±1977 SOIL DATA (BY ROGER H. WHITNEY, INC.) NOTE: THESE SOIL TESTS CONDUCTED BY OTHERS. SOIL DATA ON FILE WITH AVON HEALTH DEPARTMENT. 80.0 32.0 TH#11A

1989 SOIL DATA

		_		SOIL TES				
-	CLIE	NT: SID SATT #89-20			LOCATION: Lot #13, Vermillion Dr. Avon, Connecticut			
-		PERCOLAT	TION TEST	SUBSOIL DATA				
	TEST	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH		SOIL TYPE		
TH#1		31	80.0	0 - 1 - 2 28 - 3		Topsoil litter. Reddish brown firm very silty fine sand and clay. Compact reddish brown very silty very fine sand. 3/16/89		
TH#2		18	26.7	0 - 1	1 8	Topsoil. Reddish brown very silty very fine sand 3/16/89		
TH#3		18	NO TEST			Water at 14" 3/15/89 Water at 8" 3/16/89 Water @ 12" 4/25/89		

SOIL	TEST	REPORT	

40.0

Orange brown moist very silty subsoil.Firm.
Very silty firm very fine sand.
3/16/89

Topsoil/litter.
Reddish orange brown subsoil.
3/16/89

CLIE	SID S	SATTAR 9-20			L	OCATION: Lot #13, Vermillion Dr. Avon, Connecticut		
	PERCOLAT	ION TEST		SUBSOIL DATA				
TEST HOLE					PTH HES	SOIL TYPE		
TH#7	31	160.0	0 2 28	-	2 28 31	Topsoil/litter. Reddish brown silty fine sand. Firm reddish brown very silty very fine s 4/26/89		
TH# 8	18	26.7	0 2	-	2 18	Topsoil/litter. Reddish brown silty fine sand. 4/26/89		
TH# 9	30	160.0	0 2 24	- - -	2 24 30	Topsoil/litter. Orange brown very silty subsoil. Reddish brown silty firm very fine sand. 4/26/89		
TH#10	18	40.0	0 2	-	2 18	Topsoil/litter. Silty orange brown subsoil. 4/26/89		

2002 SOIL DATA

			SOIL TEST REPORT DATE: August 13, 2002				
CLIENT:	Mr. Siddiq A Job# 02-05	A. Sattar		LOCATION: Lot #13A 4 Vermillion Drive Avon, CT			
	PERCOLAT	ION TEST		SUBSOIL DATA			
TEST HOLE	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH INC	CHES SOIL TYPE			
TH#101	19	26.7	0-2 $2-19$				
TH#102	18	53.3	0-1 $1-18$	r			
TH#103	18	32.0	0-2 2-18				

2003 SOIL DATA

			SOIL TEST DATE: May	
CLIENT:	CLIENT: Mr. Siddiq Sattar Job # 02-05		L	OCATION: #4 Vermillion Drive Avon, Ct.
	PERCOLAT	ION TEST		SUBSOIL DATA
TEST HOLE	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH INCHES	SOIL TYPE
DP#101	80	MINISCI	$ \begin{array}{r} 0 - 4 \\ 4 - 20 \\ 20 - 80 \end{array} $	Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, a little gravel. Seepage at 20" at downhill end of pit.
				No refusal.
				5/16/03
DP#102	72		0-4 $4-20$ $20-72$	Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, some gravel and rocks.
				Roots to 24", some deeper No apparent mottles Water at 55" No refusal
				5/16/03
DP#103	72		0-3 $3-22$ $22-72$	Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, rocks and gravel.
				Roots to 20" No apparent mottles No water No refusal
				5/16/03
DP#104	77		0-4 $4-23$ $23-77$	Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, very rocky.
				Roots to 26", some deeper No apparent mottles No water No refusal
				5/16/03
DP#105	80		$ \begin{array}{r} 0 - 5 \\ 5 - 20 \\ 20 - 80 \end{array} $	Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, rocky.
				Roots to 36", some deeper No apparent mottles No water No refusal
				5/16/03
DP#106	72		$ \begin{array}{r} 0 - 4 \\ 4 - 20 \\ 20 - 72 \end{array} $	Litter and dark topsoil. Brown silt loam. Reddish-brown firm fine sandy silty till, more compact with depth.
				Roots to 16" No apparent mottles Water at 27" No refusal
				5/16/03
DP#107	80		0-3 $3-18$ $18-80$	Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, rocky.
				Roots to 18" Mottles at 24" No refusal.
				5/16/03

2003 ADDITIONAL PERCOLATION TEST

SOIL TEST REPORT DATE: May 21, 2003							
CLIENT:	Mr. Siddiq S Job # 02-05			LOG	CATION: 4 Vermillion Drive Avon, CT		
	PERCOLAT	ION TEST			SUBSOIL DATA		
TEST HOLE	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH INCHI	ES	SOIL TYPE		
DP#101	80		0-4 $4-20$ $20-80$		Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, a little gravel. Seepage at 20" at downhill end of pit. No refusal. 5/16/03		
DP#102	72		0-4 4-20 20-72		Litter and dark topsoil. Brown silt loam. Reddish-brown compact fine sandy silty till, some gravel and rocks. Roots to 24", some deeper No apparent mottles Water at 55" No refusal		

2005 ADDITIONAL PERCOLATION TESTS

SOIL TEST REPORT DATE: <u>July 26, 2005</u>									
CLIENT:	Mr. Siddiq A Job# 02-05	A. Sattar	I	LOCATION: Lot 13A/Parcel 4420004 4 Vermillion Drive Avon, CT					
	PERCOLAT	ION TEST		SUBSOIL DATA					
TEST HOLE	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH INCHE	S SOIL TYPE					
TH#501	18	40.0	0-3 3-18	Litter and dark topsoil. Brown silt loam, cobbles.					
				7/24/05					
TH#502	20	32.0	$0-3 \\ 3-20$	Litter and dark topsoil. Brown silt loam, trace fine sand, some gravel and cobbles.					
				7/24/05					
TH#503	19	26.7	0-2 $2-19$	Litter and dark topsoil. Brown silt loam, trace fine sand, rock at bottom of hole.					
				7/24/05					
TH#504	18	40.0	0-3 3 - 18	Litter and dark topsoil. Brown silt loam, cobbles.					
				7/24/05					

2020 SOIL DATA

				IL TEST REPORT ATE: July 7, 2020
	Anthony & N Job #20-07	Michelle Ange	loni	LOCATION: 4 Vemillion Drive Avon, CT
	SOIL TEST			SUBSOIL DATA
TEST HOLE	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH INCHES	SOIL TYPE
DP#1001	58		0-3 3-18 18-58	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 18" No apparent mottles No water No refusal (very compact at bottom typical) 7/7/20
DP#1002	55		0-4 40-18 18-55	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 16" No apparent mottles No water No refusal 7/7/20
DP#1003	51		0-3 3-19 19-51	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 12" Some mottles at 19" and below No water No refusal 7/7/20
DP#1004	52		0-4 4-19 19-52	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 14" Mottles at 18" and below No water No refusal 7/7/20
DP#1005	60		0-5 5-18 18-60	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 13" Mottles at 18" and below No water No refusal 7/7/20
DP#1006	53		0-4 4-20 20-53	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 20" No apparent mottles No water No refusal 7/7/20
DP#1007	56		0-3 3-19 19-56	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 12" No apparent mottles No water No refusal 7/7/20
DP#1008	48		0-3 3-18 18-48	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 17" No apparent mottles No water No refusal 7/7/20
DP#1009	54		0-4 $4-18$ $18-54$	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some gra Roots to 18" No apparent mottles No water No refusal 7/7/20

	Anthony & N Job #20-07	Aichelle Ange	loni	LOCATION: 4 Vemillion Drive Avon, CT
	SOIL TEST			SUBSOIL DATA
TEST HOLE	TEST DEPTH INCHES	PERCOLATION MIN/INCH	DEPTH INCHES	SOIL TYPE
DP#1001	58		0-3 $3-18$ $18-58$	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 18" No apparent mottles No water No refusal (very compact at bottom typical) 7/7/20
DP#1002	55		0-4 40-18 18-55	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 16" No apparent mottles No water No refusal 7/7/20
DP#1003	51		0-3 3-19 19-51	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 12" Some mottles at 19" and below No water No refusal 7/7/20
DP#1004	52		0-4 4-19 19-52	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 14" Mottles at 18" and below No water No refusal 7/7/20
DP#1005	60		0-5 $5-18$ $18-60$	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 13" Mottles at 18" and below No water No refusal 7/7/20
DP#1006	53		0 - 4 4 - 20 20 - 53	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 20" No apparent mottles No water No refusal 7/7/20
DP#1007	56		0-3 3-19 19-56	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 12" No apparent mottles No water No refusal 7/7/20
DP#1008	48		0-3 $3-18$ $18-48$	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 17" No apparent mottles No water No refusal 7/7/20
DP#1009	54		0-4 $4-18$ $18-54$	Litter and dark topsoil Yellow-brown silt loam Red-brown very compact fine sandy silty till, some grave Roots to 18" No apparent mottles No water No refusal

410 —	
408 —	PROPOSED GROUND SURFACE
406 —	PEMOVE TOPSOU
404 —	ONLY AND REPLACE WITH SELECT SAND - EXISTING
402 —	SCARIFY GROUND—/ SURFACE PRIOR TO PLACEMENT OF SAND GROUND SURFACE
400 —	
<u>(</u>	CROSS—SECTION "A—A" SCALE: HORZ: 1"=20"

PROPOSED GROUND SURFACE -PROVIDE 6" MINIMUM COVER OVER TOP OF UNITS 1" DIAMETER BROKEN STONE -OR SCREENED GRAVEL EXTEND SEPTIC SAND 5' MINIMUM DOWNGRADIENT AND EXTEND CLEAN COMMON FILL ADDITIONAL 5' MIN. -SUITABLE CLEAN FILL DOWNGRADIENT (10' TOTAL) EXISTING GROUND SURFACE

VERT: 1"=2'

KEEP UNITS AND ROWS LEVEL. SEE PLAN FOR ELEVATIONS. SEPTIC SYSTEM DETAIL NOT TO SCALE NOTE: DO NOT CONSTRUCT SEPTIC SYSTEM

UNDER WET CONDITIONS.

6'-0" TOTAL

SCARIFY GROUND SURFACE 1'-0"

12"-HIGH BY 4'-WIDE BY 8'-LONG

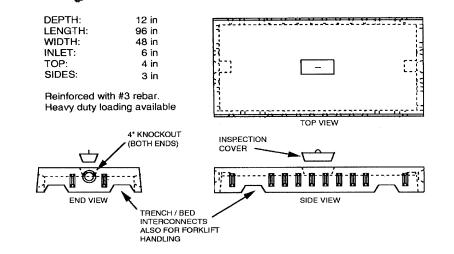
(RICHARD'S "LO-PRO" OR EQUAL.)

PRECAST CONCRETE LEACHING CHAMBER

PRIOR TO PLACEMENT OF

SEPTIC SAND

Leaching Chambers



- 1. Property lines, dimensions, locations of wetland flags, location of watercourses, topography, bench mark, some soil test locations, existing storm drainage, and miscellaneous information taken from field survey and worksheet prepared in 2003 and revised in 2006 by Neriani Surveying, Avon, CT.
- 2. Limits of wetlands soil delineated in the field on April 20, 2003 by Timothy Mischke, Soil Scientist, and located by Neriani Surveying in November 2003.
- 3. Site is located in RU-2A Residential Zone.
- 4. Total area of site = 193,350 s.f. / 4.44 acres.
- 5. Sanitary sewage disposal by individual on-site subsurface septic system. The proposed septic system shall be designed by a Professional Engineer licensed in Connecticut, approved by Farmington Valley Health District and installed in accordance with the requirements of the Connecticut Public Health Code.
- 6. This lot is included in a subdivision that was approved prior to the 1982 revisions of the Connecticut Public Health Code, and therefore the minimum required separation distance from a septic system to the watercourse is
- 7. Water supply by individual on-site well.
- 8. All construction methods and materials shall conform to the regulations and requirements of the Town of Avon.
- 9. The Owner shall be responsible for obtaining all necessary permits and approvals prior to start of construction.
- 10. All stumps shall be chipped on-site and used as mulch, or taken off-site for disposal. No stumps shall be buried
- 11. It is intended that all erosion and sediment control measures conform to the requirements of the "Connecticut Guidelines for Soil Erosion & Sediment Control", May 2002 CT DEP Bulletin 34, and the "2004 Connecticut Stormwater Quality Manual" by the CT DEP.
- 12. A pre-construction meeting shall be conducted at least two weeks prior to the start of construction with the owner, the contractor, the design engineer and the Avon Planning and Community Development Specialist, John E. McCahill. John McCahill shall also be notified 48 hours in advance of any tree clearing and the start of construction on the site (860-409-4330).

SEPTIC SYSTEM DESIGN DATA

- 1. Number of bedrooms in proposed house = 5 bedrooms
- 2. Septic tank size required and provided = 1,250 gallons + garbage disposal (250 gallons) = 1,500 gallons (precast concrete, two- compartment with outlet baffle filter)
- 3. Percolation rate used for design = Less than 10.1 min./in. (Septic system installed entirely in select sand fill)
- 4. Total effective leaching area required = 660 sq. ft.
- 5. Linear feet of 12"-high by 4'-wide by 8'-long precast concrete galleys required (5.9 s.f. / 1.f.) = 112 l.f.
- 6. Linear feet of 12"-high by 4'-wide by 8'-long precast concrete galleys proposed = 112 l.f. (14 units)
- (One 112'-long row of 14 units)
- 7. Total effective leaching area provided = 663 sq. ft. (including 12" of stone on each end)

1. No large capacity (100 gallons or greater) whirlpool or spa is proposed.

Hydraulic Factor (HF) = 10.1 - 15.0% slopes, 18.0 - 22.0" to R.L. = 28

MINIMUM LEACHING SYSTEM SPREAD

Percolation Factor (PF) = 30.1 to 40.0 min. / in. = $\underline{2.0*}$

Flow Factor (FF) = Five bedrooms = 2.0

*Leaching system installed entirely in select sand fill and bottom of system is above-existing grade and at least

24 inches above maximum groundwater.

MLSS Required = (PF)(FF)(HF) = (2.0)(2.0)(28) = 112

MLSS Provided = 112'

- APPROVED

- REMOVE TOPSOIL (±6"), REPLACE

WITH APPROVED SEPTIC SAND.

REVISIONS SOIL DATA AND SEPTIC SYSTEM DETAILS THE ANGELONI RESIDENCE PARCEL 4420004 4 VERMILLION DRIVE AVON, CONNECTICUT DAVID F. WHITNEY, **CONSULTING ENGINEERS, LLC** 21 ARCH ROAD P.O. BOX 1605 AVON, CONNECTICUT 06001 (860) 673-8412 DRAWN BY: CHECKED BY: SHEET NO. PROJECT NO. JULY 19, 2020 AS SHOWN GRA DFW 20-07