

File No.: 04-1000-20-2025-558

October 10, 2025

s.22(1)

Dear s.22(1)

Re: Request for Access to Records under the Freedom of Information and Protection of Privacy Act (the "Act")

I am responding to your request of August 20, 2025 under the *Freedom of Information and Protection of Privacy Act* for:

Record of the following reports in regards to the Vancouver Aquatic Centre Project:

- 1. Archaeologic impact assessments;
- 2. Geotechnical bore-hole logs;
- 3. Shoring engineering reports; and
- 4. Class B cost comparisons for 50 m versus 25 m options.

Date range: August 1, 2023 to February 28, 2025.

All responsive records are attached*.

*Please note, Real Estate & Facilities Management staff have advised our office that there are no records responsive to points one, three, and four.

Under Part 5 of the Act, you may ask the Information & Privacy Commissioner to review any matter related to the City's response to your FOI request by writing to: Office of the Information & Privacy Commissioner, info@oipc.bc.ca or by phoning 250-387-5629.

If you request a review, please provide the Commissioner's office with: 1) the request number (2025-558); 2) a copy of this letter; 3) a copy of your original request; and 4) detailed reasons why you are seeking the review.



Yours truly,

[Signed by Cobi Falconer]

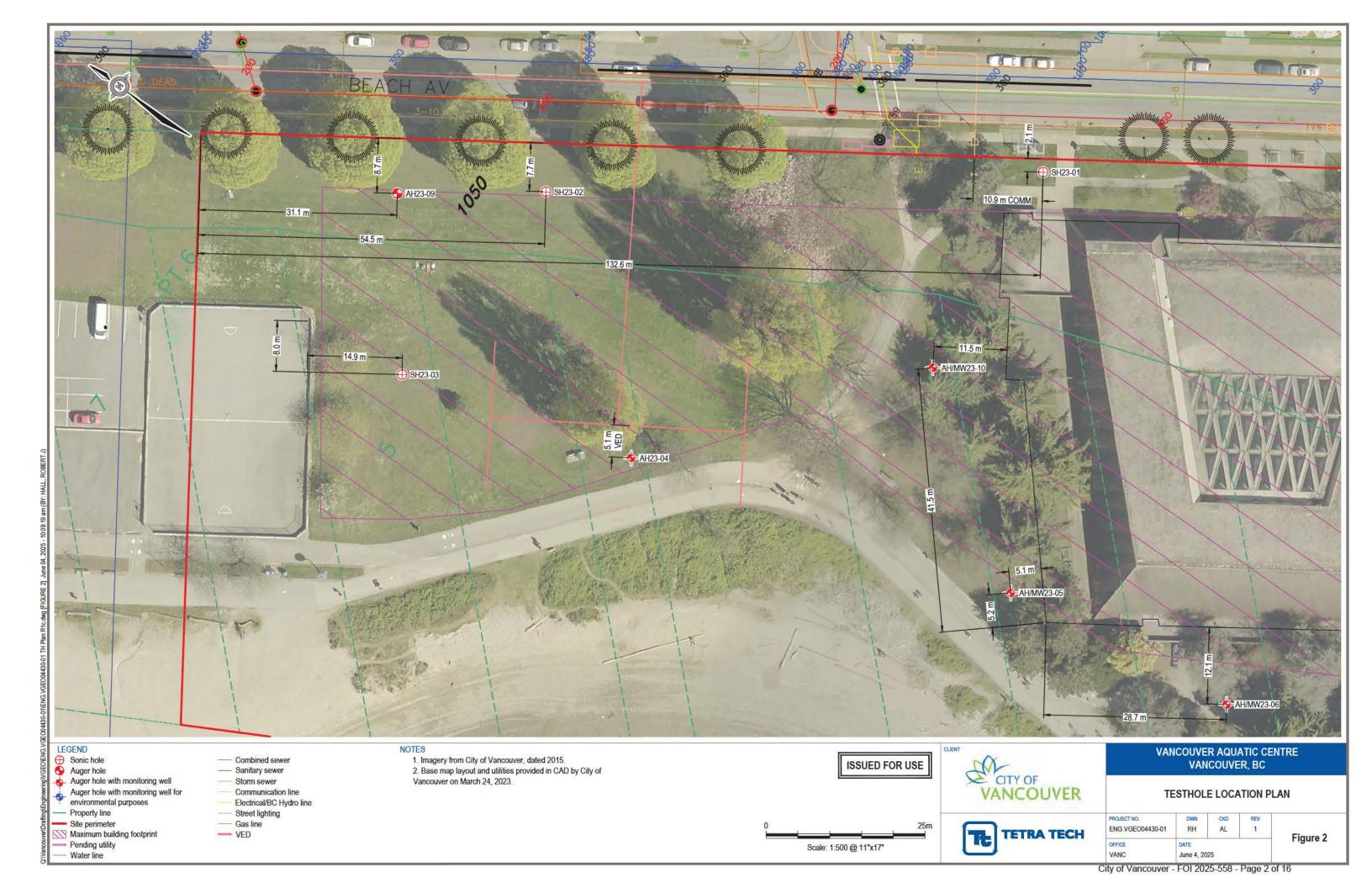
Cobi Falconer, MAS, MLIS, CIPP/C Director, Access to Information & Privacy

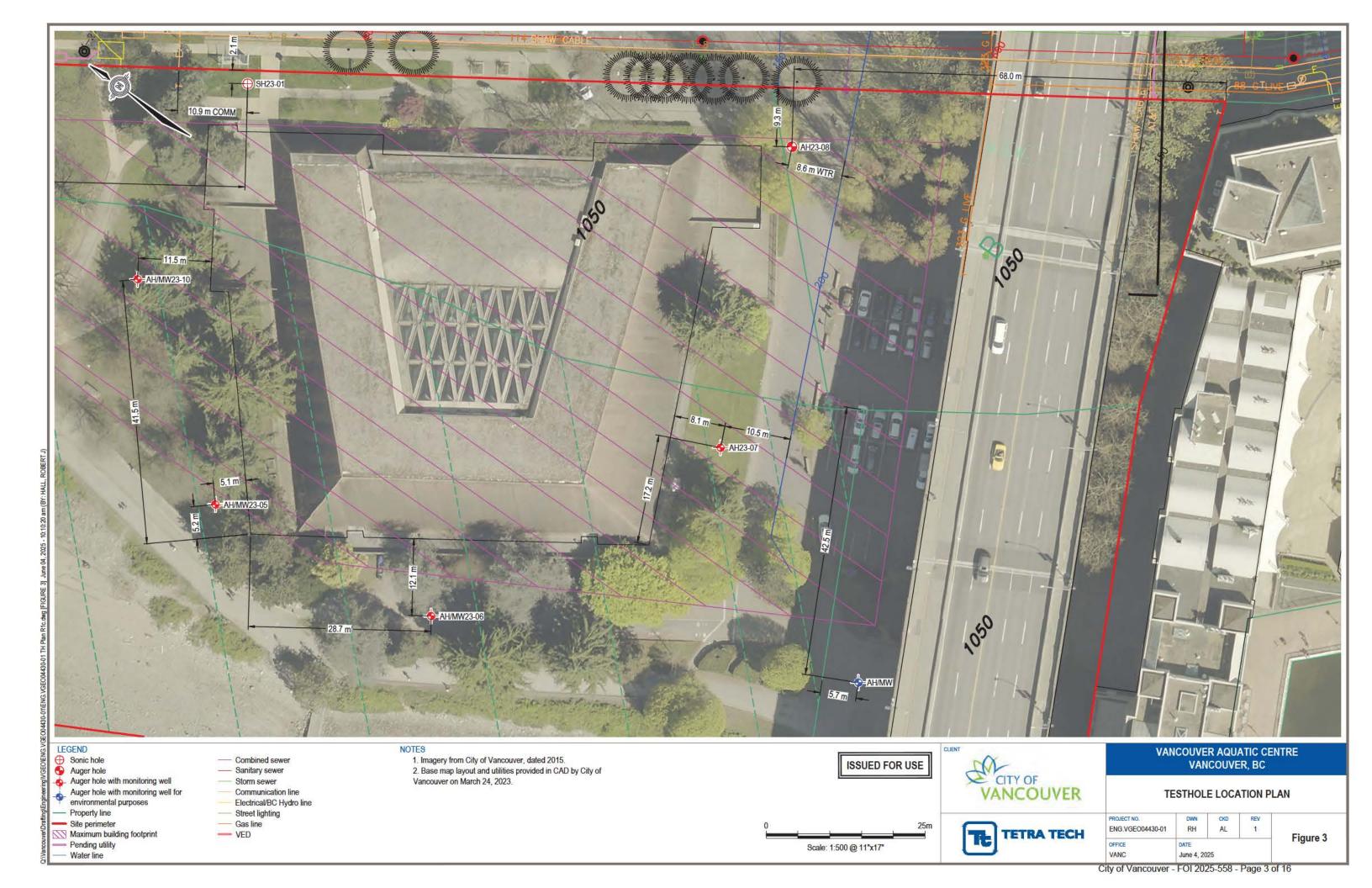
If you have any questions, please email us at foi@vancouver.ca and we will respond to you as soon as possible. You may also contact 3-1-1 (604-873-7000) if you require accommodation or do not have access to email.

Encl. (Response Package)

:kt









Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

Vancouver, BC UTM: 490158 E; 5458283 N; Z

Soil Description Soil Description Soil Description Tolkoll, seek, losse, brown, presented of notes and expenditure to the first three three to the first three three to the first three				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Vanco	ouver,	ВС								UTN	1: 49015	8 E; 54	158283 I	N; Z		
TOPSOILL sendy, loose, brown, presence of notis and vegetation. SAND price gravel, wel, porty graded, send, porty graded, send, but to 19 mm diameter. - presence of brick fragments below 0.6 m depth. - SPT-01 (11/50) at 1.5 m depth; Refusal at 6.03 m depth. SAND price gravel, well graded, well, dense, grey fine to coarse send, fine to brick fragments. SAND graded, the gravel graded, well, dense, grey fine to coarse gravel, explored graded, send, dense, deserving dense, deserving grey, fine send; coarse gravel, application of graded, graded, well, dense, grey fine to coarse gravel, application of graded, graded, well, dense, grey fine to coarse gravel, graded, well, dense, grey graded, damp, and graded, well, dense, grey graded, graded, well, dense, grey fine to coarse gravel, gub reports graded, gr			. (mm)		1	sentation	nber			ibutio Sil	n It &									_	
TOPSOIL, sandy, losse, brown, presence of nock and vegetation. SexND (FILL), sity, some gravel, wet, poorly graded, compact, brown, fire to medium sand; fire gravel up to 19 mm diameter. - presence of brick flagments below 0.6 m depth. - SPT-01 (1150) at 1.5 m depth; Refusal at 6.03 m depth. - SPT-01 (1150) at 1.5 m depth; Refusal at 6.03 m depth. - SPT-02 (1150) at 1.5 m depth; Refusal at 6.03 m depth. - SPT-03 (1016) at 1.5 m depth; Refusal at 6.03 m depth. - SPT-04 (1243925) at 3.0 m depth - SPT-05 (1150) at 1.5 m depth. - SPT-05 (1150) at 1.5 m depth. - SPT-05 (1150) at 1.5 m depth. - SPT-06 (1150) at 1.5 m depth. - SPT-07 (1150) at 1.5 m depth. - SPT-08 (1150) at 1.5 m depth. - SPT-09 (1150) at 1.5		Method	Core Diameter		-	Grapnical Repres	Sample Nun	Gravel (%)	Sand (%)				SPT		,	Plasi Lim	⇒ 20 tic M it C	oisture ontent	40 Liquid Limit	SH23-0	Depth
SPT-04 (13/45/50) at 6.1 m; Refusal at 6.52 m depth SPT-04 SAND and SILT (TILL-LIKE), occasional gravel and cobbles, poorly graded, wet, dense to very dense, grey; fine sand; coarse gravel, sub-angular, spherical up to 50 mm diameter. - boulder, 600 mm diameter detected at 7.0 m depth. SPT-05 SAND (TILL-LIKE), sity to some sit, occasional gravel, poorly graded, damp, very dense, grey to light gravel, poorly graded, damp, very dense, grey to light grey; fine sand; fine gravel up to 8 mm diameter.				vegetation. SAND (FILL), silty, some gravel, wet, poorly graded, compact, brown; fine to medium sand; fine gravel to 19 mm diameter. - presence of brick fragments below 0.6 m depth. - SPT-01 (11/50) at 1.5 m depth; Refusal at 6.03 m depth. SAND (FILL), silty, some gravel, poorly graded, damy dense, dark brown to grey; fine to coarse sand; fin	up ,		SPT-0	1	57	2	29	20				•	•				
SAND and SILT (TILL-LIKE), occasional gravel and cobbles, poorly graded, wet, dense to very dense, grey, fine sand; coarse gravel, sub-angular, spherical up to 50 mm diameter. SPT-04 SSPT-04 SSPT-04 SSPT-04 SSPT-05 SAND and SILT (TILL-LIKE), occasional gravel and cobbles, poorly graded, wet, dense to very dense, grey, fine sand; from diameter. SSPT-05 S				brick fragments. - SPT-02 (21/39/25) at 3.0 m depth SAND, silty, some gravel, well graded, wet, dense, gravel, to coarse sand; fine gravel, angular to	rey;		N>50									•					0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SAND and SILT (TILL-LIKE), occasional gravel and cobbles, poorly graded, wet, dense to very dense, grey; fine sand; coarse gravel, sub-angular, spherical up to 50 mm diameter. - boulder, 600 mm diameter detected at 7.0 m depth. GS-05 0 51 49 GS-05 0 51 49 - SPT-05 (49/50) at 9.1 m; Refusal at 9.35 m depth SAND (TILL-LIKE), silty to some silt, occasional gravel, poorly graded, damp, very dense, grey to light grey; fine sand; fine gravel up to 8 mm diameter.		Sonic drilling		- SPT-03 (10/16/27) at 4.6 m depth SILT, sandy , trace gravel, poorly graded, stiff to very stiff, damp; fine to medium sand; fine to coarse			N =43	5	35	6	60					•					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
- SPT-05 (49/50) at 9.1 m; Refusal at 9.35 m depth SAND (TILL-LIKE), silty to some silt, occasional gravel, poorly graded, damp, very dense, grey to light grey; fine sand; fine gravel up to 8 mm diameter.	AM)' \		9	SAND and SILT (TILL-LIKE), occasional gravel and cobbles, poorly graded, wet, dense to very dense, grey; fine sand; coarse gravel, sub-angular, spheri up to 50 mm diameter.	cal		N>50														MV.
- SPT-05 (49/50) at 9.1 m; Refusal at 9.35 m depth SAND (TILL-LIKE), silty to some silt, occasional gravel, poorly graded, damp, very dense, grey to light grey; fine sand; fine gravel up to 8 mm diameter.	2023-10-11 (8:40		101.				GS-05	5 0	51	4	 9 					•					2023-10-11 (8:40
				SAND (TILL-LIKE), silty to some silt, occasional grave poorly graded, damp, very dense, grey to light gre	el, \$3		N>50						[]		•					٥
				TETPATECH	Equip	ment	Type:	Max	Soni	ic Dri	lling				Star	Date: 2	023 O	ctober 1	0		



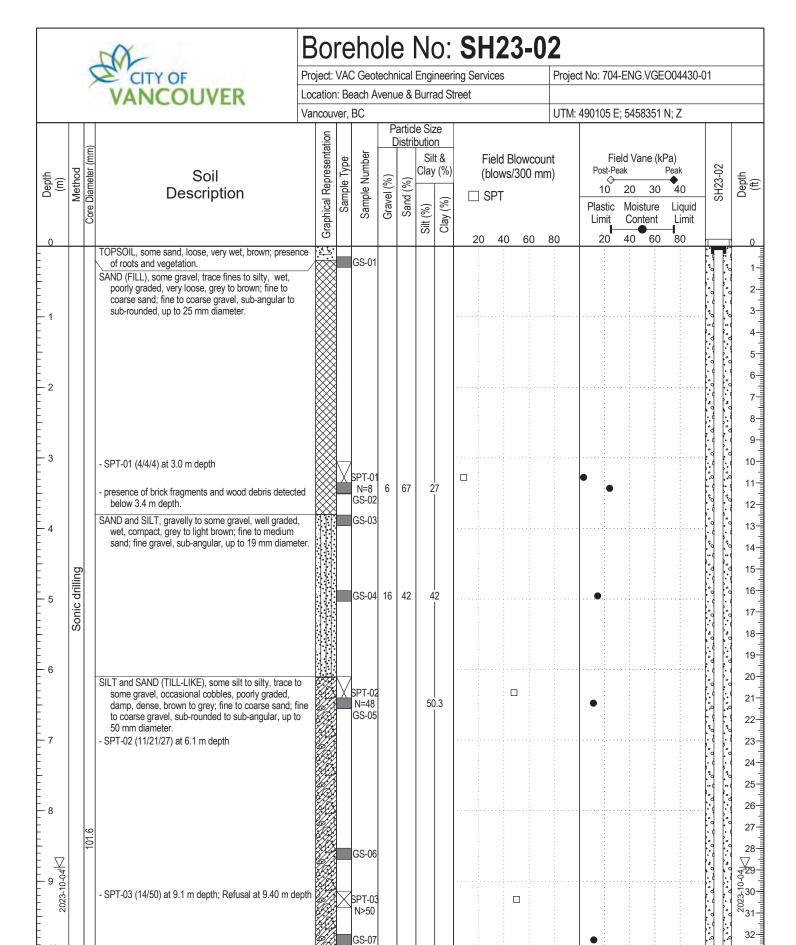
Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

Vancouver, BC UTM: 490158 E; 5458283 N; Z

	m)		ntation		₩.			le Siz	n	E: 11E			-1-11/-	/I-F	1-1		
o (m) Method	Core Diameter (mm)	Soil Description	Graphical Representation	Sample Type	Sample Number	Gravel (%)	Sand (%)	Clav	Clay (%)	Field E (blows.		Plastic Limit 20	eak 20 Mois	30	/a) Peak 40 Liquid Limit 80	SH23-01	Depth
1 2 Dulliup sidos	8	SANDSTONE, highly weathered, extremely weak, very thinly bedded, grey, medium grained, grey bedrock recovered as pulverized rock due to drilling effort at 11.0 m depth. - moderately weathered, very weak rock below 12.2 m depth. - slightly weathered rock below, weak rock below 13.7 m depth.			GS-07												
7 8 8		END OF SONIC HOLE AT 15.2 m DEPTH. - Soil descriptions, consistency, and density are based on visual classifications, field observations and testing, drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected. - Upon completion of drilling, a PVC casing consisting of a 50 mm diameter Schedule 40 PVC pipe was installed to the bottom of the testhole for completing Downhole Seismic Test. - Water level measured in drill casing before the PVC casing installation. - UTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS.	of										:	:		,,,0	







Contractor: Downrite Drilling

Equipment Type: Max Sonic Drilling

Start Date: 2023 October 5

Logged By: FH

Completion Date: 2023 October 6

Reviewed By: AL

Page 1 of 2



Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

Vapouror BC

LITM: 400105 F: 5458351 N: 7

		\	/ancou	iver,	ВС							UTM:	490105	E; 54	158351	N; Z		
O (m) Method	Core Diameter (mm)	Soil Description	Graphical Representation	Sample Type	Sample Number	Distri	Clav		Field E (blows SPT	/300	mm)		Post- < 10	Peak 20 ic Mo	Vane (kl	Peak 40 Liquid Limit 80	SH23-02	Depth (ft)
11 12 bulling juos 14 15 16		- contains cobbles up to 250 mm diameter below 10.7 m depth recovered pulverized rock due to drilling effort between 10.7 m and 11.1 m depth SANDSTONE, highly weathered, extremely weak, thinly bedded, grey, fine to medium grained, grey bedrock recovered as pulverized rock due to drilling effort at 11.1 m depth - moderately weathered, very weak rock below 12.2 m depth - slightly weathered to fresh rock, weak rock below 13.4 m depth	y		GS-08													33- 34- 35- 36- 37- 38- 39- 40- 41- 42- 43- 44- 45- 46- 46- 46- 50- 51- 51- 52- 53- 54- 55- 55- 55-
17 18 19 20		 END OF SONIC HOLE AT 16.8 m DEPTH. Soil descriptions, consistency, and density are based on visual classifications, field observations and testing, drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected. Upon completion of drilling, a PVC casing consisting of a 50 mm diameter Schedule 40 PVC pipe was installed to the bottom of the testhole for completing Downhole Seismic Test. Water level measured in drill casing before the PVC casing installation. UTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS. 	of									2			16.8 m			55 56 57 58 59 60 61 62 63 64 65





Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGE004430-01

Location: Beach Avenue & Burrad Street

$\top \top$			000000	, BC						UTM:	490066 I	Ξ; 5458346	N; Z		
(m) Method Core Diameter (mm)			Graphical Representation	Sample Number			e Siz bution Silt Clay (%)	1 : &	Blowco s/300 r		Fi Post-P \$\triangle 10 Plastic Limit \$\mathbb{H}\$	20 30	Pa) Peak 40 Liquid Limit 80	SH23-03	Depth
2023-10-11 √ Sonic drilling 101.6	SANDSTONE, highly weathered, extremely weak bedded, grey - bedrock recovered as pulverized rock due to dril effort at 4.9 m depth	e to 38 mm epth.		SPT-0: N=5 GS-01 SPT-0: N=14 GS-02 GS-03 SPT-0: N>50 GS-04	2 6	83		1							
	Soil descriptions, consistency, and density are be on visual classifications, field observations and testing, drill performance, and laboratory testing Some variation through the interpreted soil lay.	d ng.													3





Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

Vancouver BC

LITM: 490066 F: 5458346 N: 7

				Vanco	ıver,	BC								UTM:	490066 I	Ξ; 5458346	N; Z		
				tion			F [artic Distri	le Siz butio	ze n									
(m)	Method	neter (mm)	Soil	presenta	Sample Type	Sample Number			Si	It & / (%)			lowco 300 m		Fi Post-P \$ 10	eld Vane (k _{eak}	Peak	3-03	Depth
u L	Met	Core Diameter (mm)	Description	Graphical Representation	Sampl	Sample	Gravel (%)	Sand (%)	Silt (%)	Clay (%)		SPT			Plastic Limit	Moisture Content	Liquid Limit	SH23-03	De
10		Н	expected.		+						20	40	60	80	20	40 60	80		3
			 Upon completion of drilling, a PVC casing consisting a 50 mm diameter Schedule 40 PVC pipe was 																3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 5 5 5 5
			installed to the bottom of the testhole for completing Downhole Seismic Test.																3
11			- UTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS .																3
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20				Contra												pth: 9.2 m			





Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

Vancouver, BC

UTM: 490083 E: 5458316 N: Z

TOPSOIL, very loose, brown, presence of roots and SAND (FILL), some silt to silty, some gravel, occasi fragments, well graded, dry to damp, loose to cobrown; fine to coarse sand; fine to coarse gravel mm diameter. - presence of brick and asphalt fragments below 0.9 - becomes damp below 1.5 m depth. - silty, poorly graded, loose below 2.1 m depth. - silty, poorly graded, loose below 2.1 m depth. - Target depth not achieved due to conflict with met (debris/inactive pipe) on site of the auger hole Soil descriptions, consistency and density are basis	-	Graphical Representation	Sample Type	Sample Number		Distrik			Field Blo (blows/3			Post-Po	eld Var		'a) [⊃] eak	
TOPSOIL, very loose, brown, presence of roots and SAND (FILL), some silt to silty, some gravel, occasi fragments, well graded, dry to damp, loose to co brown; fine to coarse sand; fine to coarse gravel mm diameter. - presence of brick and asphalt fragments below 0.9 - becomes damp below 1.5 m depth. - silty, poorly graded, loose below 2.1 m depth. END OF AUGER HOLE AT 3.0 m DEPTH. DCPT completed at a depth of 4.7 m. - Target depth not achieved due to conflict with met (debris/inactive pipe) on site of the auger hole.	-		Sample Type	ample Number			Sil	t &				Post-Po				
TOPSOIL, very loose, brown, presence of roots and SAND (FILL), some silt to silty, some gravel, occasi fragments, well graded, dry to damp, loose to co brown; fine to coarse sand; fine to coarse gravel, mm diameter. - presence of brick and asphalt fragments below 0.9 - becomes damp below 1.5 m depth. - silty, poorly graded, loose below 2.1 m depth. END OF AUGER HOLE AT 3.0 m DEPTH. DCPT completed at a depth of 4.7 m. - Target depth not achieved due to conflict with met (debris/inactive pipe) on site of the auger hole.	-		Sampl	ample	<u></u>						,	. ♦			•	Depth
TOPSOIL, very loose, brown, presence of roots and SAND (FILL), some silt to silty, some gravel, occasi fragments, well graded, dry to damp, loose to co brown; fine to coarse sand; fine to coarse gravel, mm diameter. - presence of brick and asphalt fragments below 0.9 - becomes damp below 1.5 m depth. - silty, poorly graded, loose below 2.1 m depth. - silty, poorly graded, loose below 2.1 m depth. - Target depth not achieved due to conflict with met (debris/inactive pipe) on site of the auger hole.	-		- 1	ιχ	Grave	Sand (%)	Silt (%)	Clay (%)	O DCPT			10 Plastic Limit	Mois Cont		40 Liquid Limit	. De
SAND (FILL), some silt to silty, some gravel, occasi fragments, well graded, dry to damp, loose to co brown; fine to coarse sand; fine to coarse gravel. mm diameter. - presence of brick and asphalt fragments below 0.9 - becomes damp below 1.5 m depth. - silty, poorly graded, loose below 2.1 m depth. END OF AUGER HOLE AT 3.0 m DEPTH. DCPT completed at a depth of 4.7 m. - Target depth not achieved due to conflict with met (debris/inactive pipe) on site of the auger hole.	-	1 14.						_	20 40	60	80	20	40	60	80	1
DCPT completed at a depth of 4.7 m. - Target depth not achieved due to conflict with met (debris/inactive pipe) on site of the auger hole.	ompact, dark I, up to 50			GS-01 GS-02 GS-03		55	2	8				•				1 1 1 1
classification, field observations and testing, drill performance, and laboratory testing. Some varia the interpreted soil layers is expected. - Auger hole dry at the bottom drilling depth. - Upon completion of drilling the testhole was backfing drilling cuttings and bentonite pellets. - UTM coordinates are approximate (+/- 5 m) and we using a handheld GPS.	sed on visual I ation through															1 1 1 1 1 1 2 2
9																2 2 2 2 2 2 2 3 3 3 3 3
0			- 1													



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		5	CITY OF	Pr	oje	ct: VA	C Ge	eotec	chnic	al E	ngineering Services	Project No: 704-ENG.VGEO04430-01
		1	VANCOUVER	Lo	cat	ion: B	each	Ave	nue	& Bı	urrard Street	
				Va	anco	ouver,		Partic	In C		1	UTM: 490096 E; 5458251 N; Z
o Depth (m)	Method	Core Diameter (mm)	Soil Description	Graphical Representation	Sample Type	Sample Number		Distri	Si Cla	on ilt & y (%	(3.0.1.6, 3.3.1.1.1.1)	Field Vane (kPa) Post-Peak Peak 10 20 30 40 Plastic Moisture Liquid Limit Content Limit 20 40 60 80
- 2	Solid stem auger	152	TOPSOIL, very loose, brown, presence of roots and vegetation. SAND (FILL), some silt, some gravel, well graded, dry, compact, light brown to light yellow; fine to coarse sand; fine to coarse gravel, elongated, sub-rounded, up to 50mm diameter. - presence of cobbles, occasional brick fragments below 1.4m depth. SAND (FILL), some silt, some gravel, poorly graded, dry, compact, brown, occasional brick fragments and wood debris; fine to coarse sand; fine gravel, spherical, subrounded, up to 2.5 mm diameter. SAND, silty, occasional gravel, loose to compact, moist, grey, hydrocarbon odour; fine to medium sand; coarse gravel, sub-rounded, spherical gravel, up to 30 mm diameter. SAND (TILL-LIKE), silty, some gravel, poorly graded, wet, compact, hydrocarbon odour; fine to medium sand; silt, low plastic, dark grey, firm; fine gravel, sub-rounded, spherical, 10 mm to 20 mm diameter.			GS-02 GS-03 GS-04 GS-05	3 4 6	59		335		
- 5 - 6 - 7			END OF AUGER HOLE AT 4.3 m DEPTH. DCPT completed to a depth of 4.3 m Soil descriptions, consistency and density are based on visual classification, field observations and testing, drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected Upon completion of drilling, a nested monitoring well was installed at this location consisting of a 50 mm diameter Schedule 40 PVC pipe with a 1.5 m slotted screen between 2.7 m and 4.3 m, and a vapor probe installed at 1.4 m depth. The well was completed at surface with a flush mount cover No water level observed upon installation of monitoring wellUTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS.									
10	ł		TETRA TECH	Ed	quip	actor: ment ed By:	Туре) Prill	Completion Depth: 4.3 m Start Date: 2023 October 4 Completion Date: 2023 October 4
	_					wed E		L				Page 1 of 1

			M	E	30	ore	h	0	le	1	lo: AH/MW	23-06		
		5	CITY OF	_							ngineering Services	Project No: 704-ENG.VGEO0	4430-01	
		1	VANCOUVER	Lo	cati	ion: Be	each	Ave	nue	& Bı	ırrard Street			
				Va	anco	ouver,		artic	lo Ci	70	T	UTM: 490105 E; 5458217 N; 2	<u>Z</u>	
o Depth (m)	Method	Core Diameter (mm)		Graphical Representation	Sample Type	Sample Number		Distri	Si Clay	on It & y (%)	(2.0.0.0,000)	Field Vane (kPa) Post-Peak Peak 10 20 30 40 Plastic Moisture Liquid Limit Content Limit 20 40 60 80	_ _ MW23-06	Depth (ft)
2023-10-03 (2:32 pm)	Solid stem auger	152	ASPHALT (150 mm). SAND (FILL), silty, some gravel, well graded, moist to wet, compact, black to brown, hydrocarbon odour; fine to coarse sand; coarse gravel, rounded, elongated, 25 mm to 40 mm diameter. SAND (FILL), silty, some gravel, poorly graded, wet to very wet, loose to compact, grey to brown; fine to coarse sand; coarse gravel up to 50 mm diameter. - hydrocarbon odour detected below 1.5 m depth.			GS-01 GS-02 GS-03	15	50	2	26				203-10-03 (2:32 PM)/ S
-3 8208	S		SAND and SILT, some gravel, quartz fragments, very wet, well graded, compact to dense, grey to dark grey, hydrocarbon odour; fine to medium sand; coarse gravel, sub-angular, spherical, up to 50 mm diameter. SAND, some silt, occasional gravel, well graded, very wet, dense, grey to dark grey, hydrocarbon odour; fine to coarse sand; fine gravel, sub-angular, elongated, up to 12 mm diameter.	***		GS-04 GS-05	13	45	2	14		•		12
5 - 6 - 7 - 7 - 8 9 10 - 10 - 10 - 10 - 10 - 10 -			END OF AUGER HOLE AT 4.9 m DEPTH. DCPT completed to a depth of 5.2 m. - Soil descriptions, consistency and density are based on visual classification, field observations and testing, drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected. - Upon completion of drilling, a nested monitoring well was installed at this location consisting of a 50 mm diameter Schedule 40 PVC pipe with a 1.5 m slotted screen between 1.6 m and 3.1 m, and a vapor probe installed at 1.2 m depth. The well was completed at surface with a flush mount cover. -UTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS.											21 23 24 25 26 27 28 30 31 32 29 33 32 24 32 32 32 32 32 33 33 32 33 33 33 33 34 34 34 34 34 34 34 34 34
10	_	_		C	ontra	actor:	L Dow	/nrite	Drill	 lina		Completion Depth: 4.9 m		
			TETRA TECH	-		ment					rill	Start Date: 2023 October 3		
	t	1	TETRA TECH			ed By:						Completion Date: 2023 Octob	er 4	
						wed E		ı				Page 1 of 1		



Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrard Street

Vancouver, BC.

LITM: 490154 F: 5458192 N: 7

			Vancouve	er, BC)							UTM: 4901	54 E; 5458	3192 N; Z		
				tion				articl Distrib								
(m) Method	Core Diameter (mm)	Soil		epresental	Sample Type	Sample Number			Sil	t & / (%)	Field Blo (blows/3		Post-P		Peak	Depth
Me	Core Diar	Description		Graphical Representation	Samp	Sample	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	O DCPT			Moisture	Liquid Limit	ا ۾ َ
<u>a</u>	+	TOPSOIL, some sand, loose, dark brown, presence of	roots and								20 40	60 80	20	40 60	80	
st (152	vegetation. SAND (FILL), some silt, occasional gravel, well graded compact to dense, brown; fine to coarse gravel, subto sub-angular, up to 30 mm diameter.	, moist, -rounded		1 1	GS-01										1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 Pilos	+	END OF AUGER HOLE AT 1.2 m DEPTH		\bowtie								D				-
		DCPT completed to a depth of 4.7 m. - Target depth not achieved due to presence of cobble depth.	s at 1.2 m													
2		 Auger hole dry at the bottom drilling depth. -UTM coordinates are approximate (+/- 5 m) and were using a handheld GPS. 	collected								ϕ					
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Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

		Vancou	ver, Bo	С						UTM: 490206 E; 5458167 N; Z	
			ation					le Si butio			
(m) Method	Core Diameter (mm)	Soil Description	Graphical Representation	Sample Type	Sample Number	(%) le	(%)	Cla	It & y (%)	10 20 30 40	Depth
2	Core D	Besonption	Graphical	San	Samp	Gravel (%)	Sand (%)	Silt (%)	Clay (%)		
		TOPSOIL, sandy, some gravel, damp, loose, brown; presence of roots.	<u> </u>							20 40 60 80 20 40 60 80	
		SAND (FILL), silty, some gravel, contains cobbles, poorly graded, dry to damp, compact, brown to yellow; fine to coarse sand; cobbles, sub-rounded, up to 80 mm diameter.			GS-01						
					GS-02	13	60	2	 27 	•	
		- presence of cobbles, up to 120 mm diameter below 1.8m depth.									
n auger		SAND (FILL), silty, some gravel, contains cobbles, damp, compact, yellow to light brown and grey; fine to coarse sand fine gravel, sub-rounded, up to 20 mm.			GS-03	3					
Solid stem	152									b p	
S		SILT and SAND, occassional gravel, damp, yellow to light brown, firm to stiff, non-plastic; fine to medium sand.			GS-04		46		50		
					GS-06	;					
		SAND, some gravel, occasional silt, grey, very dense, moist; fine to coarse sand; fine gravel, angular, up to 20 mm diameter.									
		SAND (TILL-LIKE), occasional silty lenses, grey to dark grey, well graded, very dense, damp; coarse sand. END OF AUGER HOLE AT 5.6 m DEPTH. DCPT completed at a depth of 5.4 m. - Soil descriptions, consistency and density are based on visual			GS-07	,					
		 classification, field observations and testing, drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected. Upon completion of drilling the testhole was backfilled with drilling cuttings and bentonite pellets. 									
		Auger hole dry at the bottom drilling depth. - UTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS.	t								
		Contrac	tor: Do	ownr	rite Dri	lling				Completion Depth: 5.64 m	





Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

Vancouver BC

LITM: 490096 F: 5458370 N: 7

			Vancou	ver, B	С						UTM: 49009	6 E; 5458370 N; Z	
			·	ion				artic Distril					
(m)	Method	Core Diameter (mm)	Soil Description	Graphical Representation	Sample Type	Sample Number	Gravel (%)	Sand (%)	Sil Clay	t & / (%)	(Siewerese minny	Field Vane (kPa) Post-Peak Peak 10 20 30 40	Depth
)		Core		Graphic	S	Sal	Gre	Sa	Silt (%)	Clay (%)	O DCPT 20 40 60 80	Plastic Moisture Liquid Limit Content Limit 20 40 60 80	
<u> </u>			TOPSOIL, sandy, some gravel, loose, brown, presence of roots	<u>, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,</u>							Q		
			SAND (FILL), some silt, some gravel, contains cobbles, compact, dry, yellow; fine to medium sand; coarse gravel, angular, elongated, up to 50 mm diameter; cobbles up to 10 mm. - presence of brick fragments, presence of organic matter from 1.2 m to 2.0 m in depth.	\otimes	××××××××××××××××××××××××××××××××××××××	GS-01 GS-02							
			- sand and silt, loose below 2.5 m depth.			GS-03 GS-04		61	3	38 		•	
	Solid stem auger	152				GS-05					0		
			SILT and SAND, trace gravel, poorly graded, very loose to loose, damp, green to grey, low plastic to non-plastic; fine to medium sand; coarse gravel, angular, up to 40 mm diameter	· .		GS-06	8	42	5	60 	0	•	
			- sand and silt, occasional gravel, compact to dense, light brown; fine to coarse sand below 6.1m depth.			GS-07			45	5.1		•	
			SAND (TILL-LIKE), some silt, well graded, very dense, grey to dark grey; fine to coarse sand. END OF AUGER HOLE AT 7.0 m DEPTH. DCPT completed at a depth of 7.9 m. - Soil descriptions, consistency and density are based on visual classification, field observations and testing, drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected. - Upon completion of drilling the testhole was backfilled with drilling cuttings and bentonite pellets. - Auger hole dry at the bottom drilling depth.			GS-08)	
0			 - UTM coordinates are approximate (+/- 5 m) and were collected using a handheld GPS. 	d									
			Contrac	tor: Do	ownr	rite Dri	lling				Completion	Depth: 7.01 m	
			TETDA TECLI Fauipm	ent Tv	ne: l	HY Au	aer [rill			Start Date: 2	023 October 4	



Project: VAC Geotechnical Engineering Services Project No: 704-ENG.VGEO04430-01

Location: Beach Avenue & Burrad Street

	Vancoi	uver,	ВС						UTM:	490128	E; 5458270	N; Z		
Method Ocio Diameter (mm) Description	Graphical Representation	Sample Type	Sample Number		Clav		Field Bi (blows/-			F Post-F \$\(\frac{1}{2}\) Plastic Limit \$\mathbb{I}\$	20 30 Moisture	Pa) Peak 40 Liquid Limit 80	ı	Depth (#)
TOPSOIL, sandy, very loose, brown, presence of rocand vegetation. SAND (FILL), some silt, occasional brick fragments a wood debris, poorly graded, dry to damp, loose to compact, light brown; fine to coarse sand; fine graelongated, subrounded, up to 10 mm diameter. - becomes damp, compact, yellow below 1.5 m dept	and avel,		GS-01 GS-02 GS-03			,							° - ° °	1 0 2 3 3 4 4 5 5 6 7 8 9 10 11 11 11 11 11 11 11 11 11 11 11 11
SAND (FILL), some gravel, poorly graded, dry, loose grey to yellow; fine to coarse sand, compact, grey fine gravel, up to 10 mm diameter. SAND (FILL), some silt, occasional brick fragments, poorly graded, damp, compact, yellow to light bro fine to coarse sand. - presence of concrete fragments, wood debris at 3.9 depth. SAND, some silt, some gravel, well graded, damp, compact, grey to dark brown; fine to coarse sand gravel, sub-rounded, up to 20 mm diameter.	y; wn; 0 m		GS-04 GS-05 GS-06	73	1	5_		D	>					12 ⁻ 13 ⁻ 14 ⁻ 15 ⁻
SAND (TILL-LIKE), silty, some gravel, well graded, damp, dense, light grey to yellow; fine to coarse s fine gravel, sub-rounded, up to 50 mm diameter. END OF AUGER HOLE AT 5.2 m DEPTH. DCPT completed to a depth of 4.3 m depth. - Soil descriptions, consistency and density are base visual classification, field observations and testing drill performance, and laboratory testing. Some variation through the interpreted soil layers is expected. - Upon completion of drilling, a vapour probe was installed at this location at 1.4 m depth. The well completed at surface with a flush mount cover. - Auger hole dry at the bottom drilling depth. -UTM coordinates are approximate (+/- 5 m) and we collected using a handheld GPS	d on I, was		GS-07							•				16 17 18 19 20 21 22 23 24
														25 26 27 28 29 30 31 32

