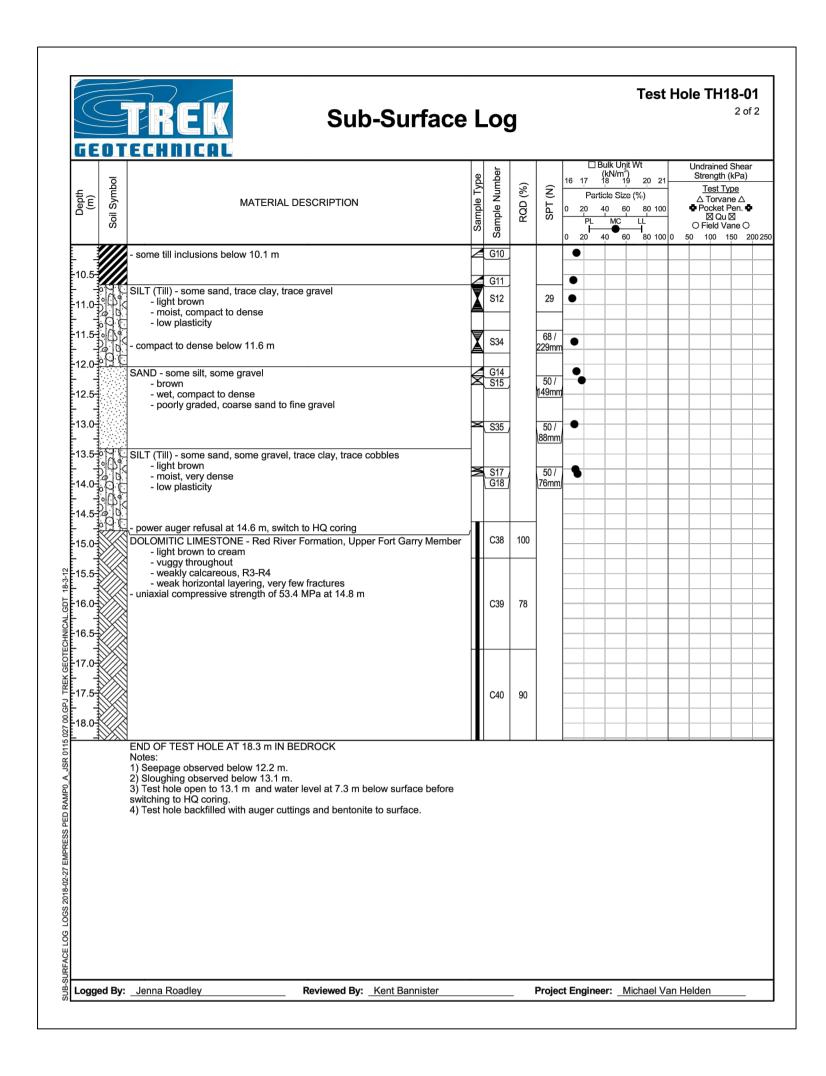
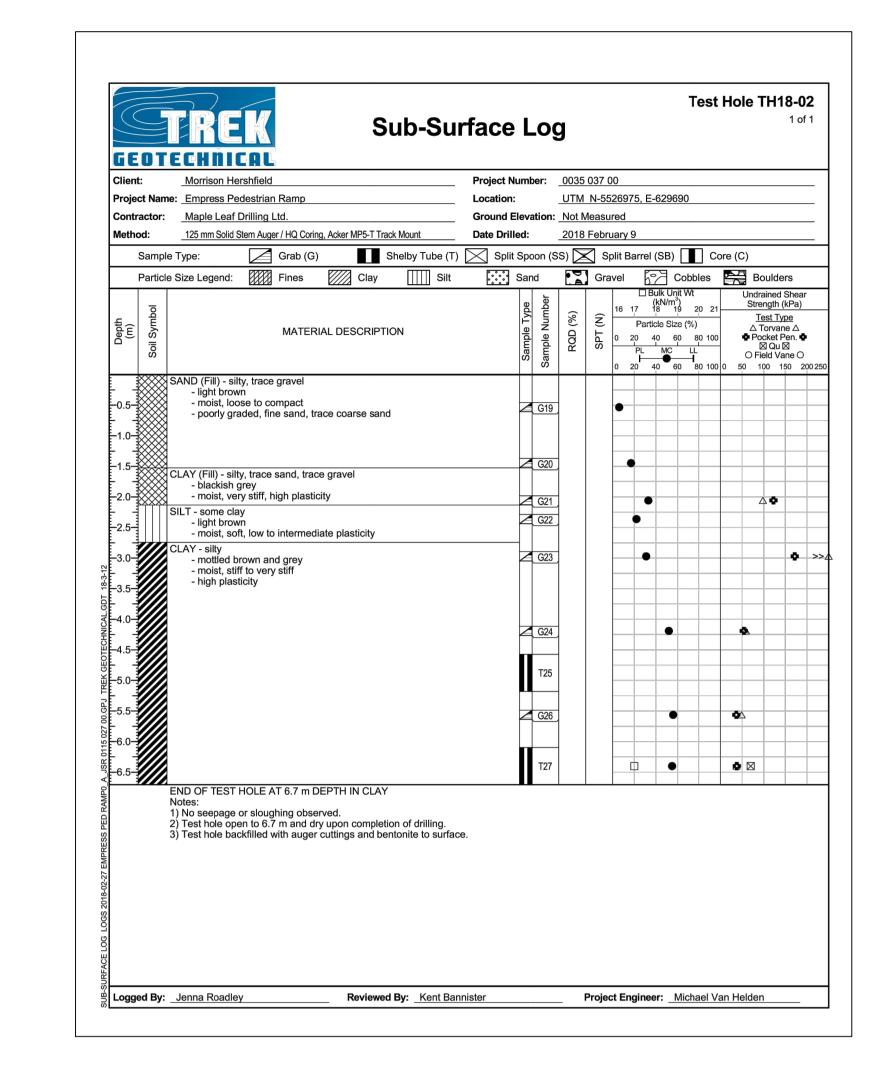
TENT	IRE		S	ub-Su	rface	L	og					Tes	t Ho	ole 7	ГН1	8-0	
Client:	Morrison He	rshfield			Project N	umbe	r: _0	0035 (037 00								_
Project Name	e: Empress Pe	destrian Ramp			Location			JTM	N-5527	'023,	E-6216	61					
ontractor:	Maple Leaf [Drilling Ltd.			Ground E	levati	on: _N	Not M	easure	d							
flethod:	125 mm Solid S	Stem Auger / HQ Corin	ig, Acker MP5-T Tra	ck Mount	Date Drill	ed:	_2	2018 I	Februa	ry 9 -	2018 F	ebruary	23				_
Sample	Туре:	Grab (G)		Shelby Tube (T)	Split	Spoo	n (SS)) 🔀	Spli	Barre	el (SB)		Core (C)			
Particle	Size Legend:	Fines	Clay	Silt		Sand	-	<u></u>	Grave	el	(P)	Cobbles	<u></u>	В	oulde	rs	_
		VVVV · · · · · · · · · · · · · · · · ·	V////	шш	<u> </u>		. T				Bulk Ur	nit Wt		Undra	ained	Shea	
Soil Symbol		MATER	IAL DESCRIPTI	ON		Sample Type	Sample Number	RQD (%)	SPT (N)	20 PL	MC		00	☐ △ T ♣ Po © O Fi	ngth (est Ty Forvan cket P ☑ Qu I eld Va	r <u>pe</u> ne ∆ Pen. ∎ ⊠ ane O	,
	SILT (Fill) - sand	dy, some gravel (<10 mm diamete	er), trace clay			G01			•							Ī
0.5-	light browdry, loose																ļ
	- no plastic	ity							-							-	+
.0-													+				+
5	CLAY - silty trad	ce precipitates, tra	ace silt inclusion	s(<20 mm diame	eter)		G02			•				4			j
	- brown		acc siit iriolusiori	3(-20 mm diame	2001)		302]
.0-	- moist, stifi - high plast								-							<u> </u>	4
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5-///	grey below 4.6	m					G04							•			Ī
5.0-						11	T05			Ф	•		•	K		<u> </u>	1
							-				-					-	+
5.5													-			-	+
	- firm below 5.8	m									-		1_				+
).U=						4	G06				•		•	7			
6.5																	1
									-		-		-			-	+
7.0-											-		+			-	+
													1_				†
·							G07				•		• 4	7			
3.0-						Ш	T08				φ.		2 D	4			1
											-					-	+
3.5-	soft to firm belo	ow 8.5 m											-			-	+
																	+
9.0-						4	G09				•						İ
9.5																	1
										_	-		_			<u> </u>	+
ogged By:	Jenna Roadley	V	Reviewed	I By: Kent Ban	nister			Р	roject	Engin	eer:	Michael '	√an H	lelder	١		

Client Morrison Hershfield Project Number Client Cost			ECHNI Marriago Ha	archfield			Drainet N	li ima	hau.	0035	027	00							_
Contractor: Maple Leaf Drilling Ltd. Mathod: 125 mm Solid Stem Auger / HQ Coring, Acker MP5-T Track Mount Mathod: 2018 February 9							•		ber.				92. F-	629680	<u> </u>				-
Sample Type:								-	ation:				<i>,</i>	02000	,				_
Particle Size Legand: Fines	Metho	d:			ring, Acker MP5-T T	rack Mount							9						
MATERIAL DESCRIPTION A B Bulk Unit With 20 21 Strength 16 17 18 17	5	Sample	Туре:	Grab (0	G)	Shelby Tube (T)	Split	t Sp	oon (S	s) ⋝	S	plit B	arrel	(SB)	Co	ore (C)			_
MATERIAL DESCRIPTION A B Bulk Unit With 20 21 Strength 16 17 18 17								_		<u>• = </u>		_		<u> </u>	bbles		Boulde	ers	-
SAND (Fill) - silty, trace gravel - light brown - moist, loose to compact - poorly graded, fine to coarse sand -1.0 CLAY (Fill) - silty, some sand, trace gravel, trace organics - blackish grey - moist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling -2.5 3.5 CLAY - silty - mottled brown and grey - moist, stiff - high plasticity -4.0 -4.5 -5.5 - firm to stiff below 5.5 m				WWW	V///	Щ	[0.0.0]	\top	T			T	□Bi	ulk Unit \		Un	drained	Shea	
SAND (Fill) - silty, trace gravel - light brown - moist, loose to compact - poorly graded, fine to coarse sand -1.0 CLAY (Fill) - silty, some sand, trace gravel, trace organics - blackish grey - moist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling -2.5 3.5 CLAY - silty - mottled brown and grey - moist, stiff - high plasticity -4.0 -4.5 -5.5 - firm to stiff below 5.5 m	_	loqu						Vpe	g L	(%	9	16							-
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- light brown - molist, loose to compact - poorly graded, fine to coarse sand -1.0 CLAY (Fill) - silty, some sand, trace gravel, trace organics - blackish grey - molist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling -2.5 -3.0 CLAY - silty - mottled brown and grey - moist, stiff - high plasticity - high plasticity -4.0 -4.5 -5.0 - firm to stiff below 5.5 m		(XXX) -	AND (ES)	lt. tun					ιχ			0 2	20 4	0 60	80 100	ı			
- poorly graded, fine to coarse sand -1.0 CLAY (Fill) - sitty, some sand, trace gravel, trace organics - blackish grey - moist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling CLAY - sitty - mottled brown and grey - moist, stiff - high plasticity -4.5 -5.5 - firm to stiff below 5.5 m		‱ ^s	 light brov 	vn										-			+		+
CLAY (Fill) - silty, some sand, trace gravel, trace organics - blackish grey - moist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling CLAY - silty - mottled brown and grey - moist, stiff - high plasticity -4.0 -5.5 - firm to stiff below 5.5 m	-0.5-		- moist, loc - poorly ar	ose to compact aded, fine to coa	rse sand			\geq	G28				•				+		+
- blackish grey - moist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling -2.5 -3.0 -3.0 -3.5 -3.5 -3.5 -5.0 -5.5 - firm to stiff below 5.5 m - G33	[,]		. , , ,																1
- blackish grey - moist, stiff - low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling -2.5 -3.0 -3.0 -3.5 -3.5 -3.5 -5.0 -5.5 - firm to stiff below 5.5 m - G33	<u>`</u> }	₩ ,	CLAY (Fill) - eil	tv. some sand tr	ace gravel trace	organics		+											4
- low to intermediate plasticity - suspected rubble at 1.8 m, grinding while drilling -2.53.03.03.53.53.53.54.04.55.55.5 firm to stiff below 5.5 m	-1.5-	***	 blackish 	grey	acc graver, trace	organios		Z	G29				•				+		+
-2.53.03.53.54.55.05.55.5firm to stiff below 5.5 m	<u></u>		 low to int 	termediate plastic	city												+		†
CLAY - silty - mottled brown and grey - moist, stiff - high plasticity -4.5 -5.0 -firm to stiff below 5.5 m	2.0	‱-	suspected rub	oble at 1.8 m, grii	nding while drillir	ng													I
CLAY - silty - mottled brown and grey - moist, stiff - high plasticity 4.5 -5.0 - firm to stiff below 5.5 m	-2.5-																+		4
CLAY - silty - mottled brown and grey - moist, stiff - high plasticity 4.5 -5.0 - firm to stiff below 5.5 m	1							L					-				+		+
- moist, stiff - high plasticity -4.5 -5.0 - firm to stiff below 5.5 m - G33	-3.0-k							+	G30							•			1
- high plasticity -4.0 -4.5 -5.0 -5.5 - firm to stiff below 5.5 m -6.0 -6.0	-3.5		- mottled b - moist, sti	prown and grey iff															1
5.0 T32 T32 G33 G33																	+	+	+
5.0 T32 T32 G33 G33	- 4.0 -																		†
5.0 T32 T32 G33 G33	4.5								G31					•					I
-5.5 firm to stiff below 5.5 m										1		-	_				-		+
6.0	-5.0-								132			¹	Ψ				+		+
6.0																			†
	- J.S-	////	firm to stiff be	low 5.5 m															1
END OF TEST HOLE AT 6.1 m DEPTH IN CLAY	-6.0-								G33								\perp		_
END OF TEST HOLE AT 6.1 m DEPTH IN CLAY Notes: 1) No seepage or sloughing observed. 2) Test hole open to 6.1 m and dry upon completion of drilling. 3) Test hole backfilled with auger cuttings and bentonite to surface. Logged By: Jenna Roadley Reviewed By: Kent Bannister Project Engineer: Michael Van Helden		N 1	Notes:) No seepage	or sloughing obs	served.		ee.												





BOREHOLE LOG NOTES:

- REFER TO THE GEOTECHNICAL REPORT PREPARED BY TREK GEOTECHNICAL TITLED EMPRESS PEDESTRIAN RAMP GEOTECHNICAL INVESTIGATION FINAL REPORT DATED MARCH 13, 2018.
- REFER TO DRAWING No. 117 FOR LOCATIONS OF BOREHOLES TH18-01 TO TH18-03 IN PLAN VIEW.

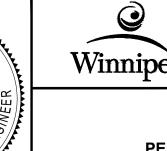
BID OPPORTUNITY No. 602-2018



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED UNDERGROUND STRUCTURES
SUPR. U/G STRUCTURES DATE COMMITTEE
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

ED RES	BM ELE\	V			m				PROFESSIONAL'S SEAL
						MORRIS	SON HEF	RSHFIELD	B.A.F.
URES					DESIGNED BY	YM	CHECKED BY	ВАР	PHILLPS Member 32723
NG IVEN					DRAWN BY	АН	APPROVED BY	BE	Member 32723 PROFESSIONAL
ON OF	С	ISSUED FOR TENDER	18/09/04	BAP	1100 00415	AS SHOWN	RELEASED FOR (CONSTRUCTION	JOLEON AND AND AND AND AND AND AND AND AND AN
ALL	В	ISSUED FOR 95% DESIGN REVIEW	18/08/07					NI/A	CONSULTANT FILE NAME
HE DING	Α	ISSUED FOR 50% DESIGN REVIEW	18/06/28	BAP	VERT SCALE	AS SHOWN		N/A	W160034 - DD BH
	No.	REVISIONS	YY/MM/DD	BY	DATE		DATE		LOGS.DWG





THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT **ENGINEERING DIVISION**

EMPRESS STREET PROJECT PEDESTRIAN ACCESSIBILITY RAMPS **BORE HOLE LOGS**

CITY DRA	AWING NUMBE	ER
	P-3494-1	118
SHEET	OF	
	118	168
DRAWIN	G No.	REV
1	18	С