

APPENDIX 'A'

GEOTECHNICAL REPORT

APPENDIX 'A' - GEOTECHNICAL REPORT

TABLE OF CONTENTS

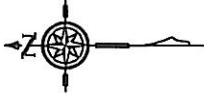
GEOTECHNICAL REPORT FOR ^GREY STREET FROM MISSION STREET TO TYNE AVENUE	1
Test Hole Locations	1
Summary of Core Samples	2
Pavement Core Photos	3

The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in pavement structure and/or soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

LEGEND

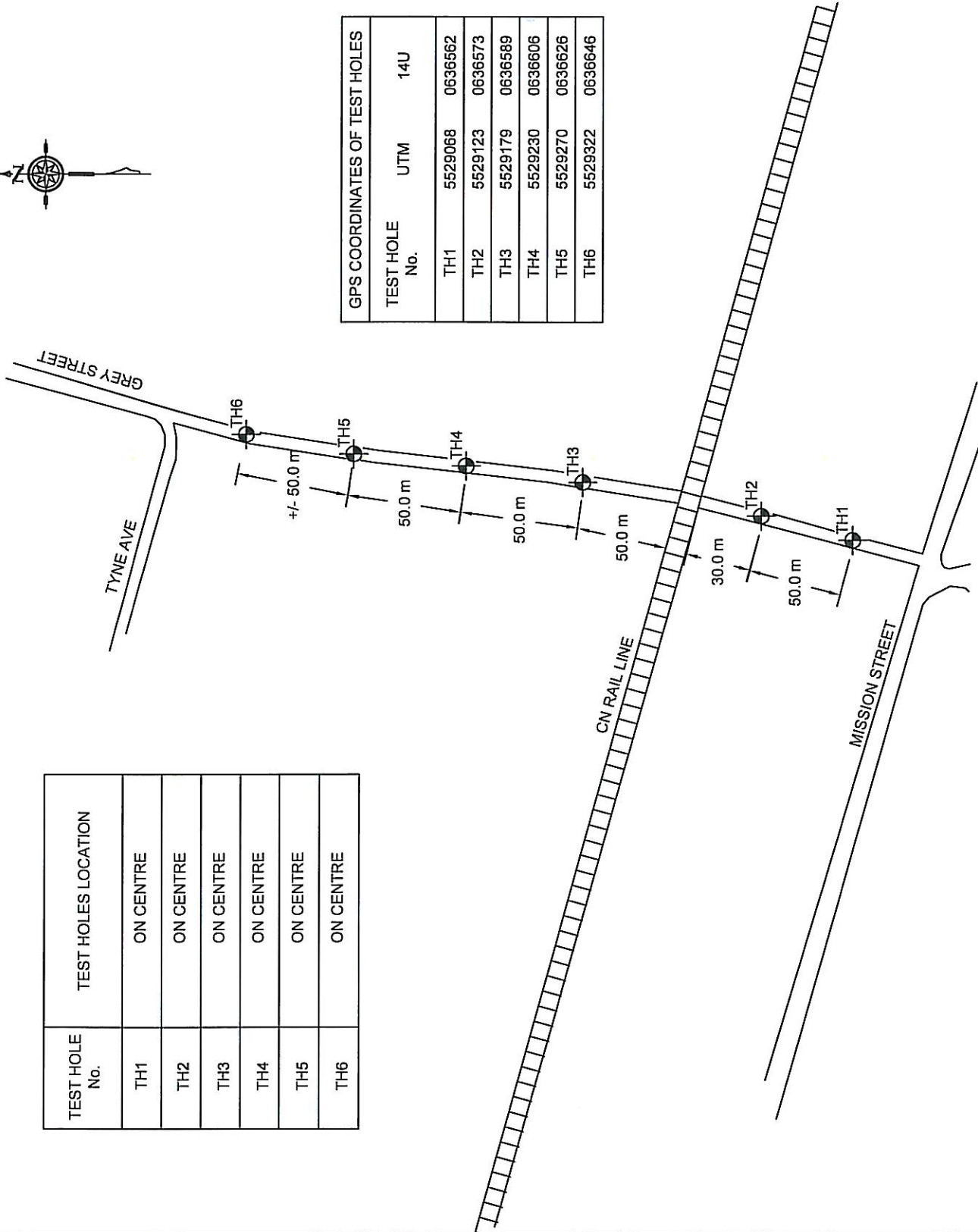



TEST HOLE



TEST HOLE No.	TEST HOLES LOCATION
TH1	ON CENTRE
TH2	ON CENTRE
TH3	ON CENTRE
TH4	ON CENTRE
TH5	ON CENTRE
TH6	ON CENTRE

GPS COORDINATES OF TEST HOLES		
TEST HOLE No.	UTM	14U
TH1	5529068	0636562
TH2	5529123	0636573
TH3	5529179	0636589
TH4	5529230	0636606
TH5	5529270	0636626
TH6	5529322	0636646



NO.	DATE	ISSUE / REVISION
0	Aug. 12/13	review / approval
		
6 - 854 Marion Street, Winnipeg, MB R2J 0K4 Phone: (204) 233-1694 Fax: (204) 238-1579		
		
Certificate of Authorization ENG-TECH Consulting Limited No. 2475 Expiry: April 30, 2014		
CLIENT: TETRA TECH		
PROJECT: GEOTECHNICAL INVESTIGATION- GREY STREET BETWEEN MISSION AND TYNE		
DWG DESCRIPTION: TEST HOLE LOCATION PLAN - GREY STREET		
SCALE: NTS		
DRAWN BY: WG	DATE: AUGUST 2013	
FILE No.: 13-071-03	CLIENT DWG/FIG No.:	
ENG-TECH DWG/FIG No.:	NO.:	
1 OF 1		

**Table 1
Summary of Pavement Structure**

File No.: 13-071-03

Geotechnical Investigation – Grey Street between Mission and Tyne

Page 1 of 3

Test Hole Number	Test Hole Location	Pavement Surface		Pavement Structure Material		Subgrade Description	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits					
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index			
1	Grey Street	Asphalt	88	-	-	Clay (Fill)	0.1	8.3										
							0.4	23.9										
							0.7	13.6										
							1.0	14.6										
							1.3	29.1										
							1.6	48.6										
							1.9	51.2										
2	Grey Street	Asphalt	83	-	-	Clay (Fill)	0.1	9.8										
							0.4	24.8										
							0.7	31.9	0.6	26.0	16.5	56.9	48	17	31			
							1.0	41.2										
							1.3	43.2										
							1.6	43.6										
							1.9	50.5										



**Table 1
Summary of Pavement Structure**

File No.: 13-071-03

Geotechnical Investigation – Grey Street between Mission and Tyne

Page 2 of 3

Test Hole Number	Test Hole Location	Pavement Surface		Pavement Structure Material		Subgrade Description	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits						
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index				
3	Grey Street	Asphalt	84	-	-	Clay (Fill)	0.1	12.2											
							0.4	29.5											
							0.7	28.6											
							1.0	28.0											
							1.3	38.5											
							1.6	41.7											
4	Grey Street	Asphalt	79	-	-	Clay (Fill)	0.1	12.0											
							0.4	35.0											
							0.7	44.3											
						Sand (Fill)	1.0	44.8	2.8	61.4	26.8	8.9	N.P.	N.P.	N.P.				
							1.3	47.7											
							1.6	38.1											
1.9	41.0																		

- N.P. = Non-Plastic.
- For Test Hole Number 4, water was observed at 0.6 m below the grade.



**Table 1
Summary of Pavement Structure**

File No.: 13-071-03

Geotechnical Investigation – Grey Street between Mission and Tyne

Page 3 of 3

Test Hole Number	Test Hole Location	Pavement Surface		Pavement Structure Material		Subgrade Description	Sample Depth (m)	Moisture Content (%)	Hydrometer Analysis				Atterberg Limits			
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index	
5	Grey Street	Asphalt	57	-	-	Clay (Fill)	0.1	12.7								
							0.4	31.2								
							0.7	48.5								
							1.0	49.7								
							1.3	50.9								
						1.6	60.0									
						1.9	29.0									
6	Grey Street	Asphalt	59	-	-	Sand (Fill)	0.1	16.3								
							0.4	27.8								
							0.7	35.2	2.4	65.7	23.2	8.7	N.P.	N.P.	N.P.	
							1.0	40.4								
							1.3	27.0								
						1.6	39.5									
						1.9	47.8									

- N.P. = Non-Plastic.
 - For Test Hole Number 5, water was observed at 1.5 m below the grade.





TH #1

88 mm ASPHALT

TH #2

83 mm ASPHALT

TH #3

84 mm ASPHALT

Grey Street
Between Mission St. and Tyne Ave.



TH #4
79 mm ASPHALT

TH #5
57 mm ASPHALT

TH #6
59 mm ASPHALT

Grey Street
Between Mission St. and Tyne Ave.

