



Commonwealth of Massachusetts

City/Town of Westport

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

A. Facility Information

Westport Land Conservation Trust

Owner Name

Adjacent to 122 Blossom Road

Street Address

Westport

City

MA

State

Map 1-Lot 10C

Map/Lot #

02790

Zip Code

B. Site Information

1. (Check one) ☒ New Construction ☐ Upgrade ☐ Repair
2. Soil Survey Available? ☒ Yes ☐ No If yes: NRCS 255B
Soil Name: Windsor Loamy Sand Soil Limitations: None
Geologic/Parent Material: Glacial Till Landform: Till Plain
Soil Map Unit: 255B
3. Surficial Geological Report Available? ☐ Yes ☒ No If yes: Year Published/Source Publication Scale Map Unit
4. Flood Rate Insurance Map
Above the 500-year flood boundary? ☒ Yes ☐ No Within the 100-year flood boundary? ☐ Yes ☒ No
If Yes, continue to #5.
5. Within a velocity zone? ☐ Yes ☒ No
6. Within a Mapped Wetland Area? ☐ Yes ☒ No MassGIS Wetland Data Layer: N/A
Wetland Type: N/A
7. Current Water Resource Conditions (USGS): Jan 2018 Range: ☐ Above Normal ☐ Normal ☒ Below Normal
Month/Year
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: TP-1 Date: 1/19/18 Time: 9:45 Weather: Partly Cloudy 35 Degrees

1. Location

Ground Elevation at Surface of Hole: Not surveyed feet Latitude/Longitude: /

Description of Location: Northeast Corner of Lot

2. Land Use

Vacant Lot (e.g., woodland, agricultural field, vacant lot, etc.) Some Stones and Boulders Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-5% Slope (%) Grass Vegetation Rolling Till Plain Landform TS 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 40 feet Drinking Water Well >100 feet Other feet

4. Parent Material: Glacial Till Unsuitable Materials Present: Yes No

If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: N/A Depth Weeping from Pit N/A Depth Standing Water in Hole

Estimated Depth to High Groundwater: 30" (Mottles) inches elevation



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C. On-Site Review (continued)

Deep Observation Hole Number: TP-1

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-12	A	10 YR 4/4	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
12-30	B	10 YR 5/8	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
30-72	C1	2.5 Y 5/3	30"	2.5 Y 5/3 10 YR 5/8	25%	Sandy Loam	0-5%	0-5%	Firm-friable	dry	
72-120	C2	2.5 Y 6/3				Fine Loamy Sand	5-10%	0-5%	Friable	Dry	Some boulders

Additional Notes:



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C. On-Site Review (continued)

Deep Observation Hole Number: TP-2 1/19/18 10:00 Partly Cloudy 35 Degrees
Date Time Weather

1. Location

Ground Elevation at Surface of Hole: Not surveyed Latitude/Longitude: /
feet

2. Land Use Vacant Lot Some Stones and Boulders 0-5%
(e.g., woodland, agricultural field, vacant lot, etc.) Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)
Grass Till Plain TS
Vegetation Landform Position on Landscape (SU, SH, BS, FS,

3. Distances from: Open Water Body >100 Drainage Way >100 Wetlands >100
feet feet feet feet
Property Line 40 Drinking Water Well >100 Other
feet feet feet feet

4. Parent Material: Glacial Till Unsuitable Materials Present: ☐ Yes ☒ No

If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: N/A N/A
Depth Weeping from Pit Depth Standing Water in Hole

Estimated Depth to High Groundwater: 36" (Mottles)
inches elevation



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C. On-Site Review (continued)

Deep Observation Hole Number: TP-2

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-12	A	10 YR 4/4	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
12-36	B	10 YR 5/8	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
36-120	C	2.5 Y 6/3	36"	2.5 Y 5/3 10 YR 5/8	25%	Fine Loamy Sand	5-10%	5-10%	friable	dry	Some boulders

Additional Notes:



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D. Determination of High Groundwater Elevation

1. Method Used:

☐ Depth observed standing water in observation hole

☐ Depth weeping from side of observation hole

☒ Depth to soil redoximorphic features (mottles)

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

Obs. Hole # TP-1

Obs. Hole # TP-2

inches

inches

inches

inches

30"

36"

inches

inches

inches

inches

Index Well Number

Reading Date

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

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

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

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?

Upper boundary:

30
inches

Lower boundary:

120
inches

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

Upper boundary:

N/A
inches

Lower boundary:

N/A
inches



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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: TP-3 Date: 1/19/18 Time: 10:30 Weather: Partly Cloudy 35 Degrees

1. Location

Ground Elevation at Surface of Hole: Not surveyed feet Latitude/Longitude: /

Description of Location: Northeast Corner of Lot

2. Land Use

Vacant Lot (e.g., woodland, agricultural field, vacant lot, etc.) Some Stones and Boulders Surface Stones (e.g., cobbles, stones, boulders, etc.) 0-5% Slope (%) Grass Vegetation Rolling Till Plain Landform TS 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 40 feet Drinking Water Well >100 feet Other feet

4. Parent Material: Glacial Till Unsuitable Materials Present: Yes No

If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: N/A Depth Weeping from Pit N/A Depth Standing Water in Hole

Estimated Depth to High Groundwater: 36" (Mottles) inches elevation



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C. On-Site Review (continued)

Deep Observation Hole Number: TP-3

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-12	A	10 YR 4/4	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
12-34	B	10 YR 5/8	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
34-120	C1	2.5 Y 6/3	36"	2.5 Y 5/3 10 YR 5/8	25%	Fine Loamy Sand	0-5%	0-5%	Firm-friable	dry	Some Boulders

Additional Notes:



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C. On-Site Review (continued)

Deep Observation Hole Number: TP-4 1/19/18 11:00 Partly Cloudy 35 Degrees
Date Time Weather

1. Location

Ground Elevation at Surface of Hole: Not surveyed Latitude/Longitude: /
feet

2. Land Use Vacant Lot Some Stones and Boulders 0-5%
(e.g., woodland, agricultural field, vacant lot, etc.) Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)
Grass Till Plain TS
Vegetation Landform Position on Landscape (SU, SH, BS, FS,

3. Distances from: Open Water Body >100 Drainage Way >100 Wetlands >100
feet feet feet feet
Property Line 40 Drinking Water Well >100 Other
feet feet feet feet

4. Parent Material: Glacial Till Unsuitable Materials Present: ☐ Yes ☒ No

If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: N/A N/A
Depth Weeping from Pit Depth Standing Water in Hole

Estimated Depth to High Groundwater: 38" (Mottles)
inches elevation



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C. On-Site Review (continued)

Deep Observation Hole Number: TP-2

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-12	A	10 YR 4/4	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
12-38	B	10 YR 5/8	N/A			Sandy Loam	0-5%	0-5%	friable	dry	
38-116	C	2.5 Y 6/3	38"	2.5 Y 5/3 10 YR 5/8	25%	Fine Loamy Sand	5-10%	10-20%	friable	dry	Some boulders

Additional Notes:



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D. Determination of High Groundwater Elevation

1. Method Used:

☐ Depth observed standing water in observation hole

☐ Depth weeping from side of observation hole

☒ Depth to soil redoximorphic features (mottles)

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

Obs. Hole # TP-3

Obs. Hole # TP-4

inches

inches

inches

inches

36"

38"

inches

inches

inches

inches

Index Well Number

Reading Date

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

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

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

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?

Upper boundary:

34
inches

Lower boundary:

120
inches

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

Upper boundary:

N/A
inches

Lower boundary:

N/A
inches



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F. Board of Health Witness

John Swartz

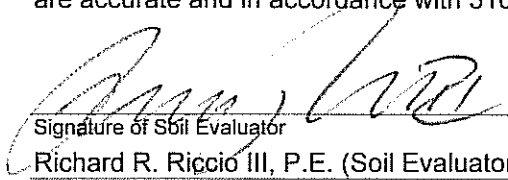
Name of Board of Health Witness

Westport

Board of Health

G. Soil Evaluator 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

Richard R. Riccio III, P.E. (Soil Evaluator #2035)

Typed or Printed Name of Soil Evaluator / License #

1/23/18

Date

6/30/19

Expiration Date of License

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.



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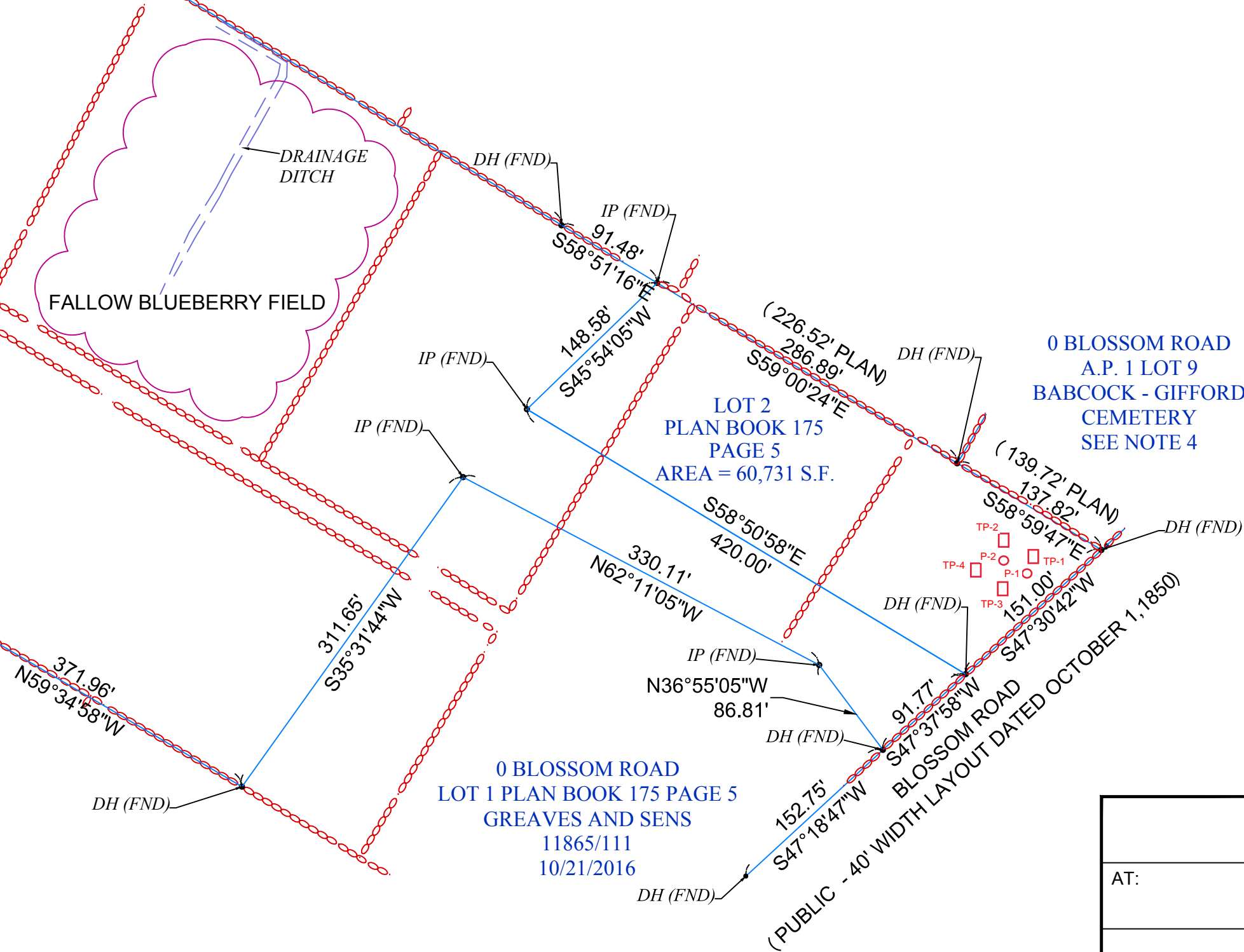
Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

Field Diagrams

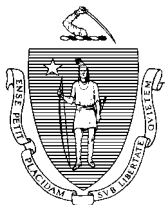
Use this sheet for field diagrams: See attached plan.

LOT 3
REMAINING LAND"
BOOK 175 PAGE 5
29.78 ACRES

BLOSSOM ROAD
LOT 11
SHELOWITZ
52/81
2/1982



PLAN OF LAND		
AT:		122 BLOSSOM ROAD
		WESTPORT, MA
FOR:		ESTATE OF ELIZABETH S. RULON
SOUTHCOAST ENGINEERING		
182 DRIFT ROAD WESTPORT, MA		
SCALE: AS NOTED	(508) 636-8815	DATE: 4/25/17
DESIGN:	DRAWN BY: GN	REV.
REV.	FIELD: GN, WW, TC, VA	



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

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.

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



A. Site Information

Westport Land Conservation Trust

Owner Name

Adjacent to 122 Blossom Road

Street Address or Lot #

Westport

MA

02790

City/Town

State

Zip Code

Brendan Buckless

Contact Person (if different from Owner)

Telephone Number

B. Test Results

	1/19/18 Date	10:00 Time	1/19/18 Date	10:30 Time
Observation Hole #	TP-1		TP-2	
Depth of Perc	36-54"		36-54"	
Start Pre-Soak	10:09		10:35	
End Pre-Soak	10:24		10:50	
Time at 12"	10:24		10:50	
Time at 9"	10:51		11:22	
Time at 6"	11:29		12:06	
Time (9"-6")	38 mins		44 mins	
Rate (Min./Inch)	13 m.p.i.		15 m.p.i.	
	Test Passed: <input checked="" type="checkbox"/>		Test Passed: <input checked="" type="checkbox"/>	
	Test Failed: <input type="checkbox"/>		Test Failed: <input type="checkbox"/>	

Richard R. Riccio III, P.E.

Test Performed By:

John Swartz, Westport Board of Health

Board of Health Witness

Comments:
