

**Soil Test Results Report**  
for  
**Proposed Warehouse**  
**296 Flanders Road**  
**East Lyme, CT 06333**

**Date: March, 2024**

## Executive Summary

Soil testing was conducted on the subject property located at 296 Flander Road in the town of East Lyme, Connecticut by BL Companies on March 13, 2024. Test locations are depicted on the project site plan sheets.

The site soils substratum consists of sand/gravel mix and coarse to medium coarse sands of relatively loose compaction. Soil redox was evident between 6.5' to 10'. Water was observed between 5.5' and 14.5'.

In-situ infiltration testing was performed using the Turf-Tech Infiltrometer, which is approved by the CT DEEP for in-situ infiltration testing at elevations at or near the anticipated bottom of the proposed stormwater management subsurface systems. Due to the porous nature of the existing soils, the infiltration rates encountered are much faster than the maximum allowable design rate of 5.0 inches/hour as decreed in the 2024 CT DEEP Water Quality Manual. In consideration of the similarity of the soil substratum across the entire site being sand/gravel mix and sand in combination with the test infiltration rate being excessively higher than the maximum design rate allowed: it was determined that further infiltration testing is unwarranted.

Site soil test results are as follow:

### Test Holes

#### TP-1

Depth	Description
0" - 18"	Topsoil
18" - 46"	Tan/brown sandy loam
46" - 76"	Tan sand and gravel, loose
76" - 120"	Tan coarse-medium sand, loose

Mottling at 84"

Water at 103"

No Refusal

#### TP-2

Depth	Description
0" - 10"	Topsoil
10" - 27"	Tan/brown sandy loam
27" - 82"	Tan sand & gravel, loose
82" - 130"	Tan coarse sand, loose

Mottling at 84"  
 Water at 106"  
 No Refusal

**TP-3**

Depth	Description
0" - 10"	Topsoil
10" - 30"	Tan/brown sandy loam
30" - 98"	Tan sand & gravel, loose
98" - 127"	Tan coarse sand, loose

Mottling at 94"  
 Water at 107"  
 No Refusal

**TP-4**

Depth	Description
0" - 10"	Topsoil
10" - 28"	Orange-brown sandy silt
28" - 72"	Tan sand & gravel, loose
72" - 124"	Tan coarse sand, loose

Mottling at 79"  
 Water at 120"  
 No Refusal

**TP-5**

Depth	Description
0" - 15"	Topsoil
15" - 32"	Orange-brown sandy silt
32" - 64"	Tan sand & gravel, loose
64" - 124"	Tan coarse sand, loose

Mottling at 118"  
 Water at 188"  
 No Refusal

**TP-6**

Depth	Description
0" - 17"	Topsoil
17" - 32"	Orange-brown sandy silt
32" - 75"	Tan sand & gravel, loose
75" - 138"	Tan coarse sand, loose

Mottling at 119"

Water at 129"

No Refusal

**TP-7**

Depth	Description
0" - 12"	Topsoil
12" - 27"	Orange-brown sandy silt
27" - 72"	Tan sand & gravel, loose
72" - 142"	Tan coarse sand, loose

Mottling at 117"

Water at 131"

No Refusal

**TP-8**

Depth	Description
0" - 15"	Topsoil
15" - 30"	Orange-brown sandy silt
30" - 66"	Tan sand & gravel, loose
66" - 104"	Tan coarse/medium sand, loose

Mottling at 102"

Water at 140"

No Refusal

**TP-9**

Depth	Description
0" - 18"	Topsoil
18" - 42"	Orange-brown sandy silt
42" - 72"	Tan sand & gravel, loose
72" - 146"	Tan coarse sand, loose

Mottling at 106"

Water at 138"

No Refusal

**TP-10**

Depth	Description
0" - 12"	Topsoil
12" - 43"	Tan/brown sandy loam
43" - 64"	Tan sand & gravel, loose
64" - 130"	Tan coarse sand, loose

Mottling at 95"

No water

No Refusal

**TP-11**

Depth	Description
0" - 20"	Topsoil
20" - 47"	Tan/brown sandy loam
47" - 74"	Tan sand & gravel, loose
74" - 120"	Tan coarse sand, loose

Mottling at 113"

No Water

No Refusal

**TP-12**

Depth	Description
0" - 11"	Topsoil
11" - 70"	Tan coarse sand, loose

Mottling at 15"

Water at 66"

No Refusal

**TP-13**

Depth	Description
0" - 12"	Topsoil
12" - 34"	Tan/brown sandy loam
34" - 67"	Tan sand & gravel, loose
67" - 120"	Tan coarse sand, loose

Mottling at 115"

Water at 175"

No Refusal

**Infiltration Tests**

Infiltration Test IT-1

Test depth = 58"

Time (seconds)	Drop (inches)	Rate (inch/second)	Rate (inch/hour)
36	2-1/2	0.0694	250
34	2-1/2	0.0735	265
30	2-1/2	0.0833	300
32	2-1/2	0.0781	281
		AVERAGE	274

Infiltration Test IT-2  
Test depth = 50"

Time (seconds)	Drop (inches)	Rate (inch/second)	Rate (inch/hour)
60	1-1/2	0.025	90.0
60	1-1/8	0.01875	67.5
60	1	0.0167	60.1
60	1	0.0167	60.1
60	0.825	0.01375	49.5
60	0.825	0.01375	49.5
60	0.825	0.01375	49.5
		AVERAGE	49.5