



Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Ryan Geeleher, 39 College Highway, Southampton, MA, 01073

(413) 326-0592

Owner Name

89 Clark Street

Street Address

Southampton

City

MA
State

Map 27, Parcel 6

Map/Lot #

01073

Zip Code

B. Site Information

1. (Check one) ☒ New Construction ☐ Upgrade ☐ Repair

2. Soil Survey Available? ☒ Yes ☐ No If yes:

NRCS 1981

Source

BoB

Soil Map Unit

Boxford silt loam

Soil Name

Soil Limitations

Glacial outwash

Soil Parent material

Outwash plain

Landform

3. Surficial Geological Report Available? ☐ Yes ☐ No

If yes:

Year Published/Source

Map Unit

Description of Geologic Map Unit:

4. Flood Rate Insurance Map Within a regulatory floodway? ☐ Yes ☒ No

5. Within a velocity zone? ☐ Yes ☒ No

6. Within a Mapped Wetland Area? ☐ Yes ☒ No

If yes, MassGIS Wetland Data Layer:

Wetland Type

7. Current Water Resource Conditions (USGS):

January 2024
Month/Day/ Year

Range: ☒ Above Normal

☐ Normal

☐ Below Normal

8. Other references reviewed:



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C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 1A, 1B Feb. 15, 2024 11:00 AM clear: 35 degrees
Hole # Date Time Weather Latitude Longitude:
1. Land Use Hayfield grasses none noted 3% +/-
(e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: glacial outwash outwash plain
Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >100 feet Drainage Way >100 feet Wetlands >100 feet
Property Line 32' to west feet Drinking Water Well >100 feet Other _____ feet

4. Unsuitable Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: 38" and 28" Depth Weeping from Pit yes, yes Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
DH - 1A	0-12	Ap	sandy loam	10 yr 3/3	-	-	-	-	Massive		Friable, crumb-like, fine roots
	12-24	Bw	sandy loam	10 yr 4/6	-	-	-	-	Massive		Friable, no stones
	24-126	C	coarse sand	10 yr 4/3	24"	10 yr 5/8	>5%	25%	few small stones	Loose	Single-grain, no structure, bands of fine sandy loam: (5 y 5/6)
DH - 1B	0-9	Ap	sandy loam	10 yr 3/3	-	-	-	-	Massive		Friable, crumb-like, fine roots
	9-18	BC	loamy sand	10 yr 4/6	-	-	-	-	Massive		Friable, granular, no stones
	18-68	C-1	coarse sand	10 yr 4/3	28"	10 yr 5/8	>5%	-	no stones	Loose	Single-grain, no structure
	68-130	C-2	sandy loam	5 y 5/6	-	-	-	5%	no stones	Firm	Blocky, saturated



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Additional Notes:

Refusal > 126 inches (Hole 1A), >130 inches (Hole 1B)

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

Deep Observation Hole Number: 2A, 2B Feb. 15, 2024 11:30 clear: 35 degrees
Hole # Time Weather Latitude Longitude:

1. Land Use: Hayfield grasses none noted 3% +/-
(e.g., woodland, agricultural field, vacant lot, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)

Description of Location: _____

2. Soil Parent Material: glacial outwash outwash plain
Landform Position on Landscape (SU, SH, BS, FS, TS)

3. Distances from: Open Water Body >100 feet Drainage Way >100 feet Wetlands >100 feet
Property Line >60 feet Drinking Water Well >100 feet Other _____ feet

4. Unsuitable
Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: 34", 48" Depth Weeping from Pit yes, yes Depth Standing Water in Hole

Soil Log

Depth (in)	Soil Horizon /Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
				Depth	Color	Percent	Gravel	Cobbles & Stones			
0-12	Ap	sandy loam	10 yr 3/3	-	-	-	-	-	Massive		Friable, crumb-like, fine roots
12-24	Bw	sandy loam	10 yr 4/6	-	-	-	-	-	Massive		Friable, no stones
24-132	C	c. sand	10 yr 4/3	26"	10 yr 5/8	>5%	25%	few small stones	Loose		Single-grain, no structure, bands of fine sandy loam
0-13	Ap	sandy loam	10 yr 3/3	-	-	-	-	-	Massive		Friable, crumb-like, fine roots
13-23	BC	loamy sand	10 yr 4/6	-	-	-	-	-	Massive		Friable, granular, no stones
23-72	C-1	m-c sand	5y 5/3	26"	10 yr 5/8	>5%	20%	no stones	Loose		single-grain, no structure
72-130	C-2	c. sand	10 yr 5/8	-	-	-	30%	no stones	Extr. loose		single-grain, bands of sandy loam (5 y 5/6)



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Additional Notes:

D. Determination of High Groundwater Elevation

1. Method Used:

☐ Depth observed standing water in observation hole

Obs. Hole # 1A, 1B

_____ inches

Obs. Hole # 2A, 2B

_____ inches

☐ Depth weeping from side of observation hole

_____ inches

_____ inches

☒ Depth to soil redoximorphic features (mottles)

24, 28 inches

26, 26 inches

☐ Depth to adjusted seasonal high groundwater (S_h)
(USGS methodology)

_____ inches

_____ inches

Index Well Number

Reading Date

$$S_h = S_c - [S_r \times (OW_c - OW_{max}) / OW_r]$$

Obs. Hole/Well# _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

2. Estimated Depth to High Groundwater: 24, 28, 26, 26 inches

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

☒ Yes ☐ No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary: 24, 18,
24, 23

Lower boundary: 126, 130, 132, 130
inches

c. If no, at what depth was impervious material observed?

Upper boundary: _____
inches

Lower boundary: _____
inches

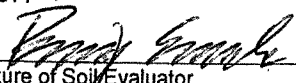


Date: February 15, 2024

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F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.



Signature of Soil Evaluator

Barry Searle

Typed or Printed Name of Soil Evaluator / License #

Charles Kaniecki

Name of Approving Authority Witness

February 15, 2024

Date

June 30, 2025

Expiration Date of License

Southampton BOH

Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

Field Diagrams: Use this area for field diagrams:



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Percolation test and deep hole
Locations for lot at:

**89 Clark Street
Southampton, Massachusetts**

Owner: **Ryan Geeleher
39 College Highway
Southampton, MA 01073**

Percolation tests and soil evaluations
Conducted by:

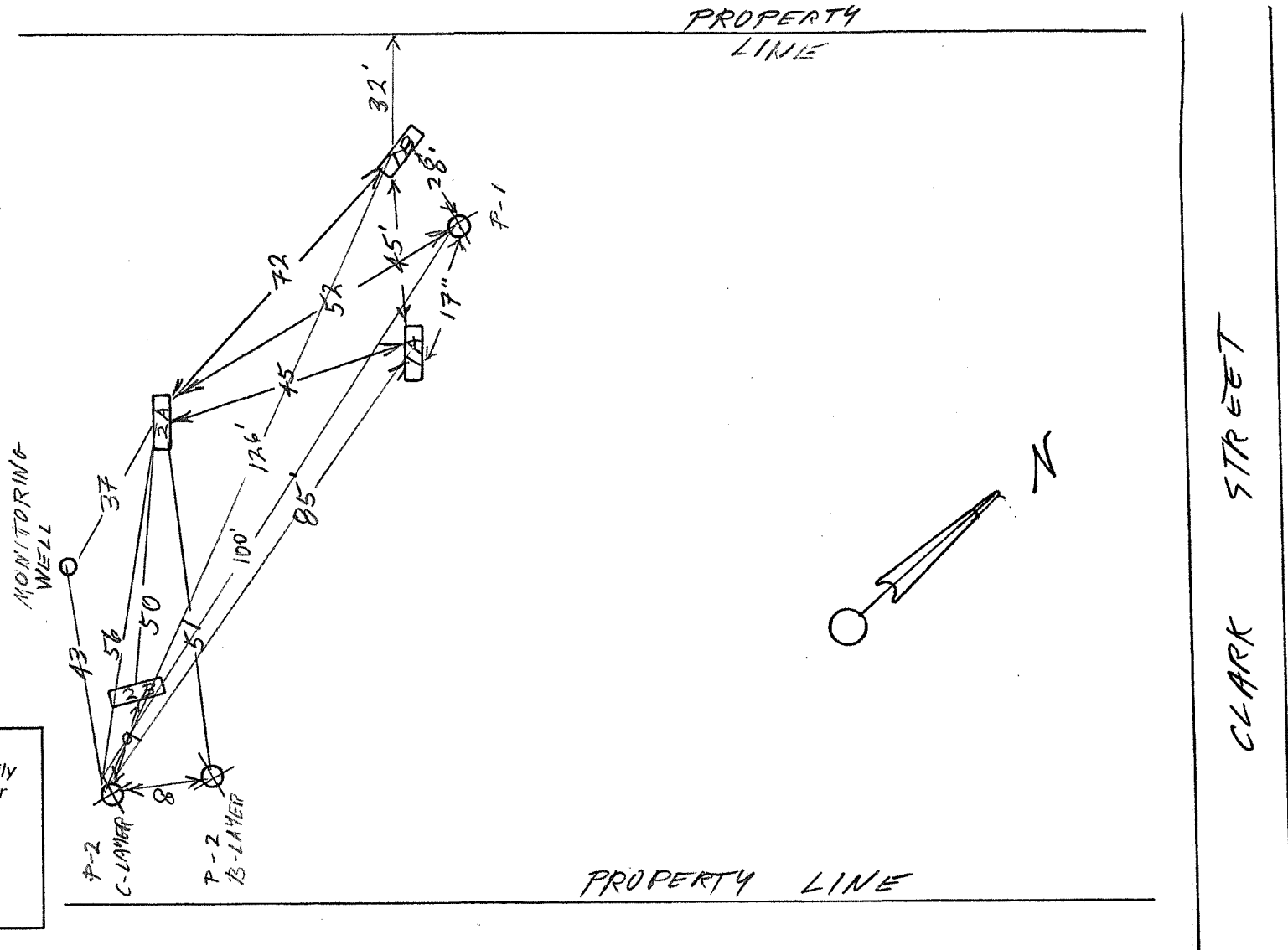
**Barry Searle, RS #1185
Soil Evaluator # 2183**

This Drawing NOT TO SCALE

Board of Health Witness:
**Charles Kaniecki, Agent
Southampton Board of Health**

Date conducted:
February 15, 2024

NOTE: The confirmation of passed percolation tests does not necessarily constitute the viability of the site for building purposes. Local zoning regulations, wetland regulations, setback distance requirements or other site considerations may take precedence





Commonwealth of Massachusetts
City/Town of Southampton
Percolation Test
Form 12

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

A. Site Information

Ryan Geeleher, 39 College Highway, Southampton, MA 01073

Owner Name

89 Clark Street

Street Address or Lot #

Southampton

City/Town

MA

State

01073

Zip Code

Contact Person (if different from Owner)

Telephone Number

B. Test Results

	Feb 15, 2024 Date	12:00 Time	Feb 15, 2024 Date	1:00 Time
Observation Hole #	#1		#2 C-layer	#2 B-layer
Depth of Perc	34"		35"	23"
Start Pre-Soak	12:35		1:11	1:50
End Pre-Soak	12:50		1:26	2:05
Time at 12"	12:51		1:28	2:06
Time at 9"	12:56		1:29	2:09
Time at 6"	1:06		1:30	2:15
Time (9"-6")	10 minutes		1 minute	6 minutes
Rate (Min./Inch)	4MPI		<2 MPI	2 MPI
	Test Passed:	☒	Test Passed:	☒
	Test Failed:	☐	Test Failed:	☐

Barry Searle, RS #1185, SE #2183

Test Performed By:

Charles Kaniecki, Health Agent

Board of Health Witness

Comments:

Also present: Ryan Geeleher, Owner, Jeff Dugas, machine operators
Darcie Gasparini, Jerry Hillman, Dennis Vogel, Southampton Senior Center Building Committee

