

SOIL CONDITIONS SUMMARY TABLE	SUMMARY LOG OF SUBSURFACE EXPLORATIONS AT PROJECT SITES
Project Name: <u>Silver Maple Wind</u>	Applicant Name: _____
	Project Location (municipality): <u>Clifton</u>

Lot No.	Exploration Symbol (TP 1, B 2, etc.)	* if at SSWD Field	Description of subsurface materials by: ● Soil profile/condition (if by S.E.), ● Soil series name (if by C.S.S.), or by ● Geologic unit (if by C.G.)	Depths to (inches):				Ground Surface Slope (%)	Ground Surface Elevation
				Redoximorphic Features	Bedrock	Hydraulically Restrictive Layer	Limit of Exploration		
	TP 1	<input type="checkbox"/>	Peru loam	22	-	22	22		
	2	<input type="checkbox"/>	Peru grav silo	20	-	20	27		
	3	<input type="checkbox"/>	Peru grav loam	21	-	21	28		
	4	<input type="checkbox"/>	Peru grav loam	20	-	20	25		
	5	<input type="checkbox"/>	Tunbridge loam	-	? 21	-	21		
	6	<input type="checkbox"/>	Lyman fs1	-	15	-	15		
	7	<input type="checkbox"/>	Peru grav silo	22	-	22	30		
	8	<input type="checkbox"/>	Peru grav loam	21	-	21	30		
	9	<input type="checkbox"/>	Peru grav loam	25	-	25	30		
	10	<input type="checkbox"/>	Brayton loam	0	-	0	20		
	11	<input type="checkbox"/>	Colonel cobb loam	16	-	16	30		
	12	<input type="checkbox"/>	Peru fs1	24	-	24	30		
	13	<input type="checkbox"/>	Peru cobbly loam	27	-	27	32		
A	1	<input type="checkbox"/>	Peru grav silo	22	-	22	96		
	2	<input type="checkbox"/>	Peru grav silo	28	72	25	72		
	3	<input type="checkbox"/>	Lyman grav silo	11	16	11	16		
	4	<input type="checkbox"/>	Peru grav fs1	26	-	26	72		
	5	<input type="checkbox"/>	Peru grav fs1	27	-	27	72		
	6	<input type="checkbox"/>	Colonel grav SL	17	-	17	36		
	7	<input type="checkbox"/>	Peru grav SL	24	-	24	50		
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							
		<input type="checkbox"/>							

INVESTIGATOR INFORMATION AND SIGNATURE	
Signature: <u>Johanna Szillery</u>	Date: <u>9/14/2020</u>
Name Printed: <u>Johanna Szillery</u>	Cert/Lic/Reg. #: <u>CS5494</u>
Qualification: <input type="checkbox"/> Licensed Site Evaluator <input checked="" type="checkbox"/> Certified Soil Scientist <input type="checkbox"/> Certified Geologist <input type="checkbox"/> Other:	



SOIL PROFILE / CLASSIFICATION INFORMATION **DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES**

Project: Silver Maple Wind Energy Owner Name: _____ Project Location (municipality): Clifton

Exploration Symbol: 1 Test Pit Boring
8 " Organic horizon thickness Ground surface elev. _____

Texture	Consistency	Color	Mottling
loam	very friable	7.5YR 2.5/3	
	friable	7.5YR 3/3	none
	friable	7.5YR 4/4	
		10YR 5/4	
Limit of observation = 22"			

soil data by S.E. >> Soil Classification: _____ Slope: _____ Limiting Factor: > 22 " Depth: _____
 Groundwater Restrictive Layer Bedrock

soil data by S.S. >> Soil series/phase name: Peru Hydric Non-hydric Hydrologic Soil Group: C/D

Exploration Symbol: 2 Test Pit Boring
2 " Organic horizon thickness Ground surface elev. _____

Texture	Consistency	Color	Mottling
grav	friable	7.5YR 4/4	none
silt loam		10YR 4/6	
cobbly silt	firm	2.5Y 5/6	10YR 4/6
Limit = 27"			

soil data by S.E. >> Soil Classification: _____ Slope: _____ Limiting Factor: 20 " Depth: _____
 Groundwater Restrictive Layer Bedrock

soil data by S.S. >> Soil series/phase name: Peru Hydric Non-hydric Hydrologic Soil Group: C/D

Exploration Symbol: 3 Test Pit Boring
4 " Organic horizon thickness Ground surface elev. _____

Texture	Consistency	Color	Mottling
grav loam	friable	7.5YR 4/4	none
grav silt loam		10YR 4/6	
cobbly silt	firm	2.5Y 5/6	10YR 4/6
Limit = 28"			

soil data by S.E. >> Soil Classification: _____ Slope: _____ Limiting Factor: 21 " Depth: _____
 Groundwater Restrictive Layer Bedrock

soil data by S.S. >> Soil series/phase name: Peru Hydric Non-hydric Hydrologic Soil Group: C/D

Exploration Symbol: 4 Test Pit Boring
2 " Organic horizon thickness Ground surface elev. _____

Texture	Consistency	Color	Mottling
gravelly loam	friable	7.5YR 3/3	none
		10YR 4/6	
cobbly sandy loam	firm	10YR 5/6	10YR 4/4
Limit = 25"			

soil data by S.E. >> Soil Classification: _____ Slope: _____ Limiting Factor: 20 " Depth: _____
 Groundwater Restrictive Layer Bedrock

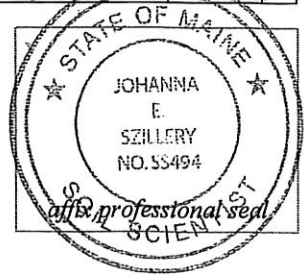
soil data by S.S. >> Soil series/phase name: Peru Hydric Non-hydric Hydrologic Soil Group: C/D

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Johanna Szillery Date: 5/21/2020

Name Printed/typed: Johanna Szillery Cert/Lic/Reg. #: CSS 494

Title: Licensed Site Evaluator Certified Soil Scientist Other:



SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project: Silver maple Wind Energy Owner Name: _____ Project Location (municipality): Clifton

Exploration Symbol: 5 Test Pit Boring
3 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6	loam	friable	10YR3/3	none
12			10YR4/6	
18				
24		refusal	21"	
30			(potential bedrock?)	
36				
42				
48				

soil data by S.E. Soil Classification Slope Limiting Factor 21 " Groundwater Restrictive Layer Bedrock ?

soil data by S.S. Soil series/phase name: Tunbridge Hydric Non-hydric Hydrologic C Soil Group

Exploration Symbol: 6 Test Pit Boring
0 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6	fine	very fr.	10YR4/4	
12	sandy loam	friable	10YR4/6	none
18				
24		refusal	@ 15"	
30				
36				
42				
48				

soil data by S.E. Soil Classification Slope Limiting Factor 15 " Groundwater Restrictive Layer Bedrock ?

soil data by S.S. Soil series/phase name: Lyman Hydric Non-hydric Hydrologic D Soil Group

Exploration Symbol: 7 Test Pit Boring
4 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			10YR 6/2	
6	grav		7.5YR3/3	none
12	sub loam	friable		
18		↓	10YR 4/4	↓
24	cob			
30	silt	firm	10YR5/6	7.5YR 4/4
36				
42				
48				

soil data by S.E. Soil Classification Slope Limiting Factor 22 " Groundwater Restrictive Layer Bedrock

soil data by S.S. Soil series/phase name: Peru Hydric Non-hydric Hydrologic C/D Soil Group

Exploration Symbol: 8 Test Pit Boring
2 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			10YR 6/2	
6	grav	very	10YR 6/2	
12	sub loam	friable	10YR3/3	none
18		friable	10YR4/6	↓
24	cob			
30	silt	firm	2.5Y5/6	10YR 4/4
36				
42				
48				

soil data by S.E. Soil Classification Slope Limiting Factor 21 " Groundwater Restrictive Layer Bedrock

soil data by S.S. Soil series/phase name: Peru Hydric Non-hydric Hydrologic C/D Soil Group

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Johanna Szillery Date: 5/21/2020

Name Printed/typed: Johanna Szillery Cert/Lic/Reg. # CSS 494

Title: Licensed Site Evaluator Certified Soil Scientist Other:



SOIL PROFILE / CLASSIFICATION INFORMATION **DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES**

Project: Silver Maple Wind Energy Owner Name: _____ Project Location (municipality): Clifton

Exploration Symbol: 9 Test Pit Boring
4 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0		v. fr.	10YR 6/2	
6	gray loam			
12	loam	friable	10YR	
18			4/6	none
24				
30	cobbly loam	firm	2.5Y 5/6	10YR 4/4
36		Limit = 30"		
42				
48				

soil data by S.E. → Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer
 Bedrock

soil data by S.S. → Soil series/phase name: Peru Hydric Non-hydric Hydrologic Soil Group: C/D

Exploration Symbol: TP10 Test Pit Boring
9 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6	oa - mucky		sat	
12				
18	cobb loam	firm	10YR 6/2	conc deple
24				
30		Limit = 20"		
36				
42				
48				

soil data by S.E. → Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer
 Bedrock

soil data by S.S. → Soil series/phase name: Brayton Hydric Non-hydric Hydrologic Soil Group: _____

Exploration Symbol: TP11 Test Pit Boring
6 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6	cobb loam	v. fr.	10YR 6/2	none
12				
18	↓	friable	7.5Y 2/4	mo
24				
30		firm	7.5YR 3/3	4/6 c.f
36		Limit = 30"		
42				
48				

soil data by S.E. → Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer
 Bedrock

soil data by S.S. → Soil series/phase name: Colonel Hydric Non-hydric Hydrologic Soil Group: _____

Exploration Symbol: TP12 Test Pit Boring
5 " Organic horizon thickness Ground surface elev. _____

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6	FSI	v. fr.	10YR 6/3	
12	cobb	friable	10YR 3/6	none
18	FSI		10YR 5/4	
24	↓			
30		firm	2.5Y 4/4	mottled
36		Limit = 30"		
42				
48				

soil data by S.E. → Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer
 Bedrock

soil data by S.S. → Soil series/phase name: Peru Hydric Non-hydric Hydrologic Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Johanna Szillery Date: 5/21/2020

Name Printed/typed: Johanna Szillery Cert/Lic/Reg. #: CSS 494

Title: Licensed Site Evaluator Certified Soil Scientist
 Certified Geologist Other:



SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name: Silver Maple Wind Applicant Name: _____ Project Location (municipality): Clifton

Exploration Symbol # TP 13 Test Pit Boring Probe
3 " Organic horizon thickness Ground surface elev. _____
 _____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0	<u>cobbly loam</u>	<u>v. fr.</u>	<u>2.5Y 6/3</u>	
10			<u>10YR 3/6</u>	
20	<u>cobbly sandy loam</u>	<u>frable</u>	<u>10YR 5/4</u>	
30	<u>cobbly sandy loam</u>	<u>firm</u>	<u>2.5Y 5/3</u>	<u>10YR 5/6 of</u>
40		<u>LIMIT OF OBS = 32</u>		
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor 27 Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: Peru cobbly loam Hydric Non-hydric Hydrologic C1D Soil Group _____

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor _____ Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: _____ Hydric Non-hydric Hydrologic _____ Soil Group _____

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor _____ Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: _____ Hydric Non-hydric Hydrologic _____ Soil Group _____

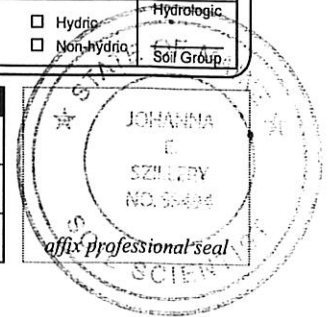
Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor _____ Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: _____ Hydric Non-hydric Hydrologic _____ Soil Group _____

INVESTIGATOR INFORMATION AND SIGNATURE

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 Title: Licensed Site Evaluator Certified Soil Scientist Certified Geologist Professional Engineer



SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name: Silver Maple Wind Applicant Name: _____ Project Location (municipality): Clifton

Exploration Symbol # A1 Test Pit Boring Probe
7 " Organic horizon thickness Ground surface elev. _____
96 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0			7.5Y 5/2	
Bhs	grav silo	very friable	7.5YR 3/4	none
10		friable	7.5YR 4/6	↓
20				
BC	grav + cobb silo	firm	2.5Y 5/4	netted
30				
C	(crins of cos sand)		2.5Y 4/3	
40				
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor 22 Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: peru Hydric Non-hydric Hydrologic _____ Soil Group _____

Exploration Symbol # A2 Test Pit Boring Probe
5 " Organic horizon thickness Ground surface elev. _____
72 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0			7.5Y 5/2	
Bhs	grav silo	v fr	7.5YR 3/4	none
10		friable	7.5YR 4/6	↓
20				
BC	grav + cobb silo	firm	2.5Y 4/3	10YR 4/6 c,f
30				
C	silo w/ cos s	very firm		
40				
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor 25 Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: peru Hydric Non-hydric Hydrologic _____ Soil Group _____

Exploration Symbol # A3 Test Pit Boring Probe
6 " Organic horizon thickness Ground surface elev. _____
16 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0			7.5YR 2.5/3	
Bhs	grav silo	v fr friable	7.5YR 3/3	none
10		firm	2.5Y 5/6	moist
20				
30				
40				
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor 11/16 Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: lyman Hydric Non-hydric Hydrologic _____ Soil Group _____

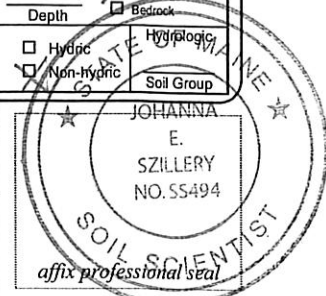
Exploration Symbol # A4 Test Pit Boring Probe
3 " Organic horizon thickness Ground surface elev. _____
72 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0			7.5YR 5/2	
Bhs	grav silo	v fr	7.5YR 3/3	none
10		friable	7.5YR 4/6	↓
20				
30	v. grav + cobb silo	firm	2.5Y 5/4	10YR 5/6 c,f
40		v. firm		
50				
60				

Soil Details by S.E. Soil Classification _____ Slope _____ Limiting Factor 26 Groundwater Restrictive Layer Bedrock
 Profile _____ Condition _____ Percent _____ Depth _____
 S.S. Soil Series/Phase Name: peru Hydric Non-hydric Hydrologic _____ Soil Group _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Johanna Szillery Date: 9/4 9/12
 Name Printed: Johanna Szillery Cert/Lic/Reg. #: CSS 494
 Title: Licensed Site Evaluator Certified Soil Scientist Certified Geologist Professional Engineer



SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name: Silver Maple Wind Applicant Name: _____ Project Location (municipality): Clifton

Exploration Symbol # A5 Test Pit Boring Probe
7 " Organic horizon thickness Ground surface elev. _____
72 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0	grav SL	v. fri.	7.5YR5/2	
10			7.5YR3/3	none
20	grav SL	frable	10YR4/6	
30				
40	v. cobb cas SL	firm	2.5Y4/4	mott. 10YR4/6 cf

Soil Classification: _____ Slope: _____ Limiting Factor: 27 Groundwater
 Restrictive Layer
 Bedrock
 Profile: _____ Condition: _____ Percent: _____ Depth: _____
 Soil Series/Phase Name: peru Hydric Non-hydric Hydrologic: _____
 Soil Group: _____

Exploration Symbol # A6 Test Pit Boring Probe
4 " Organic horizon thickness Ground surface elev. _____
36 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0	grav SL	fr	7.5YR4/4	none
10			10YR4/6	
20				
30	v. grav + cobb SL	firm	2.5Y4/3	mott.
40		very firm		
50	machine refusal 36" (very firm/dense only?)			

Soil Classification: _____ Slope: _____ Limiting Factor: 17 Groundwater
 Restrictive Layer
 Bedrock
 Profile: _____ Condition: _____ Percent: _____ Depth: _____
 Soil Series/Phase Name: Colonel Hydric Non-hydric Hydrologic: _____
 Soil Group: _____

Exploration Symbol # A7 Test Pit Boring Probe
4 " Organic horizon thickness Ground surface elev. _____
50 " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0	grav SL	fr	7.5YR3/3	none
10			7.5YR4/6	
20				
30	very grav + cobb SL	firm	2.5Y4/3	10YR5/6 cf
40		very firm		
50	machine refusal 50" (very firm/dense?)			

Soil Classification: _____ Slope: _____ Limiting Factor: 24 Groundwater
 Restrictive Layer
 Bedrock
 Profile: _____ Condition: _____ Percent: _____ Depth: _____
 Soil Series/Phase Name: peru Hydric Non-hydric Hydrologic: _____
 Soil Group: _____

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Classification: _____ Slope: _____ Limiting Factor: _____ Groundwater
 Restrictive Layer
 Bedrock
 Profile: _____ Condition: _____ Percent: _____ Depth: _____
 Soil Series/Phase Name: _____ Hydric Non-hydric Hydrologic: _____
 Soil Group: _____

INVESTIGATOR INFORMATION AND SIGNATURE

Signature: Johanna Szillery Date: 9/14 9/12/20
 Name Printed: Johanna Szillery Cert/Lic/Reg. #: 494
 Title: Licensed Site Evaluator Certified Soil Scientist Certified Geologist Professional Engineer

