

Project No. 17-360

Date: 7/28/2023  
Revision: \_\_\_\_\_

Commonwealth of Massachusetts  
Hingham, Massachusetts  
**Soil Suitability Assessment for On-site Sewage Disposal**

Performed By: Paul Louderback SE# 14618 Test Dates: 7/28/2023  
Performed By: \_\_\_\_\_ Test Dates: \_\_\_\_\_  
Witnessed By: NA - For Drainage Testhole #: 23-01  
Witnessed By: \_\_\_\_\_ Testhole #: \_\_\_\_\_

**FACILITY INFORMATION**

Site Location: \_\_\_\_\_ Owner/ Applicant Information: \_\_\_\_\_  
Builder's lot #: \_\_\_\_\_ Name: Steven and Caroline Young  
Street Address: 16 Bishops Lane Address: 16 Bishops Lane  
Town, State, Zip: Hingham, MA 02043 Town, State, Zip: Hingham, MA 02043  
Assessor's Map: 70-22 Telephone no.: \_\_\_\_\_

**SITE INFORMATION**

Construction Type:  
New Construction:  Repair:  Upgrade:  Drainage:   
Published Soil Survey Available: No:  Yes:   
Year Published: 2023 Publication Scale: 1:12,000 a. Soil Map Unit: 427B Drainage Class: HSG B  
b. Soil Map Unit: \_\_\_\_\_ Drainage Class: \_\_\_\_\_  
Soil Name: a. Newfields Fine Sandy Loam Soil Limitations: None

Surficial Geologic Report Available: No:  Yes:   
Year Published: 2018 Publication Scale: 1:250,000  
Geological Material/map unit: Course Deposits: consists of gravel deposits, sand and gravel deposits, & sand  
Landform: Morains, till plains

Flood Insurance Rate Map:  
Above 500 year flood boundary? No:  Yes:  Within a velocity zone? No:  Yes:   
Within 500 year flood boundary? No:  Yes:  Within 100 year flood boundary? No:  Yes:

Wetland Area:  
National Wetland Inventory Map: (map unit) n/a Name: \_\_\_\_\_  
Wetlands Conservancy Program Map: (map unit) n/a Name: \_\_\_\_\_  
Current Water Resource Conditions (USGS): (Month/year) July-2023  
Range: Above Normal:  Normal:  Below Normal:

Other References Reviewed: From MA-D4W 79R Duxbury well  
Comments: \_\_\_\_\_

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\*Deep Hole # 23-01

Builder's lot #: \_\_\_\_\_

Street Address: 16 Bishops Lane

Town: Hingham, MA 02043

Assessor's Map: 70-22

### DETERMINATION OF HIGH GROUNDWATER ELEVATION

Method Used:

Depth observed standing in observation hole: A: \_\_\_\_\_ inches B: \_\_\_\_\_ inches

Depth weeping from side of observation hole: A: \_\_\_\_\_ inches B: \_\_\_\_\_ inches

Depth to soil mottles: \_\_\_\_\_ inches

Ground water adjustment: \_\_\_\_\_ feet

Index Well Number: \_\_\_\_\_ Reading Date: \_\_\_\_\_ Index well level: \_\_\_\_\_

Adjustment factor: None Adjustment groundwater level:

### DEPTH OF PERVIOUS MATERIAL

Depth of Naturally Occurring Pervious Material

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:

If yes, at what depth was it observed? Upper Boundary (inches): see logs  
Lower Boundary (inches): see logs

### CERTIFICATION

I certify that I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature of Soil Evaluator: \_\_\_\_\_ Date: July 18, 2023

Typed or Printed Name of Soil Evaluator: Paul Louderback SE# 14618

Date of Soil Evaluator Exam: 5/17/2022

Name of Board of Health Witness: NA - For Drainage

Board of Health: \_\_\_\_\_

\*If applicable, only deep hole with shallowest ESHGW listed.

**ON-SITE REVIEW**

DEEP HOLE #: 23-01 DATE: 7/28/2023 TIME: 9:00 WEATHER: Sunny 85°  
 SITE ADDRESS or MAP/LOT #: 16 Bishops Lane, Hingham Hingham, MA 02043  
 OWNER: Young Family Trust ( Steve Young) JOB NO.: 17-360  
 LOCATION (Identify on Plan): See Attached Plan GROUND ELEVATION AT SURFACE OF HOLE: 26±

LAND USE: Residential SURFACE STONES: Yes:  No:  SLOPE (%): 3-5%

VEGETATION: Heavily wooded empty lot LANDFORM: Moraine/ till plain

**DISTANCES FROM:**

OPEN WATER BODY: >100 ft PROPERTY LINE: >10 ft POSSIBLE WET AREA: >100 ft DRAINAGEWAY: >100 ft  
 DRINKING WATER WELL: >100 ft OTHER: \_\_\_\_\_

**DEEP OBSERVATION HOLE LOG**

Depth (inches)	Soil Hor./ Layer	Soil Texture (USDA)	Soil Color (Munsell)	Redoximorphic Features	Other (Structure, Consistency,% Gravels, Stones, Boulders)
0-12	A	Loamy Sand	10Yr 2/2	-	Massive Friable
12-24	Bw	Loamy Sand	10Yr 5/6	-	Massive Friable
24-120	C	Coarse Sand	2.5 Y 6/3	-	20% gravel & stones (dense in place, loose in hand)
					Single grain, loose

PARENT MATERIAL: Course loamy deposits over gravel/sand deposit Unsuitable Material Present? Yes:  No:  If Yes:  
 Disturbed Soil:  Fill Mat'l:  Impervious Layer(s):  Weathered/Fractured Rock:  Bedrock:

GROUNDWATER OBSERVED: Yes:  No:  If Yes: What is the depth of Groundwater:  
 Standing in Hole: 109" Weeping from Face: 105" Saturating the Face: - Mottling: none observed

Estimated Depth to Seasonal High Ground Water : \_\_\_\_\_

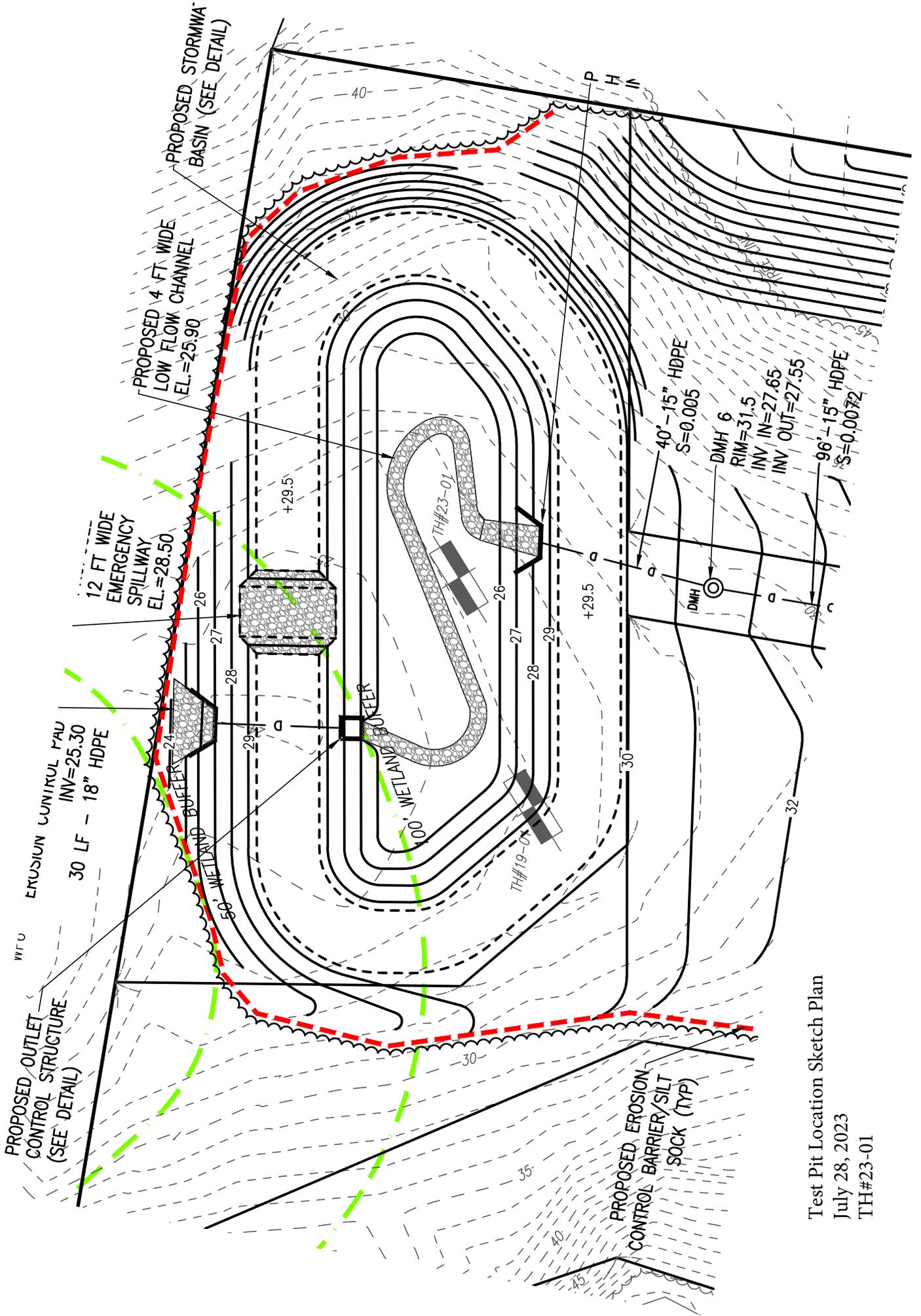
**PERCOLATION TEST**

Percolation Hole #:	<u>N/A</u>	Percolation Hole #:	_____
Test Date:	<u>for drainage</u>	Test Date:	_____
Depth of Perc:	_____	Depth of Perc:	_____
Start of Presoak:	_____	Start of Presoak:	_____
End of Presoak:	_____	End of Presoak:	_____
Time @ 12":	_____	Time @ 12":	_____
Time @ 9":	_____	Time @ 9":	_____
Time Elapse:(12"-9")	_____	Time Elapse:(12"-9")	_____
Time AT 6":	_____	Time AT 6":	_____
Time Elapse: (9"-6"):	_____	Time Elapse: (9"-6"):	_____
Rate: (min/in.):	_____	Rate: (min/in.):	_____
Test Passed/ Failed/ Discon/ Add. Test Req'd:	_____	Test Passed/ Failed/ Discon/ Add. Testing Req'd:	_____

Performed By: Paul Louderback Witnessed By: N/A - for drainage Mach./Oper.: Meridian - Brendan Smith  
 Comments: \_\_\_\_\_

*An indication that the "site passed" indicates only that the basic criteria for a soil evaluation and percolation test under Title 5 have been met in the area tested. Further soil evaluations and design work are necessary to determine whether a septic system for a particular use, meeting the requirements of Title5 and applicable local bylaws, will in fact be feasible on this site.*

*An indication that the "site failed" indicates only that the area tested did not meet the minimum criteria (at the time of testing) for a successful soil evaluation and/or percolation test in the area tested. Additional testing at another depth or other areas may result in passing results.*



Test Pit Location Sketch Plan  
 July 28, 2023  
 TH#23-01