RECORD OF BOREHOLE: BH-1

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/06/2018
END DATE: 02/06/2018
BORING METHOD: 116 mm Solid Stem Auger
CONTRACTOR: Nova Drilling Inc.

PENETRATION TEST HAMMER, 64kg; DROP, 760mm
SAMPLER HAMMER, 64kg; DROP, 760mm

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	BLOWS	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE								
FILL Gravelly Sand, grey, moist, loose	0.00							
Sand, trace silt, some rock fragments, brown, moist, compact	-1.70	1	SS	8				
SILTY SAND TILL some gravel, some clay, reddish brown, moist to wet, compact	-2.20	2	SS	14				
		3	SS	17				
		4	SS	16				
		5	SS	17				
dense	-4.07	6	SS	37				
		7	SS	37				
CLAYEY SILT TILL some sand, trace to some gravel, grey, moist to wet, hard	-5.70	8	SS	76				
		9	SS	50/0.08				
End of Borehole	-6.21							

Notes:
1. Free water was observed at 3.2 m below existing ground surface at the completion of drilling.
2. Borehole was open to 4.1 m below existing ground surface at the completion of drilling.
3. Borehole location was daylighted to 1.5 m below existing ground surface and backfilled on 01/28/2018.

Auger Grinding

Well Spoon - Auger Grinding

Auger Grinding

WATER LEVEL RECORD: 02/06/2018 ▽

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: BH-2

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/06/2018
END DATE: 02/06/2018
BORING METHOD: 116 mm Solid Stem Auger
CONTRACTOR: Nova Drilling Inc.

PENETRATION TEST HAMMER, 64kg; DROP, 760mm
SAMPLER HAMMER, 64kg; DROP, 760mm

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	BLOWS	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE								
FILL Gravelly Sand, grey, moist, loose; Sandy Silt, trace rootlets, trace gravel, reddish brown, moist, loose	0.00							
SILTY SAND TILL some gravel, reddish brown, trace black stains, moist, loose	-0.76	1	SS	9				
		2	SS	8				
compact to dense	-1.50	3	SS	19				
		4	SS	22				
		5	SS	47				
		6	SS	24				
		7	SS	37				
GRAVELLY SAND reddish brown, wet, dense	-5.10	8	SS	50				
SANDY CLAYEY SILT TILL trace gravel, trace rock fragments, reddish brown, moist, hard	-5.40	9	SS	50/0.08				
End of Borehole	-5.50							

Notes:
1. Free water was observed at 2.2 m below existing grade at the completion of drilling.
2. Borehole was open to 3.4 m below existing grade at the completion of drilling.

Well Spoon

WATER LEVEL RECORD: 02/06/2018 ▽

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-6

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	0.00						
FILL Sandy Silt, trace organics, trace rootlets, trace gravel, reddish brown, moist	-0.30						
SILTY SAND TILL some gravel, reddish brown, trace organics, trace rootlets, reddish brown, moist	-0.61	1	grab				
		2	grab				
		3	grab				
Clayey, some gravel, some rock fragments	-2.41	4	grab				
End of Test Pit	-2.65						

Notes:
1. Excavator refusal occured at 3.5 m below existing ground surface.
2. Wet pit walls were observed at 1.4 m below existing ground surface at the completion of excavation.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-7

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	0.00						
FILL Sand, trace organics, trace rootlets, brown	-0.20						
SILTY SAND TILL some clay, some gravel, reddish brown, moist	-0.61	1	grab				
		2	grab				
		3	grab				
		4	grab				
		5	grab				
End of Test Pit	-1.65						

Note:
1. Wet pit walls were observed at 1.2 m below existing ground surface at the completion of excavation.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-8

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	0.00						
SILTY SAND TILL some clay, trace gravel, trace oxidation, reddish brown, moist	-0.30	1	grab				
		2	grab				
no oxidation, some gravel	-2.50	3	grab				14 52 27 7
		4	grab				
End of Test Pit	-3.00						

Notes:
1. Wet pit walls were observed at 1.0 m below existing ground surface at the completion of excavation.
2. At 4.0 m below existing ground surface the pit walls caved in.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-9

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	0.00						
FILL Sand, some silt, trace gravel, trace organics, trace rootlets, reddish brown	-0.30	1	grab				
SILTY SAND TILL some clay, trace gravel, reddish brown, moist	-1.90	2	grab				
		3	grab				
some clay to clayey, cobbles		4	grab				
		5	grab				
End of Test Pit	-4.10						

Notes:
1. Wet pit walls were observed at 0.3 m below existing ground surface at the completion of excavation.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-10

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	0.00						
FILL Sand, trace gravel, trace silt, reddish brown	-0.30	1	grab				
SILTY SAND TILL trace gravel, reddish brown, moist	-0.76	2	grab				
		3	grab				
		4	grab				
some gravel, trace clay	-3.70	5	grab				
		6	grab				
End of Test Pit	-4.10						

Notes:
1. Excavator bucket grinding occured at 4.0 m below existing ground surface.
2. Freewater was not observed at the completion of excavation.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-11

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	0.00						
SILTY SAND trace gravel, reddish brown, moist	-0.20						
SILTY SAND TILL some gravel, some clay, reddish brown, moist	-0.61	1	grab				
		2	grab				
		3	grab				
moist to wet	-2.90	4	grab				13 45 (42)
		5	grab				
End of Test Pit	-4.60						

Notes:
1. Wet pit walls were observed at 1.1 m below existing ground surface at the completion of excavation.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-12

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	-0.30						
SILTY SAND TILL trace organics, trace gravel, brown, moist	-0.76	1	grab				
		2	grab				
trace black staining	-1.40	3	grab				
		4	grab				
End of Test Pit	-3.00						

Note:
1. Freewater was not observed at the completion of excavation.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP

RECORD OF BOREHOLE: TP-13

PROJECT: Canadian Coast Guard College
LOCATION: 1190 Westmount Rd. Sydney, NS
AECOM PROJECT No.: 60563670
CLIENT: Public Services and Procurement Canada

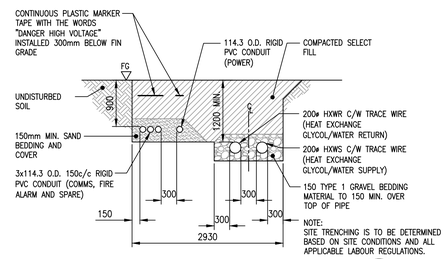
START DATE: 02/09/2018
END DATE: 02/09/2018
CONTRACTOR: B. Curry & Sons Construction Ltd.

SHEET 1 OF 1

DESCRIPTION	ELEV. (m)	DEPTH (m)	SAMPLE NUMBER	TYPE	COMBUSTIBLE VAPOUR CONCENTRATION (%LEL)	WATER CONTENT (%)	REMARKS & GRAIN SIZE DISTRIBUTION (%)
GROUND SURFACE							
TOPSOIL / ORGANICS 300 mm thick, black	-0.30						
FILL Sand, some gravel, trace silt, reddish brown, moist	-0.76	1	grab				
SILTY SAND TILL some clay, trace gravel, brown, moist	-1.90	2	grab				
		3	grab				
End of Test Pit	-2.90						

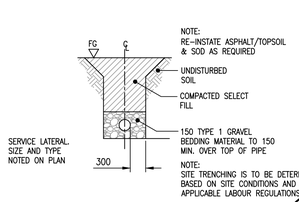
Note:
1. At 2.0 m below existing ground surface, the pit walls continued to cave in.

(LOG TO BE READ IN CONJUNCTION WITH REPORT)
DEPTH SCALE 1 : 50
LOGGED BY: JL
CHECKED BY: SP



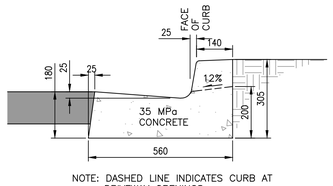
TYPICAL JOINT USE TRENCH (A/1)

SCALE: 1:50



SERVICE LATERAL TRENCH (B/1)

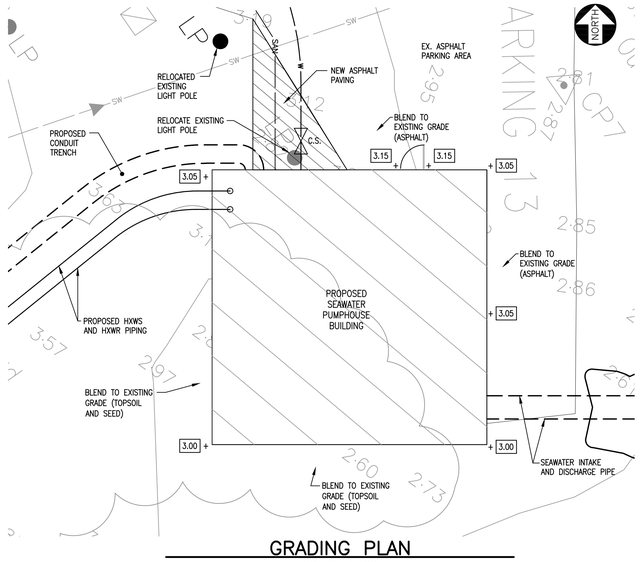
SCALE: 1:50



NOTE: DASHED LINE INDICATES CURB AT DRIVEWAY OPENINGS.

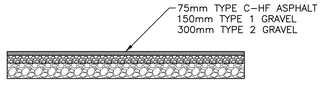
CONCRETE CURB AND GUTTER

SCALE : 1:10



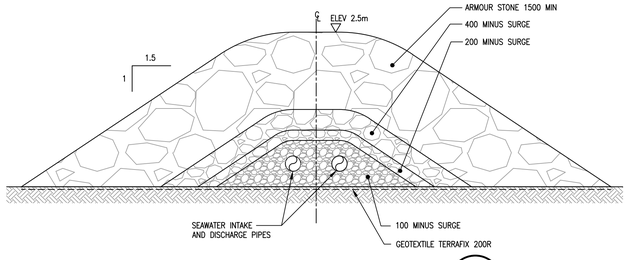
GRADING PLAN

SCALE : 1:300



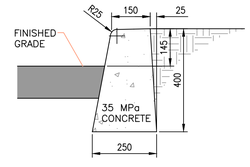
DETAIL – ASPHALT REINSTATEMENT (D/1)

SCALE : 1:50



SHORELINE PROTECTION (C/1)

SCALE: 1:50



ASPHALT PAVEMENT CUT AREA

SCALE : 1:10

PWGSC B1 (2004)

E-DRM/GDD-E: 538447

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GENERAL NOTES

GEOTECHNICAL INFORMATION PROVIDED BY PWGSC: GEOTECHNICAL INVESTIGATION IN SUPPORT OF THE MECHANICAL UPGRADE PROJECT – CANADIAN COAST GUARD COLLEGE (CCGC), SYDNEY, NOVA SCOTIA, MARCH, 2018

revisions		date
0	Issued for Tender	06/29/18

project / projet
CANADIAN COAST GUARD COLLEGE, SYDNEY, NS MECHANICAL & SPRINKLER UPGRADES

drawing / dessin
PROPOSED SEAWATER PUMPHOUSE BUILDING GRADING PLAN AND TYPICAL DETAILS

designed / conçu: CDH/SDM
date: 06/29/18
drawn / dessiné: CDH
date: 06/29/18
approved / approuvé: SDM
date: 06/29/18
Tender / Soumission: Joan Muise, PWGSC Project Manager / Administrateur de projets TPSGC
project number / no. du projet: R.065476.711
drawing no. / no. du dessin: C–102