



ENGINEERING • LAND SURVEYING • PLANNING
CERTIFICATE OF AUTHORIZATION NUMBER 24GA28220200

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ERIC B. RUPNARAIN, PE

October 26th, 2020

Fred Haniken
587 Hamilton Street
Franklin Township, NJ

Re: Soil Permeability Testing
Block 204, Lots 18 - 22 (AKA 587 Hamilton Street)
Franklin Township, Somerset County

Dear Fred,

As requested, on October 16th and 26th, 2020, Goldenbaum Baill Engineering, Inc. (GBE), has performed onsite soil permeability testing at the above referenced property. The testing was completed to determine the existing soil permeability and seasonal high-water table for design of an onsite stormwater infiltration system. Four (4) soil logs were excavated at the location shown on the attached sketch. The results of the testing are as follows:

Soil Log #1 / Basin Flood #1

0 - 8"	Topsoil
8 - 16"	10YR5/4 yellow brown clay loam, subangular blocky, friable
16 - 48"	10YR4/4 dark yellow brown fractured rock (shale), 20% gravel, 40% cobbles, 30% stone, with 10% clay loam as filler, subangular blocky, friable, mottling @ 36", common, medium, district 10YR7/1 no seepage

machine refusal @ 48 inches

Basin Flood @ 36"

First Fill	10/19/20	10:20 AM	12" water
Dry	10/19/20	12:40 PM	
Second Fill	10/19/20	12:45 PM	12" water
Dry	10/19/20	4:30 PM	

The first filled drain in less than 24 hours and the second fill drained in less than 12 hours. Therefore, a permeability rate of 0.5 inch / hour can be used for design.

Soil Log #2

- 1 - 8" Topsoil
- 9 - 16" 10YR5/4 yellow brown clay loam, subangular blocky, friable
- 16 - 68" 10YR4/4 dark yellow brown fractured rock (shale), 20% gravel, 40% cobbles, 30% stone, with 10% clay loam as filler, subangular blocky, friable

seepage @ 68 inch, 6 inches of water accumulated in 4 hours.

machine refusal @ 68 inches

Soil Log #3 / Basin Flood #2

- 2 - 14" Topsoil
- 14 - 30" 10YR5/4 yellow brown clay loam, subangular blocky, friable
- 30 - 54" 10YR4/4 dark yellow brown fractured rock (shale), 15% gravel, 30% cobbles, 40% stone, with 15% clay loam as filler, subangular blocky, friable, mottling @ 42", common, medium, district 10YR7/1

machine refusal @ 54 inches

Basin Flood @ 32"

First Fill	10/26/20	9:20 AM	12" water
Dry	10/26/20	1:25 PM	
Second Fill	10/26/20	1:30 PM	12" water
Dry	10/26/20	5:30 PM	

The first filled drain in less than 24 hours and the second fill drained in less than 12 hours. Therefore, a permeability rate of 0.5 inch / hour can be used for design.

Soil Log #4

- 15 - 10" Topsoil
- 10 - 28" 10YR5/4 yellow brown clay loam, subangular blocky, friable
- 28 - 50" 10YR4/4 dark yellow brown fractured rock (shale), 20% gravel, 40% cobbles, 30% stone, with 10% clay loam as filler, subangular blocky, friable, mottling @ 42", common, medium, district 10YR7/1
seepage at 50



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