January 24, 2025

PAUPL23001

ATH-NJ LLC
Attn: Mr. Paul Ploskonka
219 N. Vineyard Blvd.
Collingswood, NJ 08108

RE: Infiltration Testing Summary Report
Elk Cannabis Cultivation Facility
Block 44, Lot 4
730 Buck Road, Elk Township
Gloucester County, New Jersey

Dear Mr. Ploskonka:

On January 16th & 17th, 2025, Pennoni directed the excavation of 13 test pits and conducted 13 single-ring infiltration tests. The test locations were selected and established in the field by Pennoni. The approximate testing locations are shown on the attached Site Location Plan (LP-1).

FIELD WORK

Test pits, TP-1 through TP-13, were excavated by Ambient Group, LLC using a Cat 420 F.I.T. rubber tire backhoe under the full-time direction of Pennoni. The test pits were excavated to a minimum of 2ft below the proposed infiltration testing elevation to identify potential limiting zones and confirm the uniformity of the subsoil.

After establishing that the subsurface conditions were suitable for testing, the test pits were extended laterally and raised to the testing elevation. The infiltration tests were performed in general accordance with the New Jersey Stormwater Best Management Practices (BMP) Manual, Chapter 12 (revised March 2024).

SUBSURFACE STRATIGRAPHY

The ground cover at the test pit locations was fallow farmland consisting of gravelly silt. A brief description of the underlying soil strata is listed in Table 1 below.

Table 1: Soil Stratum Descriptions

STRATUM	DESCRIPTION
1	Grayish brown F/M SAND, some C/F rounded Gravel, little Silt
2	Orange brown to tan to light brown to brown to gray C/M/F SAND, some to little C/F rounded Gravel, little to trace Silt

FINDINGS & CONCLUSIONS

Groundwater and evidence of a seasonal high water table (SHWT) was observed during our testing. A summary of our infiltration testing results is presented below.

Table 2: Supplemental Infiltration Testing Summary

Test Pit No. / Infiltration Test	Approximate Testing Depth (ft)	Approximate Testing Elevation (Elev.)	Soil Stratum Tested	Stabilized Infiltration Rate (in./hr)	Hydraulic Conductivity (in/hr)	Approximate Limiting Zone Depth (ft)	Limiting Zone Type
TP-1/I-1	3.0	122.0	2	13.5	4.62	5.0	SHWT
TP-2/I-2	2.0	123.0	2	1.0	0.75	4.5	SHWT
TP-3/I-3	4.0	120.0	2	12.0	4.71	-	NE
TP-4/I-4	4.0	120.0	2	12.0	4.55	-	NE
TP-5/I-5	4.0	120.0	2	15.0	6.28	-	NE
TP-6/I-6	4.0	120.0	2	12.0	4.90	-	NE
TP-7/I-7	4.0	120.0	2	27.0	8.22	-	NE
TP-8/I-8	5.0	121.0	2	12.0	4.11	8.0	SHWT
TP-9/I-9	5.0	120.0	2	4.0	1.37	7.0	SHWT
TP-10/I-10	5.0	120.0	2	20.0	6.85	7.5	SHWT
TP-11/I-11	5.0	122.0	2	6.0	2.05	9.0	SHWT
TP-12/I-12	5.0	122.0	2	2.0	0.68	-	NE
TP-13/I-13	5.0	122.0	2	0.5	0.17	9.0	SHWT

*NE - Not Encountered, SHWT - Seasonal High Water Table

We trust that the information presented in this report is what you require at this time, and we thank you for the opportunity to assist you with this project. If you have any questions, or if you need any further assistance with this project, please contact this office at your earliest convenience.

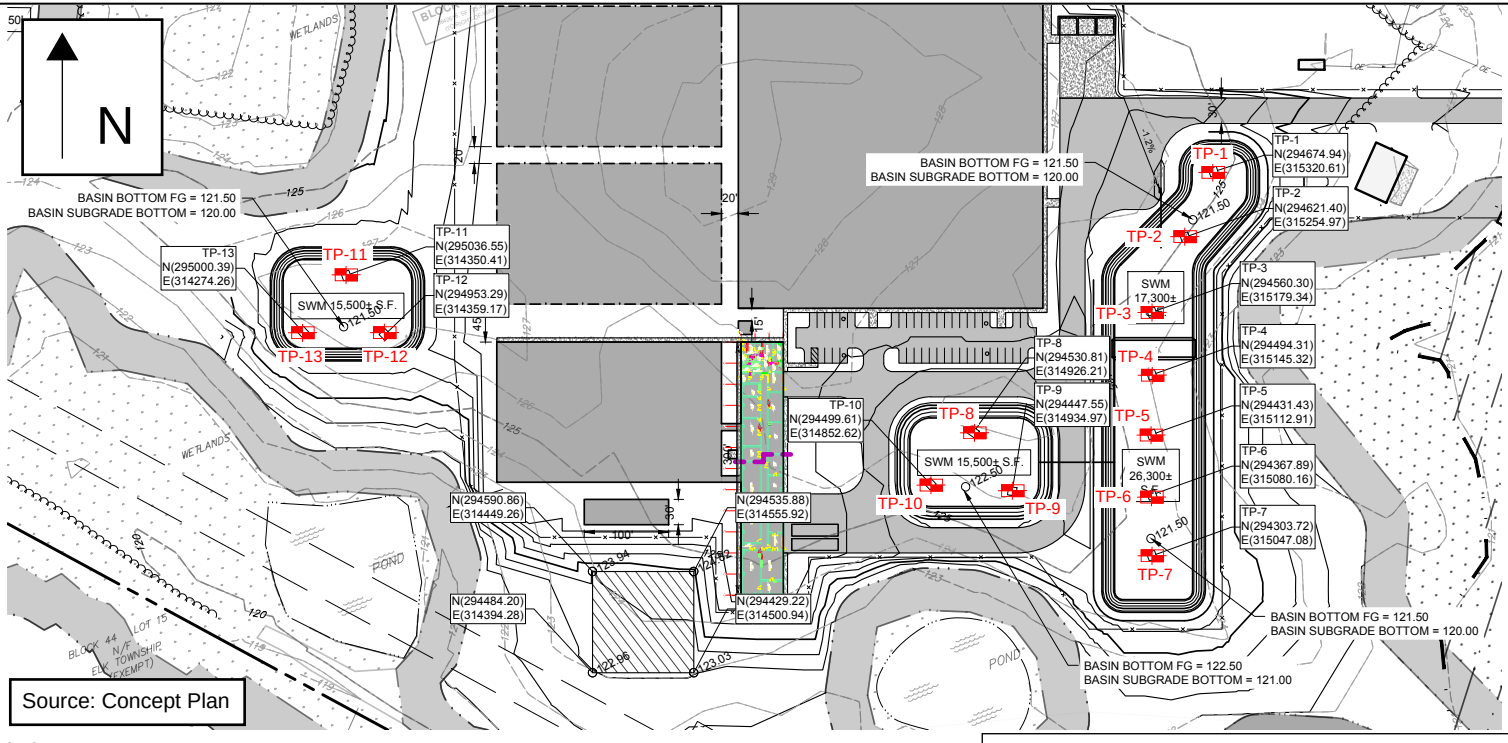
Respectfully,

PENNONI ASSOCIATES INC.

Olivia Sidwell, EIT
Graduate Geotechnical Engineer

Murat Arkan, PE
Senior Geotechnical Engineer

Attachments: *Site Location (LP-1)*
Test Pit Logs (TP-1 through TP-13)
Infiltration Testing Data Sheets (I-1 through I-13)



NOTES:
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LEGEND

TP-1 Test Pit/ Infiltration Test Location

SITE LOCATION PLAN

SCALE: NTS	APPROVED BY: MA	DRAWN BY: AA
1/20/2025	FILE LOCATION: U:PAUPL23001	

Elk Cannabis Cultivation Facility
730 Buck Rd. Elk Township, NJ

PENNONI ASSOCIATES INC.

PAUPL23001

LP-1

Test Pit TP-1
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 125.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
1.0				124.0	
				Burnt orange to tan C/M/F SAND, some to little C/F rounded gravel, trace silt	
2.5					I-1 @ 3ft
					Generally stable sidewalls 0-7ft
			2		
5.0				Light orange brown to tan with light gray streaks	SHWT @ 5ft
7.5					
8.0				117.0	
				Test Pit terminated at 8.0 feet.	

NOTES:

Test Pit TP-2
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 125.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
▽ **DURING EXCAVATION** 10.0' / Elev 115.0'
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.0 / 124.0	
				Burnt orange to dark gray C/M/F SAND, some to little C/F rounded gravel, little silt	
2.5					Unstable sidewalls from 3 to 11 ft
				Light brown to tan with light gray streaks	
5.0					SHWT @ 4.5ft
			2		
7.5					
10.0▽					GW @ 10ft
				11.0 / 114.0	
				Test Pit terminated at 11.0 feet.	

NOTES:

Test Pit TP-3
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 124.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
1.0				123.0	
				Burnt orange to dark brown C/M/F SAND, some C/F rounded gravel, trace silt	
2.5					
					I-3 @ 4ft
			2		
5.0					
				Tan to light brown to brown F/M/C SAND, trace C/F rounded gravel, trace silt	
7.5					
8.0				116.0	
				Test Pit terminated at 8.0 feet.	

NOTES:

Test Pit TP-4
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 124.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
1.5					122.5
2.5			2	Dark brown to brown gray C/M/F SAND, some C/F rounded gravel, little silt	
5.0				Orange to brown to tan F/M/C SAND, little C/F rounded gravel, trace silt	I-4 @ 4ft
7.5					
8.0					116.0
				Test Pit terminated at 8.0 feet.	

NOTES:

Test Pit TP-5
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 124.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
1.0				123.0	
			2	Orange brown to light brown to tan to gray C/M/F SAND, some C/F rounded gravel, little to trace silt	I-5 @ 4ft
2.5					
5.0					
7.5					
8.0				116.0	

Test Pit terminated at 8.0 feet.

NOTES:

TEST PIT LOG

Test Pit TP-6
PAGE 1 OF 1

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 124.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
1.0				123.0	
				Orange to brown to tan C/M/F SAND, some C/F rounded gravel, trace silt	
2.5					
					I-6 @ 4ft
			2		
5.0				Brown to tan F/M/C SAND, little C/F gravel, trace silt	
7.5					
8.0				116.0	
				Test Pit terminated at 8.0 feet.	

NOTES:

Test Pit TP-7
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/16/25 **COMPLETED** 1/16/25
GROUND ELEVATION 124.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
1.0				123.0	
				Dark brown C/M/F SAND, some C/F rounded gravel , trace silt	
2.5					
			2	Orange brown to tan C/M/F SAND, some C/F rounded gravel, trace silt	I-7 @ 4ft
5.0					
7.5					
8.0				116.0	
				Test Pit terminated at 8.0 feet.	

NOTES:

Test Pit TP-8
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/17/25 **COMPLETED** 1/17/25
GROUND ELEVATION 126.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
▽ **DURING EXCAVATION** 10.5' / Elev 115.5'
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.0 / 125.0	
				Brown to orange brown to tan C/M/F SAND, some C/F rounded gravel, little to trace silt	
2.5					
5.0					I-8 @ 5ft
			2		
7.5					SHWT @ 8ft
				Light gray streaks, soil mottling	
10.0					
▽				10.5 / 115.5	GW @ 10.5ft
				Test Pit terminated at 10.5 feet.	

NOTES:

TEST PIT LOG

Test Pit TP-9
PAGE 1 OF 1

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/17/25 **COMPLETED** 1/17/25
GROUND ELEVATION 125.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.0 / 124.0	
				Brown to dark gray to light brown to tan C/M/F SAND, some C/F rounded Gravel, little Silt	
2.5					
5.0					I-9 @ 5ft
			2	Orange brown to tan C/M/F SAND, little C/F gravel, trace silt	
				Light gray streaks, soil mottling	SHWT @ 7ft
7.5					
10.0					
				10.5 / 114.5	
				Test Pit terminated at 10.5 feet.	

NOTES:

TEST PIT LOG

Test Pit TP-10
PAGE 1 OF 1

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/17/25 **COMPLETED** 1/17/25
GROUND ELEVATION 125.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.0 / 124.0	
				Dark gray to tan to dark brown C/M/F SAND AND C/F rounded GRAVEL, little silt	
2.5					
				Brown to orange brown to tan C/M/F SAND, some to little C/F rounded gravel, trace silt	
5.0					I-10 @ 5ft
			2		
7.5				Light gray streaks, soil mottling	SHWT @ 7.5ft
10.0					
				10.5 / 114.5	

Test Pit terminated at 10.5 feet.

NOTES:

TEST PIT LOG

Test Pit TP-11
PAGE 1 OF 1

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/17/25 **COMPLETED** 1/17/25
GROUND ELEVATION 127.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
▽ **DURING EXCAVATION** 10.0' / Elev 117.0'
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.0 / 126.0	
			2	Orange brown to tan to brown to dark gray C/M/F SAND, some C/F rounded gravel, trace silt	
2.5					
5.0					I-11 @ 5ft
7.5					
				Light gray streaks, soil mottling	SHWT @ 9 ft
10.0					GW @ 10 ft
				11.0 / 116.0	
				Test Pit terminated at 11.0 feet.	

NOTES:

Test Pit TP-12
PAGE 1 OF 1

TEST PIT LOG

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/17/25 **COMPLETED** 1/17/25
GROUND ELEVATION 127.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
DURING EXCAVATION -
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.5 / 125.5	
2.5				Orange brown to brown to dark gray C/M/F SAND, some C/F rounded gravel, trace silt	
5.0					I-12 @ 5ft
			2	Orange brown to dark brown C/M/F SAND, some C/F rounded gravel, trace silt	
7.5					
10.0					
				10.5 / 116.5	
				Test Pit terminated at 10.5 feet.	

NOTES:

TEST PIT LOG

Test Pit TP-13
PAGE 1 OF 1

CLIENT ATH-NJ LLC
PROJECT NAME Elk Cannabis Cultivation Facility
PROJECT NUMBER PAUPL23001
PROJECT LOCATION 730 Buck Road, Elk Township, New Jersey
DATE STARTED 1/17/25 **COMPLETED** 1/17/25
GROUND ELEVATION 127.0'
EXCAVATION CONTRACTOR Ambient Group, LLC
WATER ENCOUNTERED:
EXCAVATION METHOD Excavator
▽ **DURING EXCAVATION** 10.0' / Elev 117.0'
OPERATOR / HELPER Mike Ritorto
AT END OF EXCAVATION -
LOGGED BY O. Sidwell **CHECKED BY** M. Arkan
AFTER EXCAVATION -

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0.0				Depth / Elev.	
			1	Grayish brown F/M SAND, some C/F rounded gravel, little silt	
				1.0 / 126.0	
				Orange brown to brown C/M/F SAND, some C/F rounded gravel, trace silt	
2.5					
5.0					I-13 @ 5ft
			2		
7.5					
				Soil mottling with light gray streaks	SHWT @ 9ft
10.0▽					GW @ 10ft
				11.0 / 116.0	
				Test Pit terminated at 11.0 feet.	

NOTES:

Infiltration Test Number: I-1

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-1	Testing Depth (ft): 3.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 4	Ring Diameter (in): 5.5
Ground Surface Elev. 125	Proposed BMP Elev. 120	Testing Elev. 122
Test Soil Strata: SAND		
Limiting Zones: SHWT at 5 ft (Elev. 120)		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	4.50	0.00	4.50	18.00	15.00	5.14
1	4.50	0.00	4.50	20.00	13.50	4.62
2	4.50	0.00	4.50	20.00	13.50	4.62
3	4.50	0.00	4.50	20.00	13.50	4.62
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		4.62

Infiltration Test Number: I-2

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-2	Testing Depth (ft): 2.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 125	Proposed BMP Elev. 120	Testing Elev. 123
Test Soil Strata: SAND		
Limiting Zones: SHWT at 4.5 ft (Elev. 120.5)		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	1.50	3.50	30.00	7.00	2.40
1	5.00	1.50	3.50	30.00	7.00	2.40
2	5.00	4.50	0.50	30.00	1.00	0.34
3	5.00	4.50	0.50	30.00	1.00	0.34
4	5.00	4.50	0.50	30.00	1.00	0.34
5	5.00	4.50	0.50	30.00	1.00	0.34
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		0.75

Infiltration Test Number: I-3

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-3	Testing Depth (ft): 4.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 124	Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND		
Limiting Zones: NE		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	0.00	5.00	18.00	16.67	5.71
1	5.00	0.00	5.00	21.00	14.29	4.89
2	5.00	0.00	5.00	20.00	15.00	5.14
3	5.00	0.00	5.00	25.00	12.00	4.11
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		4.71

Infiltration Test Number: I-4

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-4	Testing Depth (ft): 4.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 2	Ring Diameter (in): 5.5
Ground Surface Elev. 124	Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND		
Limiting Zones: NE		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	6.00	0.00	6.00	16.00	22.50	7.70
1	6.00	0.00	6.00	21.00	17.14	5.87
2	6.00	0.00	6.00	30.00	12.00	4.11
3	6.00	0.00	6.00	30.00	12.00	4.11
4	6.00	0.00	6.00	30.00	12.00	4.11
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		4.55

Infiltration Test Number: I-5

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-5	Testing Depth (ft): 4.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 124	Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND		
Limiting Zones: NE		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	0.00	5.00	15.00	20.00	6.85
1	5.00	0.00	5.00	15.00	20.00	6.85
2	5.00	0.00	5.00	15.00	20.00	6.85
3	5.00	0.00	5.00	20.00	15.00	5.14
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		6.28

Infiltration Test Number: I-6

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-6	Testing Depth (ft): 4.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 2	Ring Diameter (in): 5.5
Ground Surface Elev. 124	Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND		
Limiting Zones: NE		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	6.00	0.00	6.00	15.00	24.00	8.22
1	6.00	0.00	6.00	19.00	18.95	6.49
2	6.00	0.00	6.00	30.00	12.00	4.11
3	6.00	0.00	6.00	30.00	12.00	4.11
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		4.90

Infiltration Test Number: I-7

Project: Elk Cannabis Cultivation Facility	Project Number: PAUPL23001	Date: 01/16/2025
Project Location: Elk, NJ	Test Location: TP-7	Testing Depth (ft): 4.0
Test Performed By: O. Sidwell	Ring Seating Depth (in): 2	Ring Diameter (in): 5.5
Ground Surface Elev. 124	Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND		
Limiting Zones: NE		

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	4.50	0.00	4.50	12.00	22.50	7.70
1	4.50	0.00	4.50	15.00	18.00	6.16
2	4.50	0.00	4.50	10.00	27.00	9.24
3	4.50	0.00	4.50	10.00	27.00	9.24
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		8.22

Infiltration Test Number: I-8

Project: Elk Cannabis Cultivation Facility		Project Number: PAUPL23001	Date: 01/17/2025
Project Location: Elk, NJ		Test Location: TP-8	Testing Depth (ft): 5
Test Performed By: O. Sidwell		Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 126		Proposed BMP Elev. 120	Testing Elev. 121
Test Soil Strata: SAND			
Limiting Zones: SHWT @ 8 ft (Elev. 118)			

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	0.00	5.00	15.00	20.00	6.85
1	5.00	4.00	1.00	5.00	12.00	4.11
2	5.00	4.00	1.00	5.00	12.00	4.11
3	5.00	4.00	1.00	5.00	12.00	4.11
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		4.11

Infiltration Test Number: I-9

Project: Elk Cannabis Cultivation Facility		Project Number: PAUPL23001	Date: 01/17/2025
Project Location: Elk, NJ		Test Location: TP-9	Testing Depth (ft): 5
Test Performed By: O. Sidwell		Ring Seating Depth (in): 2.5	Ring Diameter (in): 5.5
Ground Surface Elev. 125		Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND			
Limiting Zones: SHWT @ 7 ft (Elev. 118)			

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.50	0.00	5.50	85.00	3.88	1.33
1	5.50	4.50	1.00	15.00	4.00	1.37
2	5.50	4.50	1.00	15.00	4.00	1.37
3	5.50	4.50	1.00	15.00	4.00	1.37
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		1.37

Infiltration Test Number: I-10

Project: Elk Cannabis Cultivation Facility		Project Number: PAUPL23001	Date: 01/17/2025
Project Location: Elk, NJ		Test Location: TP-10	Testing Depth (ft): 5
Test Performed By: O. Sidwell		Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 125		Proposed BMP Elev. 120	Testing Elev. 120
Test Soil Strata: SAND			
Limiting Zones: SHWT @ 7.5 ft (Elev. 117.5)			

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	0.00	5.00	15.00	20.00	6.85
1	5.00	4.00	1.00	3.00	20.00	6.85
2	5.00	4.00	1.00	3.00	20.00	6.85
3	5.00	4.00	1.00	3.00	20.00	6.85
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		6.85

Infiltration Test Number: I-11

Project: Elk Cannabis Cultivation Facility		Project Number: PAUPL23001	Date: 01/17/2025
Project Location: Elk, NJ		Test Location: TP-11	Testing Depth (ft): 5
Test Performed By: O. Sidwell		Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 127		Proposed BMP Elev. 120	Testing Elev.122
Test Soil Strata: SAND			
Limiting Zones: SHWT @ 9 ft (Elev. 118)			

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	0.00	5.00	40.00	7.50	2.57
1	5.00	4.00	1.00	10.00	6.00	2.05
2	5.00	4.00	1.00	10.00	6.00	2.05
3	5.00	4.00	1.00	10.00	6.00	2.05
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		2.05

Infiltration Test Number: I-12

Project: Elk Cannabis Cultivation Facility		Project Number: PAUPL23001	Date: 01/17/2025
Project Location: Elk, NJ		Test Location: TP-12	Testing Depth (ft): 5
Test Performed By: O. Sidwell		Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 127		Proposed BMP Elev. 120	Testing Elev. 122
Test Soil Strata: SAND			
Limiting Zones: NE			

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	0.00	5.00	140.00	2.14	0.73
1	5.00	4.00	1.00	30.00	2.00	0.68
2	5.00	4.00	1.00	30.00	2.00	0.68
3	5.00	4.00	1.00	30.00	2.00	0.68
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		0.68

Infiltration Test Number: I-13

Project: Elk Cannabis Cultivation Facility		Project Number: PAUPL23001	Date: 01/17/2025
Project Location: Elk, NJ		Test Location: TP-13	Testing Depth (ft): 5
Test Performed By: O. Sidwell		Ring Seating Depth (in): 3	Ring Diameter (in): 5.5
Ground Surface Elev. 127		Proposed BMP Elev. 120	Testing Elev. 122
Test Soil Strata: SAND			
Limiting Zones: SHWT @ 9 ft (Elev. 118)			

Trial #	Initial Water Height (in.)	Final Water Height (in.)	ΔHeight (in.)	ΔTime (min)	Infiltration Rate (in/hr)	Converted Hydraulic Conductivity (in/hr)
Pre Soak	5.00	3.50	1.50	120.00	0.75	0.26
1	5.00	4.50	0.50	60.00	0.50	0.17
2						
3						
4						
5						
6						
7						
8						
9						
10						
				Hydraulic Conductivity (in/hr)		0.17

Test Boring – Test Pit – Auger Probe Log Key Sheet

LEGNED

COLUMN	*DESCRIPTION*
Depth	Depth in feet below ground surface.
Description	Description of sample including color, texture, and classification of subsurface material as applicable. Estimated depths to bottom of Strata as interpolated from the boring are also shown.
Stratum	Strata numbers as assigned by the geotechnical engineer.
Sample No.	Split barrel sample and sample number (S-x) Undisturbed Tube sample and sample number (U-x) Rock core run and core number (R-x) NR indicates "No Recovery."
Blow Counts	Soils (ASTM D 1586): Indicates number of blows obtained for each 6 inches of penetration of the standard split-barrel sampler. Rock (ASTM D 2113): indicates percent recovery (REC) per length of run and rock quality designation (RQD). RQD is the sum of rock pieces that are 4 inches or longer in length in one run divided by the total core run.
Recovery	For soil samples indicates the length of recovery in the sample spoon.
Remarks	Special conditions or test data noted during drilling.
Ground Water	Free water level as shown ( )*; *Free water level as noted may not be indicative of daily, seasonal, or long term fluctuations.

DESCRIPTIVE TERMS

RELATIVE PROPORTIONS

Descriptive Term	Symbol	Estimated Percentages
Trace	tr	1 to 10
Little	l	10 to 20
Some	sm	20 to 35
And	and	35 to 50

GRADATION OF COARSE GRAINED COMPONENTS

Soil Component	Size Range	Particle Size Maximum	Particle Size Minimum
Boulders		-	12"
Cobbles		12"	3"
Gravel	Coarse	3"	¾"
	Fine	¾"	#4 Sieve
Sand	Coarse	#4 Sieve	#10 Sieve
	Medium	#10 Sieve	#40 Sieve
	Fine	#40 Sieve	#200 Sieve
Silt		#200 Sieve	.005 mm
Clay		.005 mm	-

COMPOSITION OF COARSE-GRAINED COMPONENTS

Gradation Designation	Symbol	Defining Proportions
Coarse to Fine	CF	All fractions greater than 10% of the component
Coarse to Medium	CM	Less than 10% Fine
Medium to Fine	MF	Less than 10% Coarse
Coarse	C	Less than 10% Fine and Medium
Medium	M	Less than 10% Coarse and Fine
Fine	F	Less than 10% Coarse and Medium