ISO A1 - 594mm x 841mm

Sub-Surface Log

Test Hole TH22-06
1 of 2

Client:	Morrison Hershfield	**Project Number:**	0035-110-00
Project Name:	Creek Bend Road Bridge Replacement	**Location:**	UTM N-5519651, E-638699
Contractor:	Paddock Drilling Ltd.	**Ground Elevation:**	99.79 m (local datum)
Method:	125mm Solid Stem Auger, Acker MP8 Truck Mount	**Date Drilled:**	October 26, 2022

Sample Type: Grab (G) | Shelby Tube (T) | Split Spoon (SS) / SPT | Split Barrel (SB) / LPT | Core (C)

Particle Size Legend: Fines | Clay | Silt | Sand | Gravel | Cobbles | Boulders

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Recovery % (RQD %)	SPT (N)
99.79			SAND AND GRAVEL (FILL) - trace silt, light brown, moist, compact, well graded, sub angular (25 mm down limestone)		G42		
			CLAY (FILL) - silty, trace sand, trace gravel - grey - moist, very stiff - intermediate plasticity		G43		
98.0	2		CLAY - silty, trace sand - brown - moist, stiff - high plasticity		G44		
					G45		
	5				T46		
	6		- firm to stiff below 5.8 m trace silt inclusions (<5 mm diam.) below 6.0 m		G47		
					G48		
	8				T49		
	9				G50		
	10						
					G51		
	11				T52		

Bulk Unit Wt (kN/m³) 16 17 18 19 20 21; Undrained Shear Strength (kPa); Particle Size (%) 0 20 40 60 80 100; PL MC LL; Test Type: △ Torvane △, ✥ Pocket Pen. ✥, ☒ Qu ☒, ○ Field Vane ○; 0 50 100 150 200 250

Logged By: Kate Franklin **Reviewed By:** Michael Van Helden **Project Engineer:** Nuno Mendonca

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Sub-Surface Log

Test Hole TH22-06
2 of 2

Elevation (m)	Depth (m)	Soil Symbol	MATERIAL DESCRIPTION	Sample Type	Sample Number	Recovery % (RQD %)	SPT (N)
	12		- soft to firm below 12.0 m		G53		
	13				G54		
	15				G55		
	16				G56		
	18		- trace sand, trace gravel, very soft, transition to till below 17.7 m		G57		
80.9	19		SILT (TILL) - trace clay, trace to some sand, trace to some gravel (<50 mm diam.) - light brown - moist, compact - no to low plasticity - boulder (700 mm diam.) at 19.8 m		G58		
	20				RC59	52	
	21		- cobble (300 mm diam.) at 21.6 m		RC60	99	
76.7	23		DOLOMITIC LIMESTONE - Red River formation, Selkirk Member, cream to white colour, mottled, hard, R3, vuggy throughout, massive (no distinct bedding or foliation) - unconfined compressive strenght of 37.6 MPa at 23.4 m		RC61	98	
75.2	24				RC62	75 (82)	

Bulk Unit Wt (kN/m³) 16 17 18 19 20 21; Undrained Shear Strength (kPa); Particle Size (%) 0 20 40 60 80 100; PL MC LL; Test Type: △ Torvane △, ✥ Pocket Pen. ✥, ☒ Qu ☒, ○ Field Vane ○; 0 50 100 150 200 250

END OF TEST HOLE AT 24.6 m IN DOLOMITIC LIMESTONE

Notes:
1. Sloughing not observed.
2. Seepage observed below 3.0 m.
3. Drilling method switched from 125 mm SSA to HQ coring below 19.8 m.
4. Test hole backfilled with cuttings and bentonite to surface.

Logged By: Kate Franklin **Reviewed By:** Michael Van Helden **Project Engineer:** Nuno Mendonca

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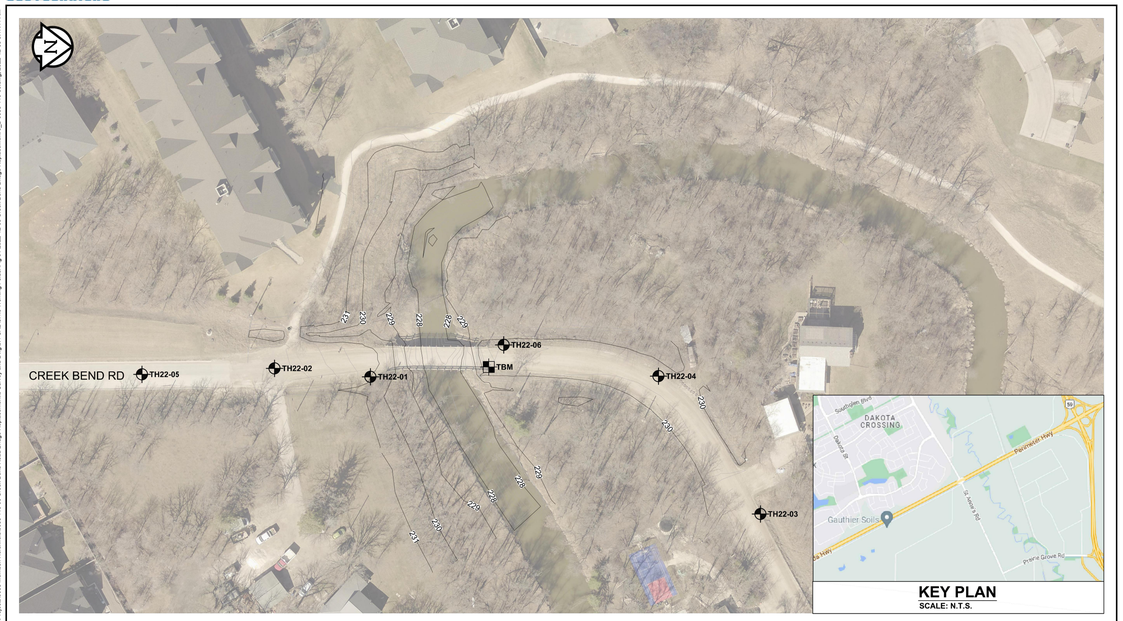
0035 110 00
Morrison Hershfield
Creek Bend Bridge Replacement



KEY PLAN
SCALE: N.T.S.

0 10 20 30 m
SCALE = 1 : 750 (279 mm x 432 mm)

LEGEND:
- TEST HOLE (TREK, 2022)
- TEMPORARY BENCHMARK
- EXISTING MAJOR CONTOUR (1 m INTERVAL)
- EXISTING MINOR CONTOUR (0.25 m INTERVAL)

NOTES:
1. AERIAL IMAGERY FROM CITY OF WINNIPEG (2021).
2. TEST HOLE LOCATIONS WERE ESTABLISHED USING A HANDHELD GPS UNIT.
3. TEST HOLE ELEVATIONS WERE SURVEYED RELATIVE TO A TBM (ASSIGNED ELEVATION OF 100.0 m LOCAL) LOCATED ON THE NORTHEAST CORNER OF THE EXISTING BRIDGE DECK.

Figure 01
Test Hole Location Plan

Z:\Projects\0035 Morrison Hershfield\0035 110-00 Creek Bend Road Bridge Replacement\3 Survey and Dwg\3-4 CADD\3.4.3 Working Folder\Fig 01 2022-12-09 Creek Bend Bridge Replacement 0_B 0035-110-00.dwg, 2022-12-09 9:17:41 AM

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736

TENDER No. 335-2023

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES COMMITTEE — DATE

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.

BM 78-009
ELEV 232.749 m
N.W. Cor. Paddington Rd. & Dakota St., 19 mm dia. x 6.1 m I.B. in Valve Box, 5.5 m S. of N.L. Paddington Rd. & on W.L. of Dakota St., in traffic island

No.	REVISIONS	YY/MM/DD	BY
C	ISSUED FOR TENDER	23/08/02	BAP
B	ISSUED FOR 95% REVIEW	23/06/27	BAP
A	ISSUED FOR 50% REVIEW	23/04/14	BAP

MORRISON HERSHFIELD

DESIGNED BY	AGG	CHECKED BY	BAP
DRAWN BY	AH	APPROVED BY	BAP
HOR SCALE / VERT SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
DATE	JUNE 27, 2023	DATE	

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
A.D.G. GILARSKI
Member
32144
2023-08-02
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME
2203665-CBR DD-BH02.DWG

Winnipeg
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

CREEK BEND ROAD BRIDGE REPLACEMENT AND RELATED WORKS

BORE HOLE LOGS 2 OF 2

CITY DRAWING NUMBER: B149-23-04
SHEET 04 OF 52
DRAWING NUMBER: 04

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