APPENDIX 'F'

GEOTECHNICAL REPORT

APPENDIX 'F' – GEOTECHNICAL REPORT

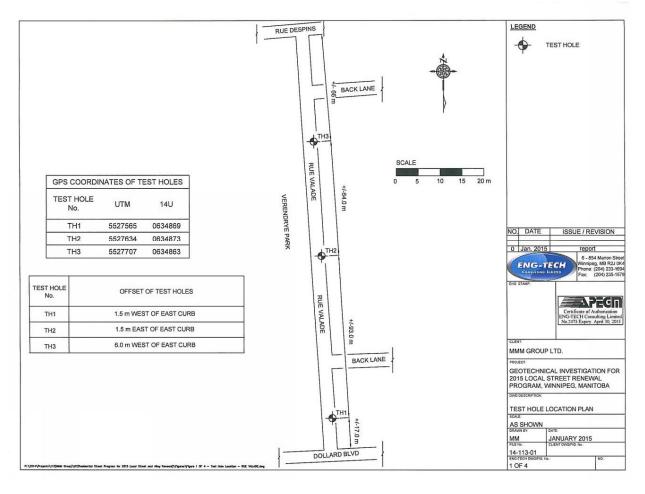
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The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. 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.

Geotechnical Report for Rue Valade

Test Hole Locations



Summary of Core Samples

Table 1 Summary of Pavement Structure Rue Valade between Rue Despins and Dollard Blvd

File No.: 14-113-01

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Test Hole		Pavemer	nt Surface	Pavement Stru	octure Material	Subgrade	Sample	Moisture	Ну	drometer	Analysis			Atterberg Li	mits
Number	Test Hole Location -	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
	I		1					-							
			155				0.1-0.4	22.8		2					
		Asphalt					0.7	28.6							
							1.0	36.5							
1	Rue Valade			Crushed Granular	460	Clay	1.3	34.8	0.0	4.9	24.9	70.2	85	27	58
		Concrete	150				1.6 33.7								
							1.9	30.4							
							0.1-0.4	21.5							
		Asphalt	57				0.7	23.9							
2	Rue Valade			Crushed	150	Clay	1.0	26.8							
2	rue valade			Granular	150	Clay	1.3	31.7							
		Concrete	148				1.6	34.9							
							1.9	32.3							

Table 1 Summary of Pavement Structure

File No.: 14-113-01

Rue Valade between Dollard Blvd. and Despins Street

Page 2 of 2

Test Hole		Pavement Surface		Pavement Structure Material		Subgrade	Sample	Moisture	Hy	drometer	Analysi	s	1	Atterberg Li	mits
Number	Test Hole Location -	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Index
			1		1										
							0.1-0.4	20.3							
		Asphalt	83				0.7	34.0							
	-			Crushed			1.0	23.2							
3	Rue Valade			Granular	150	Silty Clay	1.3	16.8							
		Concrete	152				1.6	22.1							
							1.9	21.2							(

- N.P. = Non-Plastic.

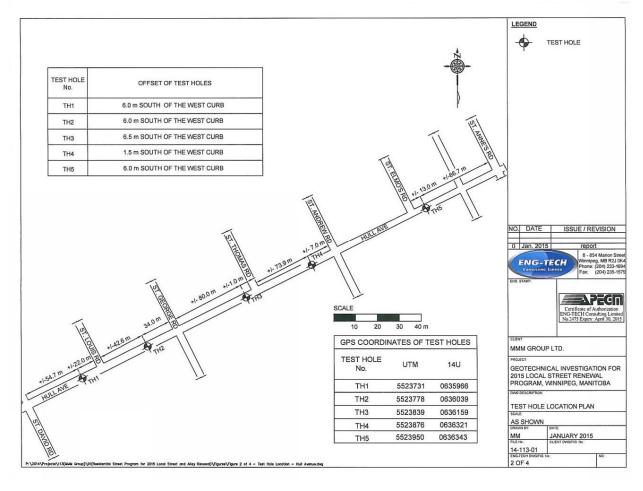
Pavement Core Photos



Rue Valade (Rue Despins to Dollard Blvd.)

Geotechnical Report for Hull Avenue

Test Hole Locations



Summary of Core Samples

Table 2 Summary of Pavement Structure

File No.: 14-113-01

Hull Avenue between St. Anne's Road and St. David's Road

Page 1 of 3

Test Hole		Pavemen	nt Surface	Pavement Stru	cture Material	Subgrade	Sample	Moisture	Hy	drometer	Analysis	5	A 1	Atterberg Lin	mits
Number	Test Hole Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticit Index
			r	1											
							0.1-0.4	38.3			_				
			153			Clay	0.7	35.5							
1	Hull Avenue	Concrete		2		Ciay	1.0	33.0	0.1	2.1	21.4	76.4	75	23	52
25							1.3	24.8							
						Silt	1.6	23.3	0.0	2.3	80.3	17.4	28	18	10
2152-22						Sinc	1.9	31.7							
1 (1894), a							0.1-0.4	30.5							
						Clay	0.7	30.6							
2	Hull Avenue	Concrete	150	Granular Fill	75	Clay	1.0	29.7							
2	Huil Avenue	Concrete	150	Granular Pili	75		1.3	39.4							
							1.6	40.3							
						Silt	1.9	41.1							

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Table 2 Summary of Pavement Structure

Hull Avenue between St. Anne's Road and St. David's Road

Pavement Surface Pavement Structure Material Hydrometer Analysis Atterberg Limits Test Hole Number Subgrade Description Sample Depth (m) Moisture Content (%) Test Hole Location Gravel Sand (%) (%) Silt (%) Plastic Limit Plasticity Index Thickness Thickness Clay (%) Liquid Limit Туре Туре (mm) (mm) 0.1-0.4 11.6 0.7 23.1 1.0 24.4 Clay 3 Hull Avenue Concrete 135 Granular Fill 200 27.2 1.3 1.6 30.9 1.9 44.9 0.1-0.4 18.1 0.7 30.2 1.0 26.7 Clay 4 Hull Avenue Concrete 151 Granular Fill 150 29.6 1.3 1.6 33.6 0.2 8.9 12.4 78.5 80 22 58 45.6 1.9

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Table 2 Summary of Pavement Structure

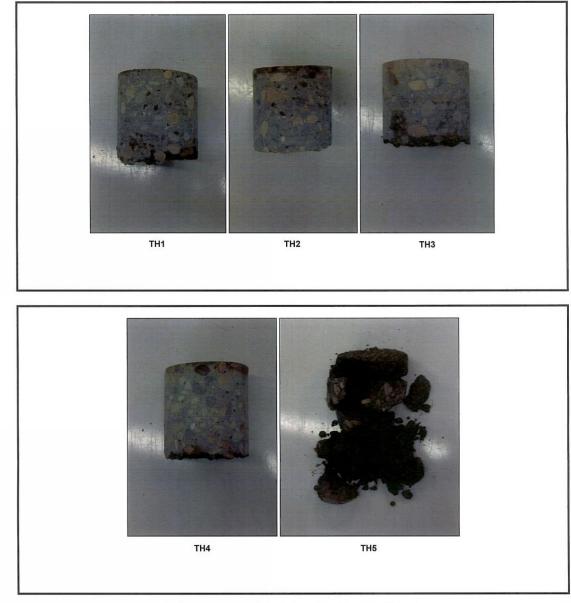
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Hull Avenue between St. Anne's Road and St. David's Road

Test Hole		Pavemer	nt Surface	Pavement Stru	Pavement Structure Material		Sample	Moisture	H	(%) (%) (%)		1	Atterberg Li	mits	
Number	Test Hole Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Subgrade Description	Depth (m)	Content (%)	Gravel (%)				Liquid Limit	Plastic Limit	Plasticity Index
	,														
							0.1-0.4	15.4							
5 Hul						0.7	24.5	0.0	9.8	60.3	29.9	36	14	22	
		Asphalt	42			Clayey Silt	1.0	26.8							
5	Hull Avenue			Granular Fill	75		1.3	22.9							
				1			1.6	28.1							
		Concrete	153			Clay	1.9	40.0							

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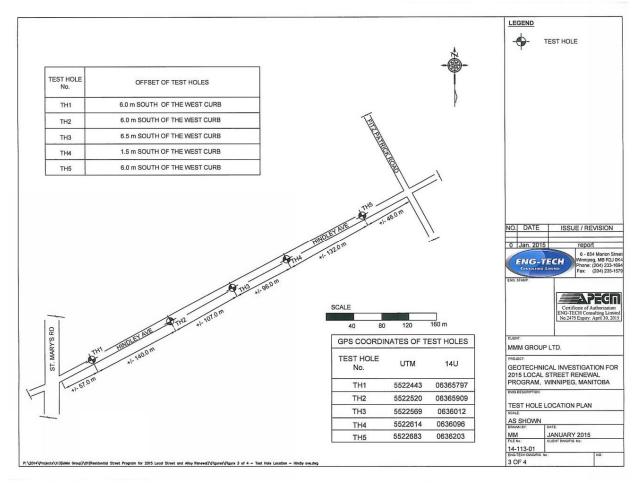
Pavement Core Photos



Hull Avenue (St. Anne's Road to St. David Road)

Geotechnical Report for Hindley Avenue

Test Hole Locations



Summary of Core Samples

Table 3

Summary of Pavement Structure

File No.: 14-113-01

Hindley Avenue between St. Mary's Road and Fitzpatrick Road

Page 1 of 3

Test Hole	_	Pavemer	nt Surface	Pavement Stru	ucture Material	Subgrade	Sample	Moisture	Hy	drometer	Analysis	S	A	Atterberg Li	mits
Number	Test Hole Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticit Index
							0.1-0.4	20.2				r			1
							0.7	33.1							
		Concrete					1.0	33.5							
1	Hindley Avenue		162	Crushed Granular	300	Clay	Clay 1.3 36.2								
							1.6	36.0	6.5	1.4	92.1	97	24	73	
							1.9	28.4							
							0.1-0.4	29.6							
							0.7	34.0							
2	Hindley Avenue	Concrete	145	Crushed 200 Clay Clay											
2	Hindley Avenue	Concrete	145	Granular	200	Ciay	1.3	40.7							
							1.6	39.0							
							1.9	34.4							

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Table 3 Summary of Pavement Structure

Hindley Avenue between St. Mary's Road and Fitzpatrick Road

Test Hole		Pavemer	t Surface	Pavement Stru	ucture Material	Subgrade	Sample	Moisture	Hy	drometer	Analysis	S	4	Atterberg Li	mits
Number	Test Hole Location	Туре	Thickness (mm)	Туре	Thickness (mm)	Description	Depth (m)	Content (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticit Index
					1		0101	22.2			_				<u> </u>
							0.7	38.2			_				
				Crushed			1.0	35.4	1.1	20.2	9.5	69.2	81	26	55
3	Hindley Avenue	Concrete	180	Granular	150	Clay	1.3	34.0							
							1.6 38.5								
							1.9	33.2							
							0.1-0.4	15.6							
							0.7	32.6							
4	Hindley Avenue	Concrete	160	Crushed	100	Clay	1.0	35.4							
4	Hindley Avenue	Concrete	160	Granular	100	Ciay	1.3	30.2							
					Instead Clay I.3 34.0 IIII 1.6 38.5 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII										
							1.9	36.1							

File No.: 14-113-01

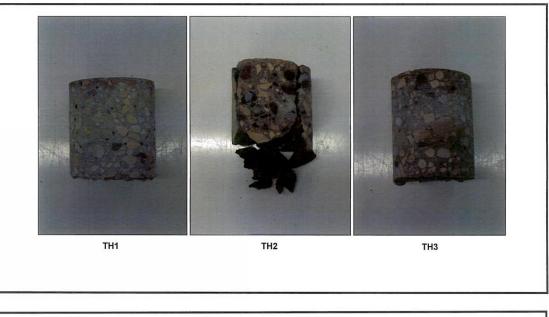
Table 3 Summary of Pavement Structure Hindley Avenue between St. Mary's Road and Fitzpatrick Road

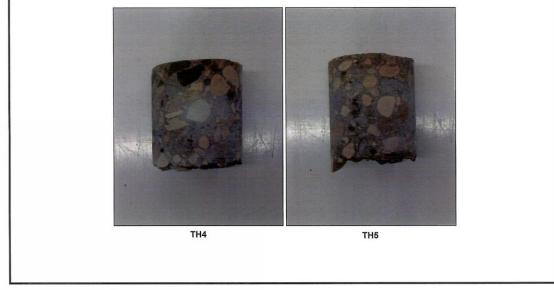
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Atterberg Limits Pavement Structure Material Hydrometer Analysis Pavement Surface Test Hole Number Subgrade Description Sample Depth (m) Moisture Content (%) Test Hole Location Gravel (%) Silt (%) Plastic Limit Sand Clay (%) Thickness (mm) Thickness (mm) Туре Liquid Limit Plasticity Index Туре (%) 0.1-0.4 10.7 0.7 30.3 1.0 28.2 0.9 10.5 30.2 58.4 65 20 45 Crushed Granular Silty Clay 5 Hindley Avenue Concrete 155 200 1.3 30.2 29.8 1.6 1.9 31.3

- N.P. = Non-Plastic.

Pavement Core Photos





Hindley Avenue (Fitzpatrick Road to St. Mary's Road)