

212 Allview Ave
Brewster, NY
(T) Southeast

ENGINEERING REPORT

3 Lot Re-Subdivision (5 Lots to 3 Lots)

Prepared by:

Peder W. Scott, P.E., R.A.
P. W. Scott Engineering
& Architecture, P.C.
3871 Route 6
Brewster, NY 10509

September 11, 2019



Introduction

The property was subdivided in 1991 into 5 lots with a private road. No improvements were made to the property lots that were transferred to Guiseppe (Joe) Mazzotta, Michelle Mazzotta, and Ann-Marie Mazzotta and held independently.

2019 Application: To eliminate private road and consolidate properties into the following:

- Lot #1 Main House (4-bedroom) & Pool
 SSDS existing (functioning) & Well existing
 Reserve testing & Cabana testing

- Lot #2 Vacant Lot
 Proposed for 3 or 4 Bedroom Residence
 New Well & SSDS

- Lot #3 Residence #1 (2 bedroom) & Residence #2 (2 bedrooms)
 2 SSDS existing
 2 new Wells required or waiver for one well serving 2 residences.
 Reserve testing to serve 2 residences (4 bedrooms)

Subdivision Constraints

There are no wetlands and no streams on the property.

Septic Design Synopsis

Drainage Basin –Diverting Reservoir

Lot #1 (DT 1A & 1B) (PT 1A & 1B)

Governing Percolation Rate: 5.66 min./inch

Design Rate: 3-7 min./inch

Deep Tests: No mottling / No water / No ledge

 Depths: 7'-9" min.

 No fill required

 4 Bedroom: Reserve: 300 lf required.

 Propose: 6 Runs of 56 lf @ 7'-0" o.c.

Lot #1 – Pool Cabana (DT 1C & 1D) (PT 1C & 1B)

Governing Percolation Rate: 5.33 min./inch

Design Rate: 3-7 min./inch

Deep Tests: No mottling / No water

 Depths: 7'-0" min.

 No fill required

 Consider as 2 Bedroom Septic: Primary: 150 lf

 Reserve: 150 lf

 Propose: 3 Runs of 50 lf @ 7'-0" o.c.

Lot #2 (DT 2A, 2C, 2D, 2E) (PT 2A, 2B, 2C, 2D)

Governing Percolation Rate: 8.66 min./inch

Design Rate: 8-10 min./inch

Deep Tests: No mottling / No water

2C & 2E Degraded Rock @ 6.5 ft.

Separation required: 5.0 ft.

Depth Trenches: 12"

Topsoil: 6" min.

6.5 ft. Required – No Fill

3-Bedroom: Required: 250 lf

4-Bedroom: Required: 333 lf

Propose: 6 Runs of 56 lf @ 7'-0" o.c.

A pump up system is required.

Lot #3 – Reserve (DT 3A & 3B) (PT 3A & 3B)

Governing Percolation Rate: 10.66 min./inch

Design Rate: 8-10 min./inch

Deep Tests: No mottling / No water / No ledge

(2-Bedroom – Res #1)

(2-Bedroom – Res #2)

See Site Plan

4-Bedroom: Required: 333 lf

Propose: 6 Runs of 56 lf @ 7'-0" o.c.

SSTS Schedule

Lot #	Lot Size (acres)	Deep Test Hole Description	Mottling and/or Ground Water Elevation	Impervious Layer Elevation	Perc Rate (min./inch)	% Slope SSDS Area	Req'd Amount of Absorption Trenches (ft)			R.O.B. Fill		Curtain Drain		Remarks
							2-Bedroom	3 Bedroom	4 Bedroom	Depth (ft.)	Vol. (cy)	Depth (ft.)	Length (ft.)	
1	2.58	1A	None	None	5.66	10%				N/A	N/A	N/A		
		1B	None	None	4.66	12%				N/A	N/A	N/A		
		1C	None	None	5.33	6%	150			N/A	N/A	N/A		
		1D	None	None	4.33	8%								
2	2.207	2A	None	None	7.33	18%								
		2C	None	None	3.0	17%		250	333	N/A	N/A	N/A		Pump up System Required
		2D	None	None	8.66	17%								
		2E	None	None	4.0	14.9%								
3	2.96	3A	None	None	10.66	13.6%								
		3B	None	None	5.3	12%				N/A	N/A	N/A		

Deep test 2B not used.

STS Schedule

Lot #	#	Depth	Depth	Soil A	Soil B	Soil C	Mottling	Water	Ledge
1	1A	7'-9"	6"	6" to 28" Brown Sand Silt	28" to 52" Olive Sand Silt	52" to 7'-9" Light Gray Sand, Degraded Rock	None	None	None
	1B	8'-0"	5"	5" - 7'-0" Olive Sand Silt Loam, Slight Compact	7'-0" to 8'-0" Light Gray Sand, Degraded Rock		None	None	None
	1C	7'-0"	8"	8" - 24" Brown Sand Silt	24" to 50" Olive Sand /Silt Loam Compact	50" to 7'-6" Light Gray Sand, Degraded Rock	None	None	None
	1D	7'-4"	6"	6" to 32" Light Brown Sand Silt Loam	32" to 7'-4" Olive Sand Silt Loam		None	None	None
2	2A	7'-0"	3"	3" to 22" Beige Sand Silt	22" to 52" Light Brown Sand Silt	52" to 7'-0" Olive Sand Silt Loam, Degraded Rock	None	None	None
	2B			Not Being Used					
3	2C	6'-6"	6"	6" to 17" Beige Sand Silt Loam	17" to 42" Light Brown Sand Silt Loam	42" to 6'-6" Brown Sand, Degraded Rock	None	None	None
	2D	6'-8"	5"	5" to 46" Light Brown Sand Silt Loam	46" to 6'-8" Olive Sand Silt Loam, Some Stone		None	None	None
	2E	6'-6"	2"	2" to 17" Beige Sand Silt	17" to 66" Light Brown Sand, Slight Silt	66" to 6'-6" Sand, Degraded Rock	None	None	None
	3A	8'-0"	2"	2" to 32" Light Brown Sand Silt Loam	32" to 50" Light Gray Sand Silt Loam	50" to 8'-0" Olive Sand Silt Loam Compact	None	None	None
	3B	8'-0"	6"	6" to 34" Light Gray Sand Slight Silt	34" to 8'-0" Olive Sandy Silt Loam Compact, Some Stone		None	None	None
								None	None



**PUTNAM COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICES**

DESIGN DATA SHEET – SUBSURFACE SEWAGE TREATMENT SYSTEM

Owner: Guiseppe Mazzotta **Address:** 212 Allview Ave, Brewster, NY
Located at (street): Allview Ave **TM #** 67.16-1-6.1, 6.2, 6.3, 6.4, 6.5
Municipality: Town of Southeast **Watershed:** Lower Hudson River

SOIL PERCOLATION TEST DATA

Date of Pre-soaking: 9/9/19 **Witnessed by:** Anthony Fricchione, PCDOH
Date of Percolation Test: 9/10/19

Hole No.	Hole depth (Inches)	Run No.	Time Start – Stop	Elapse Time (min.)	Depth to water from ground surface (inches) Start - Stop	Water level drop in inches	Percolation Rate min/inch
1A	24"	1	10:55 - 11:11	16	18" - 21"	3	5.33
		2	11:12 - 11:28	16	18" - 21"	3	5.33
		3	11:28 - 11:45	17	18" - 21"	3	5.66
		4					
		5					
1B	24"	1	10:54 - 11:10	16	18" - 22"	4	4.00
		2	11:10 - 11:21	11	18" - 21"	3	3.66
		3	11:21 - 11:35	14	18" - 21"	3	4.66
		4	11:35 - 11:49	14	18" - 21"	3	4.66
		5					
1C	24"	1	10:52 - 11:07	15	18" - 21"	3	4.66
		2	11:07 - 11:23	16	18" - 21"	3	5.33
		3	11:24 - 11:40	16	18" - 21"	3	5.33
		4					
		5					
1D	24"	1	10:51 - 10:58	6	18" - 24"	6	1.16
		2	10:58 - 11:15	17	18" - 22"	4	4.25
		3	11:15 - 11:30	15	18" - 21.5"	3.5	4.3
		4	11:31 - 11:49	18	17.5" - 21.5"	4.0	4.3
		5					

Notes:

1. Tests to be repeated at same depth until approximately equal percolation rates are obtained at each percolation test hole. (i.e., ≤ 1 min for 1-30 min/inch, ≤ 2 min for 31-60 min/inch). All data to be submitted for review.
2. Depth measurements to be made from top of hole.



**PUTNAM COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICES**

DESIGN DATA SHEET – SUBSURFACE SEWAGE TREATMENT SYSTEM

Owner: Guiseppe Mazzotta **Address:** 212 Allview Ave, Brewster, NY
Located at (street): Allview Ave **TM #** 67.16-1-6.1, 6.2, 6.3, 6.4, 6.5
Municipality: Town of Southeast **Watershed:** Lower Hudson River

SOIL PERCOLATION TEST DATA

Note: Test Hole 2B Not Used

Date of Pre-soaking: 9/9/19 **Witnessed by:** Anthony Fricchione, PCDOH
Date of Percolation Test: 9/10/19

Hole No.	Hole depth (Inches)	Run No.	Time Start – Stop	Elapse Time (min.)	Depth to water from ground surface (inches) Start - Stop	Water level drop in inches	Percolation Rate min/inch
2A	24"	1	12:14 - 12:26	12	18" - 22"	4	3
		2	12:27 - 12:45	18	18" - 21"	3.5	5.14
		3	12:46 - 1:08	22	17.5" - 21.5"	4.0	5.5
		4	1:09 - 1:30	21	18" - 21"	3	7.0
		5	1:31 - 1:53	22	18" - 21"	3	7.33
2C	24"	1	12:17 - 12:32	15	18" - 21"	3	5
		2	12:32 - 12:58	26	18" - 21"	3	8.66
		3	12:59 - 1:25	26	18" - 21"	3	8.66
		4					
		5					
2D	24"	1	12:22 - 12:33	11	18" - 22"	4	2.75
		2	12:34 - 12:48	14	18" - 21.75"	3.75	3.73
		3	12:49 - 1:01	12	18" - 21"	3	4.0
		4	1:02 - 1:14	12	18" - 21"	3	4.0
		5					
2E	26"	1	12:24 - 12:54	30	18" - 20"	2	15
		2	12:57 - 1:27	30	18" - 20"	2	15
		3	1:28 - 1:58	30	18" - 20"	2	15
		4					
		5					

Notes:

1. Tests to be repeated at same depth until approximately equal percolation rates are obtained at each percolation test hole. (i.e., ≤ 1 min for 1-30 min/inch, ≤ 2 min for 31-60 min/inch). All data to be submitted for review.
2. Depth measurements to be made from top of hole.

Note: Test Hole 2B Not Used

TEST PIT DATA
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE # <u>2A</u>	HOLE # <u>2B</u>	HOLE # <u>2C</u>	HOLE # <u>2D</u>	HOLE # <u>2E</u>
G.L.	3" Topsoil	Not Used	6" Topsoil	5" Topsoil	2" Topsoil
0.5'	3" - 22" Beige Sand Silt		6" - 17" Beige Sand Silt Loam	5" - 17" Beige Sand Silt	2" - 17" Beige Sand Silt
1.0'					
1.5'					
2.0'	22" - 52" Light Brown Sand Silt		17" - 42" Light Brown Sand Silt Loam	17" - 46" Light Brown Sand Silt Loam	17" - 66" Light Brown Sand Slight Silt
2.5'					
3.0'					
3.5'					
4.0'			42" 6'-6" Brown Sand, Degraded Rock		
4.5'	52" - 7'-0" Olive Sand Silt Loam, Degraded Rock			46" - 6'-8" Olive Sand Silt Loam, Some Stone	
5.0'					
5.5'					
6.0'					66" - 6'-6" Sand, Degraded Rock
6.5'					
7.0'					
7.5'					
8.0'					
8.5'					
9.0'					
9.5'					
10.0'					

Indicate level at which groundwater is encountered No Water

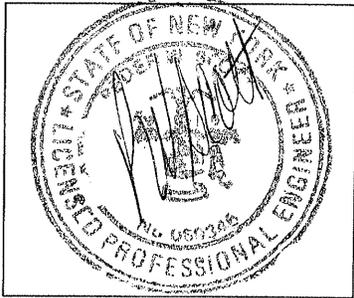
Indicate level at which mottling is observed No Mottling

Indicate level to which water level rises after being encountered _____

Deep hole observations made by: Anthony Fricchione, PCDOH Date 9/10/19

Design Professional Name: Peder Scott, P.E., R.A.
 PW Scott Engineering & Architecture, PC
 Address: 3871 Danbury Rd, Brewster, NY 10509

Signature: 



Design Professional's Seal



**PUTNAM COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVICES**

DESIGN DATA SHEET – SUBSURFACE SEWAGE TREATMENT SYSTEM

Owner: Guiseppe Mazzotta

Address: 212 Allview Ave, Brewster, NY

Located at (street): Allview Ave

TM # 67.16-1-6.1, 6.2, 6.3, 6.4, 6.5

Municipality: Town of Southeast

Watershed: Lower Hudson River

SOIL PERCOLATION TEST DATA

Date of Pre-soaking: 9/9/19

Witnessed by: Anthony Fricchione, PCDOH
Date of Percolation Test: 9/10/19

Hole No.	Hole depth (Inches)	Run No.	Time Start – Stop	Elapse Time (min.)	Depth to water from ground surface (inches) Start - Stop	Water level drop in inches	Percolation Rate min/inch
3A	24"	1	11:05 - 11:24	19	18" - 21"	3	6.33
		2	11:26 - 11:50	24	17" - 20"	3	8.00
		3	11:51 - 12:20	29	18" - 21"	3	9.66
		4	12:22 - 12:53	31	18" - 21"	3	10.33
		5	12:57 - 1:29	32	18" - 21"	3	10.66
3B	26"	1	11:06 - 11:20	14	18" - 21"	3	4.66
		2	11:22 - 11:37	15	18" - 21"	3	5.00
		3	11:39 - 11:56	17	18" - 21"	3	5.66
		4	11:58 - 12:14	16	18" - 21"	3	5.33
		5	12:17 - 12:33	16	18" - 21"	3	5.33
		1					
		2					
		3					
		4					
		5					
		1					
		2					
		3					
		4					
		5					

Notes:

1. Tests to be repeated at same depth until approximately equal percolation rates are obtained at each percolation test hole. (i.e., ≤ 1 min for 1-30 min/inch, ≤ 2 min for 31-60 min/inch). All data to be submitted for review.
2. Depth measurements to be made from top of hole.

TEST PIT DATA
DESCRIPTION OF SOILS ENCOUNTERED IN TEST HOLES

DEPTH	HOLE # <u>3A</u>	HOLE # <u>3B</u>	HOLE # _____	HOLE # _____	HOLE # _____
G.L.	2" Topsoil	6" Topsoil			
0.5'	2" - 32" Light Brown Sand Silt Loam	6" - 34" Light Gray Sand Slight Silt			
1.0'					
1.5'					
2.0'					
2.5'		34" - 8'-0" Olive Sandy Silt Loam			
3.0'	32" - 50" Light Gray Sand Silt Loam	Compact Some Stone			
3.5'					
4.0'					
4.5'	50" - 8'-0" Olive Sand Silt Loam Compact				
5.0'					
5.5'					
6.0'					
6.5'					
7.0'					
7.5'					
8.0'					
8.5'					
9.0'					
9.5'					
10.0'					

Indicate level at which groundwater is encountered None

Indicate level at which mottling is observed None

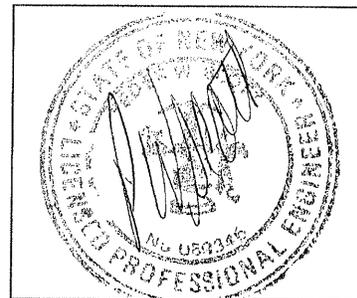
Indicate level to which water level rises after being encountered _____

Deep hole observations made by: Anthony Fricchione, PCDOH Date 9/10/19

Design Professional Name: Peder Scott, P.E., R.A.

Address: PW Scott Engineering & Architecture, PC
3871 Danbury Rd, Brewster, NY 10509

Signature: 



Design Professional's Seal