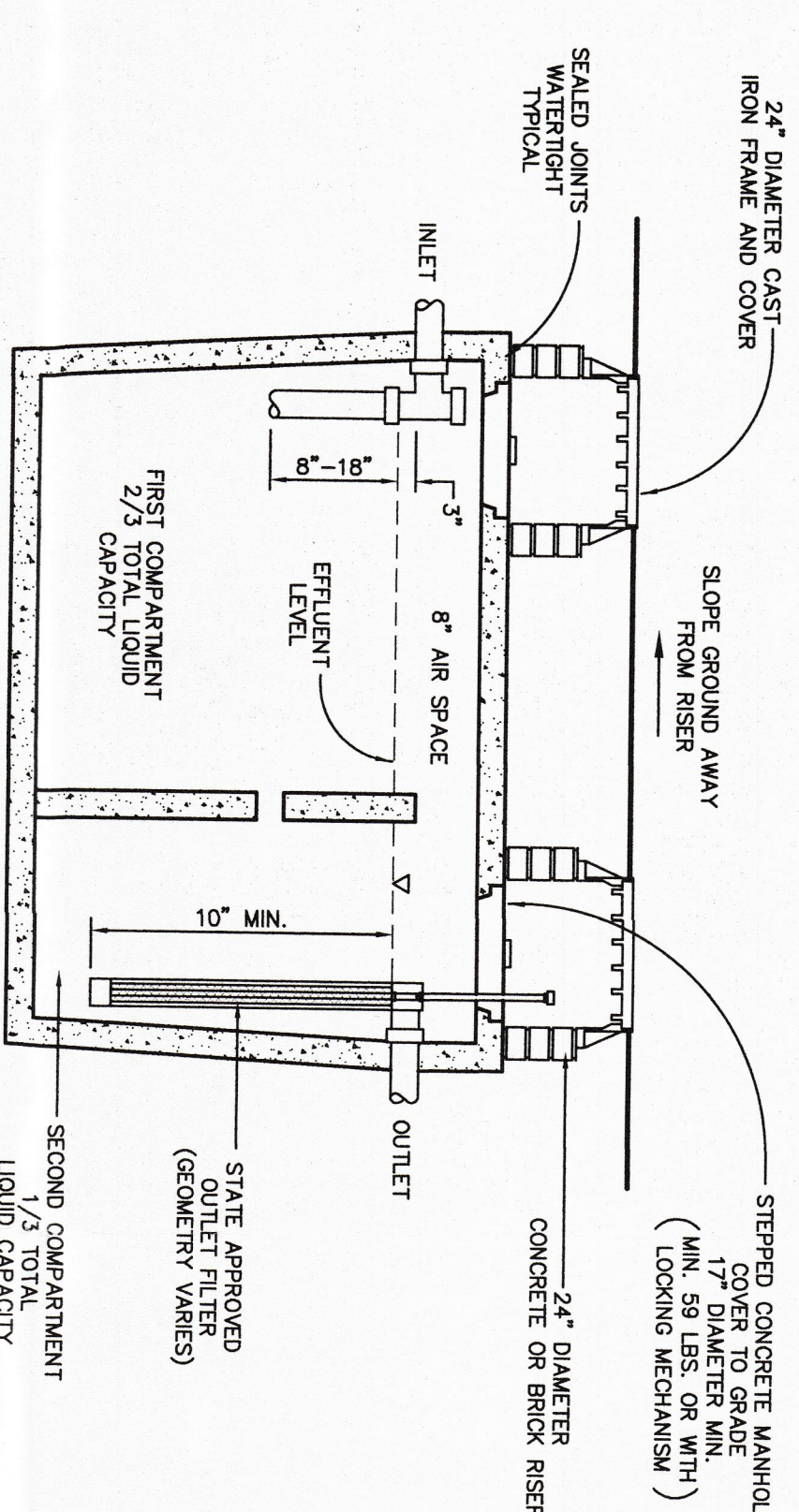
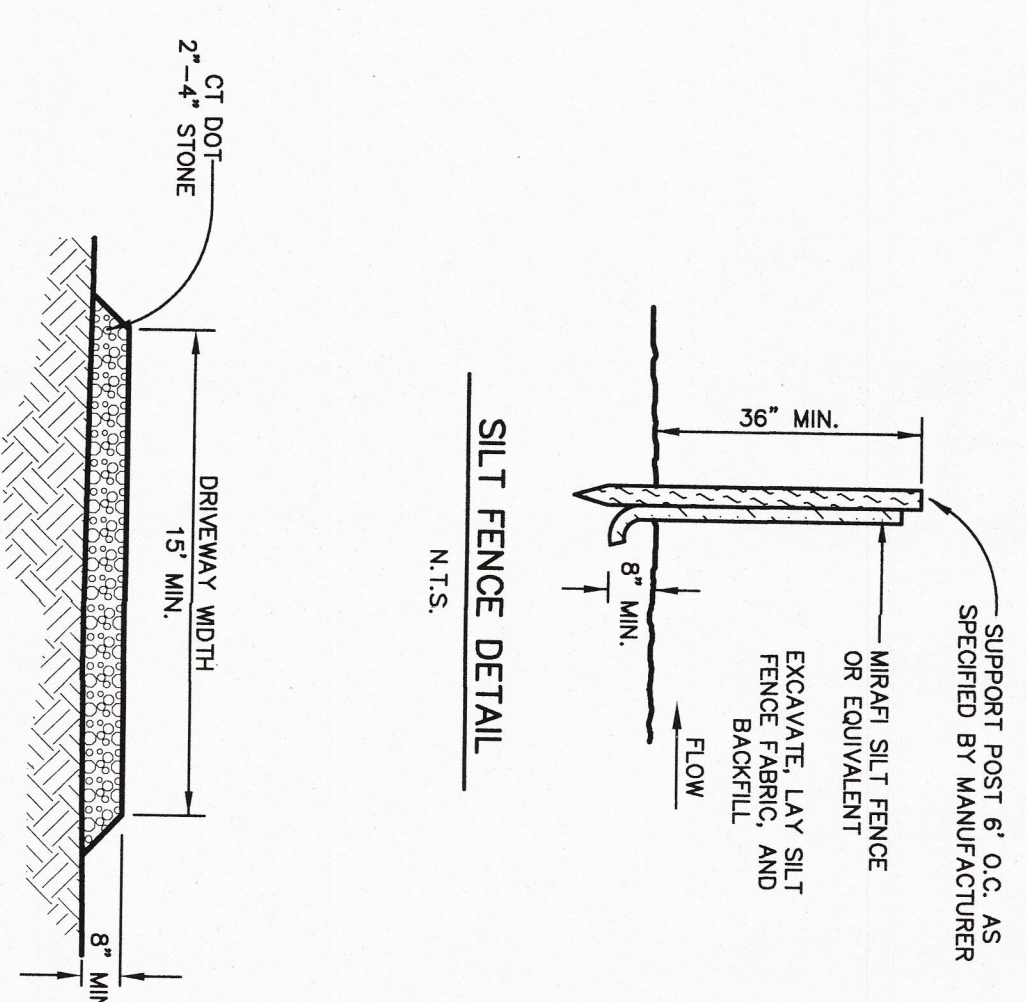


TYPICAL SEPTIC TANK DETAIL
N.T.S.

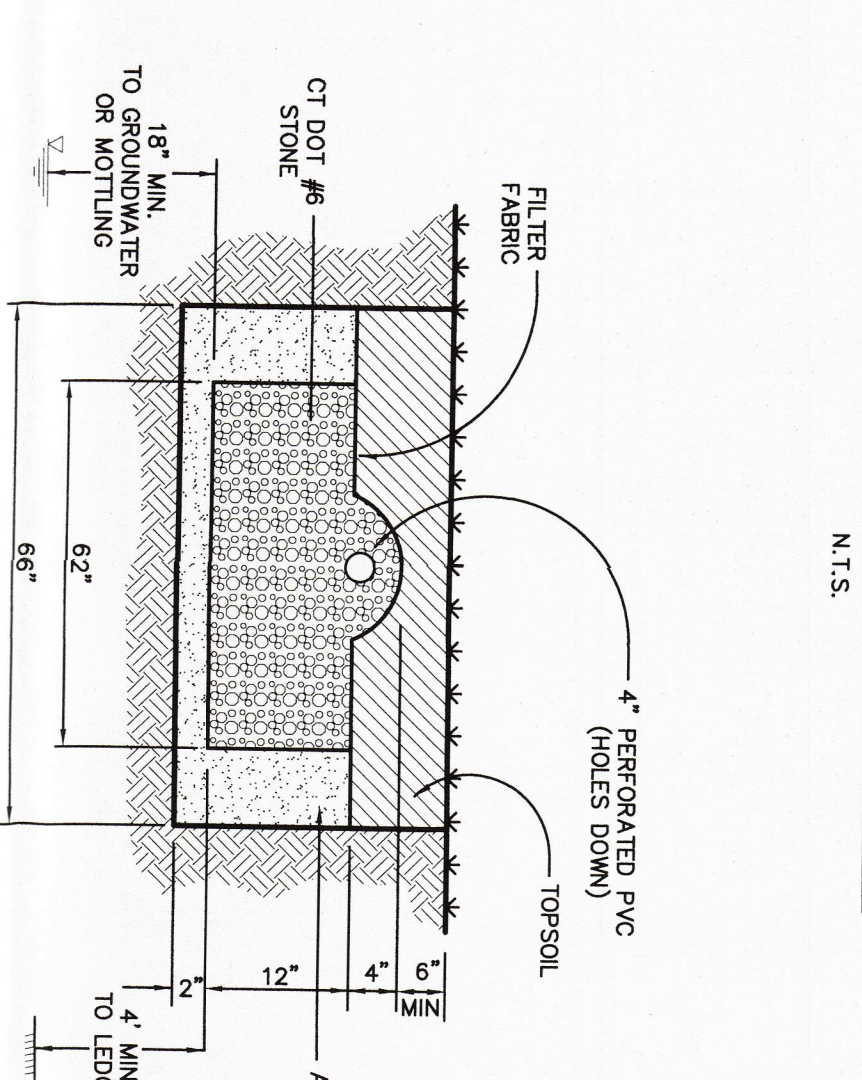


TYPICAL SEPTIC TANK DETAIL RATED H-20
N.T.S.

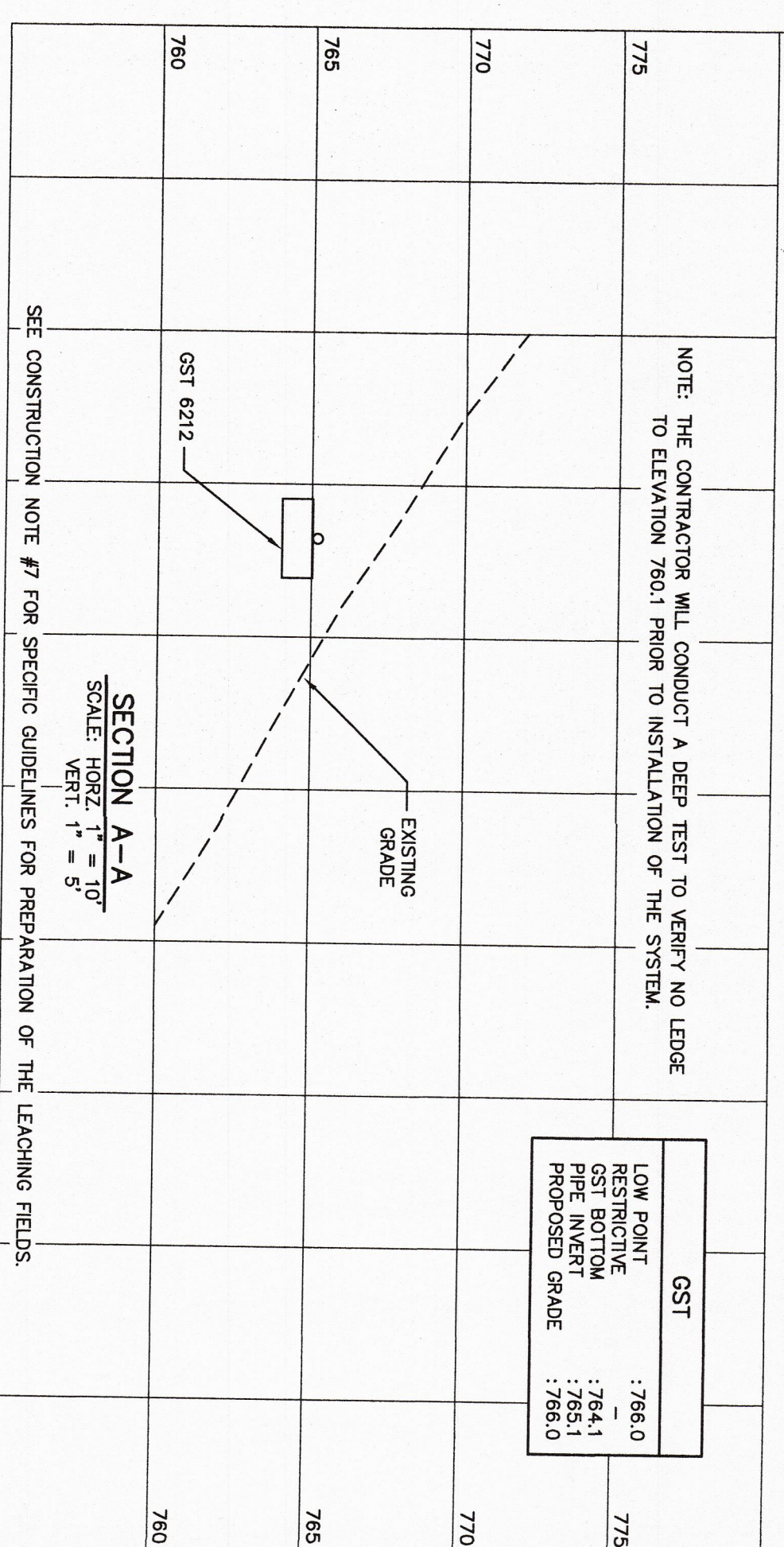


SILT FENCE DETAIL
N.T.S.

CONSTRUCTION ENTRANCE DETAIL
N.T.S.



CONSTRUCTION ENTRANCE DETAIL
N.T.S.



POINT	ELEVATION
LOW POINT RESTRICTION	768.0
EXISTING GRADE	765.1
PROPOSED GRADE	766.0

NOTE: THE CONTRACTOR WILL CONDUCT A DEEP TEST TO VERIFY NO LEDGE TO ELEVATION 760.1 PRIOR TO INSTALLATION OF THE SYSTEM.

SECTION A-A
SCALE: HORIZ. 1" = 3'
VERT. 1" = 3'

SEE CONSTRUCTION NOTE #7 FOR SPECIFIC GUIDELINES FOR PREPARATION OF THE LEACHING FIELDS.

DESIGN CRITERIA BARN CONVERSION:

1. PERCOLATION RATE: P1-C = 1:20
- A. DESIGN RATE FOR PRIMARY SYSTEM: 1:20
- B. DESIGN RATE FOR RESERVE SYSTEM: N/A
2. MINIMUM LEACHING SYSTEM SPREAD (MINISS):
 - A. HYDRAULIC GRADIENT = 30.0%
 - B. DEPTH OF RESTRICTIVE LAYER = 66" (AVERAGE D172, 5 AND 6)
 - C. FLOW FACTOR (FF1) 1 BEDROOM = 0.5
 - C. PERCOLATION FACTOR (PF1) 1:20 = 1.25
 - D. MINIMUM LEACHING SYSTEM SPREAD = N/A
 - E. LEACHING SYSTEM SPREAD PROVIDED = 32'
3. SYSTEM DESCRIPTION:
 - A. NUMBER OF BEDROOMS: 1
 - B. REQUIRED LEACHING AREA: 250 SF @ 10.0 SF/UF = 25 UF
 - C. SYSTEM COMPONENTS: 1000 GALLON SEPTIC TANK AND 300 LF OF GST 6212
 - D. TOTAL FIELDS PROVIDED:
 - 1) PRIMARY SYSTEM: 1 x 32 LF = 32 LF @ 10.0 SF/UF = 320 SF
 - 2) RESERVE SYSTEM: N/A
 - E. DEPTH OF SYSTEM CONTROL: EXISTING GRADE WILL CONTROL. THE DEPTH OF THE SYSTEM, THE CONTRACTOR WILL CONDUCT A DEEP TEST TO VERIFY NO LEDGE TO ELEVATION 760.1 PRIOR TO INSTALLATION OF THE SYSTEM.

DESIGN CRITERIA RESIDENCE CODE COMPLIANT AREA:

1. PERCOLATION RATE: P1-A = 1:20, P1-B = 1:20
- A. DESIGN RATE FOR PRIMARY SYSTEM: 1:20
- B. DESIGN RATE FOR RESERVE SYSTEM: N/A
2. MINIMUM LEACHING SYSTEM SPREAD (MINISS):
 - A. HYDRAULIC GRADIENT = 30.0%
 - B. DEPTH OF RESTRICTIVE LAYER = 66" (AVERAGE D11 THRU 4)
 - C. FLOW FACTOR (FF1) 4 BEDROOM = 1.75
 - C. PERCOLATION FACTOR (PF1) 1:20 = 1.25
 - D. MINIMUM LEACHING SYSTEM SPREAD = 10' x 1.75 x 1.25 = 22'
 - E. LEACHING SYSTEM SPREAD PROVIDED = 80'
3. SYSTEM DESCRIPTION:
 - A. NUMBER OF BEDROOMS: 4
 - B. REQUIRED LEACHING AREA: 787.5 SF @ 10.0 SF/UF = 78.75 UF
 - C. SYSTEM COMPONENTS: 1750 GALLON SEPTIC TANK AND 80 LF OF GST 6212
 - D. TOTAL FIELDS PROVIDED:
 - 1) PRIMARY SYSTEM: 1 x 80 LF = 80 LF @ 10.0 SF/UF = 800 SF
 - 2) RESERVE SYSTEM: N/A
 - E. DEPTH OF SYSTEM CONTROL: RESERVE LAYER @ 32" IN DEEP TEST 2 WILL CONTROL. THE DEPTH OF THE SYSTEM.

DEEP TEST AND PERCOLATION TEST DATA:

DEPTH TEST 1	DEPTH TEST 2	DEPTH TEST 3
0'-11" TOPSOIL 12'-57" GRANIC-BROWN BANK 51'-77" BROWN SAND & GRAVEL	0'-11" TOPSOIL 12'-57" GRANIC-BROWN BANK 12'-71" RAIN SAND & GRAVEL	0'-14" TOPSOIL 14'-36" GRANIC-BROWN BANK 32'-57" MODERATELY COMPACT 53'-84" BROWN SAND & GRAVEL
NO NOTTING NO LEDGE RESTRICTION @ 64"	NO NOTTING NO LEDGE RESTRICTION @ 60"	NO NOTTING NO LEDGE RESTRICTION @ 39"
DEPTH TEST 4	DEPTH TEST 5	DEPTH TEST 6
0'-11" TOPSOIL 11'-57" GRANIC-BROWN BANK 52'-77" BROWN COMPACT SAND & GRAVEL	0'-11" TOPSOIL 11'-48" GRANIC-BROWN SAND & GRAVEL 48'-66" BROWN SAND & GRAVEL	0'-14" GRANIC-BROWN SAND 16'-46" LOAM RAIN SAND & GRAVEL
NO NOTTING NO LEDGE RESTRICTION @ 52"	NO NOTTING NO LEDGE RESTRICTION @ 57"	NO NOTTING NO LEDGE RESTRICTION @ 57"
PERCOLATION TEST A DEPTH: 28.5' DIAMETER: 6" PRESURE: 2.00 PS TIME DEPTH DRCP 3:18 23 3/4" 5 3/4" 3:18 23 3/4" 5 3/4" 3:38 26 1/4" 7/8" 3:48 28 1/8" 5/8"	PERCOLATION TEST B DEPTH: 9' DIAMETER: 6" PRESURE: 2.00 PS TIME DEPTH DRCP 3:19 19 1/4" 4 1/8" 3:29 17 1/4" 2 1/8" 3:48 18 1/2" 7/8" 4:09 21 3/4" 3/4"	PERCOLATION TEST C DEPTH: 30' DIAMETER: 6" PRESURE: 2.00 PS TIME DEPTH DRCP 3:10 19 1/4" 2 1/8" 3:20 22 5/8" 7/8" 3:50 23 7/8" 1 1/2" 4:10 24 3/8" 1 1/2"

NOTE: DEEP TESTS WERE CONDUCTED BY MCHORD ENGINEERING ASSOCIATES, INC. ON MARCH 23, 2022 AND WERE WITNESSED BY THE HARTFORD COUNTY HEALTH DISTRICT PERCOLATION TEST TEAM. TESTS WERE PERFORMED BY MCHORD ENGINEERING ASSOCIATES, INC. ON APRIL 15, 2022.

CONSTRUCTION NOTES:

1. CONSTRUCTION OF THE SEPTIC SYSTEM SHALL BE IN ACCORDANCE WITH THE STATE OF CONNECTICUT REGULATIONS, AS WELL AS ACCEPTED STANDARDS OF GOOD WORKMANSHIP.
2. ALL SEPTIC SYSTEM MATERIALS AND CONSTRUCTION TECHNIQUES SHALL BE APPROVED BY THE STATE OF CONNECTICUT HEALTH DISTRICT.
3. THE MASTER PLAN FROM THE HOUSE/REARINGS TO THE SEPTIC TANK SHALL BE IN ACCORDANCE WITH THE STATE OF CONNECTICUT REGULATIONS AND THE STATE OF CONNECTICUT HEALTH DISTRICT.
4. THE SEPTIC TANK SHALL BE INSTALLED ON A 1% SLOPE AWAY FROM THE FOUNDATION.
5. THE SEPTIC TANK SHALL HAVE A MINIMUM CAPACITY OF 1000 GALLONS.
6. THE SEPTIC TANK SHALL BE INSTALLED ON A 1% SLOPE AWAY FROM THE FOUNDATION.
7. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF THE SEPTIC TANK ALL TOPSOIL AND THE EXPOSED SURFACE TO INSURE PROPER CONNECTION BETWEEN THE SEPTIC TANK AND THE SEPTIC TANK.
8. MATERIALS SHALL BE KEPT COVERED AT ALL TIMES.

9. PERCENT PASSING THE #40 AND #60 SIEVES MAY BE INCREASED TO NO GREATER THAN 75% IF THE EXCEEDS.
10. PERCENT PASSING THE #40 AND #60 SIEVES DOES NOT EXCEED 10% AND 20% DOES NOT EXCEED 5%.
11. THE FILL SHALL ALSO BE ACCEPTABLE TO THE LOCAL HEALTH DEPARTMENT.
12. THE FIRST 6" OF SELECT FILL SHALL BE HANDPAVED INTO THE EXISTING SOIL. THEREAFTER, AT LEAST 6" OF SELECT FILL SHALL BE HANDPAVED INTO THE EXISTING SOIL. THE FILL SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D1557. SELECT FILL SHALL BE PLACED TO A POINT BELOW THE BOTTOM OF THE TRENCH IN CASES WHERE THE DEPTH OF THE EXISTING SOIL IS LESS THAN THE DEPTH OF THE SELECT FILL.
13. FINAL GRADE, INCLUDING THE 6" TOPSOIL LAYER, SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY ON RAIN AND PART OF THE SYSTEM.
14. PERFORATED SEPTIC SYSTEM COMPONENTS SHALL BE INSTALLED AS INDICATED ON THE PLAN AND MAINTAINED DURING CONSTRUCTION. UNLESS OTHERWISE INDICATED ON THE PLAN, ALL PERFORATED SEPTIC SYSTEM COMPONENTS SHALL BE INSTALLED AS INDICATED ON THE PLAN AND MAINTAINED DURING CONSTRUCTION. UNLESS OTHERWISE INDICATED ON THE PLAN, ALL PERFORATED SEPTIC SYSTEM COMPONENTS SHALL BE INSTALLED AS INDICATED ON THE PLAN AND MAINTAINED DURING CONSTRUCTION. UNLESS OTHERWISE INDICATED ON THE PLAN, ALL PERFORATED SEPTIC SYSTEM COMPONENTS SHALL BE INSTALLED AS INDICATED ON THE PLAN AND MAINTAINED DURING CONSTRUCTION. UNLESS OTHERWISE INDICATED ON THE PLAN, ALL PERFORATED SEPTIC SYSTEM COMPONENTS SHALL BE INSTALLED AS INDICATED ON THE PLAN AND MAINTAINED DURING CONSTRUCTION.
15. THIS DESIGN IS BASED UPON THE USE OF CONVENTIONAL BATTERIES WITH A CAPACITY OF 100 GALLONS. IF A LARGER BATTERY IS USED, THE DESIGN SHALL BE REVISED TO ACCORDANCE WITH THE TECHNICAL STANDARDS. ADDITIONALLY, THE SYSTEM HAS NOT BEEN DESIGNED TO ACCEPT OTHER BATTERY TYPES. CONSULT WITH THE MANUFACTURER OF THE BATTERY FOR TECHNICAL SPECIFICATIONS. WHEN SPECIFIC BATTERIES OR OVERFLOW DEVICES ARE USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS.
16. THIS DESIGN IS BASED UPON THE USE OF CONVENTIONAL BATTERIES WITH A CAPACITY OF 100 GALLONS. IF A LARGER BATTERY IS USED, THE DESIGN SHALL BE REVISED TO ACCORDANCE WITH THE TECHNICAL STANDARDS. ADDITIONALLY, THE SYSTEM HAS NOT BEEN DESIGNED TO ACCEPT OTHER BATTERY TYPES. CONSULT WITH THE MANUFACTURER OF THE BATTERY FOR TECHNICAL SPECIFICATIONS. WHEN SPECIFIC BATTERIES OR OVERFLOW DEVICES ARE USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS.
17. THIS DESIGN CONFORMS TO APPLICABLE CODES AND ACCEPTED PRACTICE. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED.
18. MCHORD ENGINEERING ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR SEPTIC SYSTEM FAILURE, UNLESS IT SURVEYS FROM PLANS OF SYSTEM INSTALLATION.
19. PRIOR TO CONSTRUCTION A SURVEYOR LICENSED IN THE STATE OF CONNECTICUT SHALL STAKE OUT THE PROPOSED SEPTIC SYSTEM AND PROVIDE BENCHMARK ELEVATIONS.

McChord Engineering Associates, Inc.
Civil Engineers and Land Planners
1 Grinnam Hill Road
Wilton, CT 06897 (203) 834-0566

PLAN PREPARED FOR
ANKUR PATEL
WASHINGTON, CONNECTICUT

CONSTRUCTION NOTES AND DETAILS
16 WARREN ROAD
WASHINGTON, CONNECTICUT

PER NO. 227A-1
DRAWN BY: DRS
SCALE: AS SHOWN
DATE: MAY 11, 2022
CHECKED BY: TSN, HAN

DRAWING NO. SE2
SHEET 2 OF 2