SHALL EXTEND A MINIMUM OF FIVE (5) FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE LEACHING SYSTEM.
11. THE INSTALLER SHALL PROVIDE A SIEVE ANALYSIS FOR ALL SELECT FILL USED ON SITE.
12. THE DEPTH OF FILL SHOWN ON THE PROFILE IS BASED UPON THE PROFILE SECTION LINE ONLY. MORE FILL MAY BE REQUIRED IN OTHER AREAS OF THE SEPTIC SYSTEM.
13. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF PROPER SOIL EROSION AND SEDIMENTATION CONTROL MEASURES PER THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
14. PRIOR TO THE START OF CONSTRUCTION THE PROJECT SURVEYOR IS TO SET A BENCHMARK IN THE SEPTIC AREA AND STAKE THE PROPOSED LEACHING FIELDS.
15. PERCOLATION TESTS HAVE BEEN CONDUCTED WITHIN 10 FEET OF THE CORRESPONDING DEEP TEST UNLESS OTHERWISE NOTED.
16. MODIFICATIONS TO THIS PLAN SHALL BE AUTHORIZED BY THE PROJECT ENGINEER AND APPROVED BY THE LOCAL DIRECTOR OF HEALTH.

SPECIFIC NOTES:

1. THE NEW MILFORD HEALTH DEPARTMENT REQUIRES AN AS-BUILT BY THE DESIGN ENGINEER.
2. THIS PLAN IS TO ILLUSTRATE HEALTH CODE COMPLIANCE FOR THE INTERIOR RENOVATION OF THE BARN/POOL HOUSE TO A TWO-BEDROOM GUEST HOUSE. NO SEPTIC WORK IS PROPOSED WITH THIS PLAN.

SEPTIC ELEVATION TABLE		
COMPONENT	PROPOSED INVERT (FT)	INSTALLED INVERT (FT)
FLOW LINE AT NEW FOUNDATION	828.0	827.3
SEPTIC TANK INLET	827.30	826.42
SEPTIC TANK OUTLET	827.05	826.18
PUMP CHAMBER INLET	826.8	825.71
DISTRIBUTION BOX #1 INLET	EXISTING	EXISTING

TIES	
A to 1=	28.7'
B to 1=	33.3'
A to 2=	33.4'
B to 2=	31.3'
A to 3=	37.4'
B to 3=	29.1'
A to 4=	29.7'
B to 4=	33.1'
A to 5=	66.8'
B to 5=	95.2'
A to 6=	54.5'
B to 6=	84.4'
A to 7=	113.7'
B to 7=	88.3'
A to 8=	106.1'
B to 8=	76.8'



Underground utility, structure and facility locations shown have been determined from record maps provided by utility companies, governmental agencies, testimony, field locations, and other sources. Other utilities may exist on site or in the area shown. The size, location, and existence of all underground features must be field verified by the appropriate providers prior to construction Call Before You Dig, 1-800-922-4455.

1) COPIES NOT BEARING THE EMBOSSED SEAL OF THE SURVEYOR OR ENGINEER SHALL BE RENDERED NULL AND VOID.
 2) REVISIONS TO THESE PLANS BY ANYONE OTHER THAN ARTHUR H. HOWLAND, P.C. SHALL MAKE THESE PLANS NULL AND VOID. ARTHUR H. HOWLAND, P.C. SHALL TAKE NO RESPONSIBILITY FOR SAID REVISIONS.

REVISIONS:
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DEED REFERENCE: V. 151 P. 275 WASHINGTON LAND RECORDS.
 PROPERTY IS LOCATED WITHIN THE R-1 ZONE DISTRICT.
 ELEVATION DATUM IS ASSUMED.

REFER TO CONNECTICUT GENERAL STATUTES SEC. 8-13a REGARDING THE NONCONFORMING LOCATIONS OF BUILDINGS THAT HAVE EXISTED FOR MORE THAN THREE YEARS.

ARTHUR H. HOWLAND & ASSOCIATES, P.C.
 CIVIL ENGINEERS • LAND SURVEYORS
 SOIL SCIENTISTS • LAND PLANNERS

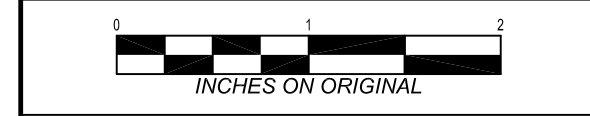
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Proposed Barn Guest House Plan

Record Owner
Angela & Edward J. Bramson
Nettleton Hill Farm, LLC
 270 Nettleton Hollow Road
 Town of Washington
 County of Litchfield
 State of Connecticut

DATE: **March 7, 2023**

SCALE: **1" = 20'**



SHEET: **Pool.3**

LEGEND

- EXISTING BOUNDARY LINE
- EXISTING BUILDING SETBACK LINE
- EXISTING CONTOUR (10 FOOT)
- EXISTING CONTOUR (2 FOOT)
- EXISTING STORM PIPE
- EXISTING EDGE OF PAVEMENT (ROAD)
- EXISTING EDGE OF PAVEMENT (PARKING)
- EXISTING BUILDING/HOUSE
- EXISTING WOOD FENCE
- EXISTING WIRE FENCE
- EXISTING RETAINING WALL
- EXISTING STONE WALL
- EXISTING SPOT ELEVATION
- EXISTING IRON PIPE
- EXISTING UTILITY POLE
- EXISTING STORM STRUCTURE
- EXISTING WELL
- EXISTING DEEP TEST
- EXISTING PERC TEST
- EXISTING SEPTIC SYSTEM (PRIMARY)
- EXISTING WETLAND FLAG
- EXISTING WETLAND
- EXISTING LEDGE OUTCROP
- EXISTING LANDSCAPING OR TREELINE
- PROPOSED CONTOUR (10 FOOT)
- PROPOSED CONTOUR (2 FOOT)
- PROPOSED GAS UTILITY
- PROPOSED WATER UTILITY
- PROPOSED STORM PIPE
- PROPOSED EDGE OF DRIVEWAY
- PROPOSED BUILDING/HOUSE
- PROPOSED PORCH/LOADING DOCK
- PROPOSED WOOD FENCE
- PROPOSED RETAINING WALL
- PROPOSED STONE WALL
- PROPOSED HAYBALES
- PROPOSED CONSTRUCTION FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED SPOT ELEVATION
- PROPOSED STORM STRUCTURE
- PROPOSED SEPTIC SYSTEM (PRIMARY)
- PROPOSED SEPTIC SYSTEM (RESERVE)
- PROPOSED LANDSCAPING OR TREELINE
- PROPOSED RIPRAP
- PROPOSED CONSTRUCTION ENTRANCE