

SEPTIC NOTES

- All materials and procedures are to conform to all applicable local and state regulations and to the normal standards of good practice.
- The Surveyor shall stake out the septic system and provide a benchmark for the contractor prior to installation of the system.
- The contractor shall verify all on-site and off-site conditions pertinent to the proposed construction. The engineer shall be notified of any field conditions that conflict with this plan.
- No open jointed perforated or pervious pipe drains are to be located within 50' down gradient of any system area. No perforated drains to be located within 25' up gradient and to the sides of the septic system.
- The septic pipe from the house to the septic tank shall be a 4" Solvent Welded PVC ASTM D 1785, Schedule 40 pipe or accepted equal. The septic pipe from the septic tank to the septic system shall be a 4" SDR 35 or accepted equal.
- Call "CALL BEFORE YOU DIG" @ 1-800-922-4455 before the start of any construction.
- Contractor shall contact the Certifying Engineer and the Health District prior to starting construction or the system will not be certified.
- The proposed septic area shall be roped off to prevent any heavy equipment from the area. All loam, stumps, and brush shall be removed from the proposed septic area. The topsoil shall be removed and the bottom surface area of the excavation shall be scarified.
- If select fill is required, the select fill shall be placed on the edge of the site and spread over the prepared area with a bulldozer. The first lift shall be 12 inches and the remaining lifts shall be 8 inches and compacted by normal bulldozing. Fill shall be placed only during dry weather. If water is present at the bottom of the excavation following a period of rain, the excavation shall be dewatered and rescarified. If the soil is moist scarification may be required by a heavy iron rake. The select fill shall extend a minimum of 5 feet laterally in all directions beyond the outer perimeter of the leaching system. The select fill shall have a percolation rate better than 1 inch in 10 minutes. After 50% of the select fill has been installed, the contractor shall have a certified lab pick up and do a sieve analysis on two samples. The contractor shall also hire an engineer to complete two percolation tests in the select fill whenever the entire leaching system (bottom and sides) will be situated within the select fill or when it appears the select fill will not be suitable. The test results shall be given to the Town Sanitarian and Design Engineer.
- Select fill placed within and adjacent to leaching system areas shall be a clean material comprised of sand, or sand and gravel, free from organic matter and foreign substances. The select fill shall meet the following requirements unless otherwise approved by the design P.E. Select fill exceeding 6 percent passing the #200 sieve based on a wet sieve analysis cannot be approved by the design P.E.
 - The select fill shall not contain any material larger than the three (3) inch sieve.
 - Up to 45% of the dry weight of the representative sample may be retained (gravel portion) on the #4 sieve.
 - The material that passes the #4 sieve is then reweighed and the sieve analysis started.
 - The remaining sample 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 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.

Select fill that does not meet the dry sieve gradation criteria but meets the wet sieve gradation criteria is acceptable.

SEPTIC DESIGN

Existing: Vacant Lot
 Proposal: Proposed (4) Bedroom Septic Design
 Septic Design is based on a percolation rate of **10.1 to 20.0 Minutes/Inch**.
 Connecticut Public Health Code requires 787.5 sq. ft. of effective leaching area for a 4 bedroom residence.
 Primary System shall be **57 L.F. of GST 6218** with an application rate of **14.0 sq. ft./ft.** to provide an effective area of **798 sq. ft.**
 Reserve System shall be **57 L.F. of GST 6218** with an application rate of **14.0 sq. ft./ft.** to provide an effective area of **798 sq. ft.**
 Size of septic tank required is **1125 Gallons**.
 Proposed Septic Tank is **1250 Gallons**.
 MLSS
 Minimum leaching spread required by the State Health Code based on the Hydraulic Gradient = (9/37) = 24% and
 Receiving Soil = $\frac{(Th + 2 \times 3) \times 3 + Th \times 5}{2} = \frac{(42 + 36 + 36) \times 3 + 56 \times 2}{2} = 47"$
 $H \times P \times P \times P = 14 \times 1.25 \times 1.75 = 30.625$
 Provided = 57" (Proposed Spread)
 APPROXIMATE PROPOSED ELEVATIONS
 Residence: First Floor **424.5**, Garage **422.7**, Cellar **415.5**
 Effluent Line At **Residence 414.1**
 Proposed Septic Tank Inlet **412.75**, Septic Tank Outlet **412.5**
 Proposed DB #1 Inlet **412.26**, Outlet **412.1**, HLO **---**

DEEP TEST HOLES DATA

176 Judd Road, Easton
 Performed by Ochman Associates Inc., May 6, 2021 (Fb 136, Pg. 102)

DEEP TEST HOLE #1	DEEP TEST HOLE #3
0 - 08" Topsoil	0 - 11" Topsoil
08" - 42" Brown Silty Loam & Roots	11" - 36" Brown Silty Loam & Roots
42" - 84" Brown Compact Loamy Fine To Medium Sand	36" - 82" Compact Gray Loamy Fine To Medium Sand
No Ledge None	No Ledge None
Mottling None	Mottling 36"
Groundwater None	Groundwater None
Roots To 42"	Roots To 36"
Restrictive 42"	Restrictive 36"

DEEP TEST HOLE #2	DEEP TEST HOLE #4
0 - 08" Topsoil	0 - 20" Topsoil
08" - 36" Brown Silty Loam & Roots	20" - 40" Brown Silty Loam & Roots
36" - 80" Brown/Gray Compact Loamy Fine To Medium Sand With Some Stones	40" - 58" Compact Gray Loamy Sand
No Ledge None	No Ledge None
Mottling None	Groundwater 20"
Groundwater None	Roots To 20"
Roots To 36"	Restrictive 36"
Restrictive 36"	Restrictive 56"

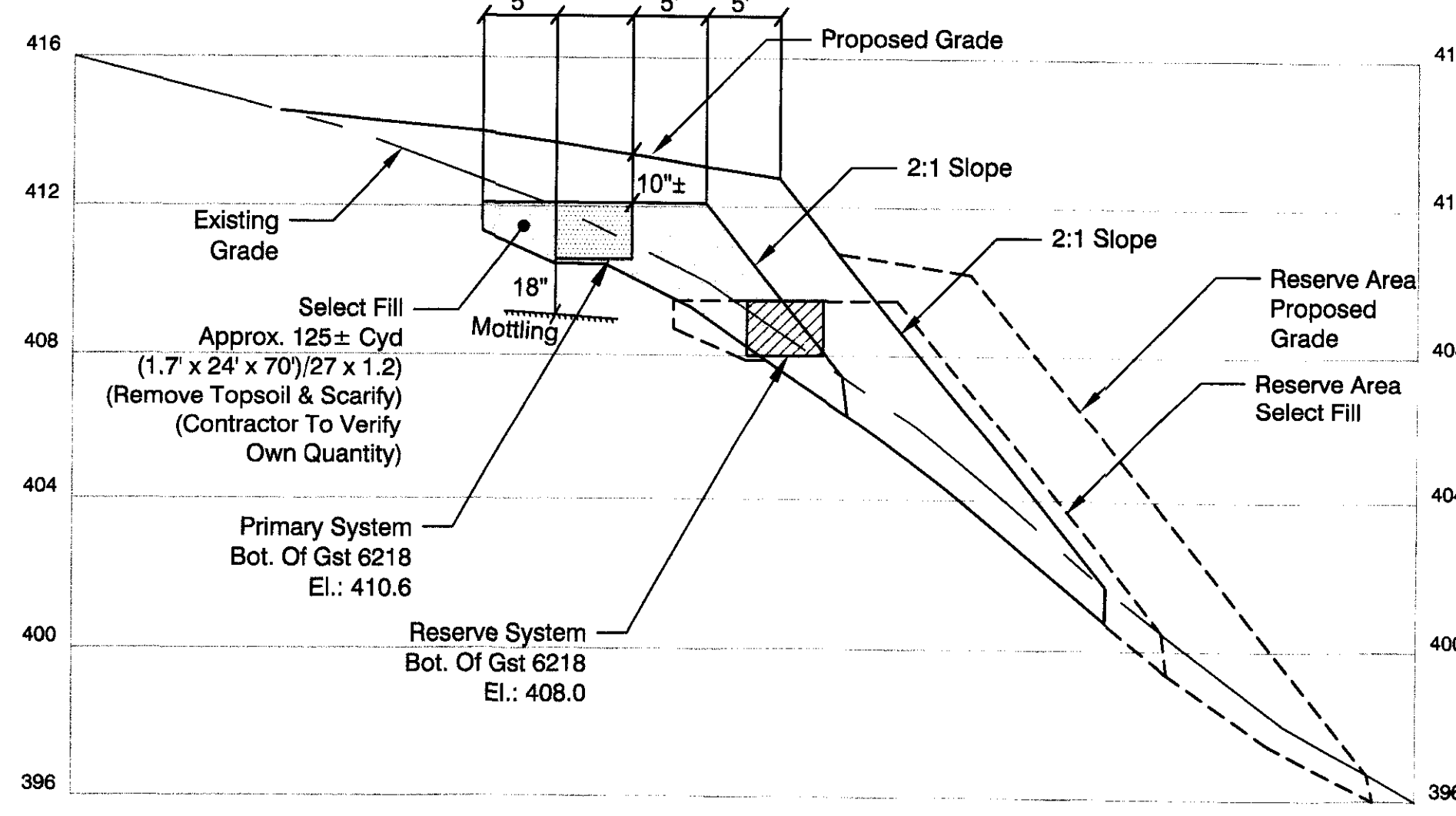
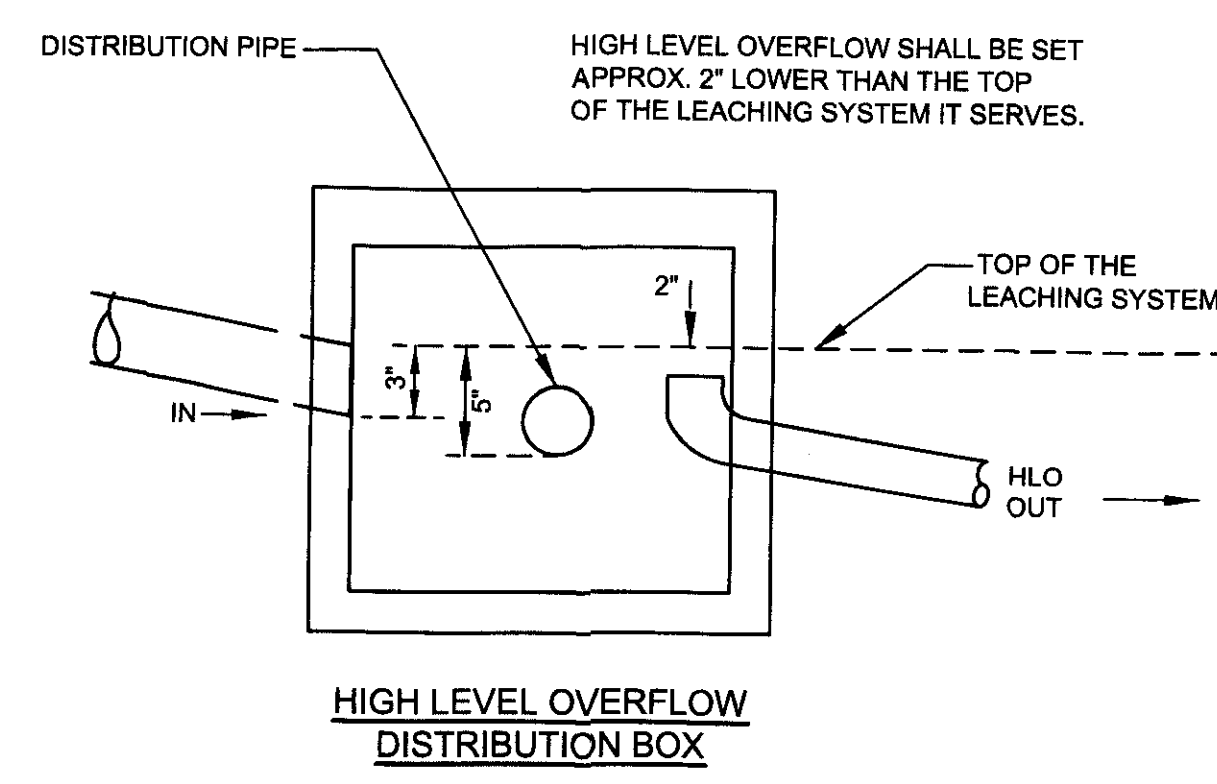
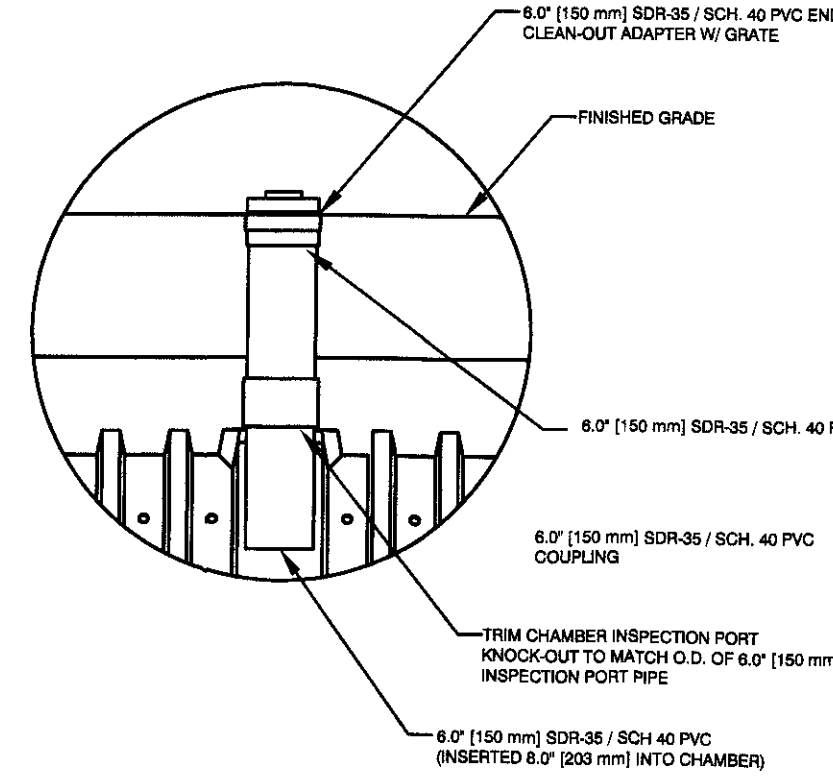
DEEP TEST HOLE #5
0 - 08" Topsoil
08" - 32" Brown Silty Loam & Roots
32" - 56" Brown Loamy Fine To Medium Sand
56" - 86" Compact Brown/Gray Loamy Sand
No Ledge None
Mottling None
Groundwater None
Roots To 56"
Restrictive 56"

PERCOLATION TEST HOLE DATA

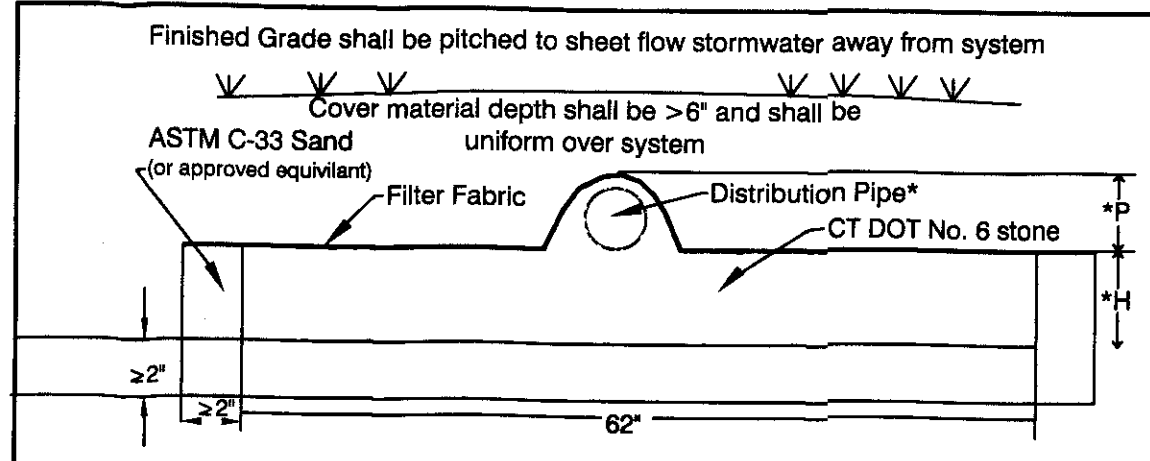
176 Judd Road, Easton
 Performed by Ochman Associates Inc., May 17, 2021 (Fb 136, Pg. 102)

PERCOLATION TEST #1	PERCOLATION TEST #2
Depth - 32"	Depth - 29"
Presoak For @ 9:40	Presoak For @ 9:40
Time	Time
10:50 8"	10:51 8-1/4"
11:20 12"	11:21 15-1/4"
11:30 13"	11:31 16"
11:40 13-3/4"	11:41 16-3/4"
11:50 14-1/2"	11:51 17-1/2"

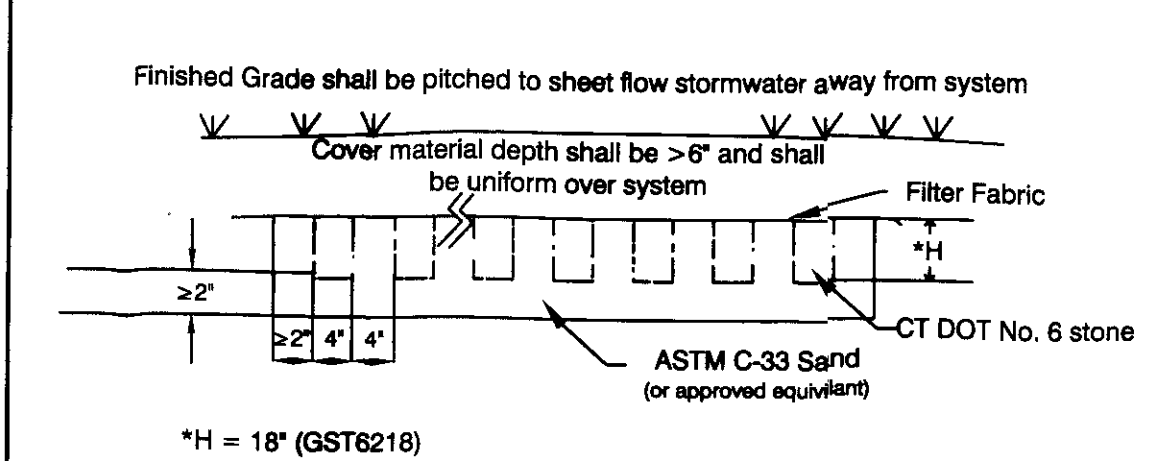
Design Rate: 1" in 13.3 Min. Design Rate: 1" in 13.3 Min.



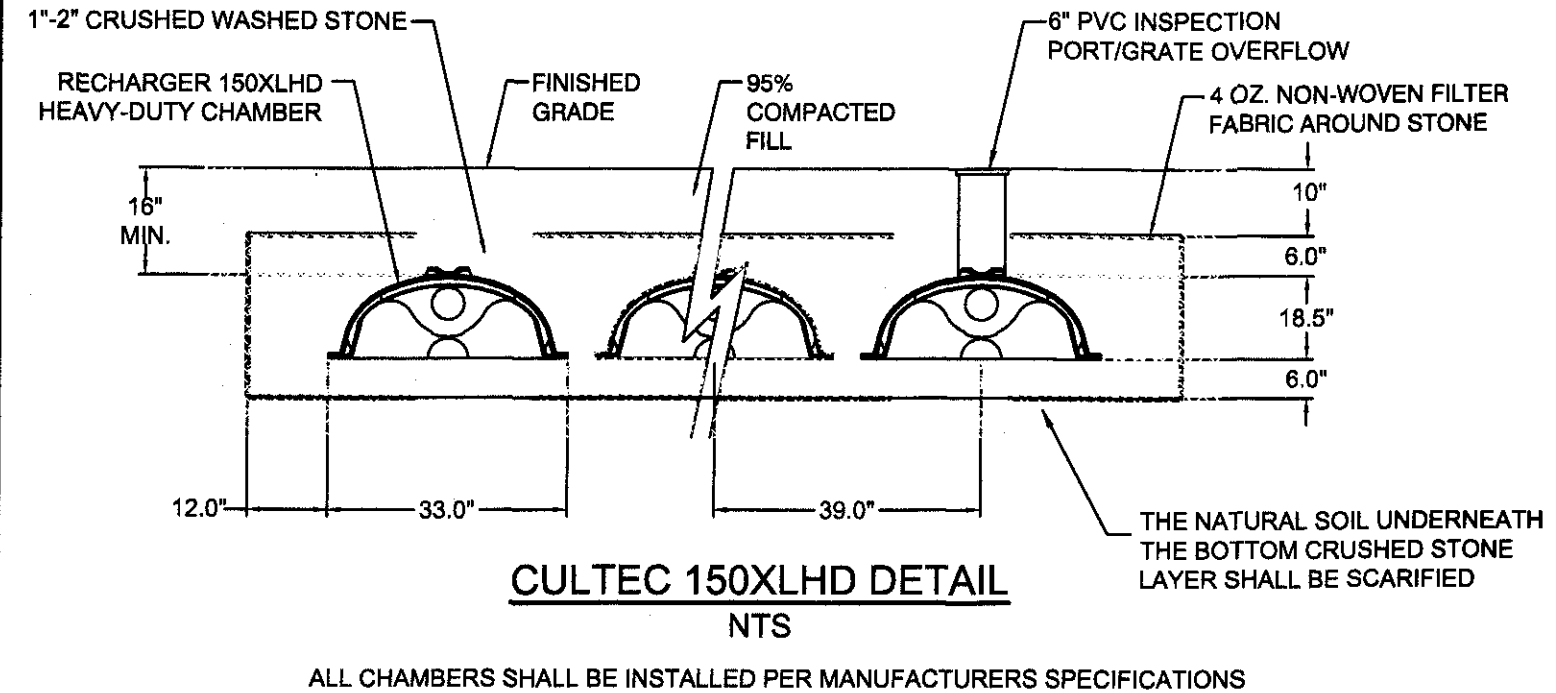
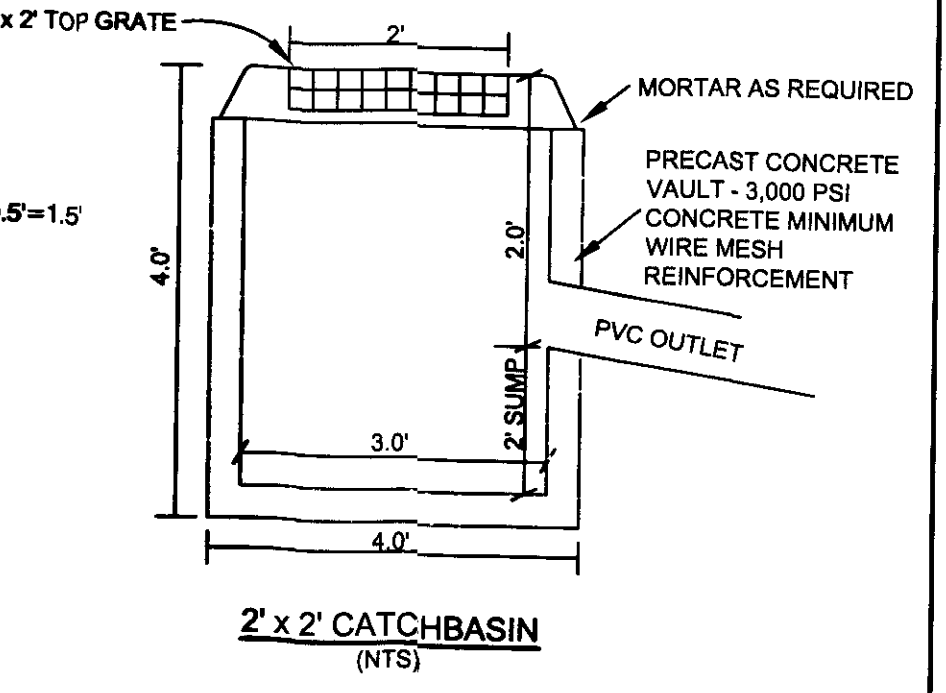
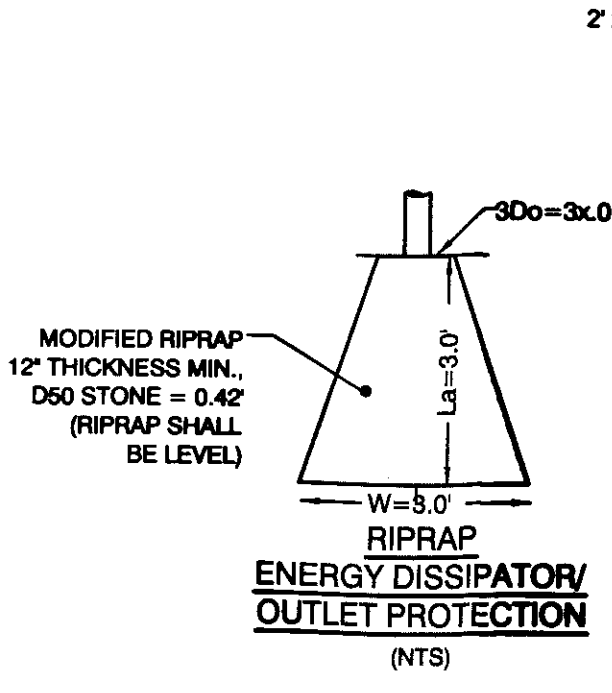
Section: A-A
 Horiz: 1" = 10'
 Vert: 1" = 4'



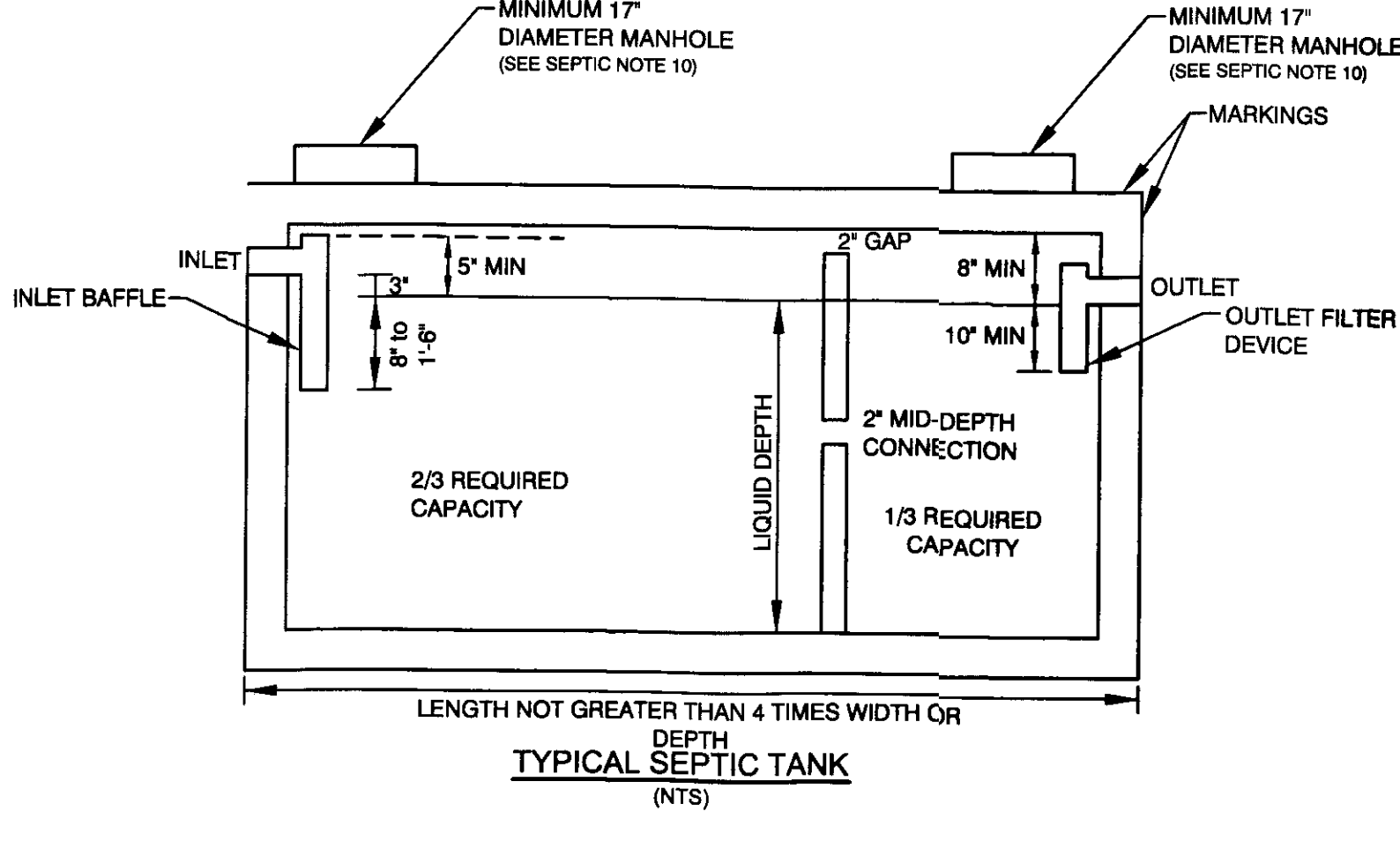
GEOMATRIX GST LEACHING SYSTEM
 B-B CROSS SECTION



GEOMATRIX GST LEACHING SYSTEM
 A-A CROSS SECTION



CULTEC 150XLHD DETAIL
 NTS



TYPICAL DEPTH SEPTIC TANK
 (NTS)

SOIL EROSION AND SEDIMENT CONTROL NOTES

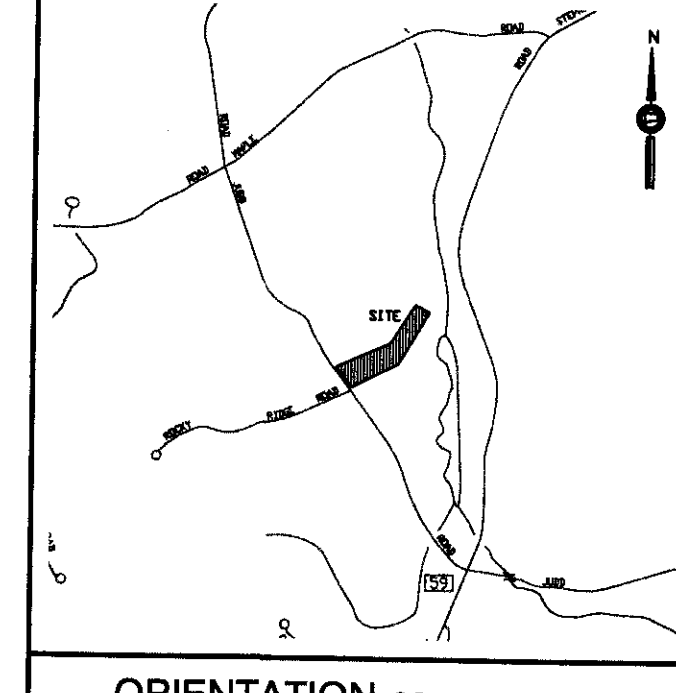
NARRATIVE
 The purpose of the Soil Erosion and Sediment Control Plan details and notes is to outline a program that minimizes soil erosion during the pool construction. THE PRIMARY POLICIES OF THIS PROGRAM ARE:

- Trapping particles at source by promptly stabilizing disturbed areas;
- Avoid concentration of water;
- Avoid contamination of existing storm drains;
- Maintenance (weekly maintenance and after storm events) of controls to ensure they are functioning properly.

NOTES

- All soil erosion and sediment controls shall be done in conformance with the 2002 Connecticut "Guidelines for Soil Erosion and Sediment Control", DEP Bulletin #34, prepared by the Connecticut Council on Soil and Water Conservation.
- The contractor is assigned the responsibility for implementing this soil 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 objectives of the plan, notifying the Planning and Zoning Office/Conservation Department of any transfer of this responsibility.
- Temporary sediment control measures must be installed in accordance with drawings and manufacturer recommendations prior to work.
- No construction or construction equipment or storage of materials will be allowed on the downhill side of the silt fence or within fenced off areas, except during construction of proposed facilities shown beyond the fences.
- Tracking pads shall be installed at start of construction and maintained in an effective condition throughout the duration of construction. Pad consist of CT DOT #3 stone, 6" minimum thickness and extend the width of the construction access. The length of the access shall be sufficient to prevent dirt from being tracked onto off site roads (minimum length of 50').
- The location of the proposed stockpile is shown on the drawing or the excess material is to be removed during construction. Silt fence will be placed at the base of the stockpile to prevent sediment from leaving the site and to protect storm drains, wetlands and watercourses.
- Silt fence shall be Mirafi envirofence, Amoco siltstop or equivalent as approved by the site engineer. Filter fabric used shall be Mirafi 100X or equivalent. Install silt fence according to manufacturers instruction, particularly, bury lower edge of fabric into ground (see detail).
- Any excavations that must be dewatered will be pumped into an active drainage system or dispersed in an undisturbed field area. The inlets of all pumps are to be floated a minimum of 24 inches off the bottom of the excavation and pumped into a ditch.
- Land disturbance shall be kept to a minimum. All disturbed area shall be planted in where permanent plantings are called for as soon as possible. Where permanent plantings are not called for, disturbed area should be seeded with grass seed and mulched as soon as practicable. Prepare seedbed (4" thick minimum) with topsoil. Seed, rake, roll, water and mulch areas according to mixes below. Water as often as necessary (up to 3 times per day) to establish cover. Mulch seeded areas at 1 to 2 tons/acre with salt hay. Maintain mulch and watering until grass is 3" high with 85% cover.

TEMPORARY SEED MIX:	PERMANENT SEED MIX:
Perennial ryegrass 40 lbs/acre	Kentucky Bluegrass 20 lbs/acre
1 lb/1000 sq. ft.	Creeping Red Fescue 20 lbs/acre
	Perennial ryegrass 5 lbs/acre
- If disturbed areas cannot be seeded immediately due to the time of year, mulch area until seeding can occur; remove mulch and seed and re-mulch as the season permits.
- Loaded trucks shall be covered as required to keep down dust.
- Affected portions of off site roads and sidewalks must be swept clean when required to keep down dust and prevent safety hazards or at least once a week during construction.
- Dust control to be achieved with watering down disturbed areas as required.
- After each storm event or once weekly, all soil erosion and sediment controls will be inspected. Any corrective actions to mitigate environmental concerns will be ordered by the site engineer or environmental engineer.
- Additional soil erosion and sediment control measures may be installed during the construction period if found necessary by the inspecting engineer or any Governing agency.
- All permanent and temporary sediment control devices will be maintained in effective condition throughout the construction period until upland disturbed areas are thoroughly stabilized. Upon completion of work and stabilization of upland areas, all temporary sediment control devices and tree protection should be removed from the site and any silt disposed of properly.



ORIENTATION SCALE: 1" = 1500'

OCHMAN ASSOCIATES, INC.
 CONSULTING ENGINEERS & SURVEYORS
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 EASTON, CONNECTICUT 06812
 PHONE (203) 268-9194

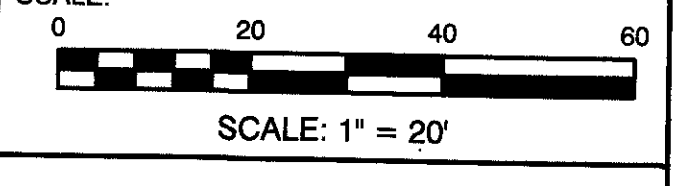
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NO.	DATE	REVISION
1.	08-11-21	Rev. Storm Drainage Per DPW

CONSTRUCTION NOTES & DETAILS: SUBSURFACE SEWAGE DISPOSAL SYSTEM & GRAVEL DRIVEWAY

- PREPARED FOR -
ANTHONY BATTAGLIA
 #176 JUDD ROAD
 EASTON, CONNECTICUT
 JULY 31, 2021

COMMENCE: 03/02/2017	FB: 166	PG: 88/102
DRAWN BY: MVB	PROJECT NO.:	
CHECKED BY: MAO	DWG NO.: 24 - 1515	



SCALE: 1" = 20'



MARK A. OCHMAN, LICENSE # 24913
 Not Valid Without A Live Signature & Embossed Seal