

Modified DEP Forms 11 & 12 - Soil Suitability Assessment & Percolation Test for On-Site Sewage Disposal

Site Information:
 Client: STEVEN NAJAS
 Address: 111 MILES AVENUE, EAST PROVIDENCE R.I. 02916
 Date: 4.28.2013
 Street: 67 SCHOOL STREET, SEEROK, MA 02771
 Site: 67 SCHOOL STREET, SEEROK, MA 02771
 Site Survey: 6/15/12
 Prepared: JACQUES S. FARO
 Scale: 1" = 20'

DEEP OBSERVATION HOLE LOG

Depth (ft)	Soil	Soil Color (Munsell)	Soil Moisture (inches)	Other (Structure, Stones, etc.)
0-1	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
1-2	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
2-3	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
3-4	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
4-5	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
5-6	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
6-7	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
7-8	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
8-9	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
9-10	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
10-11	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
11-12	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
12-13	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
13-14	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
14-15	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
15-16	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
16-17	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
17-18	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
18-19	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
19-20	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
20-21	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
21-22	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
22-23	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
23-24	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
24-25	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
25-26	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
26-27	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
27-28	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
28-29	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
29-30	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
30-31	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
31-32	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
32-33	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
33-34	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
34-35	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
35-36	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
36-37	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
37-38	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
38-39	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
39-40	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
40-41	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
41-42	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
42-43	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
43-44	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
44-45	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
45-46	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
46-47	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
47-48	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
48-49	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
49-50	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
50-51	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
51-52	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
52-53	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
53-54	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
54-55	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
55-56	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
56-57	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
57-58	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
58-59	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
59-60	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
60-61	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
61-62	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
62-63	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
63-64	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
64-65	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
65-66	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
66-67	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
67-68	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
68-69	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
69-70	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
70-71	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
71-72	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
72-73	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
73-74	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
74-75	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
75-76	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
76-77	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
77-78	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
78-79	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
79-80	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
80-81	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
81-82	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
82-83	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
83-84	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
84-85	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
85-86	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
86-87	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
87-88	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
88-89	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
89-90	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
90-91	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
91-92	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
92-93	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
93-94	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
94-95	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
95-96	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
96-97	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
97-98	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
98-99	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE
99-100	LOAM SAND	10YR 5/2	90% STIFF	FRAGILE

PERCOLATION TEST

Soil	Depth (ft)	Percolation Rate (min/in)
LOAM SAND	0-1	12
LOAM SAND	1-2	12
LOAM SAND	2-3	12
LOAM SAND	3-4	12
LOAM SAND	4-5	12
LOAM SAND	5-6	12
LOAM SAND	6-7	12
LOAM SAND	7-8	12
LOAM SAND	8-9	12
LOAM SAND	9-10	12
LOAM SAND	10-11	12
LOAM SAND	11-12	12
LOAM SAND	12-13	12
LOAM SAND	13-14	12
LOAM SAND	14-15	12
LOAM SAND	15-16	12
LOAM SAND	16-17	12
LOAM SAND	17-18	12
LOAM SAND	18-19	12
LOAM SAND	19-20	12
LOAM SAND	20-21	12
LOAM SAND	21-22	12
LOAM SAND	22-23	12
LOAM SAND	23-24	12
LOAM SAND	24-25	12
LOAM SAND	25-26	12
LOAM SAND	26-27	12
LOAM SAND	27-28	12
LOAM SAND	28-29	12
LOAM SAND	29-30	12
LOAM SAND	30-31	12
LOAM SAND	31-32	12
LOAM SAND	32-33	12
LOAM SAND	33-34	12
LOAM SAND	34-35	12
LOAM SAND	35-36	12
LOAM SAND	36-37	12
LOAM SAND	37-38	12
LOAM SAND	38-39	12
LOAM SAND	39-40	12
LOAM SAND	40-41	12
LOAM SAND	41-42	12
LOAM SAND	42-43	12
LOAM SAND	43-44	12
LOAM SAND	44-45	12
LOAM SAND	45-46	12
LOAM SAND	46-47	12
LOAM SAND	47-48	12
LOAM SAND	48-49	12
LOAM SAND	49-50	12
LOAM SAND	50-51	12
LOAM SAND	51-52	12
LOAM SAND	52-53	12
LOAM SAND	53-54	12
LOAM SAND	54-55	12
LOAM SAND	55-56	12
LOAM SAND	56-57	12
LOAM SAND	57-58	12
LOAM SAND	58-59	12
LOAM SAND	59-60	12
LOAM SAND	60-61	12
LOAM SAND	61-62	12
LOAM SAND	62-63	12
LOAM SAND	63-64	12
LOAM SAND	64-65	12
LOAM SAND	65-66	12
LOAM SAND	66-67	12
LOAM SAND	67-68	12
LOAM SAND	68-69	12
LOAM SAND	69-70	12
LOAM SAND	70-71	12
LOAM SAND	71-72	12
LOAM SAND	72-73	12
LOAM SAND	73-74	12
LOAM SAND	74-75	12
LOAM SAND	75-76	12
LOAM SAND	76-77	12
LOAM SAND	77-78	12
LOAM SAND	78-79	12
LOAM SAND	79-80	12
LOAM SAND	80-81	12
LOAM SAND	81-82	12
LOAM SAND	82-83	12
LOAM SAND	83-84	12
LOAM SAND	84-85	12
LOAM SAND	85-86	12
LOAM SAND	86-87	12
LOAM SAND	87-88	12
LOAM SAND	88-89	12
LOAM SAND	89-90	12
LOAM SAND	90-91	12
LOAM SAND	91-92	12
LOAM SAND	92-93	12
LOAM SAND	93-94	12
LOAM SAND	94-95	12
LOAM SAND	95-96	12
LOAM SAND	96-97	12
LOAM SAND	97-98	12
LOAM SAND	98-99	12
LOAM SAND	99-100	12

DESIGN CALCULATIONS

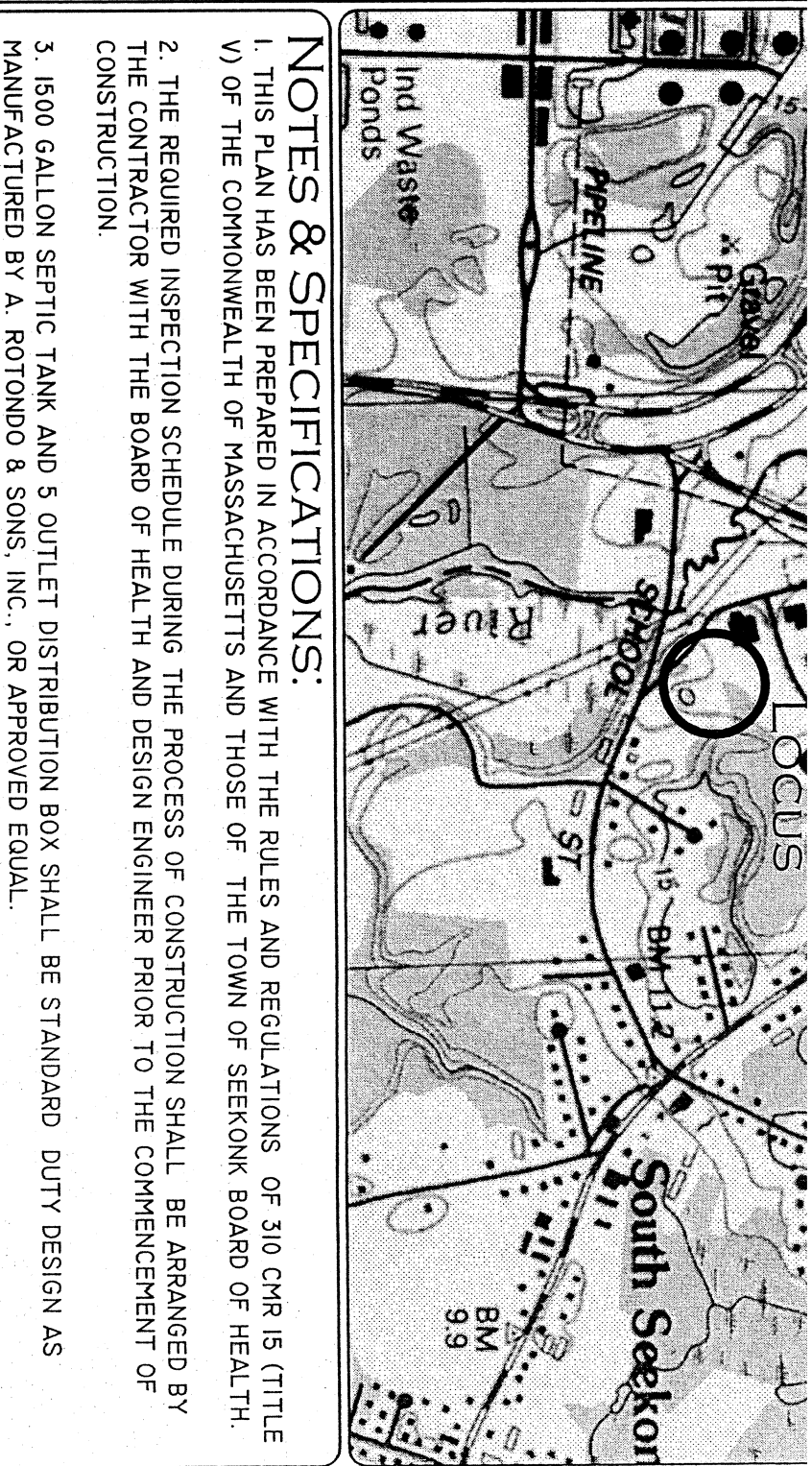
AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY)
 PROPOSED 3 BEDROOM DWELLING @ 100 GPD PER BEDROOM = 300 GPD

SEPTIC TANK SIZING (GALLONS)
 200% AVERAGE DAILY FLOW = 2 (300) = 600 GALLONS

200% AVERAGE DAILY FLOW REQUIRES 1500 GALLON TANK (MINIMUM)
 3 BEDROOM HOME REQUIRES 1500 GALLON TANK (MINIMUM)

LEACHING AREA CALCULATION
 SOIL CLASS I (SANDY LOAM)
 PERK RATE IN TP 13 WAS LESS THAN MPI
 PERK RATE IN TP 15 WAS LESS THAN 2MPI
 DESIGN FOR 5 MPI PER TITLE V

REQUIRED MINIMUM LEACHING AREA:
 ADF = 350 GPD / 0.74 GPD / SF = 446 SF MINIMUM
 TRF: LEACHING FIELD 16' WIDE AND 28' LONG
 16' X 28' = 448 SF DESIGN TOTAL
 DESIGN - 448 SF > REQUIRED - 446 SF OK
 (RESERVE AREA = 10' X 45' = 450 S.F.)



SEPTIC SYSTEM DESIGN PLAN 69-770

"KELLIE ANN COURT"

#8 KELLIE ANN COURT, SEEROK, MASSACHUSETTS 02769
 ASSESSORS MAP 7 LOT 387 (RECORD LOT 4)

PREPARED FOR: NAJAS REALTY LLC
 111 MILES AVENUE, EAST PROVIDENCE R.I.

JOB #: 09-11/11
 SCALE: 1" = 20'
 DESIGNED BY: SCA
 DATE: AUGUST 26, 2013

REVISED: 9/30/2013 BOH COMMENTS

INSITE Engineering Services, LLC
 1529 Pine Hill Road, Seerok, MA 02771
 Phone: (508) 336-4500 Fax: (508) 336-4599
 Web Address: insiteengineers.com

Professional Seal: Jacques S. Faro, State of Massachusetts, No. 12507

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SHEET 1 OF 1

INSITE Engineering Services, LLC
 Precision. Clarity. Certainty.

Professional Engineers | Land Surveyors