

APPENDIX 'A'

GEOTECHNICAL REPORT

APPENDIX 'A' - GEOTECHNICAL REPORT

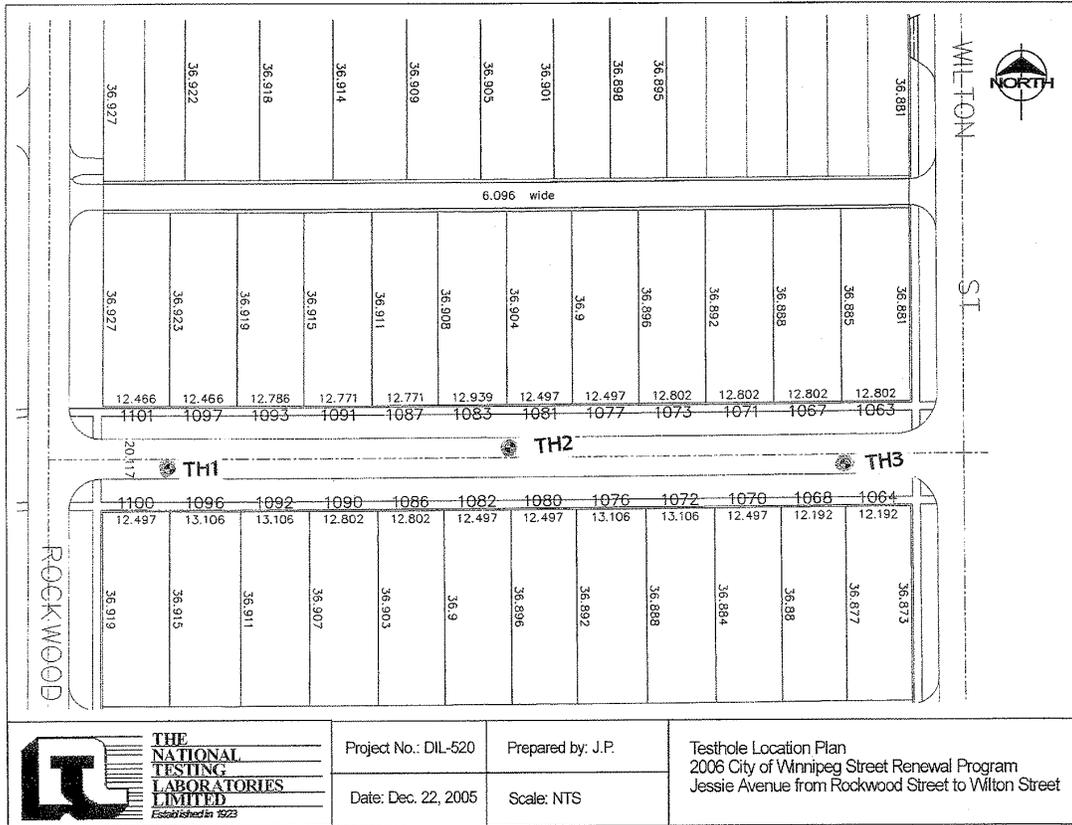
TABLE OF CONTENTS

GEOTECHNICAL REPORT FOR JESSIE AVENUE FROM WILTON STREET TO ROCKWOOD STREET	1
Test Hole Locations	1
Summary of Core Samples	2
Test Hole Log for TH # 1 Jessie Avenue	3
Test Hole Log for TH # 2 Jessie Avenue	4
Test Hole Log for TH # 3 Jessie Avenue	5
Pavement Core Photos	6
GEOTECHNICAL REPORT FOR MCGILLIVARY PLACE FROM VINCENT STREET TO BISCAYNE BAY (EAST LEG)	7
Test Hole Locations	7
Summary of Core Samples	8
Test Hole Log for TH # 1 McGillivary Place	9
Test Hole Log for TH # 2 McGillivary Place	10
Test Hole Log for TH # 3 McGillivary Place	11
Pavement Core Photos	12
GEOTECHNICAL REPORT FOR GRIERSON AVENUE FROM UNIVERSITY CRESCENT TO KING'S DRIVE	13
Test Hole Locations	13
Summary of Core Samples	14
Test Hole Log for TH # 1 Grierson Avenue	15
Test Hole Log for TH # 2 Grierson Avenue	16
Test Hole Log for TH # 3 Grierson Avenue	17
Pavement Core Photos	18
GEOTECHNICAL REPORT FOR TOWNSEND AVENUE FROM AURORA STREET TO KING'S DRIVE	19
Test Hole Locations	19
Summary of Core Samples	20
Test Hole Log for TH # 1 Townsend Avenue	21
Test Hole Log for TH # 2 Townsend Avenue	22
Test Hole Log for TH # 3 Townsend Avenue	23
Pavement Core Photos	24

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 Jessie Avenue from Wilton Street to Rockwood Street

Test Hole Locations

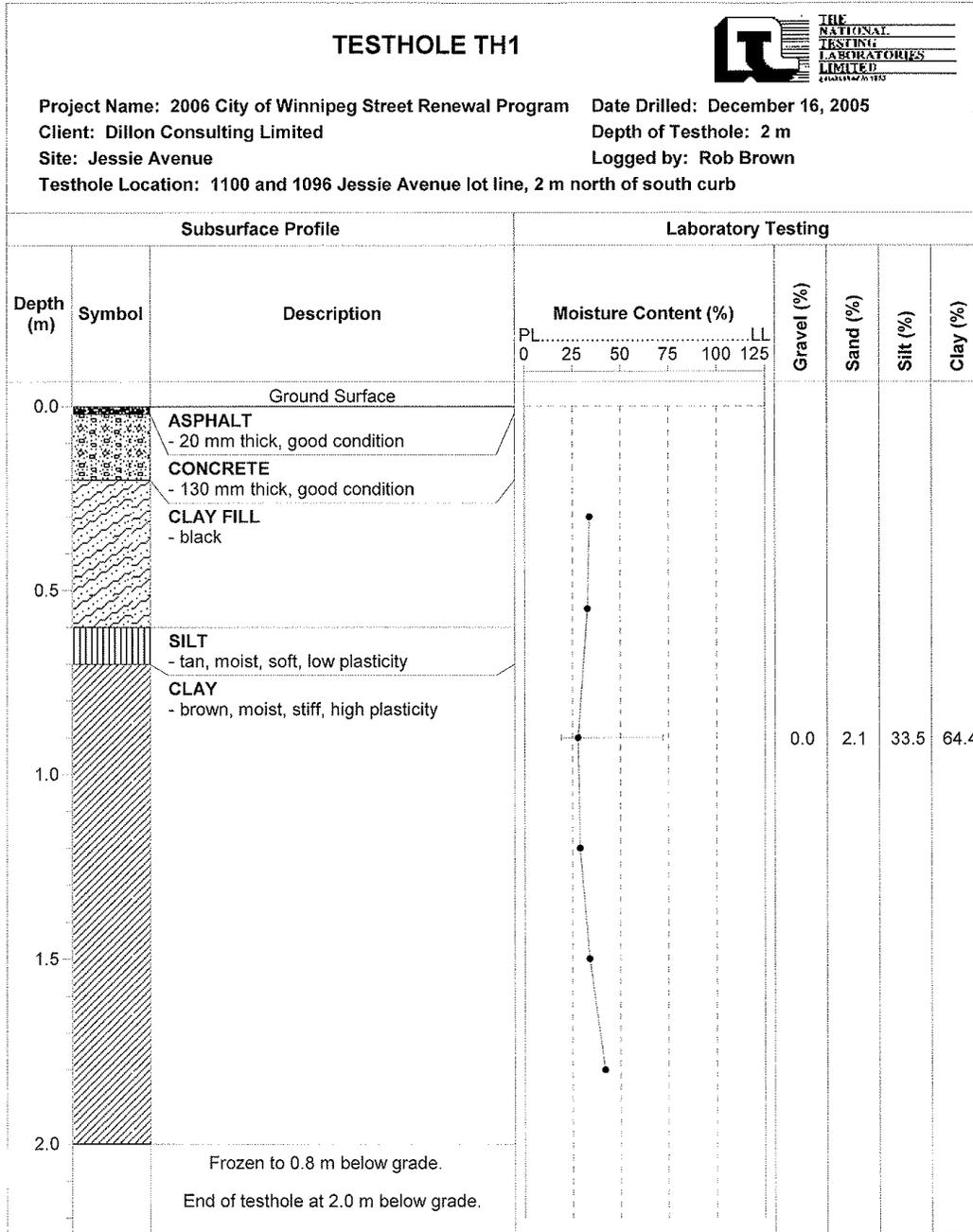


Summary of Core Samples

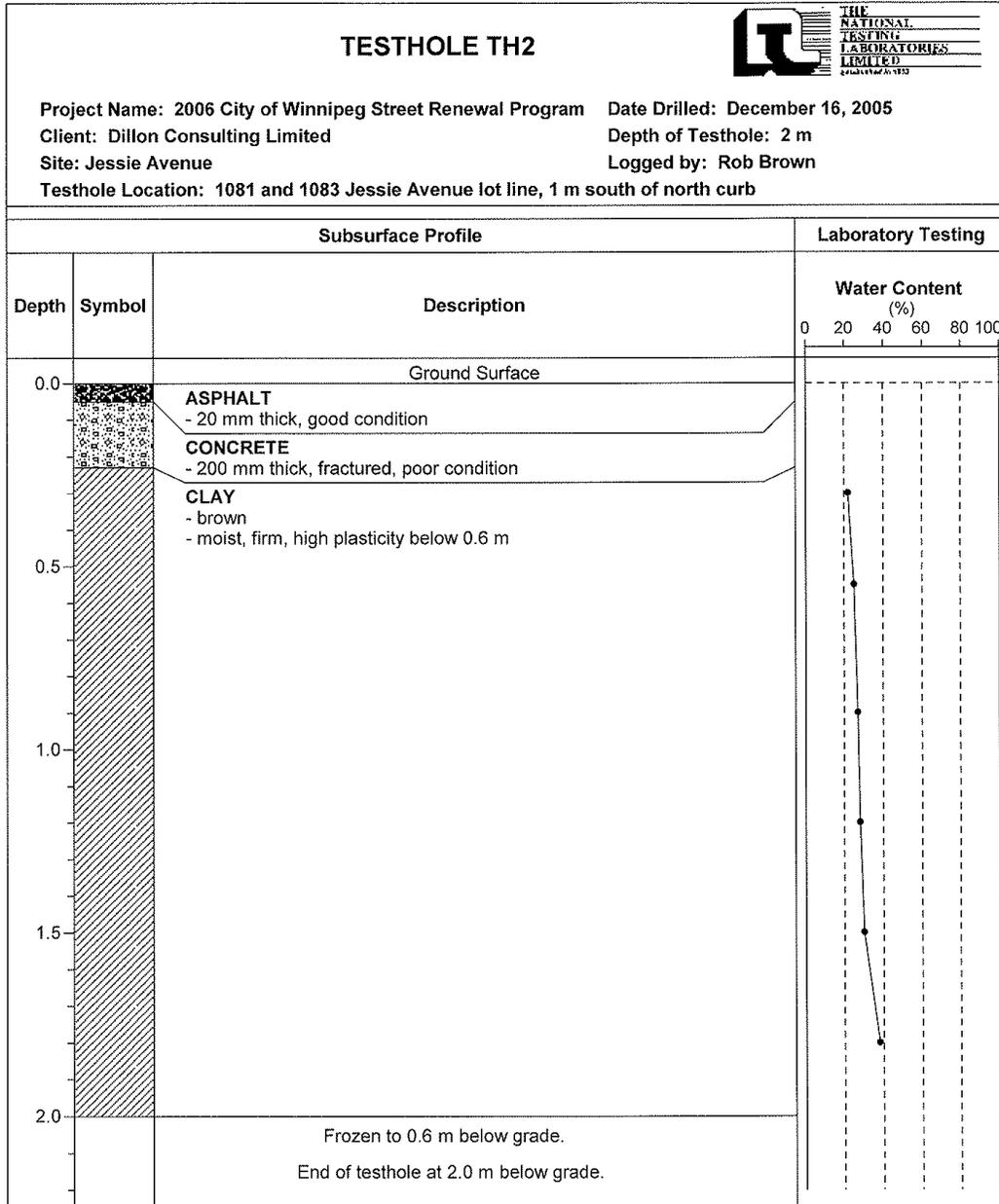
City of Winnipeg
 2006 Street Renewal Program
 Geotechnical Investigation

Testhole No.	Testhole Location	Pavement Surface		Pavement Structure Material			Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits			
		Type	Thickness (mm)	Type	Thickness (mm)	Description			Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Limit	
1	Jessie Avenue	Asphalt/Concrete	20/130	NA	0	Silty Clay	0.9	28.3	0.0	2.1	33.5	64.4	73	22	51	
2	Jessie Avenue	Asphalt/Concrete	20/200	NA	0											
3	Jessie Avenue	Asphalt/Concrete	20/150	NA	0	Silt	1.2	23.1	0	11.2	72.1	16.7	24	14	10	

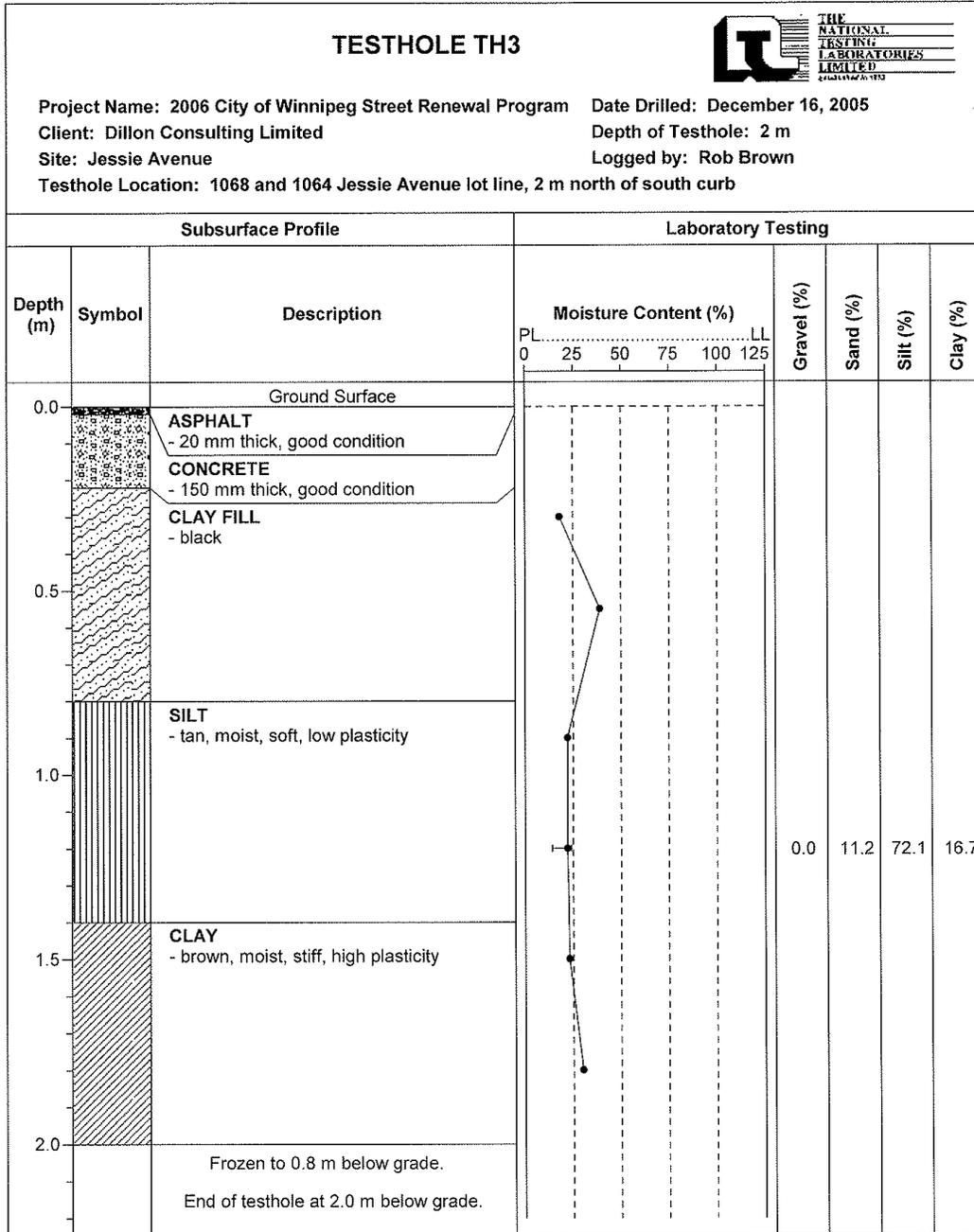
Test Hole Log for TH # 1 Jessie Avenue



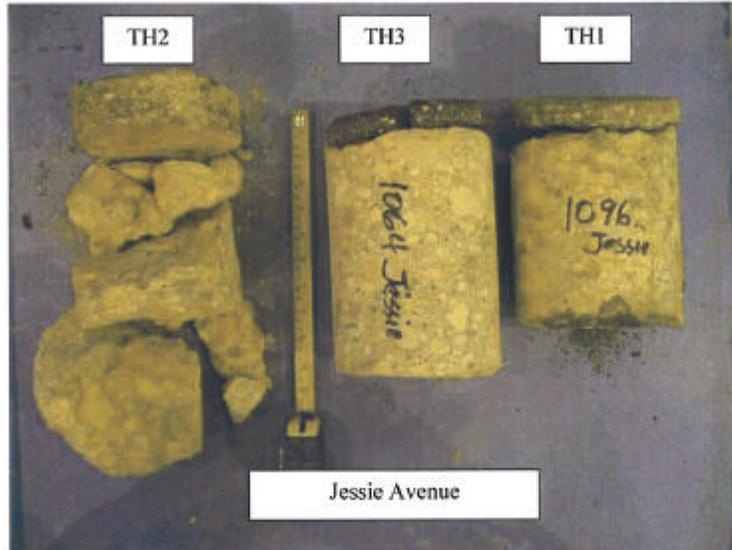
Test Hole Log for TH # 2 Jessie Avenue



Test Hole Log for TH # 3 Jessie Avenue

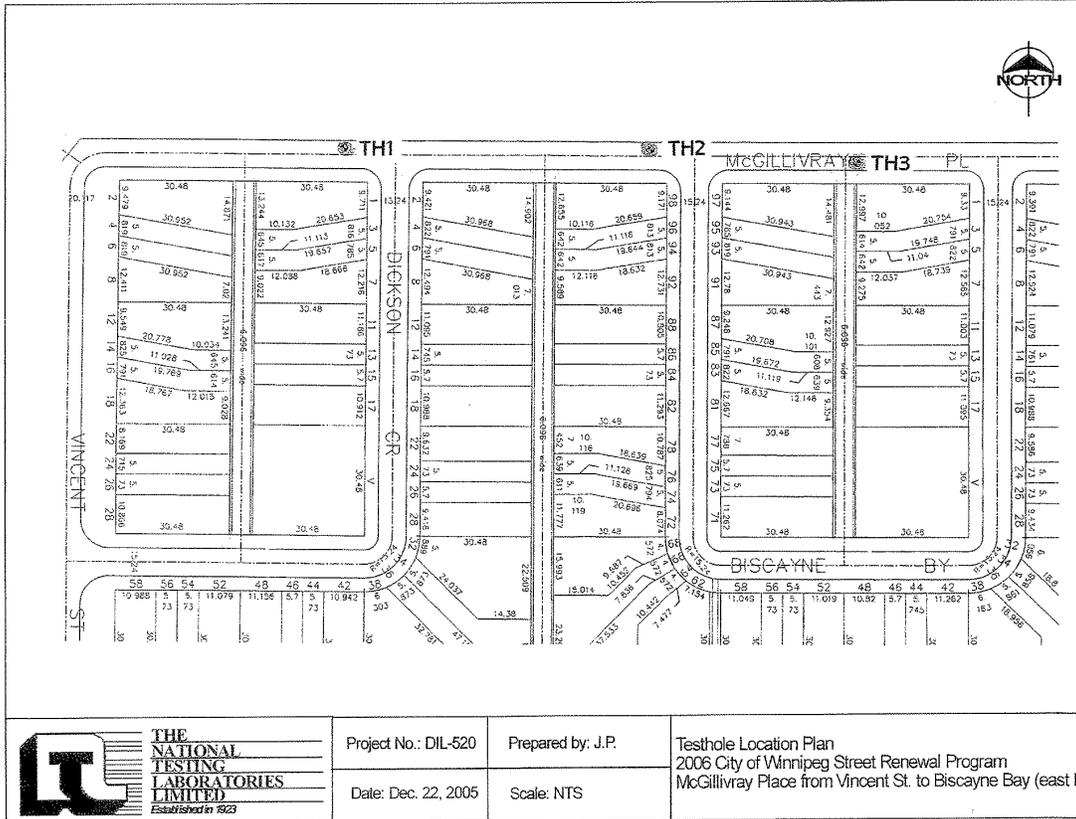


Pavement Core Photos



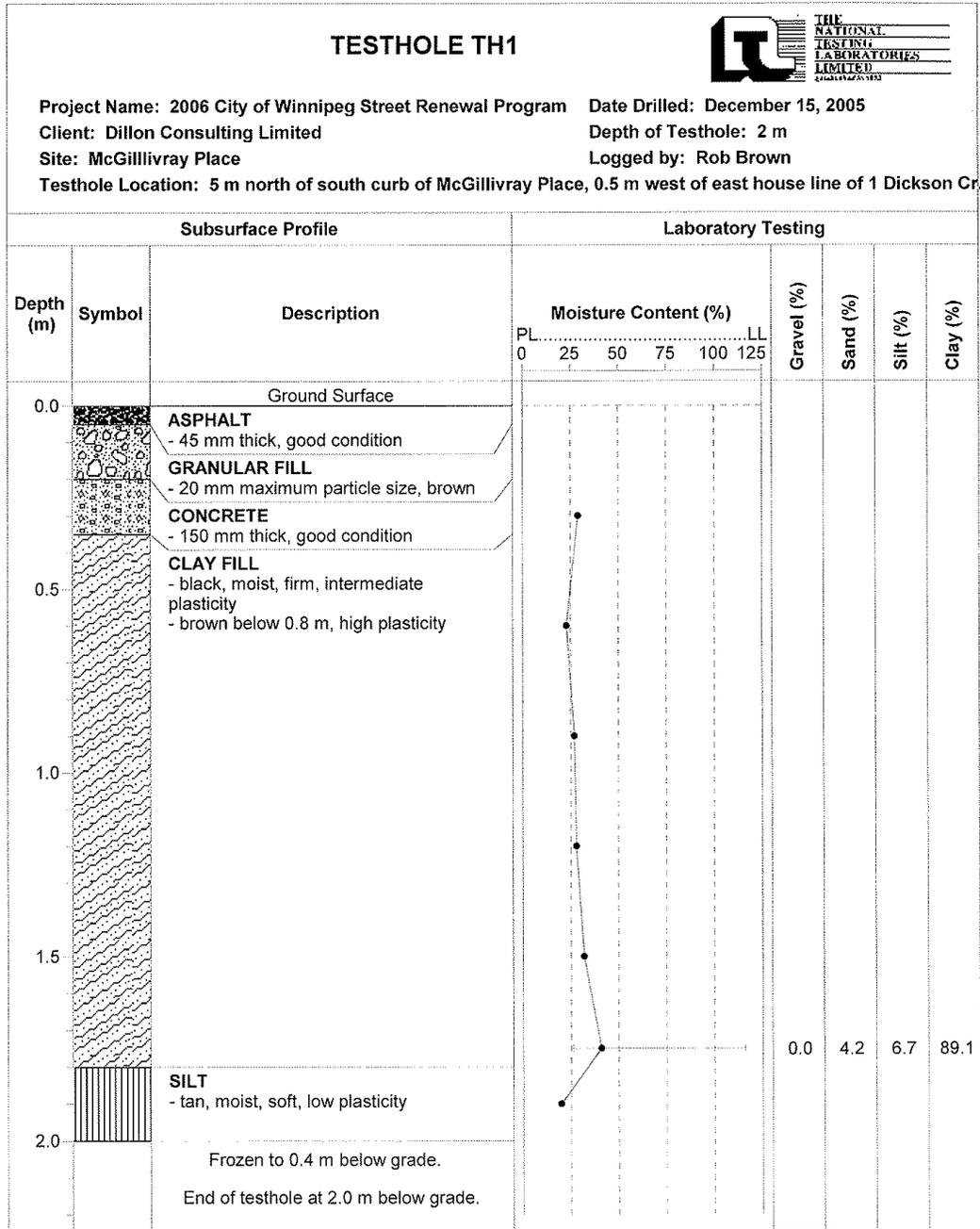
Geotechnical Report for McGillivray Place from Vincent Street to Biscayne Bay (East Leg)

Test Hole Locations

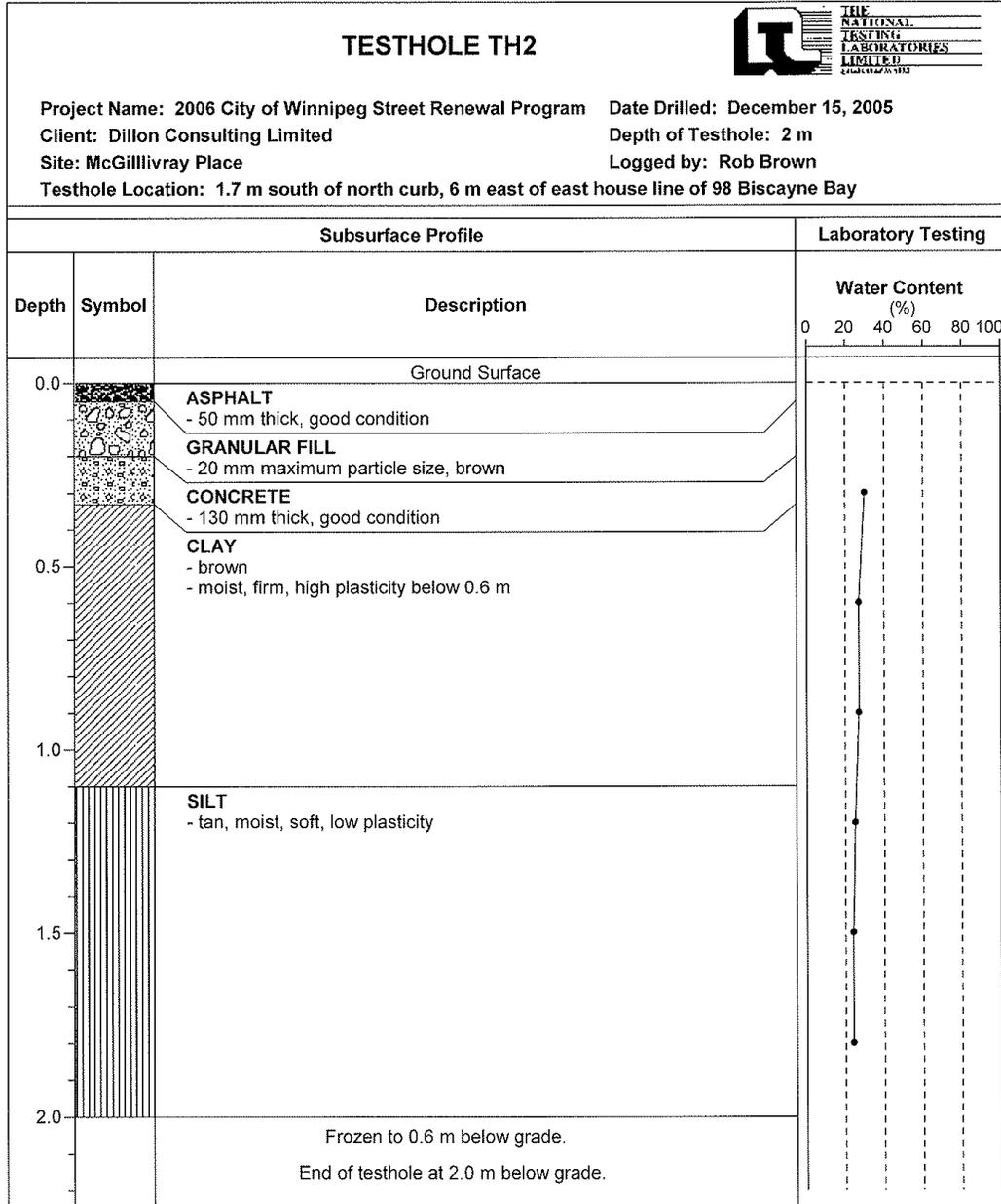


 <p>THE NATIONAL TESTING LABORATORIES LIMITED <small>Established in 1923</small></p>	Project No.: DIL-520	Prepared by: J.P.	Testhole Location Plan 2006 City of Winnipeg Street Renewal Program McGillivray Place from Vincent St. to Biscayne Bay (east leg)
	Date: Dec. 22, 2005	Scale: NTS	

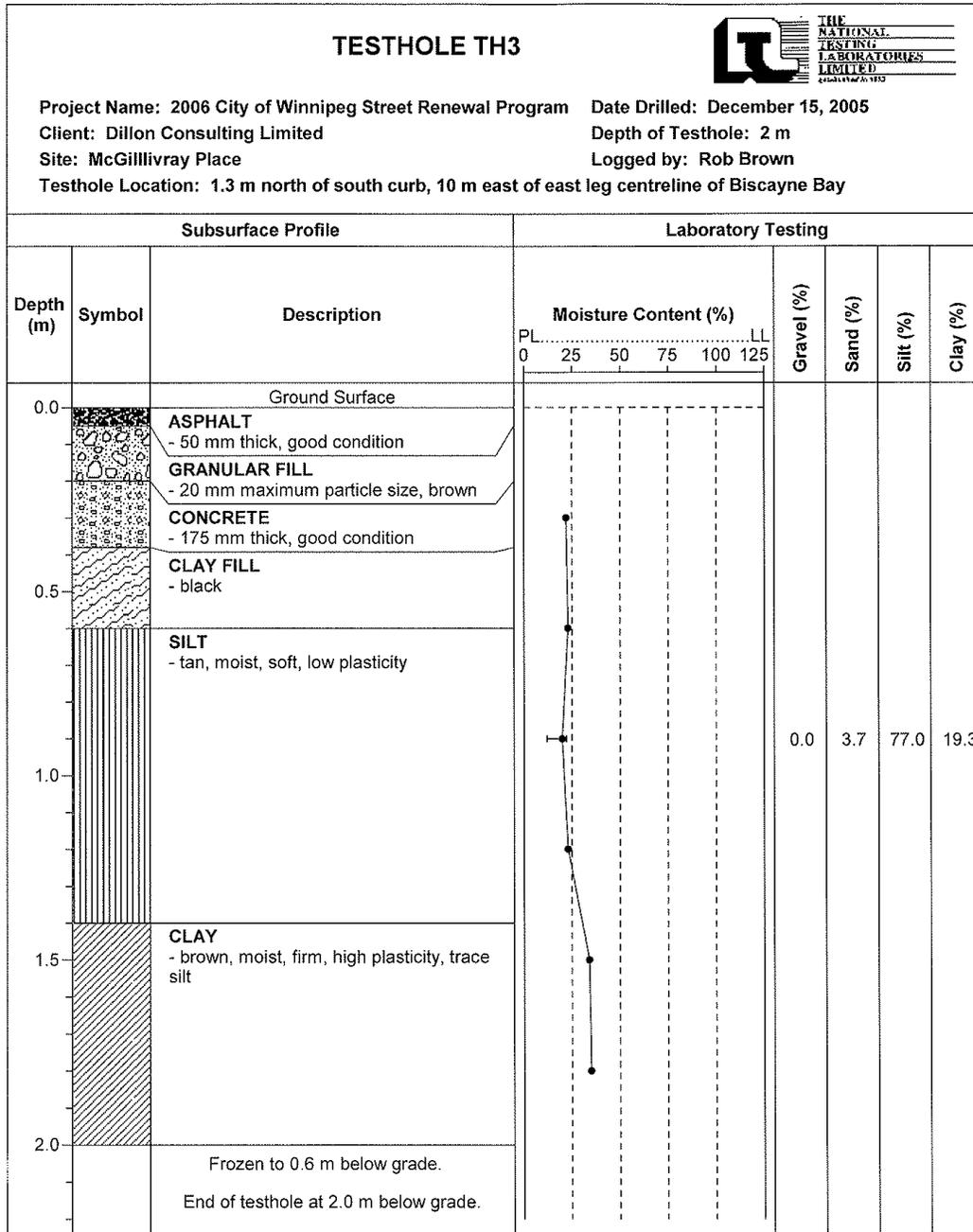
Test Hole Log for TH # 1 McGillivray Place



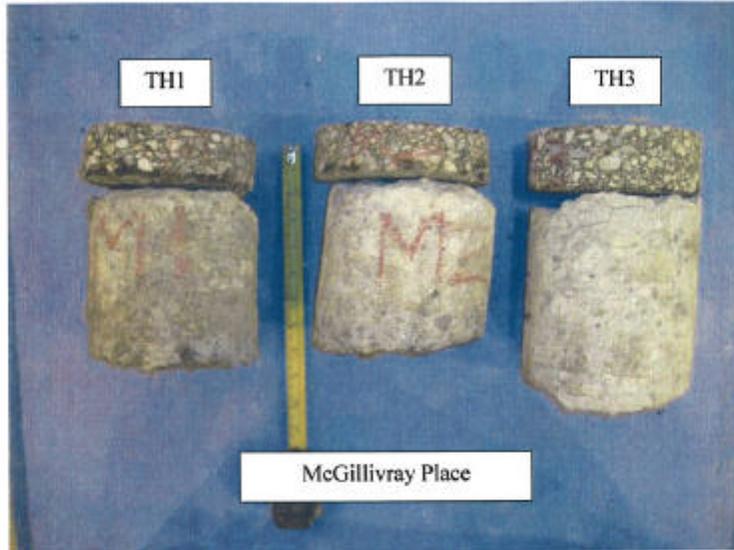
Test Hole Log for TH # 2 McGillivray Place



Test Hole Log for TH # 3 McGillivray Place

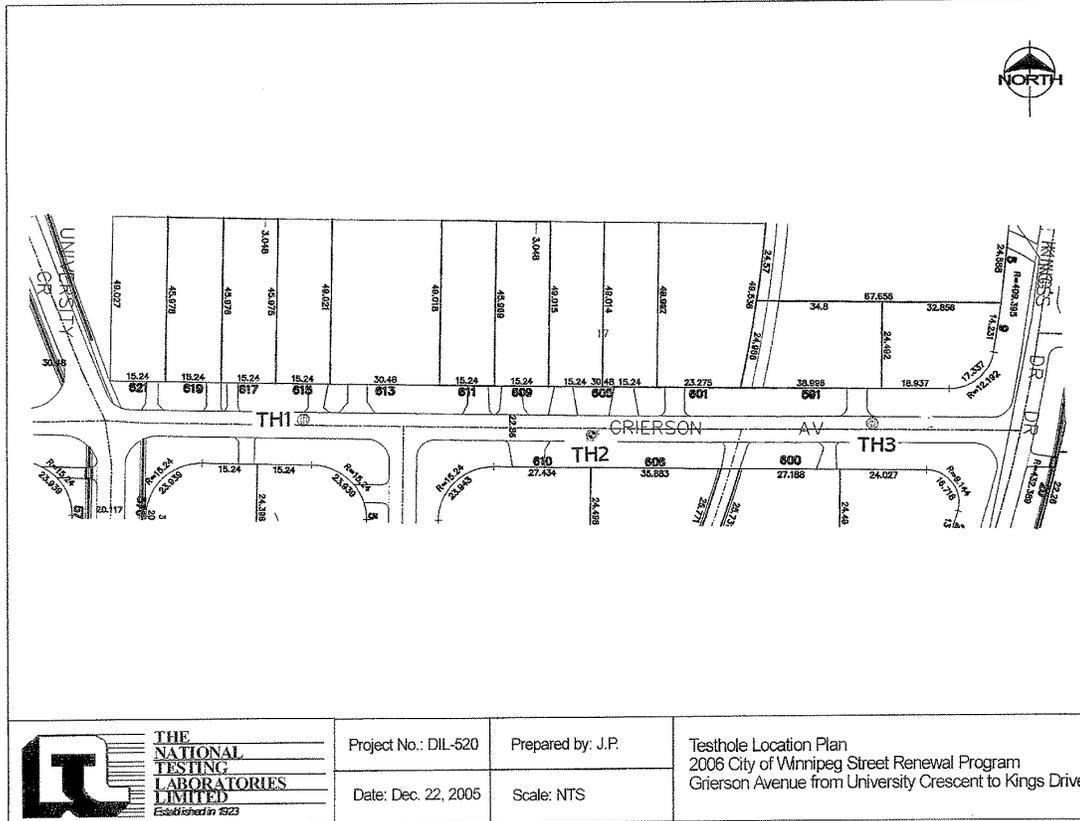


Pavement Core Photos



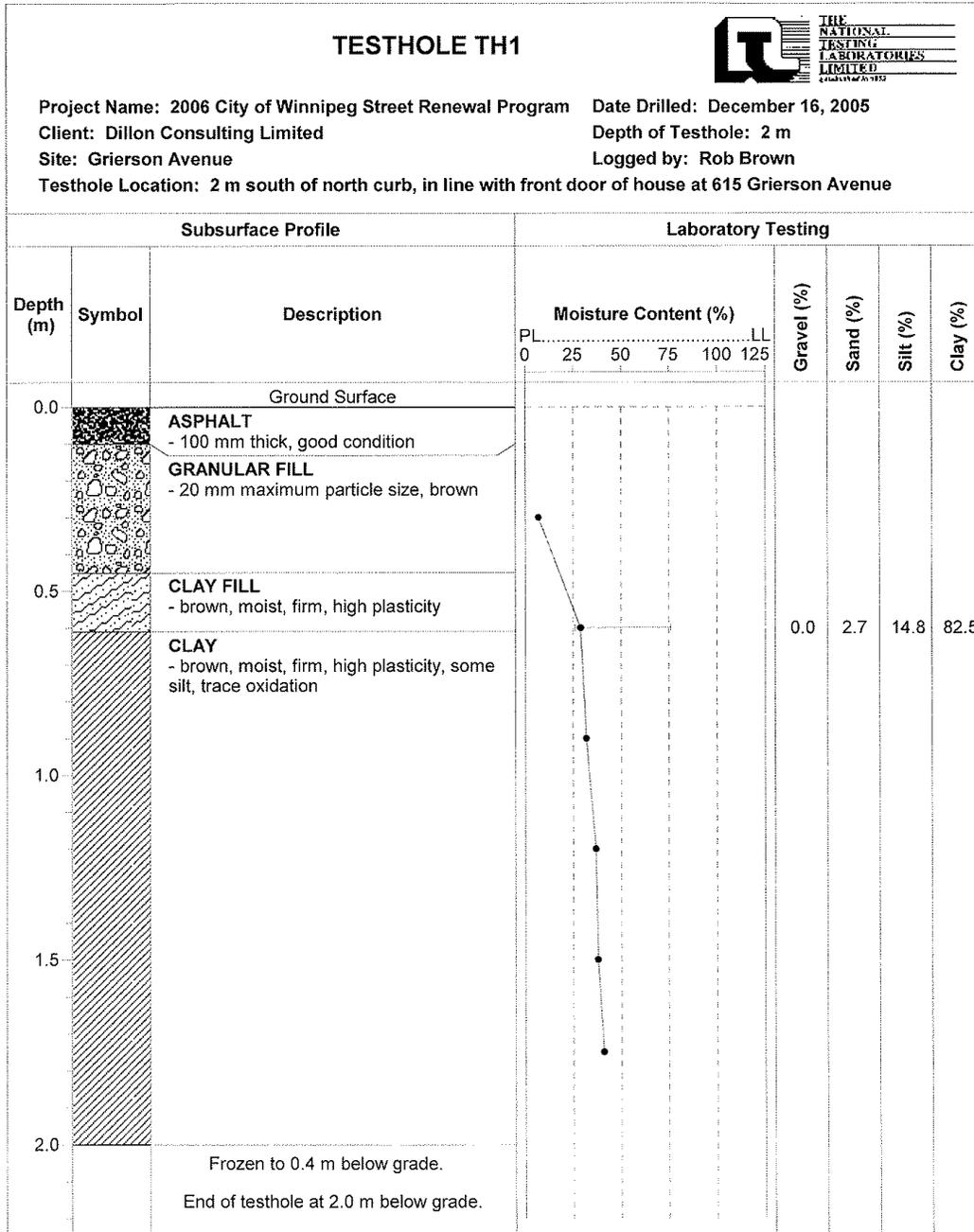
Geotechnical Report for Grierson Avenue from University Crescent to King's Drive

Test Hole Locations

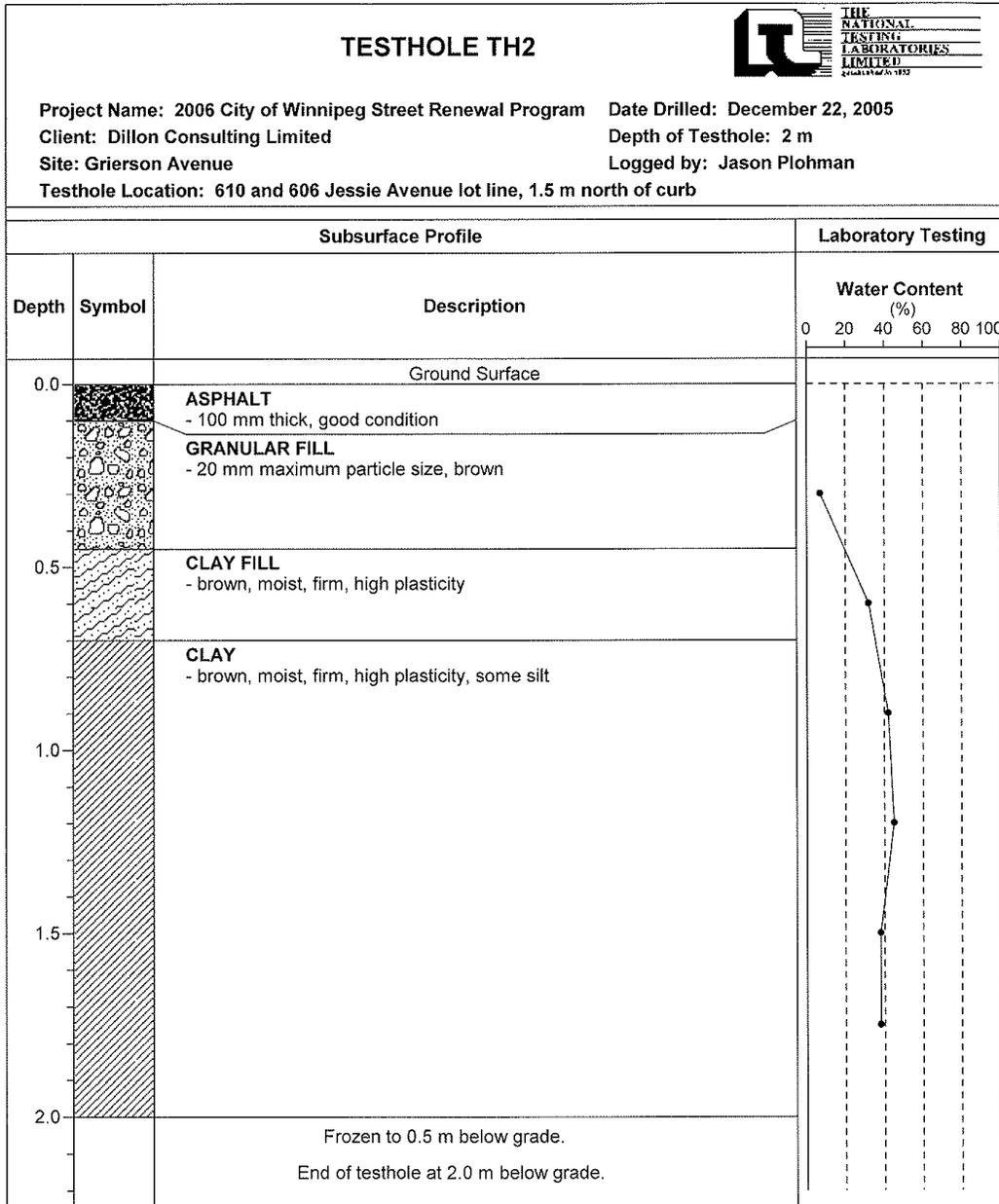


 <p>THE NATIONAL TESTING LABORATORIES LIMITED Established in 1923</p>	Project No.: DIL-520	Prepared by: J.P.	Testhole Location Plan 2006 City of Winnipeg Street Renewal Program Grierson Avenue from University Crescent to Kings Drive
	Date: Dec. 22, 2005	Scale: NTS	

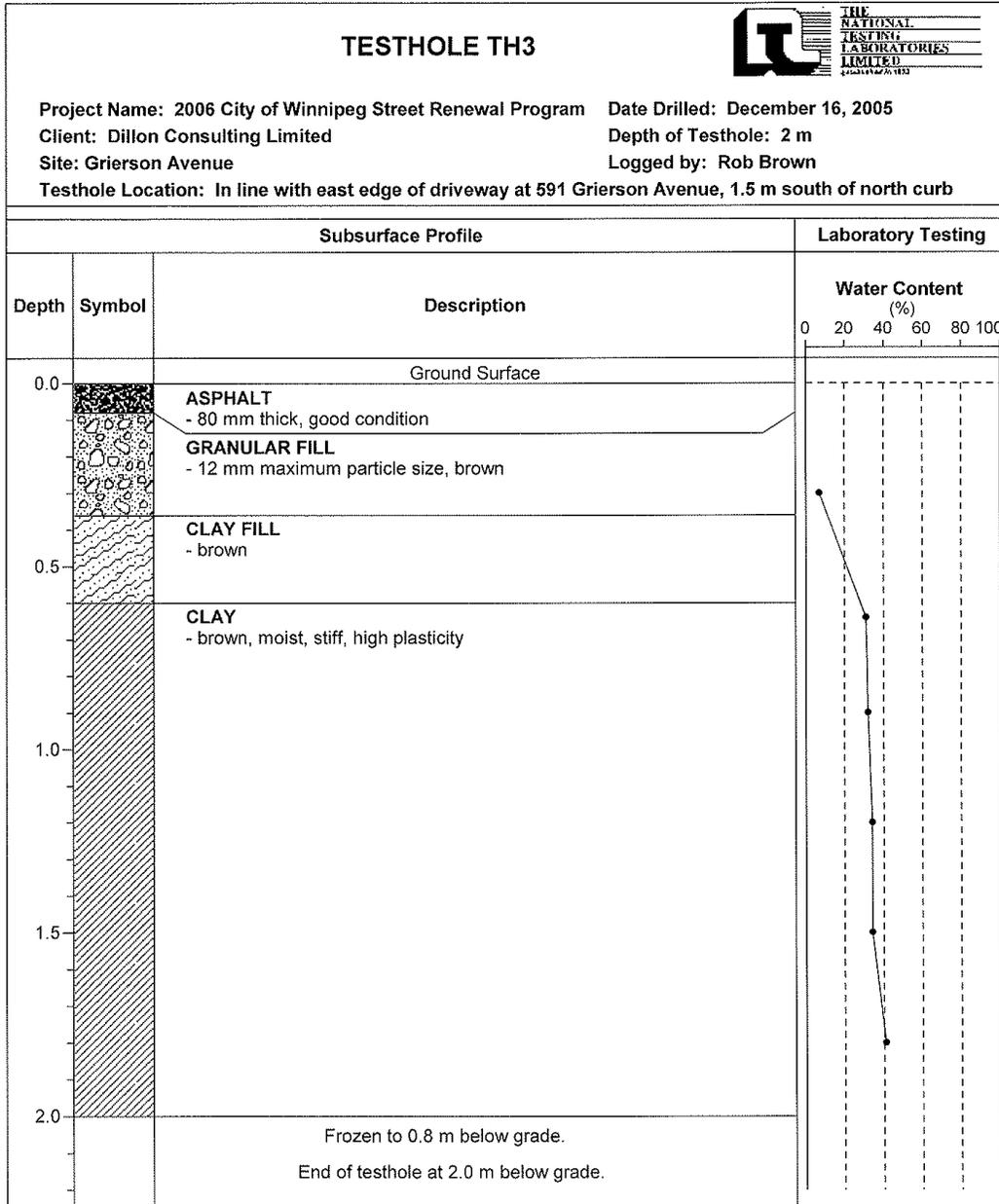
Test Hole Log for TH # 1 Grierson Avenue



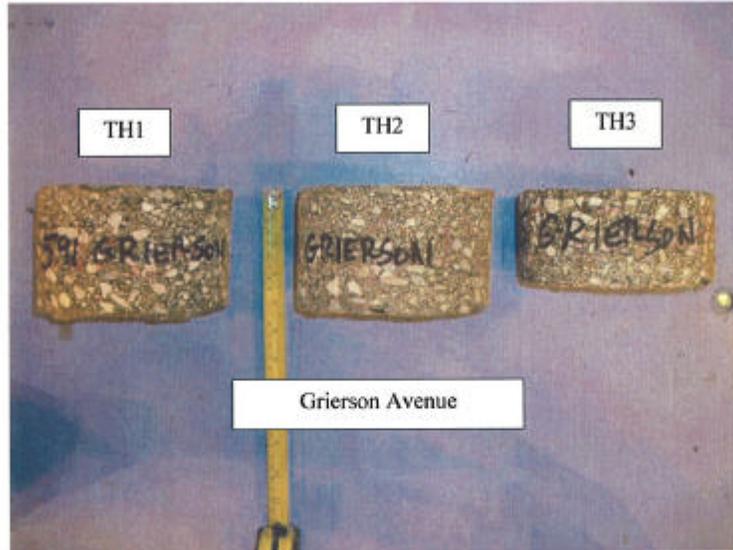
Test Hole Log for TH # 2 Grierson Avenue



Test Hole Log for TH # 3 Grierson Avenue

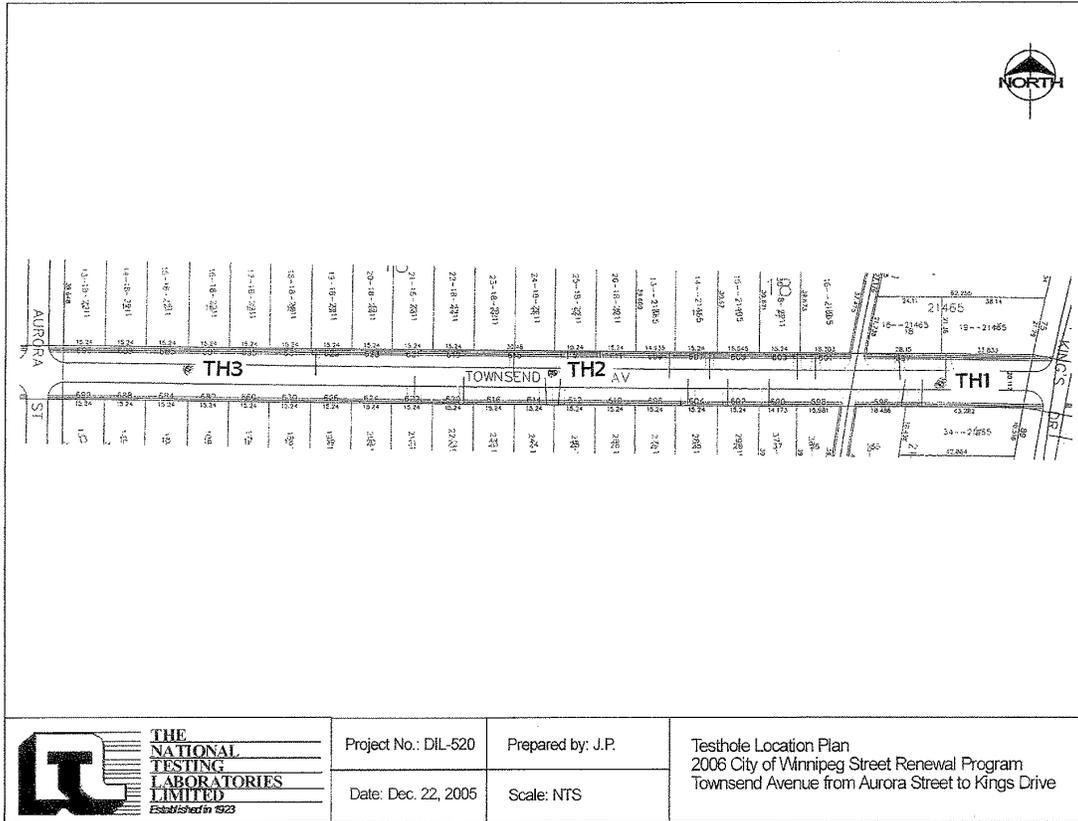


Pavement Core Photos



Geotechnical Report for Townsend Avenue from Aurora Street to King's Drive

Test Hole Locations



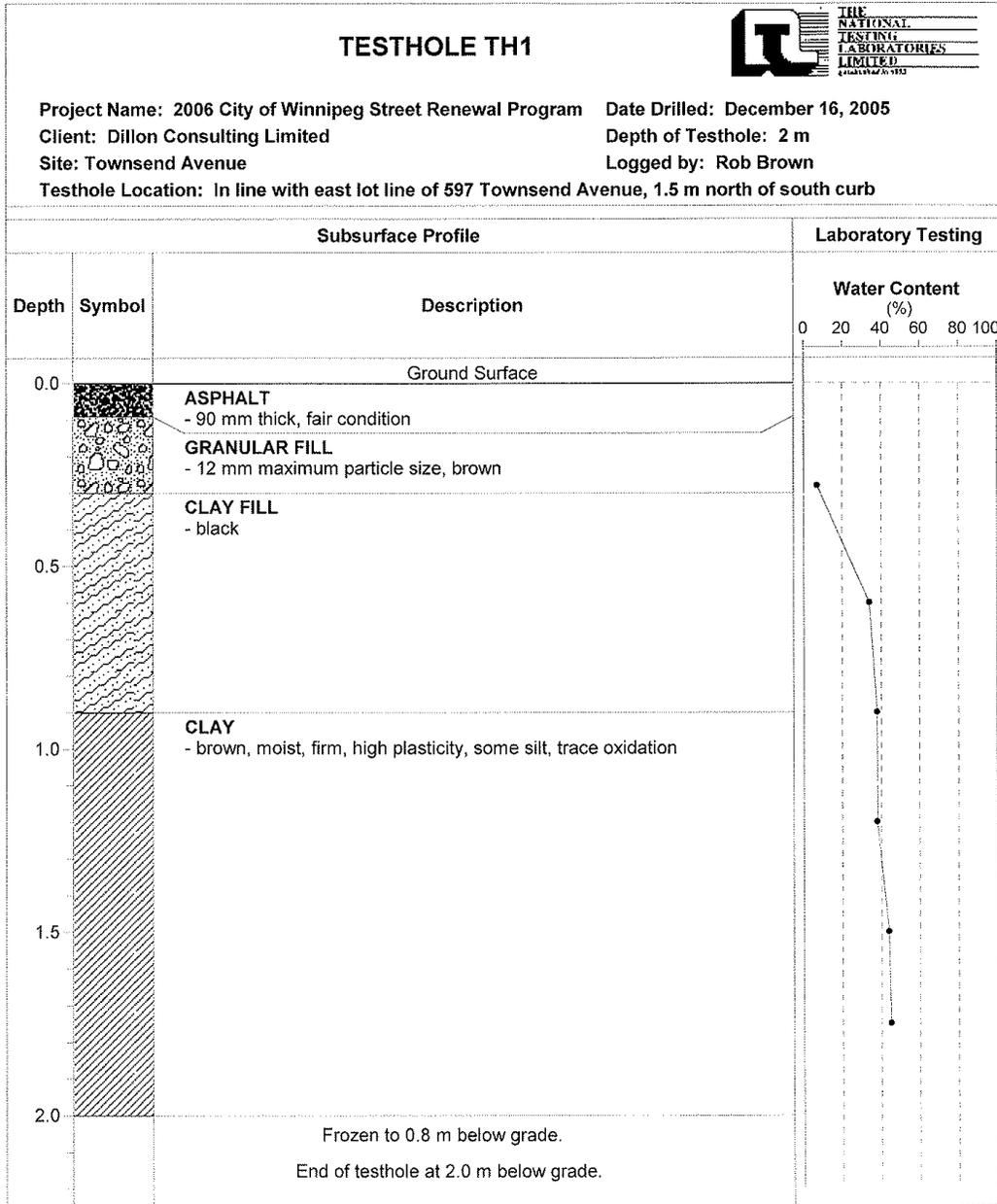
 <p>THE NATIONAL TESTING LABORATORIES LIMITED Established in 1923</p>	Project No.: DIL-520	Prepared by: J.P.	Testhole Location Plan 2006 City of Winnipeg Street Renewal Program Townsend Avenue from Aurora Street to Kings Drive
	Date: Dec. 22, 2005	Scale: NTS	

Summary of Core Samples

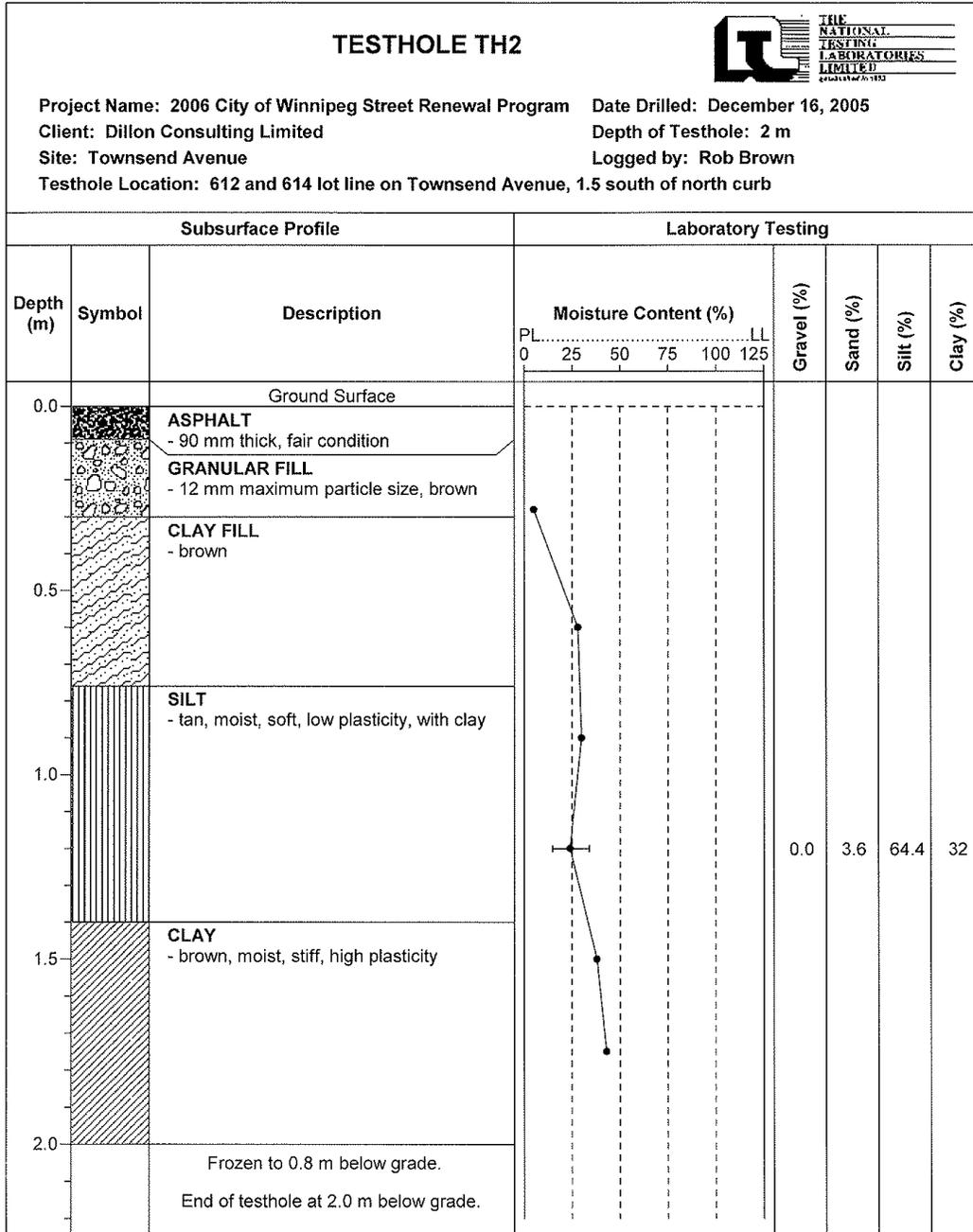
City of Winnipeg
 2006 Street Renewal Program
 Geotechnical Investigation

Testhole No.	Testhole Location	Pavement Surface		Pavement Structure Material		Sample Description	Sample Depth (m)	Moisture Content (%)	Particle Size Analysis				Atterberg Limits			
		Type	Thickness (mm)	Type	Thickness (mm)				Gravel (%)	Sand (%)	Silt (%)	Clay (%)	Liquid Limit	Plastic Limit	Plasticity Limit	
1	Townsend Avenue	Asphalt	90	Granular	205											
2	Townsend Avenue	Asphalt	90	Granular	205	Clayey Silt	1.2	24.9	0.0	3.6	64.4	32.0	34	15	19	
3	Townsend Avenue	Asphalt	90	Granular	205	Clay	0.9	30.5	0	3.9	5.5	90.6	107	29	78	

Test Hole Log for TH # 1 Townsend Avenue



Test Hole Log for TH # 2 Townsend Avenue

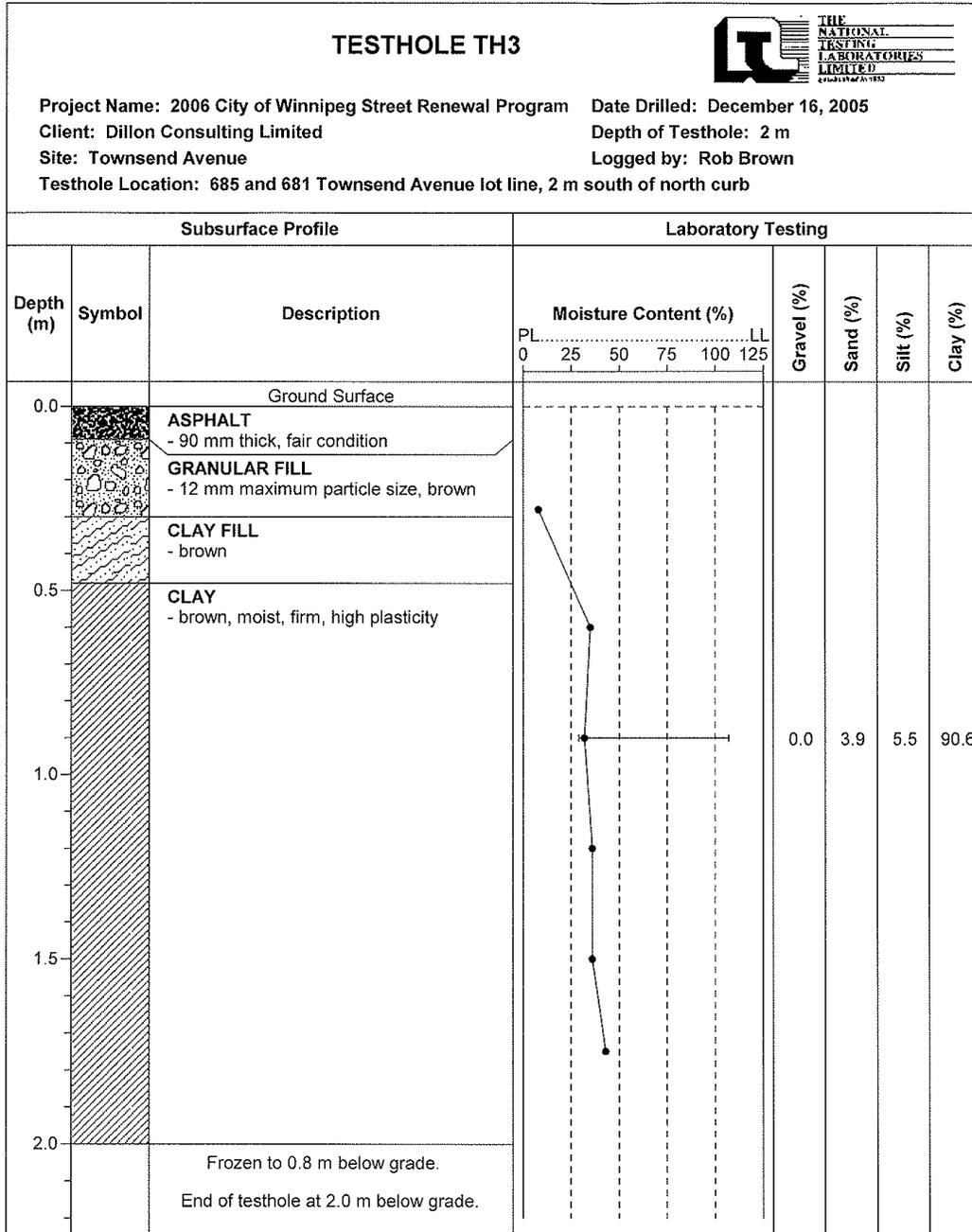


TESTHOLE TH2



Project Name: 2006 City of Winnipeg Street Renewal Program Date Drilled: December 16, 2005
 Client: Dillon Consulting Limited Depth of Testhole: 2 m
 Site: Townsend Avenue Logged by: Rob Brown
 Testhole Location: 612 and 614 lot line on Townsend Avenue, 1.5 south of north curb

Test Hole Log for TH # 3 Townsend Avenue



Pavement Core Photos

