



**Hillcrest Farms
Township of Verona
County of Essex, NJ**

Block 708, Lot 1

10-24-25

Rev 1: 2-11-26

A handwritten signature in blue ink, appearing to read 'Paul W. Anderson', is written over a horizontal line.

Paul W. Anderson PE, PP
NJ P.E. License # 33410

Introduction

The Hillcrest Farms property is located at 383 Bloomfield Avenue in Verona. The property is proposed to be redeveloped with a mixed-use building with commercial on the first floor and residential on the floors above.

The project will be classified as a major stormwater design project, and the design will be required to meet the NJ State stormwater standards for water quality, groundwater recharge and discharge rate. The soil data required to design this system is the subject of this report.

The soil exploration for this project will be conducted in two phases. The initial phase to determine soil permeability and the second stage to be completed in the January to April soil testing window will verify seasonal high ground water. In total 2 test pits will be performed in Phase 1 and 3 test pits will performed in Phase 2. The test pits were dug to approximately 15 ft in each location with soil logs for each location prepared and soil samples taken for laboratory permeability testing
Soil logs and lab test results are attached.

Test Pits 2 & 3 found a predominantly silty sand with K-4 and K-3 permeability. This deep running layer is suitable for groundwater recharge.

Rev 1:

Test pits 1, 4, & 5 performed in February during the seasonal high groundwater testing window. The soil types found were sandy silt loams similar to those found in the initial testing. The test pits were dug to 12 ft and there was no evidence of ground water or mottling. The drainage system design is not influenced by the groundwater table.

October 21, 2025

Sunny, 65F

Soil Logs

Contents: (Depth of sample, color, texture, description)

Test Pit #2

Soil Sample at 65 inches

0-6 inches Asphalt & gravel

6-38 Brown silty clay

38-192 in Brown Silty Sand

* no ground water seepage, no mottles

Test Pit #3

Soil sample at 55 inches

0-28 Fill material with bricks & blocks

28-65 Brown silty sand with gravel

65-115 Brown sandy silt loam w/ gravel

115-180 in reddish brown silt loam w/gravel

Perched water seepage at 165 in. no mottles

REV 1

February 11, 2026

Overcast, 40F

Test Pit #1

Soil sample at 11 ft

0-60" Organic soil & fill material

60-120" Brown silt loam w/ 6" stones

120-132" Brown sandy silt loam

* no groundwater seepage, no mottles

Test Pit #4

0-42" Reddish brown silty clay with fill material and large stones (12"+)

42-72" Light grey sandy silt loam with fill material, bricks, gravel

72-144" Brown silty sandy loam with small stones

* no groundwater seepage, no mottles

Test Pit #5

0-84" Large stones & gravel mixed with fill material, bricks, etc

84-120" Gray silty clay

120-144" Brown sandy silt loam with small stones

* no groundwater seepage, no mottles

SOR TESTING LABORATORIES, INC.

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Client:	Anderson Consulting Services				
Project:	Hillcrest Farm, Verona, New Jersey				
Subject:	Laboratory Testing of Soil/Aggregate Samples				
Job No.:	25-104	Report No.:	25-672	Date:	10/24/2025

On **October 21, 2025**, the client delivered two (2) soil/aggregate samples to our laboratory for testing. The client labeled the samples TP-2 (65 inches) and TP-3 (55 inches).

At the client's request, the samples were tested for the Water Permeability Rate. The table below provides our test results.

Sample ID	Water Permeability Rate
TP-2 (65")	5.3 x 10 ⁻³ cm/s (7.67 in/hr) K4
TP-3 (55")	1.8 x 10 ⁻³ cm/s (2.58 in/hr) K3

Very truly yours,

SOR TESTING LABORATORIES, INC.


Orhun Sor, M.S.
Vice President

OS/gs

cc: (1) Client, Attn: Paul Anderson (E-mail: PAnderson@gmail.com)