



Memo

To: Rockland Conservation Commission

From: Lori Macdonald, MS, PWS, CWB, Sr. Environmental Scientist

cc: Henry Nover, PE

Date: February 24, 2021

Re: **Response to December 31, 2021 Peer Review Letter from Henry Nover, PE**
Notice of Intent Supplemental Documentation (DEP File # 273-0408) Submittal
Shingle Mill Multi-Family Development, 0 Pond Street, Rockland, MA

The following are responses to the December 31, 2020 Peer Review Comment Letter from Henry Nover, PE to the Rockland Conservation Commission.

Culvert Locations

The NOI plan set has been revised to show the three existing culverts located under the site gravel access road off Pond Street and one culvert connecting Wetland F to Wetland B. The culvert connecting Wetland F to Wetland B was buried at the time of the survey and has since been dug out and cleared to restore flow from Wetland F to Wetland B. The location of intermittent stream channels at the culvert ends have been added to the plan and show flow through the culverts. The drive access has been revised to avoid replacing the 18" RCP cross culvert. No culverts will be replaced or extended as a part of the proposed project.

Temporary Impact to Bordering Vegetated Wetlands

Driveway sections on sheets C-202 thru C-208 depict the approximate limits of the buried depth of the walls and leveling pads for the retaining walls along the driveway. In addition, a Temporary Wetland Impact Exhibit is enclosed depicting the areas $\pm 5'$ off the edge of leveling pad that may result in temporary impacts to the Bordering Vegetated Wetlands. Landscaping plans will be provided in the future and will include restoration measures for these locations.

It is anticipated that the majority of the roadway work and wall construction, stormwater facility installation and general site grading can be completed from the upland areas on site. However, temporary impacts beyond the erosion controls may occur when installing and maintaining the erosion controls and to accommodate construction equipment. The plans have been revised to show a 5-foot work buffer.

Approximately 2,815 square feet of temporary impacts to Bordering Vegetated Wetlands (BVW) may occur during construction. These temporary impacts to BVW would consist of the cutting of vegetation, limbing of trees, and potential rutting associated with construction access and the installation of erosion controls. Temporary impacts to BVW will be restored in place upon completion of construction by regrading, loaming (as necessary) and seeding with a wetland seed mix. There will be no loss of BVW upon completion of the project.

The assess road work meet the following "limited project" definitions, which gives the Conservation Commission the authority to approve the work provided there are no adverse effects on specified habitat sites of Rare Species.

- 310 CMR 10.53(3)(e) The construction and maintenance of a new roadway or driveway provided there is no other reasonable alternative access, it is constructed in a manner so as not to restrict the flow of water, and BVW and BLSF is replicated to the extent practicable, and
- 310 CMR 10.53(3)(k) The construction and maintenance of roadway drainage structures including culverts to ensure flow capacities which existed on April 1, 1983.

According to MNHESP there is no Rare Species Habitat on site. No permanent impacts to BLSF will occur as a part of the project.

Wetland Stormwater Point of Analysis

The stormwater report has been modified to include Points of analysis at the edge of the BVW's for both the pre- and post-development conditions. In the enclosed package, the proposed basketball court was relocation to be outside of the 25-foot buffer. The stormwater management system was revised to provide approximately the same volume of runoff as existing conditions. Runoff flowing to the BVW will be pretreated, infiltrated and then discharged to a stormwater system with a level spreader prior to flowing to Wetland F. Attached is the revised Stormwater Report for review.

Depth to Groundwater

Soils shown on the existing conditions plan were documented in the field in October 2019 by one of Coneco's Massachusetts Soil Evaluator. Soil logs showing depth to seasonal high groundwater are attached.

Based on the test pit #8 information witnessed by Coneco, the ground water mottling was observed at 47-inches below the existing surface which was field verified by Coneco to be elevation 138.85. This corresponds to an Estimated Seasonal High-Water Table of 134.93 at this location. The bottom of the infiltration system included in the enclosed package is at elevation 139.00. Thus, the bottom of practice exceeds 4 feet of separation from groundwater and does not require a mounding analysis.

The attached revised stormwater report shows that stormwater wetlands will be fully drained within 48 hours.

Set Back of Stormwater Outlets from Wetland F and the Vernal Pool

The Stormwater Wetland 2 outlet will discharge to Wetland B and will not directly impact Wetland F or the associated vernal pool. The new proposed level spreader's outlet will be at least 25 feet from Wetland F and the associated vernal pool.

Maintenance Access to Stormwater Wetland 1

The gravel access ramps to Stormwater Wetland 1 are more gradual and the width of the access perimeter road along the back of the Stormwater Wetland has been increased from 7 feet to approximately 15 feet.

The proposed snow storage area at Stormwater Wetland 1 has been relocated. Proposed snow storage areas are also east and south of the Community Building.

Full size drainage area plans are attached.

100-year Floodplain

According to an updated revised 2020 Flood Insurance Study (FIS) Preliminary Flood Insurance Rate Map (FIRM) Panel #25023C0092L, the Zone A (Bordering Land Subject to Flooding) limits are located along the western side of the site (Attachment C: Figure 6 (revised)). The BLSF boundary taken from the 2020 preliminary FEMA floodplain map has been added to the revised NOI site plans (Attached). According to the 2020 preliminary FEMA map, the BLSF is to the south of proposed permanent structures. The project will not permanently impact BLSF. The BLSF mitigation area has been removed from the design.

Temporary impacts to the 100-year floodplain may occur to the south of the eastern apartment building when installing approximately 100 linear feet of erosion controls and when constructing the adjacent walls and wall footings.

The temporary impacts would involve the cutting of vegetation and minor earth disturbance. The areas will be restored to original grades upon completion of construction. Areas will be loamed and seeded as necessary with either a native Wildlife Habitat Restoration Mix or Wetland Seed Mix. Landscaping plans will be provided in the future that show detailed restoration efforts.



CONECO
Engineers & Scientists

4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3135 FAX 508-697-5996
WEBSITE: www.coneco.com

DATE: 01/06/2020

DESIGNED: DJD CHECKED: JEN

DRAFTED: DJD IN CHARGE: RRL

SCALE: 1" = 30'

PROJECT NO. 3395.1

SHEET NO. 1

PROJECT: SHINGLEMILL, LLC
0 POND STREET
ROCKLAND, MASSACHUSETTS 02370

PREPARED FOR: SHINGLEMILL, LLC
4 FIRST STREET
BRIDGEWATER, MASSACHUSETTS 02324

REVISIONS

NO. DATE DESCRIPTION DR/CK

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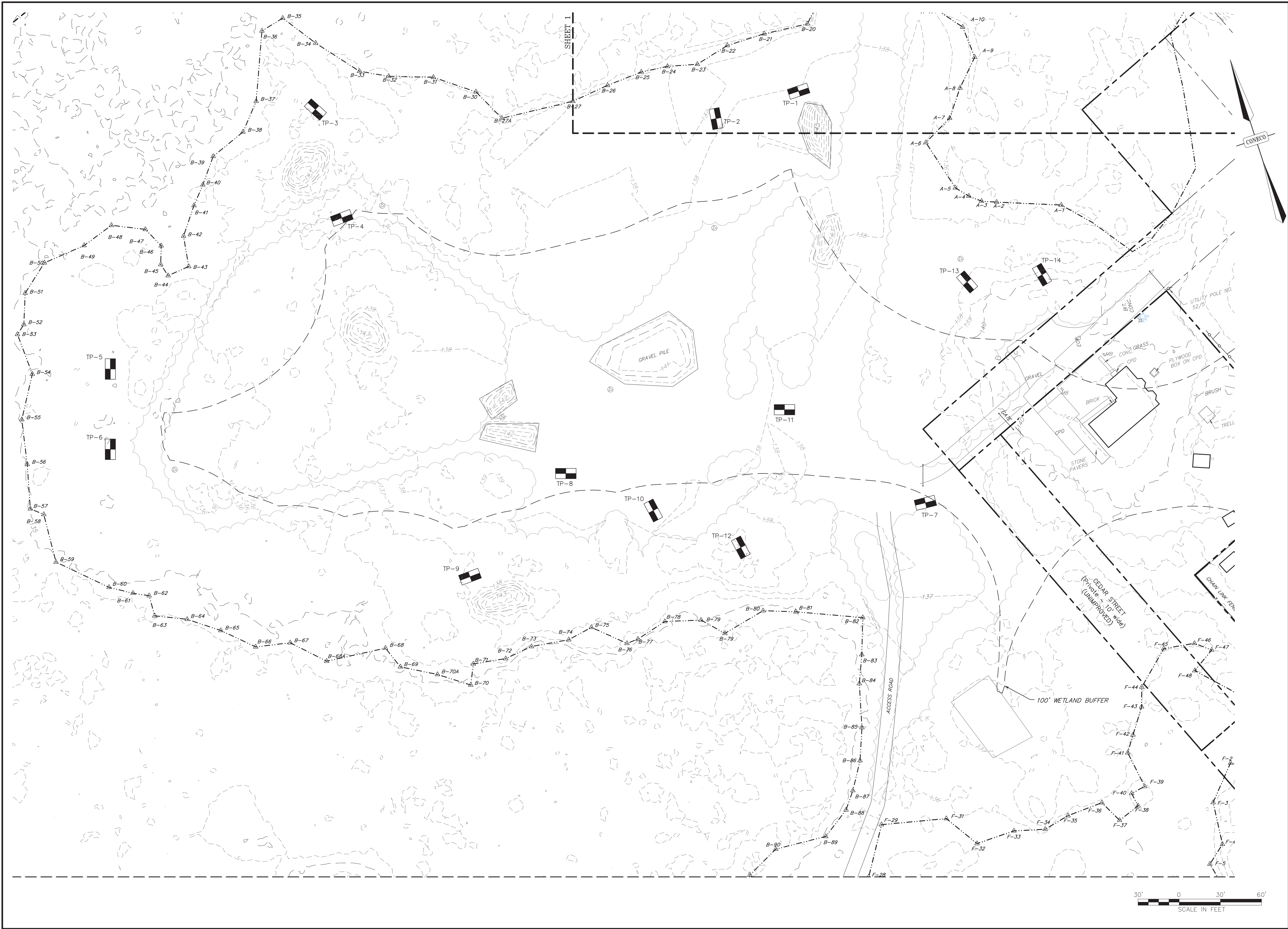
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REVISIONS	
NO.	DATE

DR/CK	DESCRIPTION

PROJECT	PREPARED FOR	DRAWING
SHINGLEMILL, LLC 0 POND STREET ROCKLAND, MASSACHUSETTS 02370	SHINGLEMILL, LLC 4 FIRST STREET BRIDGEWATER, MASSACHUSETTS 02324	TEST PIT LOCATION PLAN SHEET 2 OF 2

DATE	01/06/2020
DESIGNED:	DJD
CHECKED:	JEN
DRAFTED:	DJD
IN CHARGE:	RRL
SCALE:	1" = 30'
PROJECT NO.	3395.1
SHEET NO.	2

CONECO

Engineers & Scientists

4 FIRST STREET, BRIDGEWATER, MASSACHUSETTS 02324
PHONE 508-697-3130 FAX 508-697-5996
WWW.CONECO.COM

Job No.: 3395.1

Soil Evaluator: Damien Dmitruk

Client: _____

Witness: _____

Site Location: 0 Pond St., Rockland, MA

Excavator: Iaria Brothers - Vinny

Land Use: Vacant lot

Date: October 2, 2019

Parent Material: _____

Weather: Cloudy, 75°

Water Resource Conditions: Normal: _____ Above: _____ Below: X

TP # 3

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-24	Fill			Change in redox color at 11"	Depth		Mottling	4"
24-40	Ab	Loam	5Y 2.5/1		0-15 Min.			
40-58	C1	Sand	2.5Y 5/1	5% Gravel, 5% Cob./Stones	15-30 Min.		Weeping	
58-90	C2	Coarse Sand	2.5Y 5/1	10% Gravel, 10% Cob./Stones	30-45 Min.			
					45-60 Min.		Standing	40"
					60-75 Min.			
Rate					"/hr			

TP # 4

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-24	Fill				Depth		Mottling	31"
24-30	Ab	Coarse Sand	10YR 4/1		0-15 Min.			
30-35	Bw	Coarse Sand	10YR 5/6		15-30 Min.		Weeping	
35-79	C	Coarse Sand	10YR 4/4	10% Gravel, 10% Cob./Stones	30-45 Min.			
					45-60 Min.		Standing	40"
					60-75 Min.			
Rate					"/hr			

TP # 5

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-2	O				Depth		Mottling	6"
2-4	A	Loamy Sand	10YR 4/3	10% Gravel, 10% Cob./Stones	0-15 Min.			
4-13	Bw	Sand	2.5Y 5/4	10% Gravel, 10% Cob./Stones, heavier mottling at 26"	15-30 Min.		Weeping	25"
13-72	C	Sand	2.5Y 6/3	10% Gravel, 10% Cob./Stones	30-45 Min.			
					45-60 Min.		Standing	36"
					60-75 Min.			
Rate					"/hr			

TP # 6

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-15	Fill				Depth		Mottling	10"
15-23	Ab	Loamy Sand	10YR 2/1	10% Gravel, 10% Cob./Stones	0-15 Min.			
23-29	Bw	Sand	10YR 5/6	10% Gravel, 10% Cob./Stones	15-30 Min.		Weeping	28"
29-105	C	Sand	2.5Y 5/1	10% Gravel, 10% Cob./Stones, Heavier mottling at 55"	30-45 Min.			
					45-60 Min.		Standing	48"
					60-75 Min.			
Rate					"/hr			

TP # 7

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-113	Fill			60" to organic fill, roots at 86"	Depth		Mottling	
113-123	Ab	Loamy Sand	10YR 2/1		0-15 Min.			
123-131	Cg	Sand	5GY 5/2	10% Gravel, 5% Cob./Stones	15-30 Min.		Weeping	54"
					30-45 Min.			
					45-60 Min.		Standing	123"
					60-75 Min.			
					Rate	"/hr		

TP # 8

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-3	A	Sand	10YR 3/1	30% Gravel	Depth		Mottling	47"
3-6	Bw	Sand	10YR 4/4	20% Gravel, 30% Cob./Stones	0-15 Min.			
6-95	C1	Coarse Sand	2.5Y 5/4	20% Gravel, 30% Cob./Stones	15-30 Min.		Weeping	
					30-45 Min.			
					45-60 Min.		Standing	59"
					60-75 Min.			
					Rate	"/hr		

TP # 10

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-31	Fill			20% Gravel, 30% Cob./Stones	Depth		Mottling	45"
31-100	C1	Sand	2.5Y 5/2	10% Gravel, 10% Cob./Stones	0-15 Min.			
					15-30 Min.		Weeping	
					30-45 Min.			
					45-60 Min.		Standing	59"
					60-75 Min.			
					Rate		"/hr	

TP # 12

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-27	Fill				Depth		Mottling	42"
27-29	Ab	Loamy Sand			0-15 Min.			
29-42	Bw	Loamy Sand	10YR 5/6	10% Gravel, 10% Cob./Stones	15-30 Min.		Weeping	84"
42-56	C	Sand	10YR 4/2	10% Gravel, 10% Cob./Stones	30-45 Min.			
56-100	2C	Coarse Sand	10YR 6/1	10% Gravel, 10% Cob./Stones	45-60 Min.		Standing	90"
					60-75 Min.			
					Rate	"/hr		

TP # 13

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-10	Fill				Depth		Mottling	28"
10-17	Ab	Fine Sand	10YR 2/1	Heavy organic	0-15 Min.			
17-31	Bw	Sand	10YR 5/8		15-30 Min.		Weeping	48"
31-76	C1	Coarse Sand	2.5Y 4/4		30-45 Min.			
76-92	C2	Coarse Sand	2.5Y 5/1	10% Gravel, 30% Cob./Stones, 10% Small Boulders	45-60 Min.		Standing	48"
					60-75 Min.			
					Rate	"/hr		

TP # 14

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-36	Fill				Depth		Mottling	40"
36-41	Ab	Sandy Loam	10YR 2/1		0-15 Min.			
41-50	Bw	Loamy Sand	10YR 5/6		15-30 Min.		Weeping	
50-117	C	Medium Sand	2.5Y 4/4	20% Gravel, 5% Cob./Stones	30-45 Min.			
					45-60 Min.		Standing	56"
					60-75 Min.			
Rate							"/hr	

Job No.: 3395.1

Soil Evaluator: Damien Dmitruk

Client: _____

Witness: _____

Site Location: 0 Pond St., Rockland, MA

Excavator: Iaria Brothers - Vinny

Land Use: Vacant lot

Date: October 3, 2019

Parent Material: _____

Weather: Cloudy, 55°

Water Resource Conditions: Normal: _____ Above: _____ Below: X

TP # 1

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-100	Fill			Scrap, fill until water surface 75", sand @ bottom of pit	Depth		Mottling	
					0-15 Min.		Weeping	
					15-30 Min.			
					30-45 Min.			
					45-60 Min.		Standing	44"
					60-75 Min.			

Rate "/hr

TP # 2

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-70	Fill				Depth		Mottling	18"
70-97	C	Sand		10% Gravel, 10% Cob./Stone	0-15 Min.		Weeping	
					15-30 Min.			
					30-45 Min.			
					45-60 Min.		Standing	45"
					60-75 Min.			

Rate "/hr

TP # 9

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-22	Fill				Depth		Mottling	27"
22-60	C1	Sand		Denser mottling @32"	0-15 Min.		Weeping	
60-63	C2	Sand		10% Gravel, 10% Stone, Black	15-30 Min.			
63-90	C3	Sand	5YR 4/6	10% Gravel, 10% Cob./Stone	30-45 Min.			
					45-60 Min.		Standing	44"
					60-75 Min.			

Rate "/hr

TP # 11

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-18	Fill				Depth		Mottling	36"
18-33	C1	Coarse Sand	10YR 6/6	10% Gravel, 10% Cob./Stone	0-15 Min.		Weeping	
33-67	C2	Fine Sand	2.5Y 6/2	10% Gravel, 10% Cob./Stone	15-30 Min.			
67-90	C3	Coarse Sand	5Y 5/3	10% Gravel, 10% Cob./Stone	30-45 Min.			
					45-60 Min.		Standing	53"
					60-75 Min.			

Rate "/hr

TP # 15

Depth	Horizon	Texture	Color	Comments	Infiltration Test		Groundwater	
0-54	Fill	Coarse Loamy Sand			Depth		Mottling	21"
54-69	Ab	Silt loam	10YR 2/1		0-15 Min.			
69-99	C1	Coarse Sand	5Y 4/2	20% Gravel, 20% Cob./Stone	15-30 Min.		Weeping	48"
					30-45 Min.			
					45-60 Min.		Standing	87"
					60-75 Min.			

Rate

"/hr