

APPENDIX 'A'

GEOTECHNICAL REPORT

APPENDIX 'A' - GEOTECHNICAL REPORT

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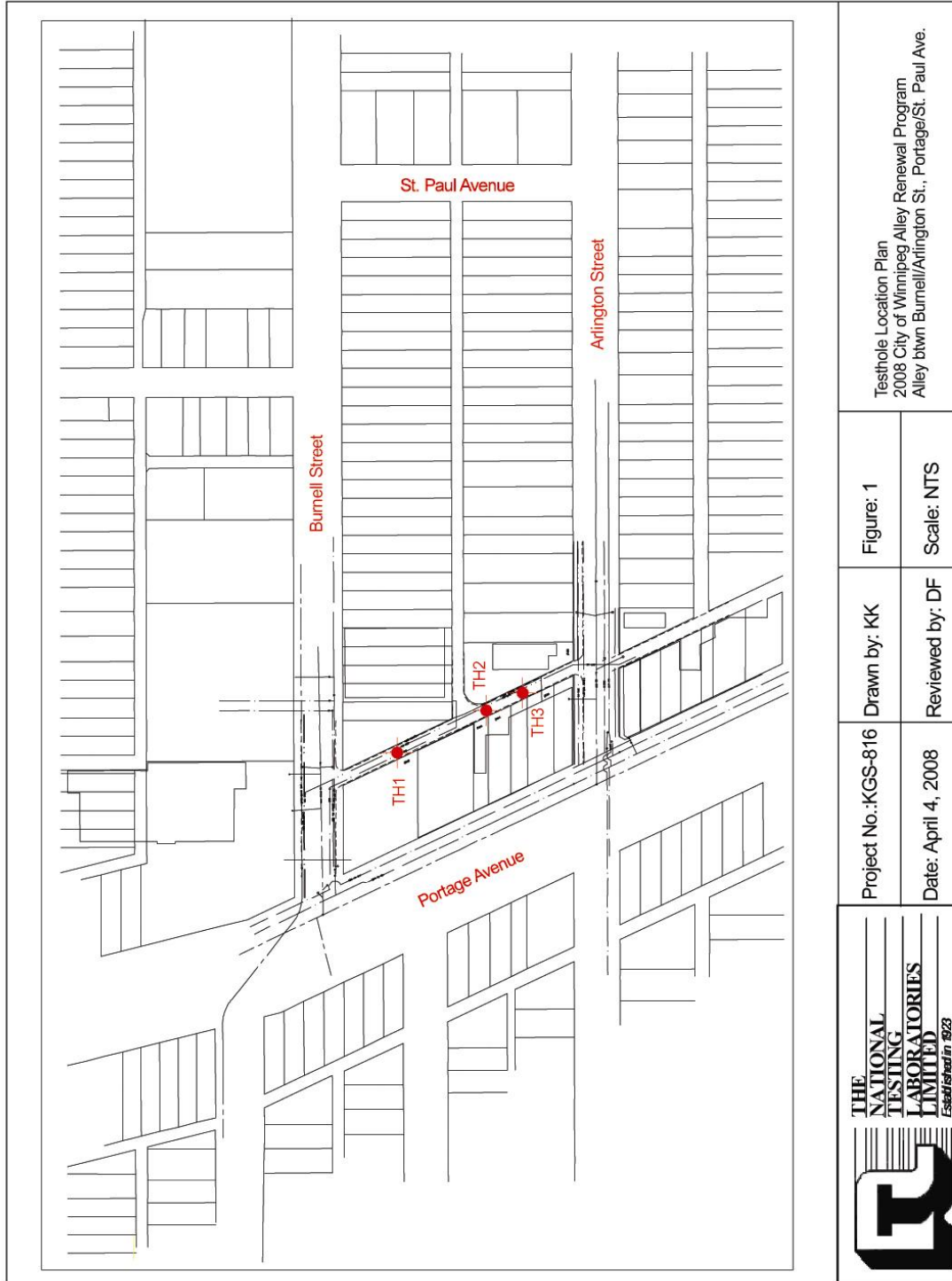
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The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown

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.

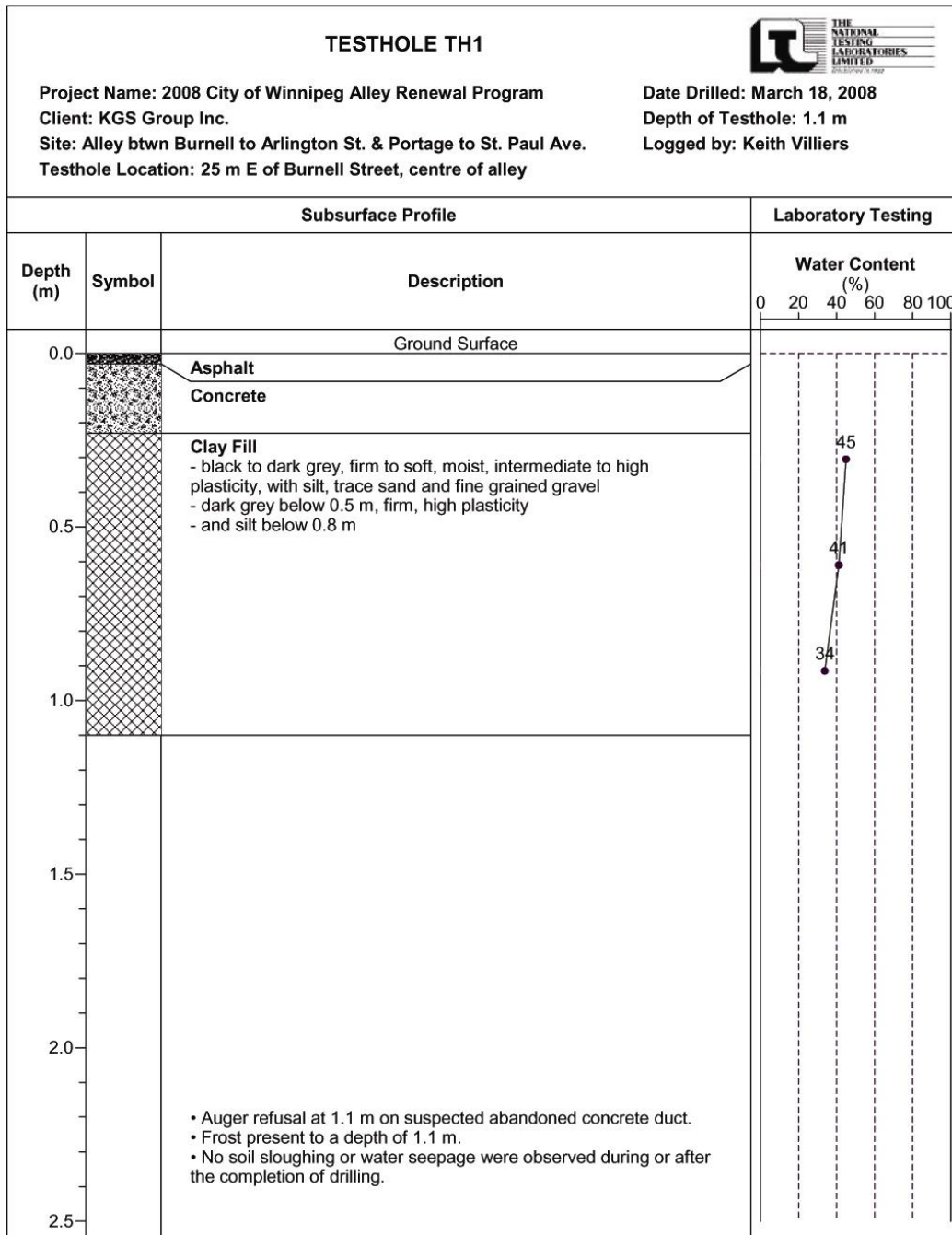
Geotechnical Report for Portage Avenue North Alley

Test Hole Locations




Testhole Location Plan 2008 City of Winnipeg Alley Renewal Program Alley btwn Burnell/Arlington St., Portage/St. Paul Ave.	
Figure: 1	Scale: NTS
Drawn by: KK	Reviewed by: DF
Project No.: KGS-816	Date: April 4, 2008
	

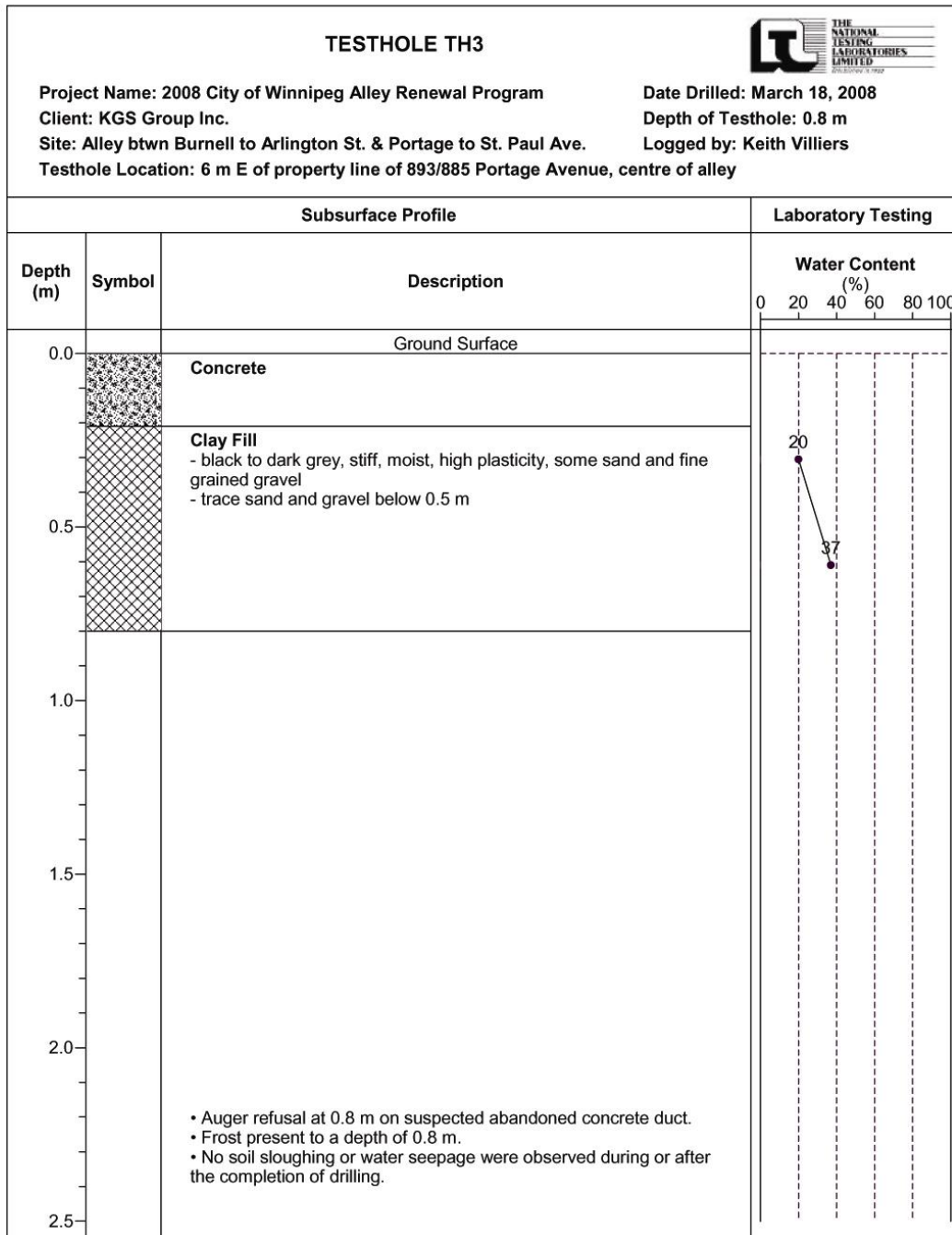
Test Hole Log for TH1



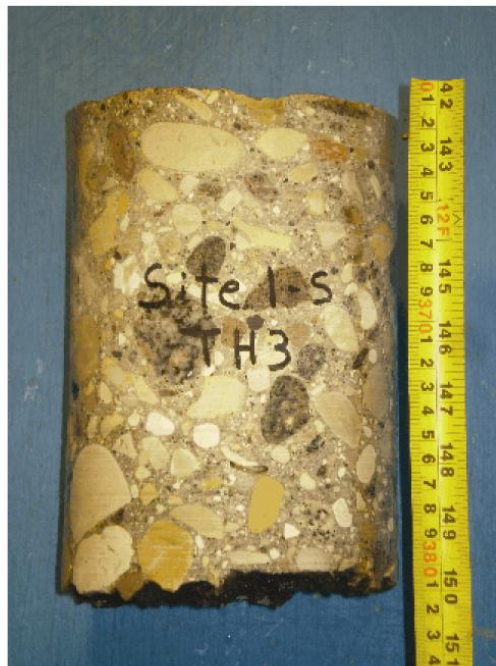
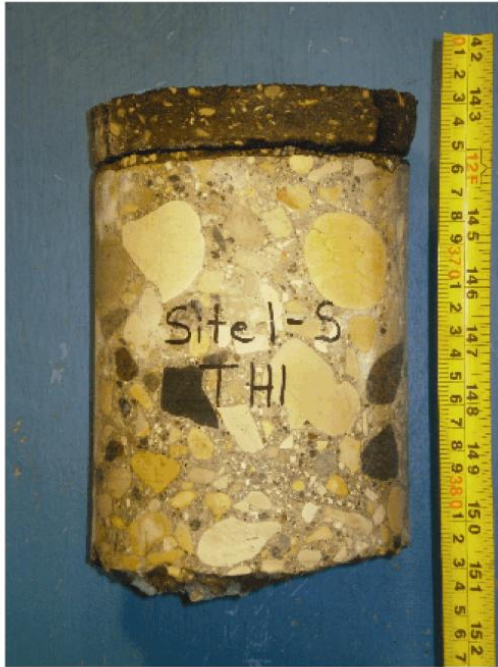
Test Hole Log for TH2

TESTHOLE TH2								
Project Name: 2008 City of Winnipeg Alley Renewal Program		Date Drilled: March 18, 2008		Client: KGS Group Inc.		Depth of Testhole: 1.1 m		
Site: Alley btwn Burnell to Arlington St. & Portage to St. Paul Ave.		Logged by: Keith Villiers		Testhole Location: In line with the property line of 893/899 Portage Avenue, centre of alley				
Subsurface Profile			Laboratory Testing					
Depth (m)	Symbol	Description	Water Content (%)		Gravel (%)	Sand (%)	Silt (%)	Clay (%)
			PL	LL				
0.0		Ground Surface						
		Concrete						
		Clay Fill - black to dark grey, stiff, moist, high plasticity, with sand and fine grained gravel - trace sand and gravel below 0.5 m, some silt - grey below 1.0 m, firm, with silt	22	38				
0.5								
1.0			41	41	0.0	5.8	20.8	73.4
1.5								
2.0								
2.5		<ul style="list-style-type: none"> • Auger refusal at 1.1 m on suspected abandoned concrete duct. • Frost present to a depth of 0.9 m. • No soil sloughing or water seepage were observed during or after the completion of drilling. 						

Test Hole Log for TH3

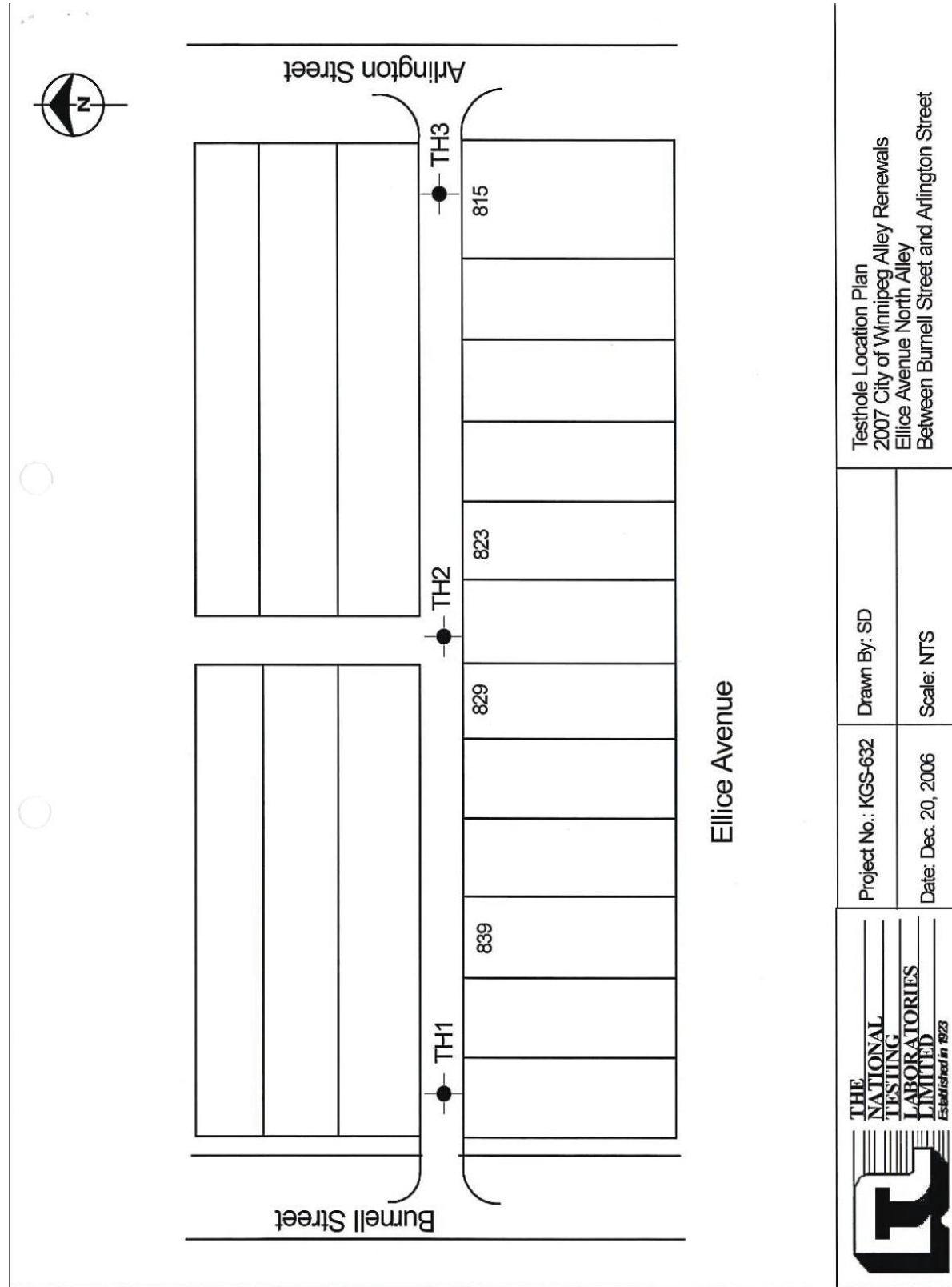


Pavement Core Photos



Geotechnical Report for Ellice Avenue North Alley

Test Hole Locations



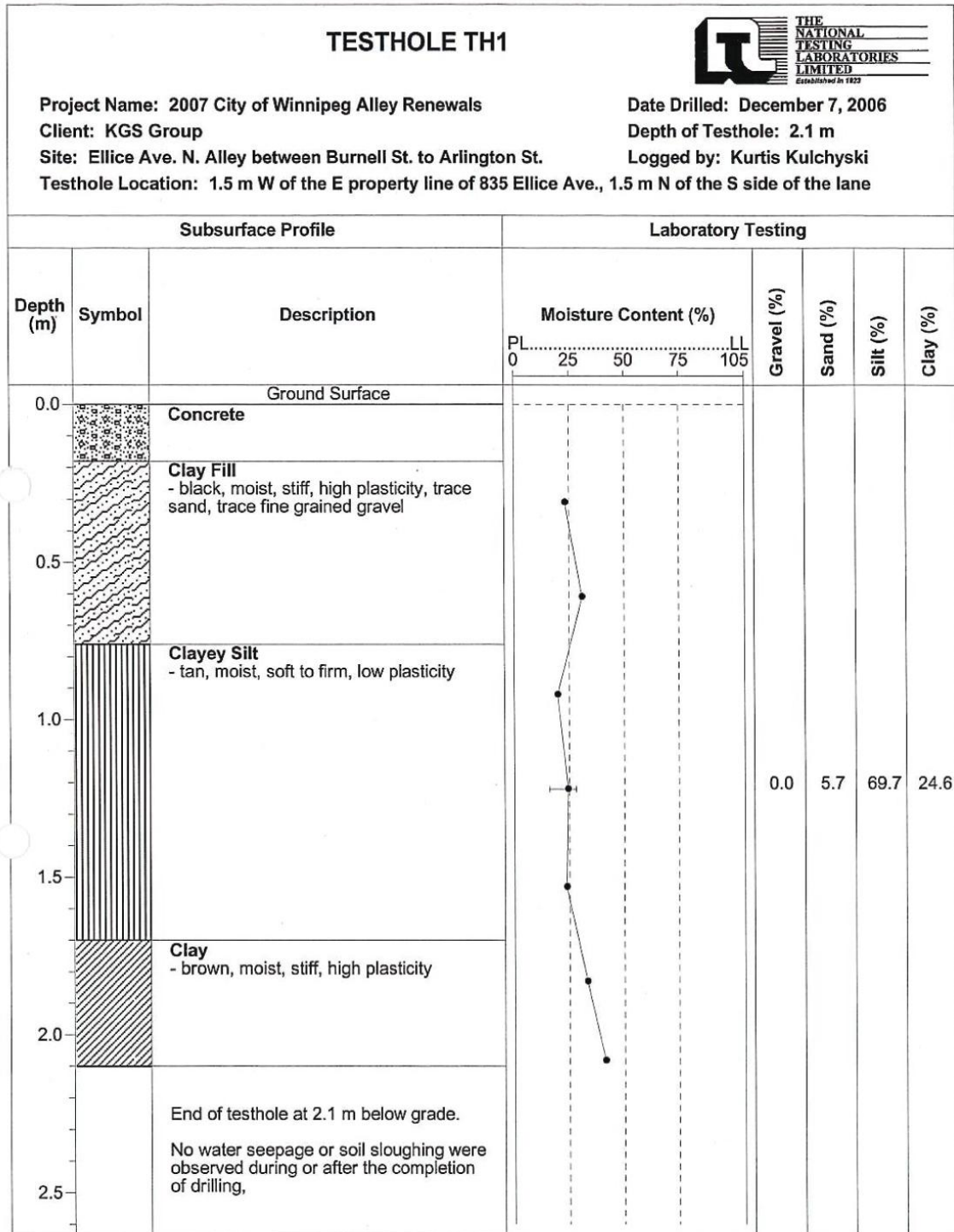
THE NATIONAL TESTING LABORATORIES LIMITED
 Established in 1923

Project No.: KGS-632
 Date: Dec. 20, 2006

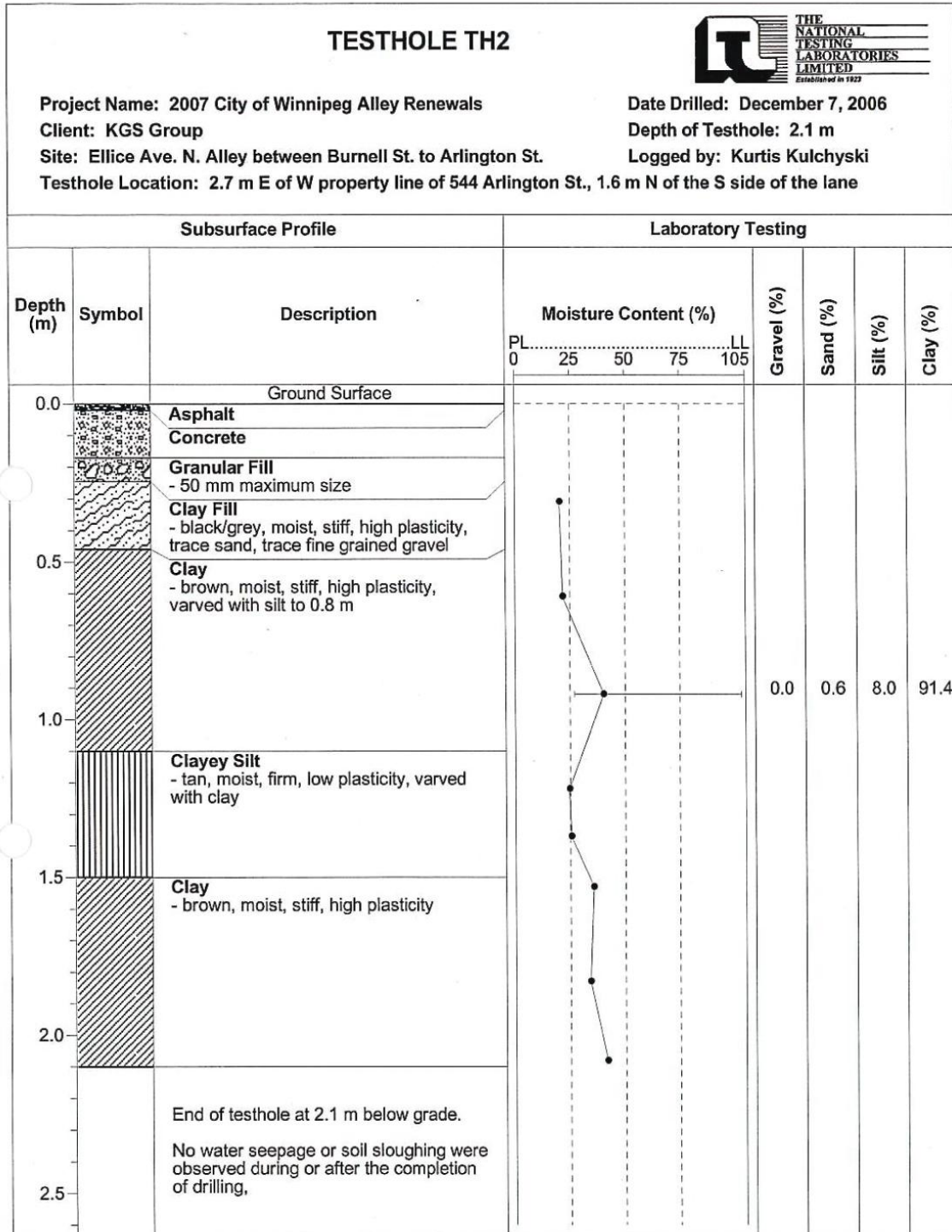
Drawn By: SD
 Scale: NTS

Testhole Location Plan
 2007 City of Winnipeg Alley Renewals
 Ellice Avenue North Alley
 Between Burnell Street and Arlington Street

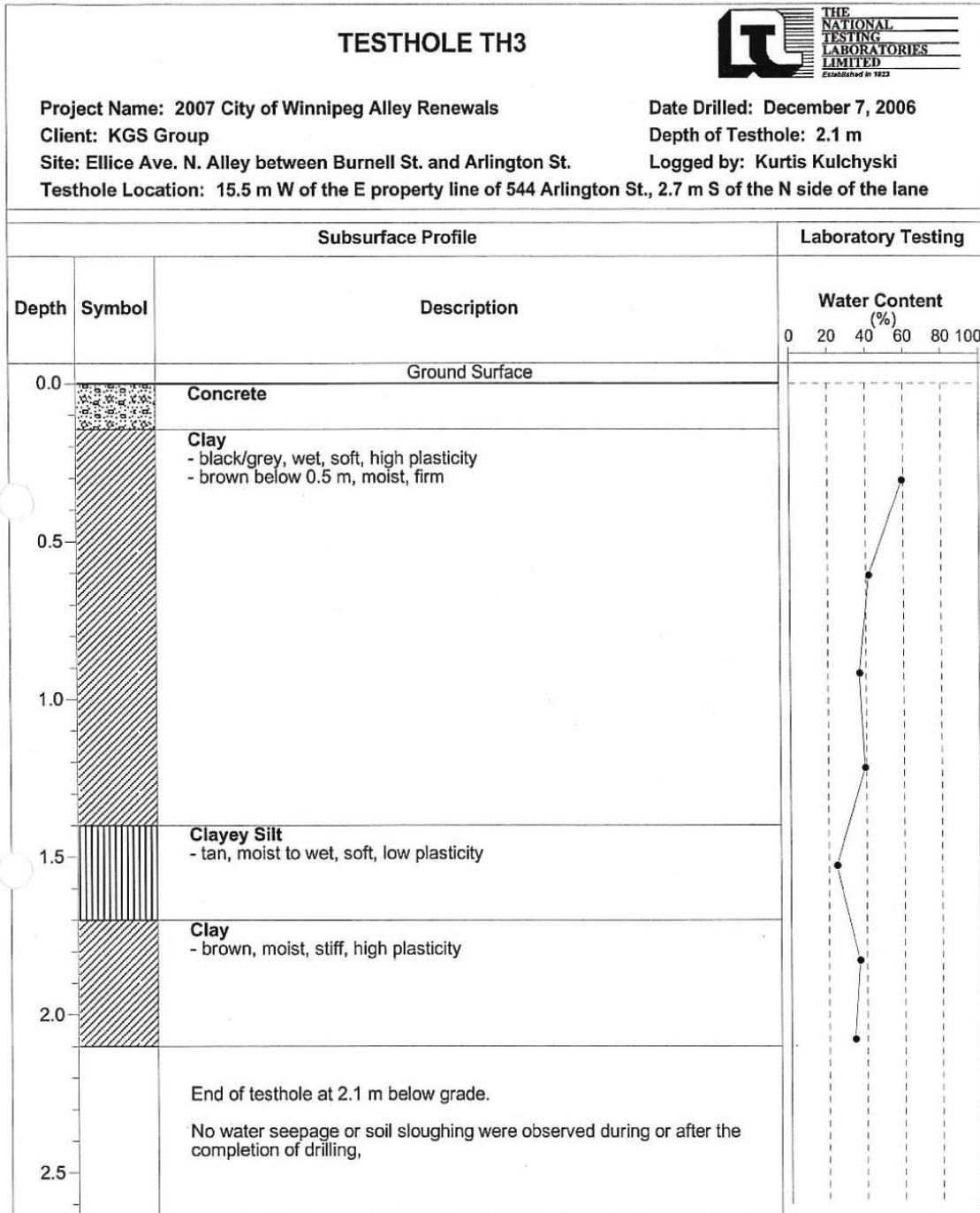
Test Hole Log for TH1



Test Hole Log for TH2

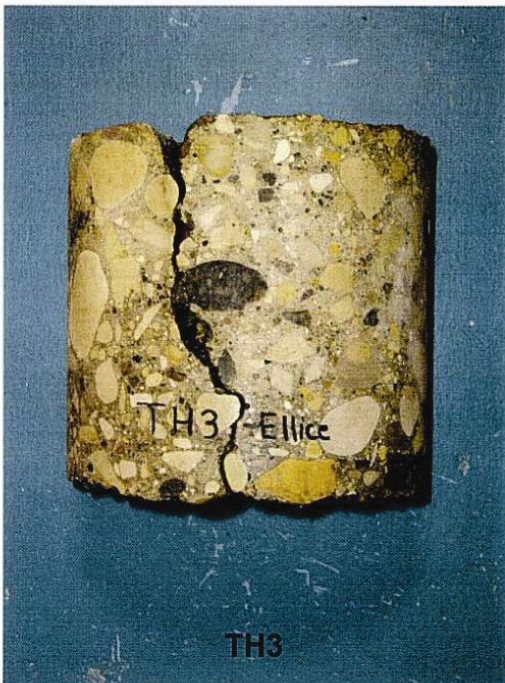
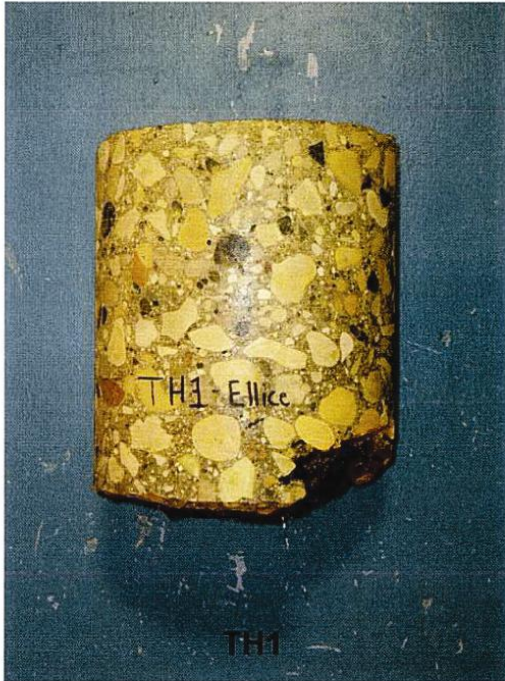


Test Hole Log for TH3



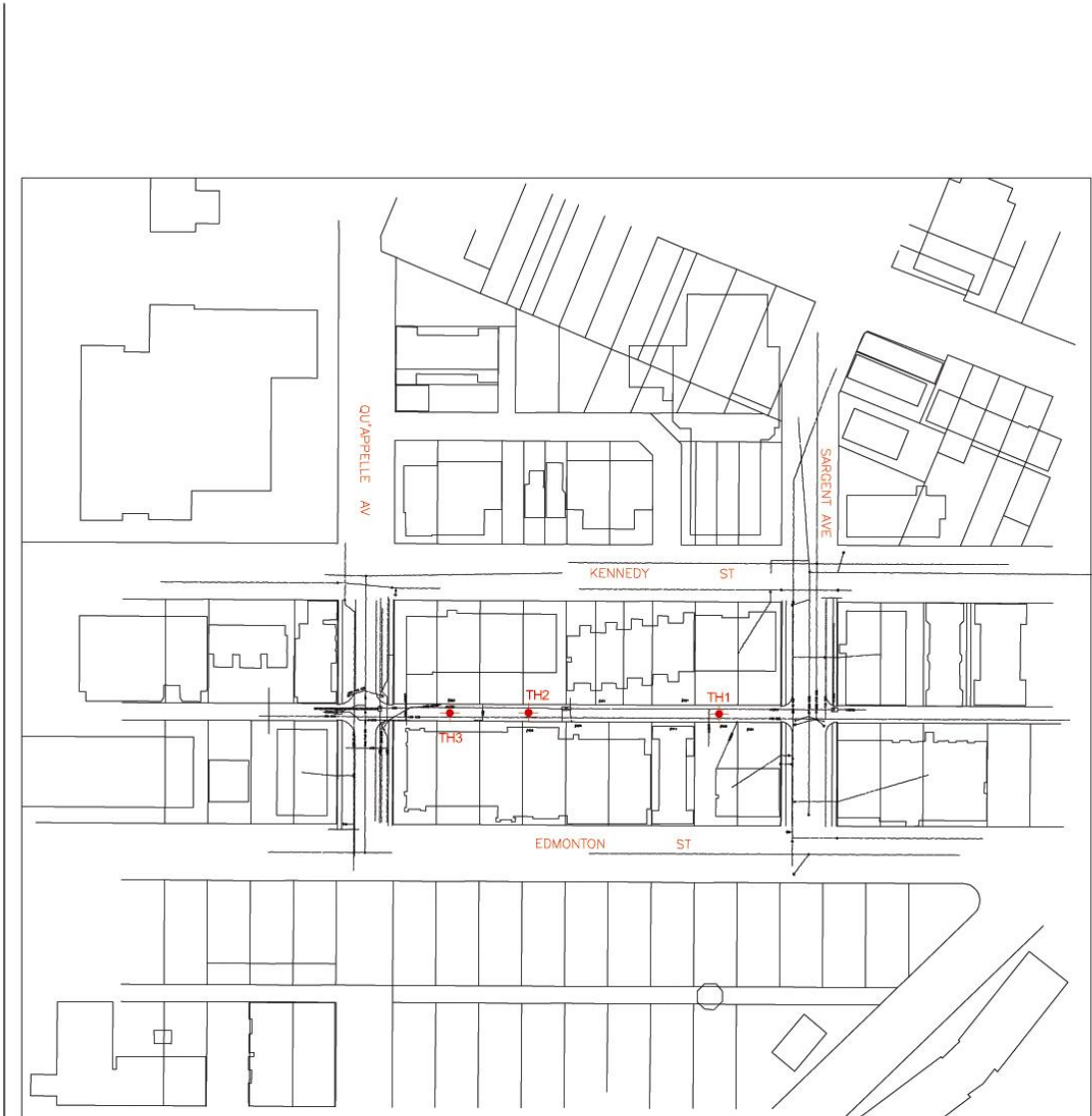
Pavement Core Photos

**2007 City of Winnipeg Alley Renewals
Ellice Avenue North Alley
Burnell Street to Arlington Street**



Geotechnical Report for Kennedy Street / Edmonton Street Alley

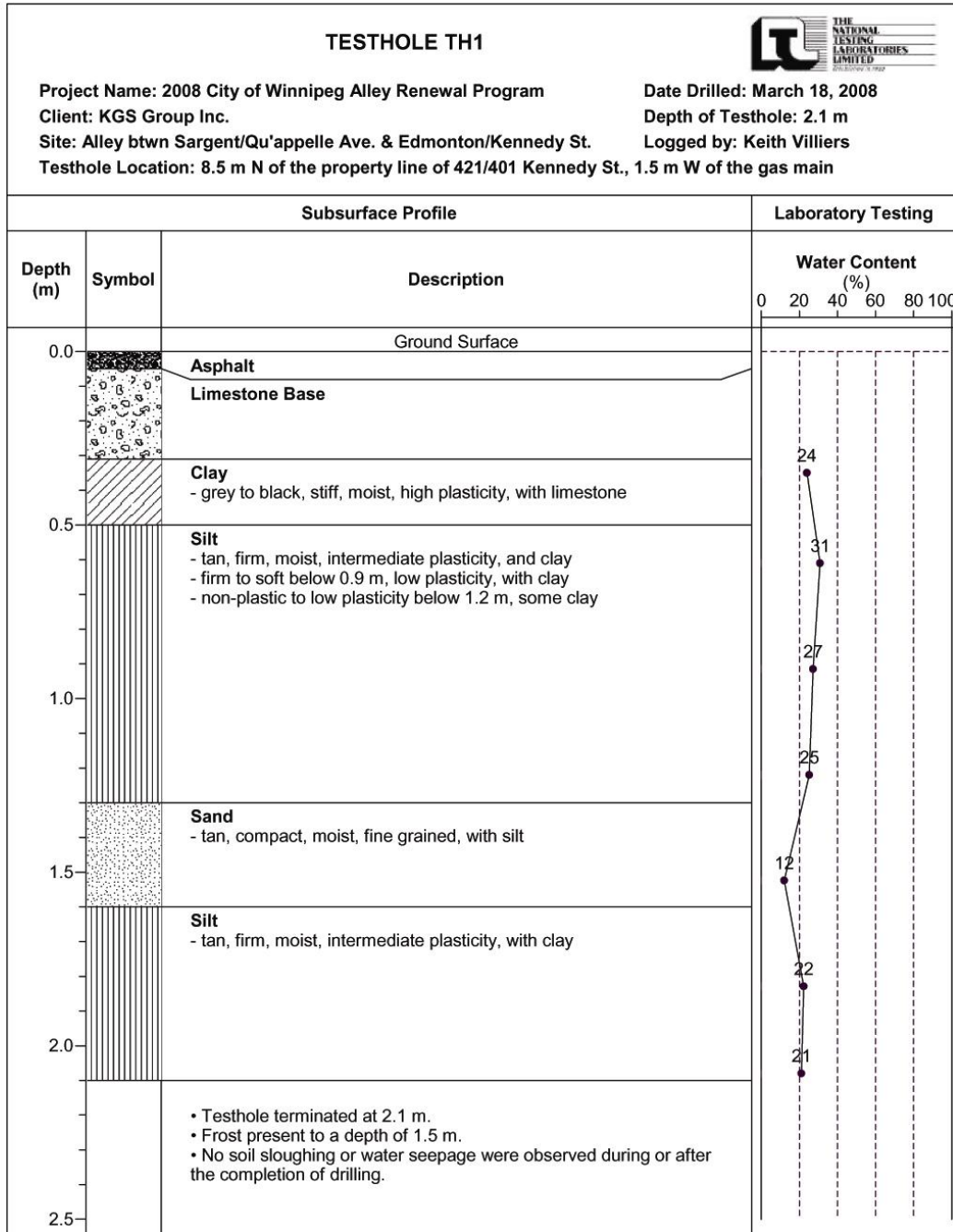
Test Hole Locations



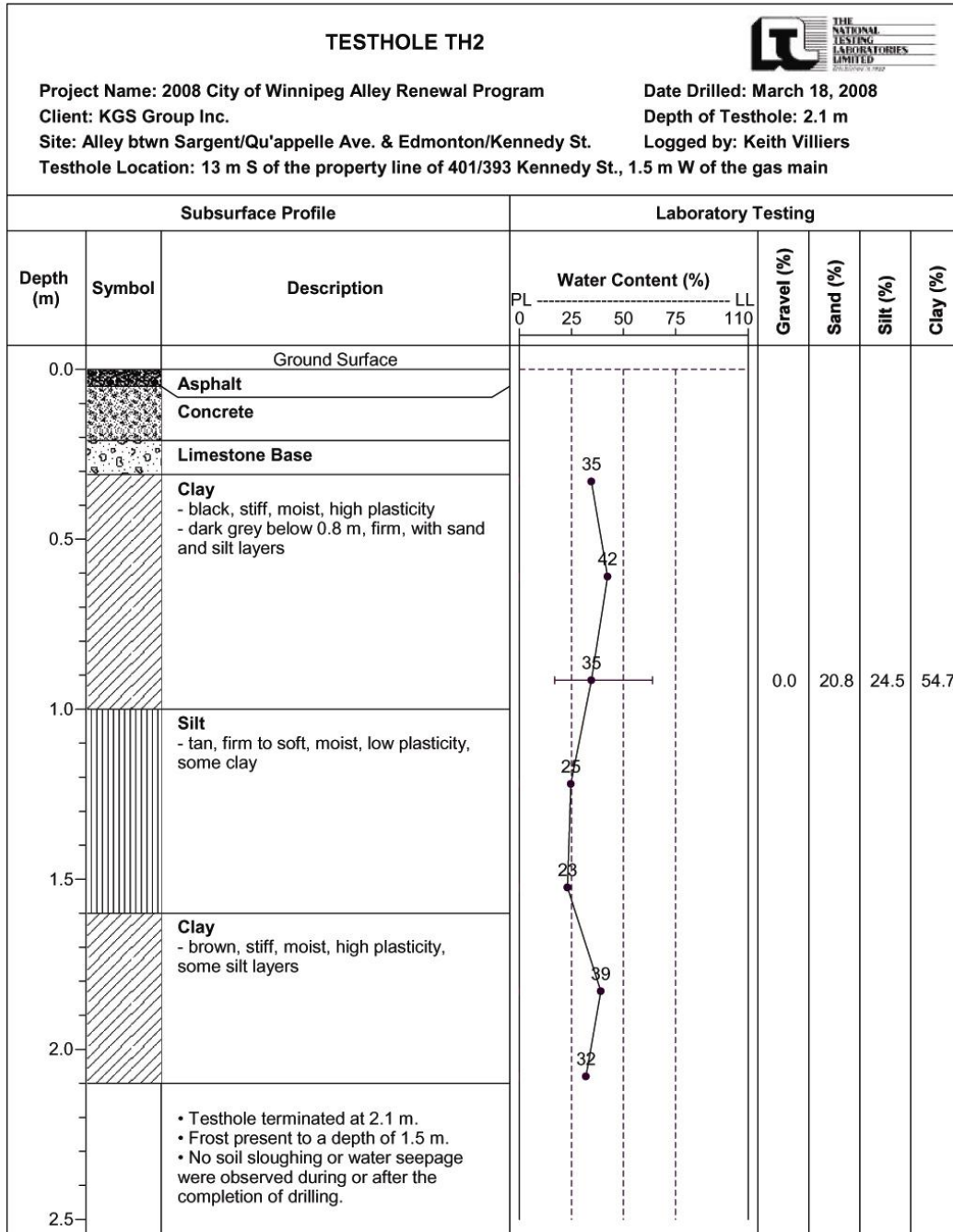
Testhole Location Plan
2008 City of Winnipeg Alley Renewal Program
Alley btwn Sargent/Qu'appelle Ave., Edmonton/Kennedy St.

Project No.: KGS-816	Drawn by: KK	Figure: 1
Date: April 6, 2008	Reviewed by: DF	Scale: NTS

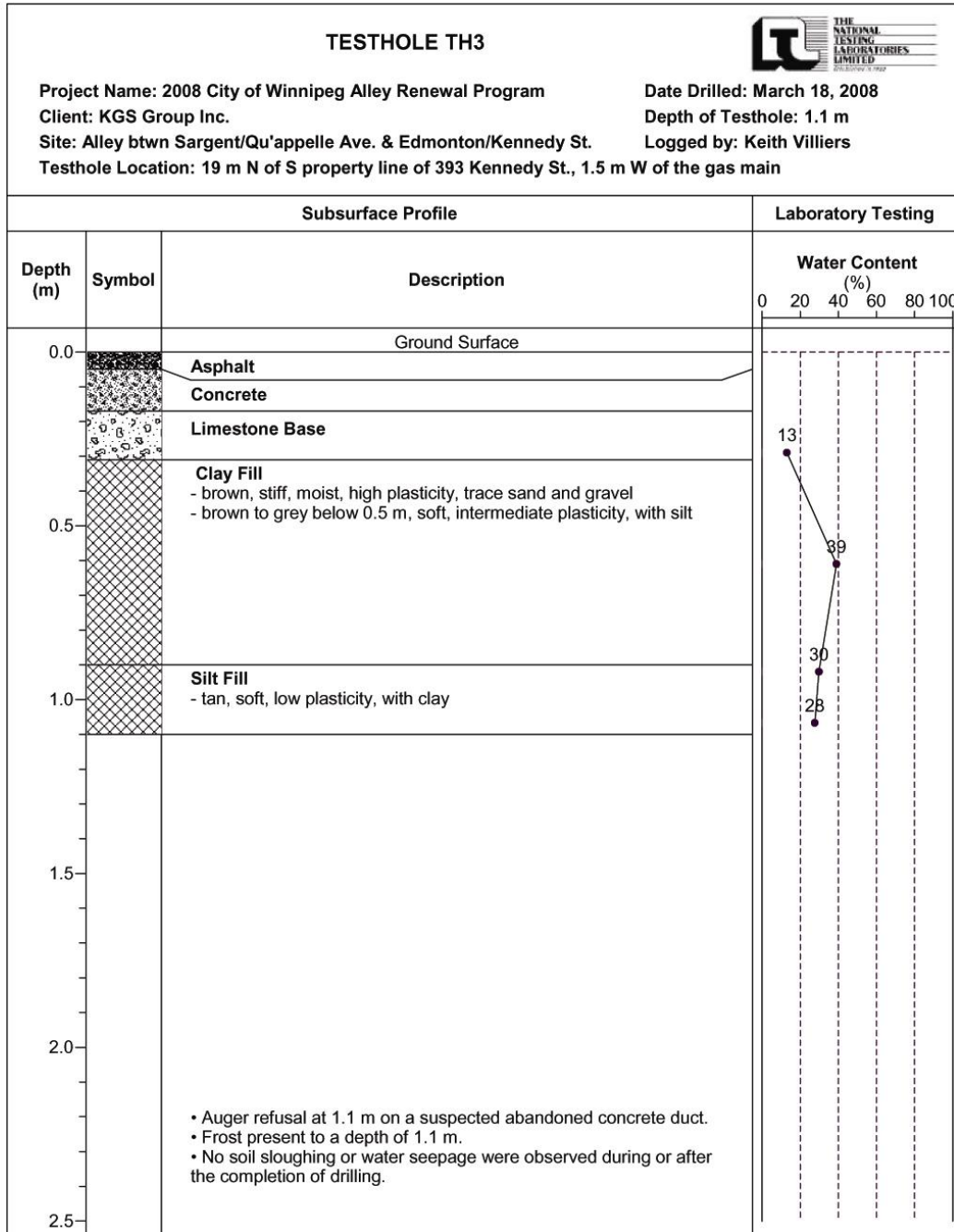
Test Hole Log for TH1



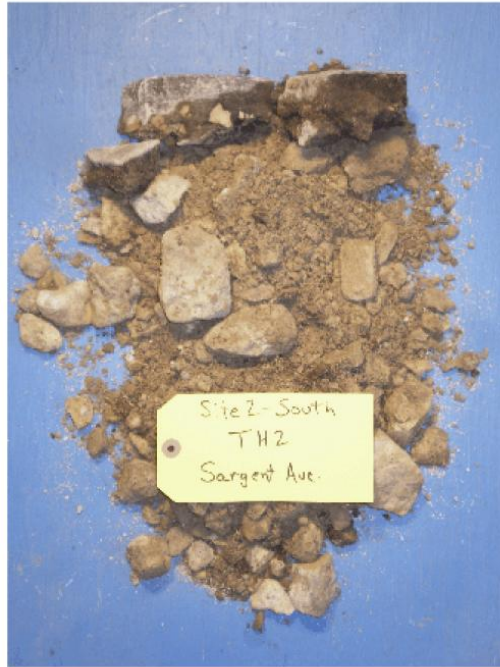
Test Hole Log for TH2



Test Hole Log for TH3

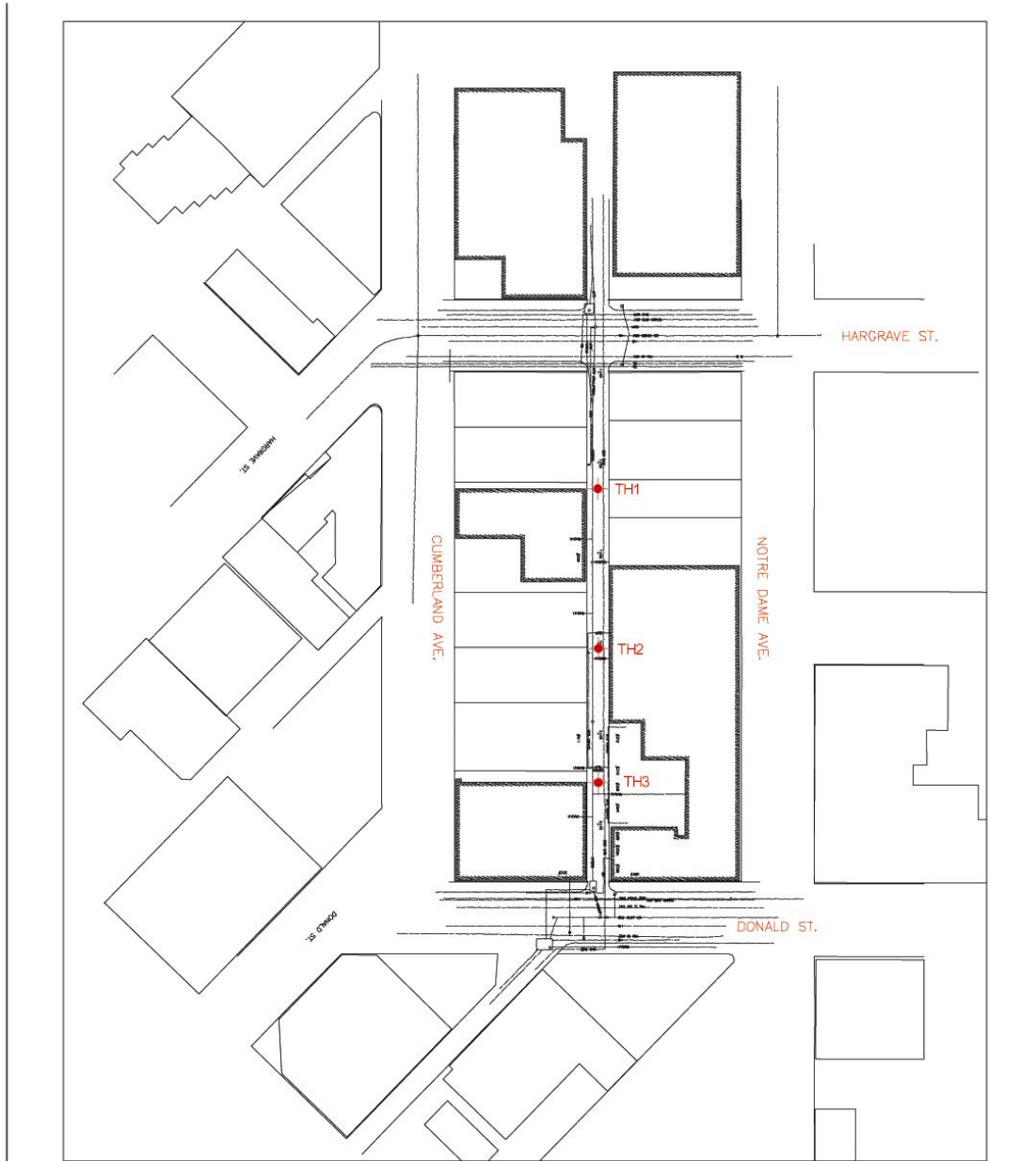


Pavement Core Photos



Geotechnical Report for Notre Dame Avenue / Cumberland Avenue Alley


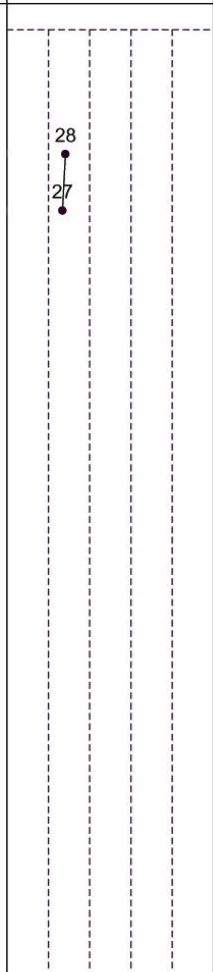



Test Hole Locations



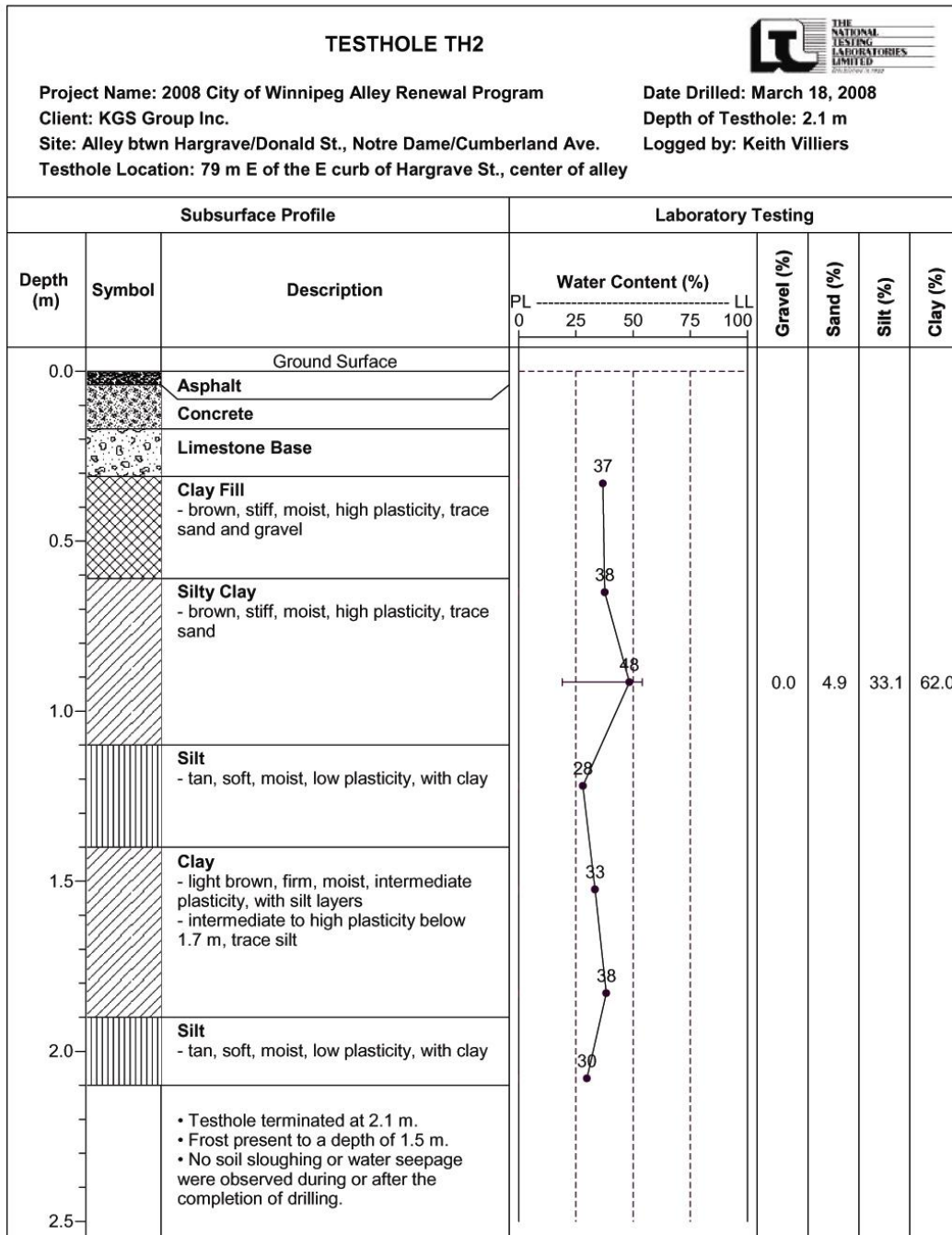
Testhole Location Plan
 2008 City of Winnipeg Alley Renewal Program
 Alley btwn Hargrave/Donald St., Notre Dame/Cumberland Ave.

Project No.: KGS-816	Drawn by: KK	Figure: 1
Date: April 7, 2008	Reviewed by: DF	Scale: NTS

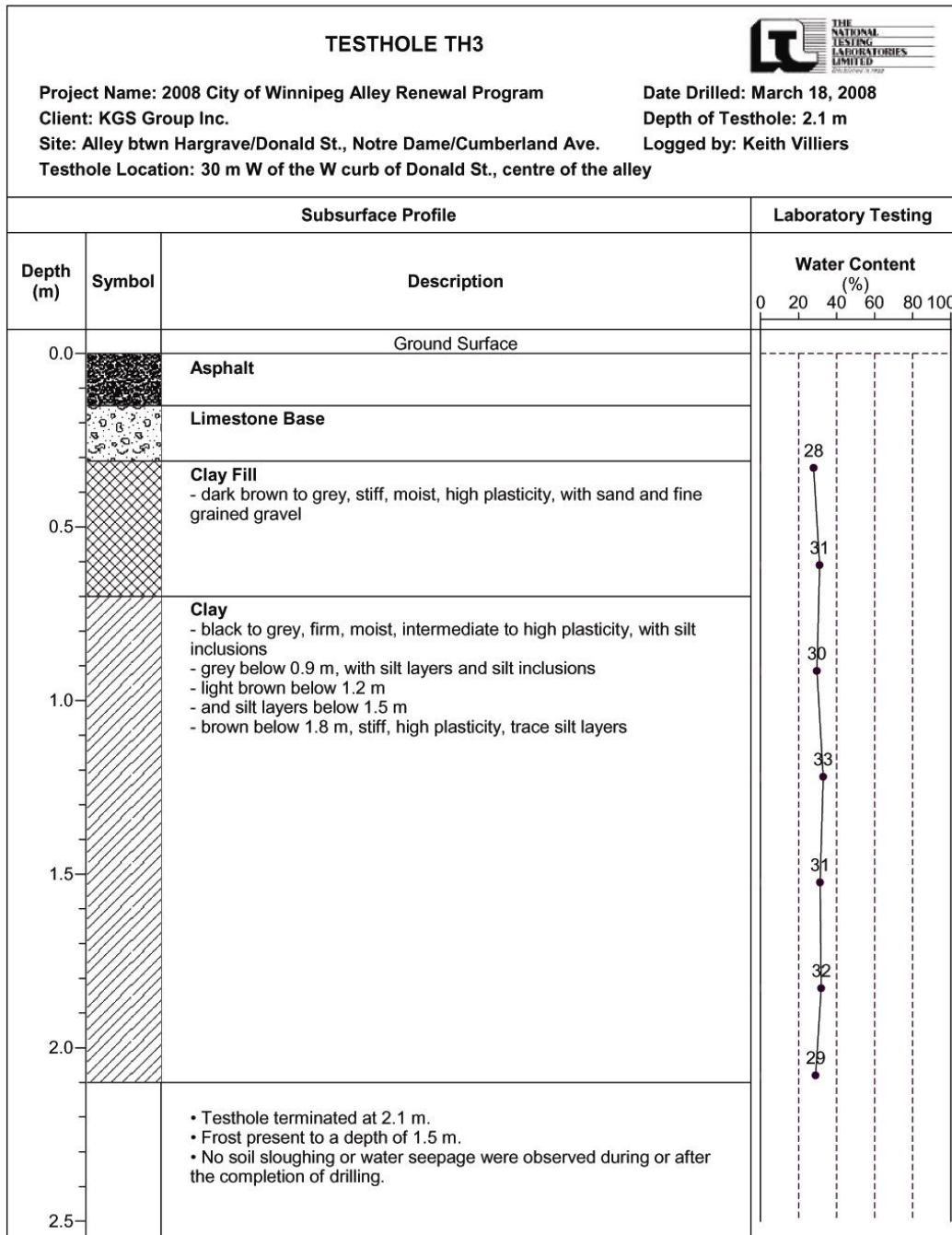
Test Hole Log for TH1

TESTHOLE TH1				
Project Name: 2008 City of Winnipeg Alley Renewal Program Client: KGS Group Inc. Site: Alley btwn Hargrave/Donald St., Notre Dame/Cumberland Ave. Testhole Location: 35 m E of the E curb of Hargrave St., centre of the alley		Date Drilled: March 18, 2008 Depth of Testhole: 0.5 m Logged by: Keith Villiers		
Subsurface Profile			Laboratory Testing	
Depth (m)	Symbol	Description	Water Content (%)	
			0	20 40 60 80 100
0.0		Ground Surface		
		Asphalt		
		Limestone Base		
		Clay Fill - brown, stiff, moist, high plasticity, trace sand and gravel		
0.5				
1.0				
1.5				
2.0				
2.5		<ul style="list-style-type: none"> • Auger refusal at 0.5 m on a suspected abandoned concrete duct. • Frost present to testhole depth. • No soil sloughing or water seepage were observed during or after the completion of drilling. 		

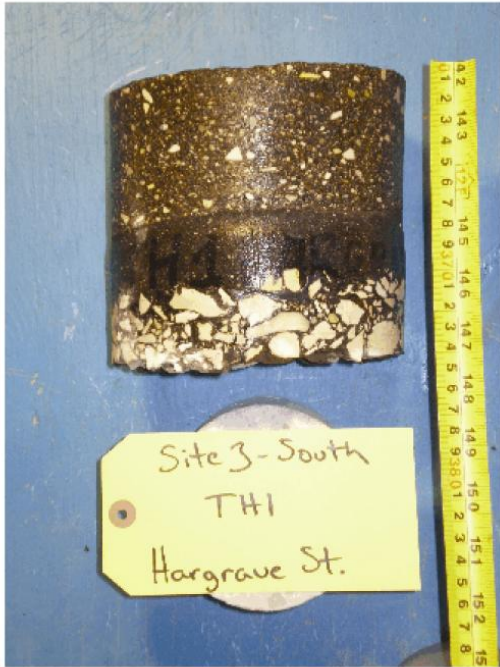
Test Hole Log for TH2



Test Hole Log for TH3



Pavement Core Photos



Site 3-South
TH1
Hargrave St.



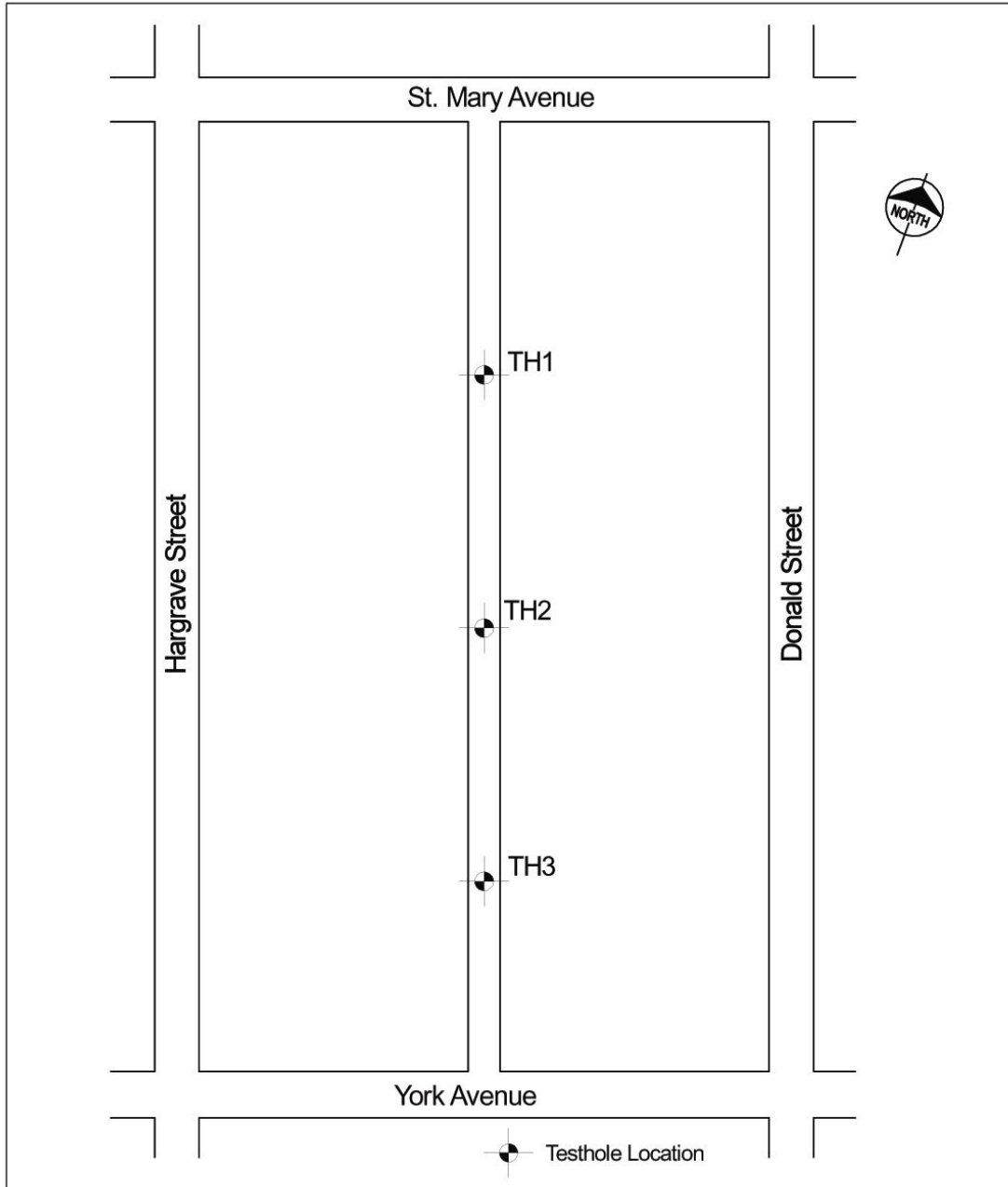
Site 3-South
TH2
Hargrave St.




Site 3-South
TH3
Hargrave St.

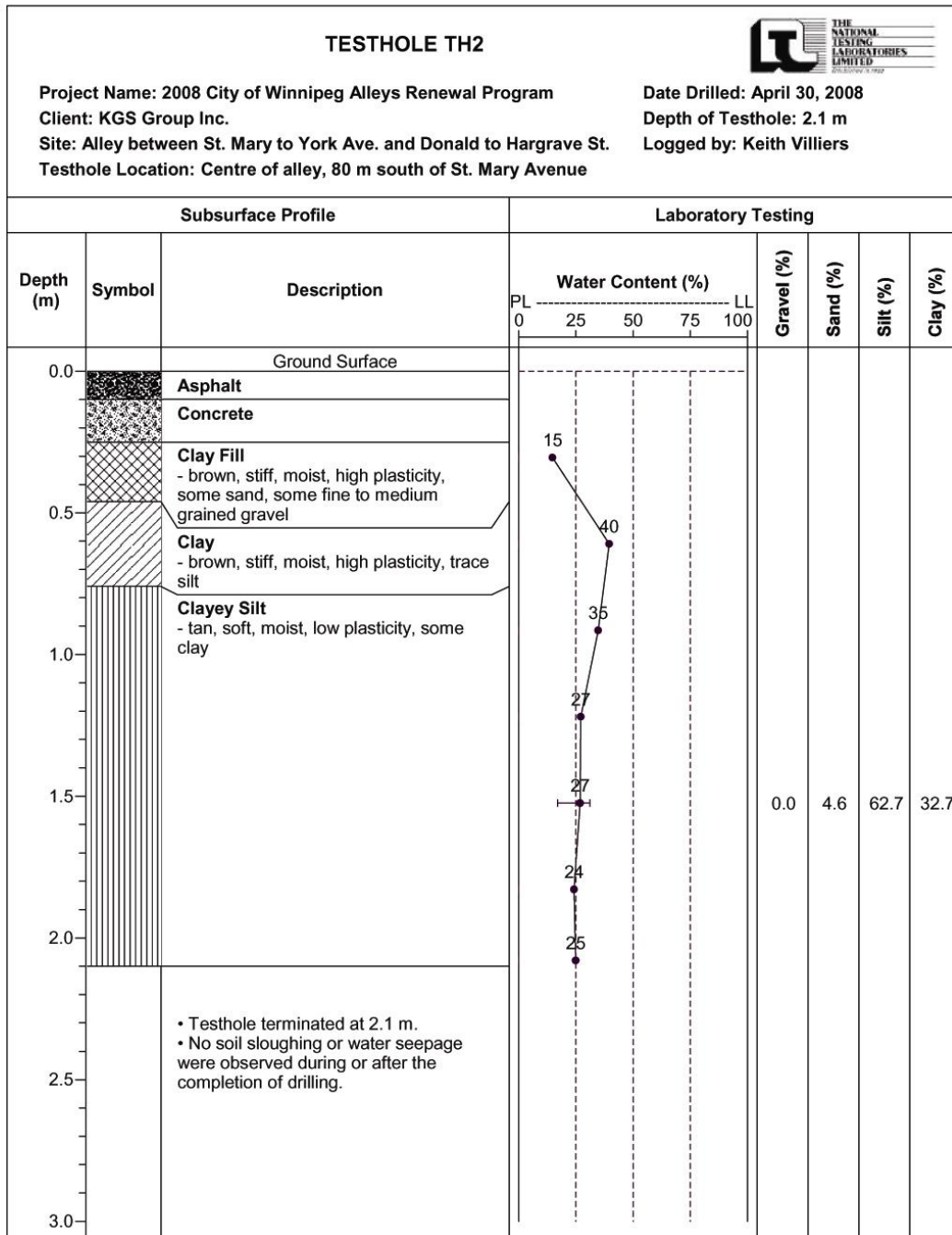
Geotechnical Report for Hargrave Street / Donald Street Alley

Test Hole Locations

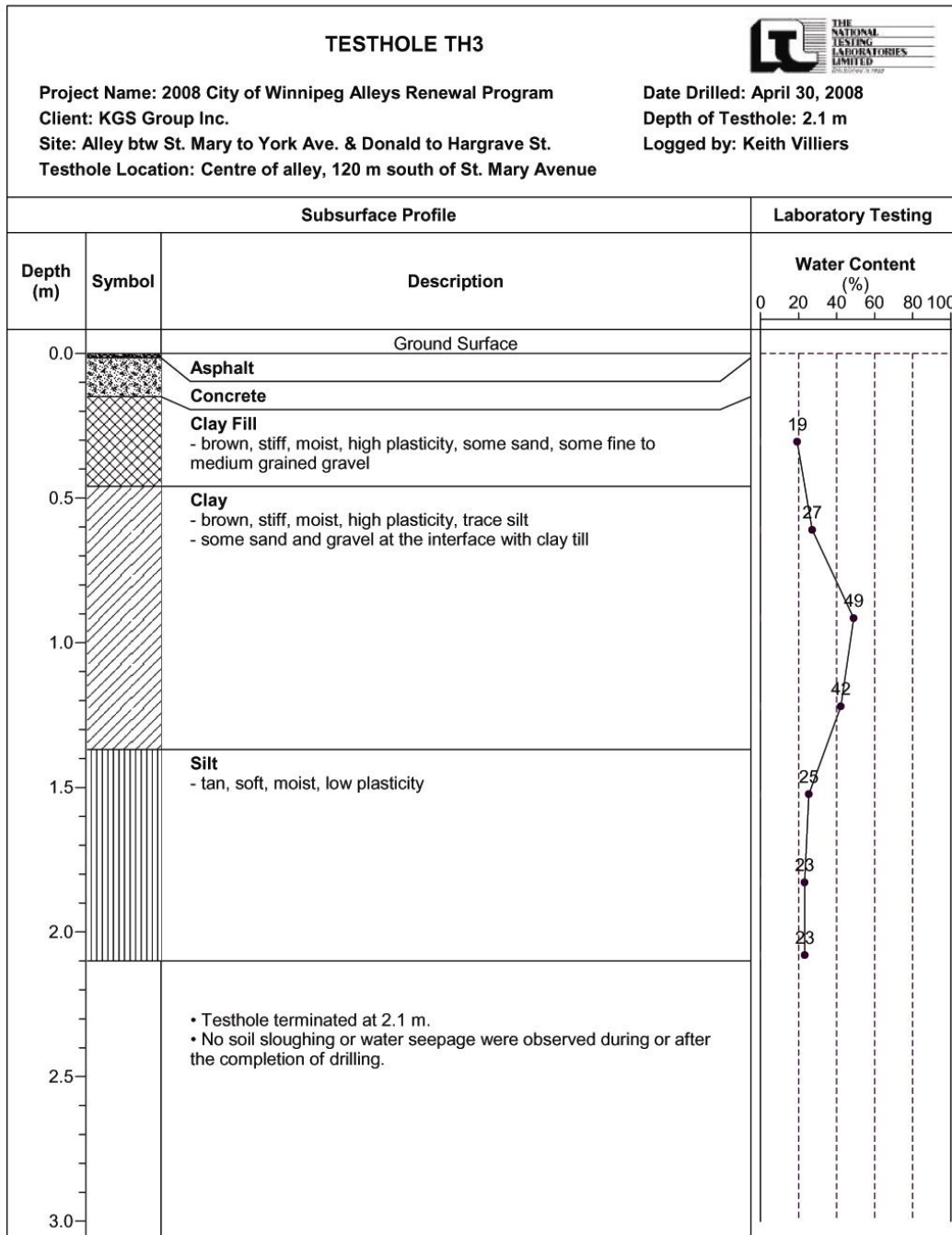


 THE NATIONAL TESTING LABORATORIES LIMITED <i>Established in 1923</i>	Testhole Location Plan 2008 City of Winnipeg Alleys Renewal Program		
	Project No.: KGS-826	Drawn by: O.B.	Figure: 1
	Date: May 9, 2008	Reviewed by: I.H.	Scale: 1:800

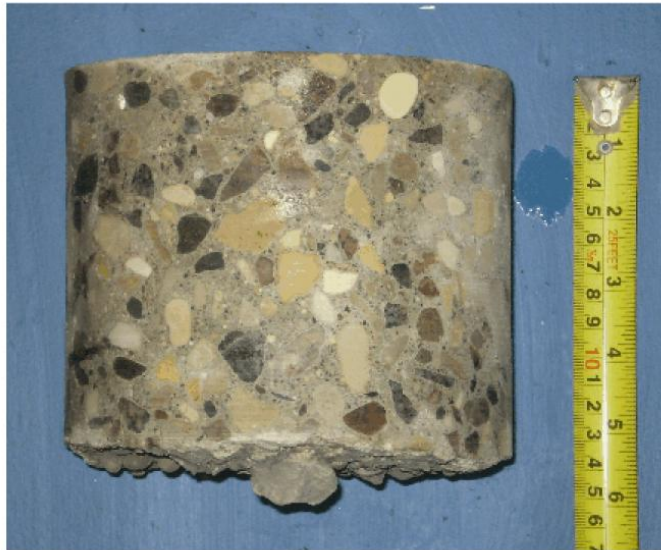
Test Hole Log for TH2



Test Hole Log for TH3



Pavement Core Photos



Core sample from Testhole TH1



Core sample from Testhole TH2

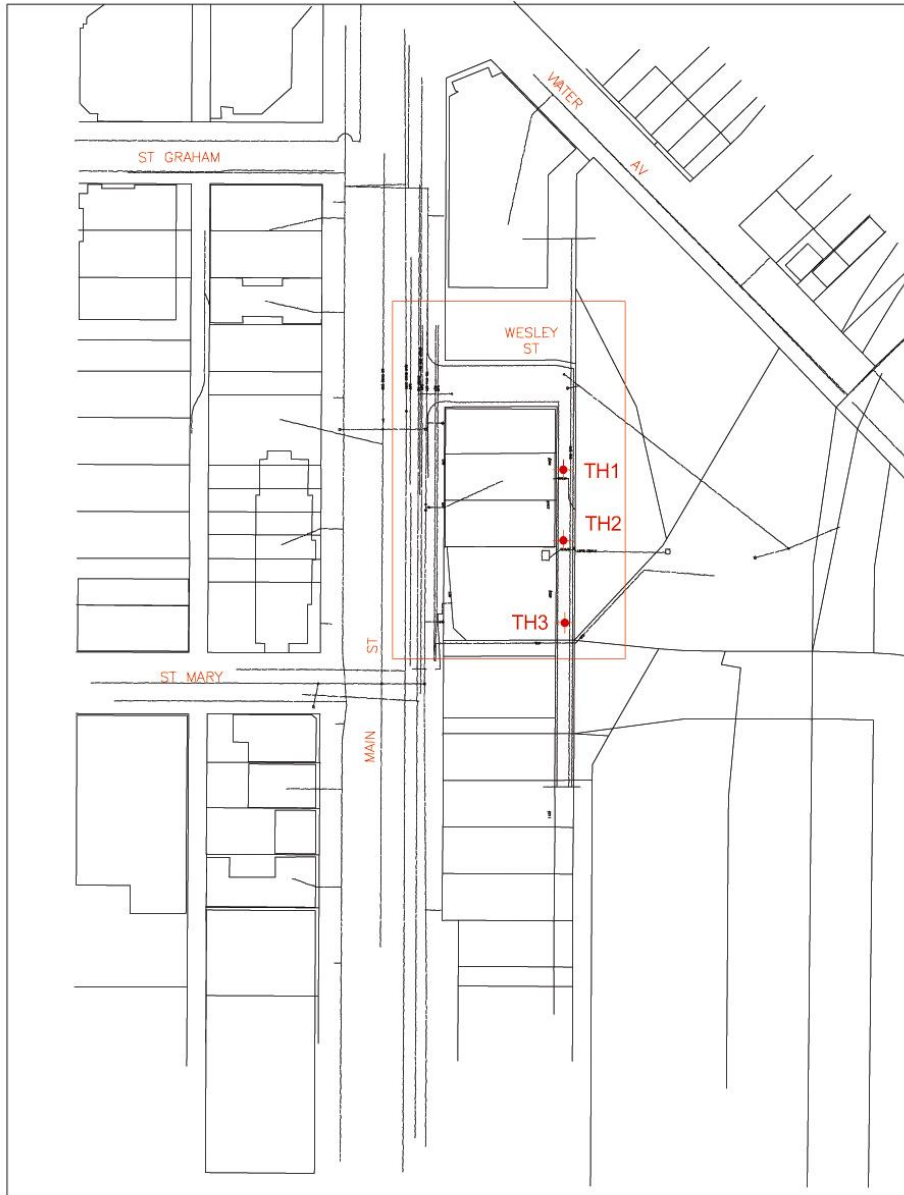
Pavement Core Photos



Core sample from Testhole TH3

Geotechnical Report for Main Street East Alley at Wesley Avenue

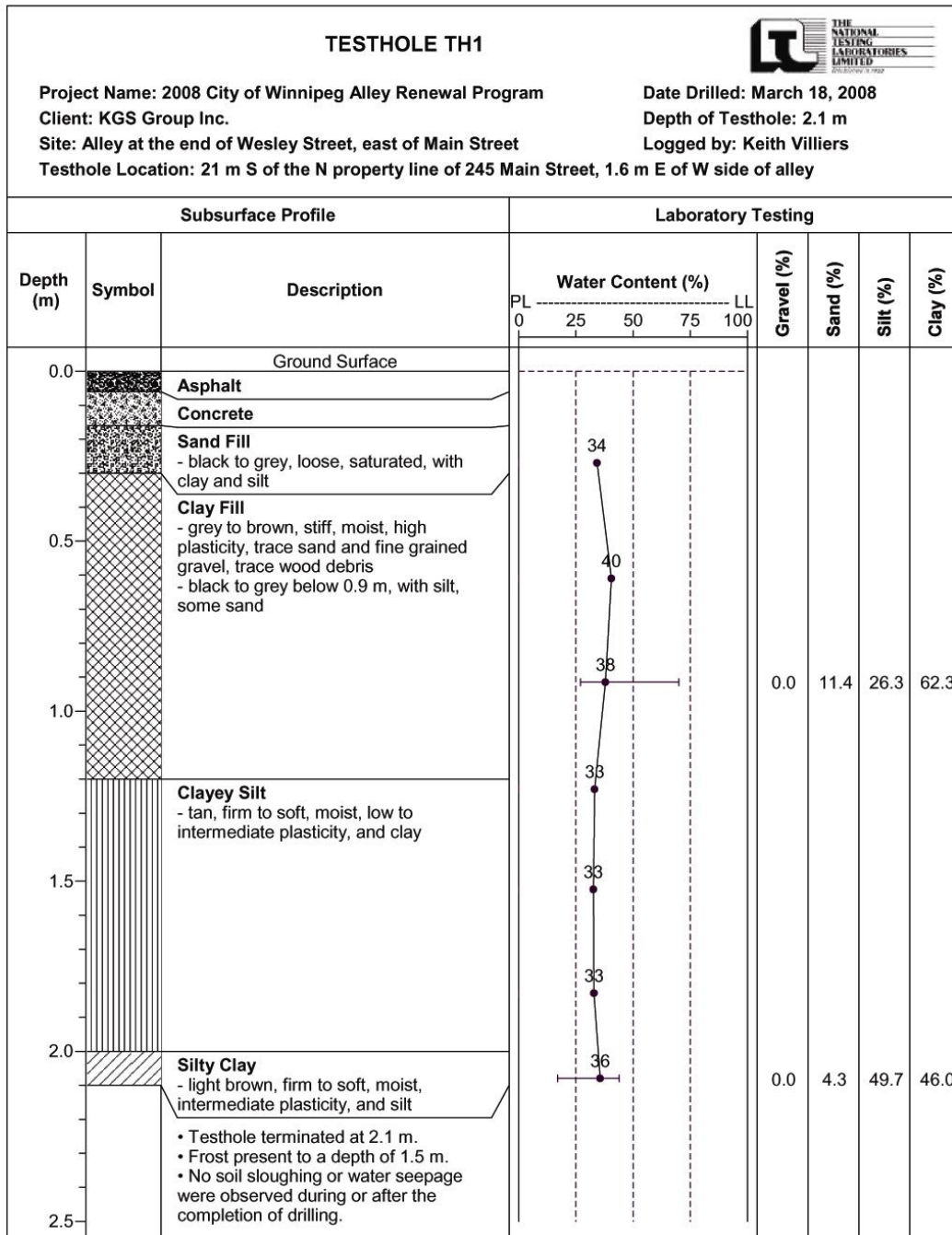
Test Hole Locations



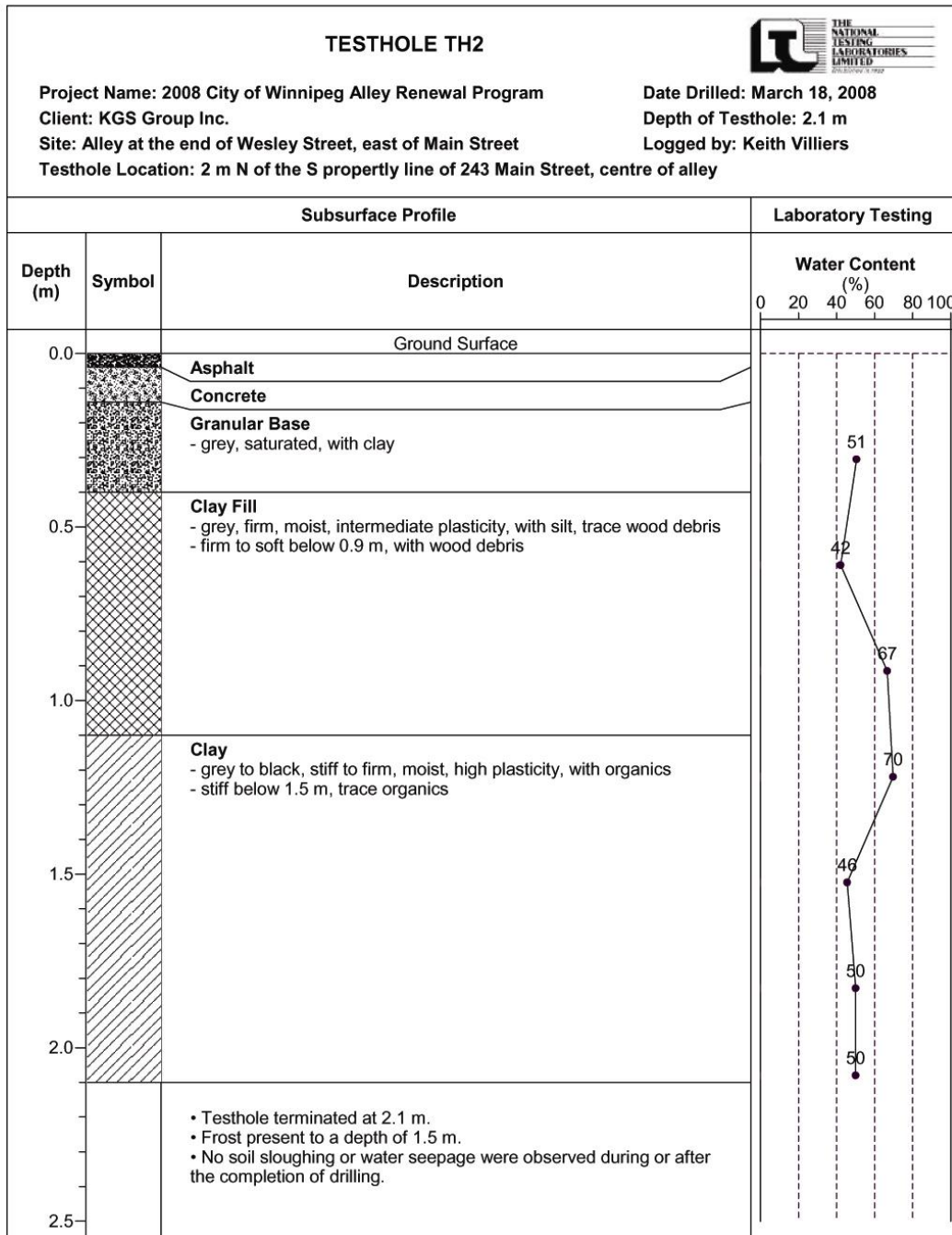
Testhole Location Plan
 2008 City of Winnipeg Alley Renewal Program
 Alley at the end of Wesley Street, east of Main Street

Project No.: KGS-816	Drawn by: KK	Figure: 1
Date: April 8, 2008	Reviewed by: DF	Scale: NTS

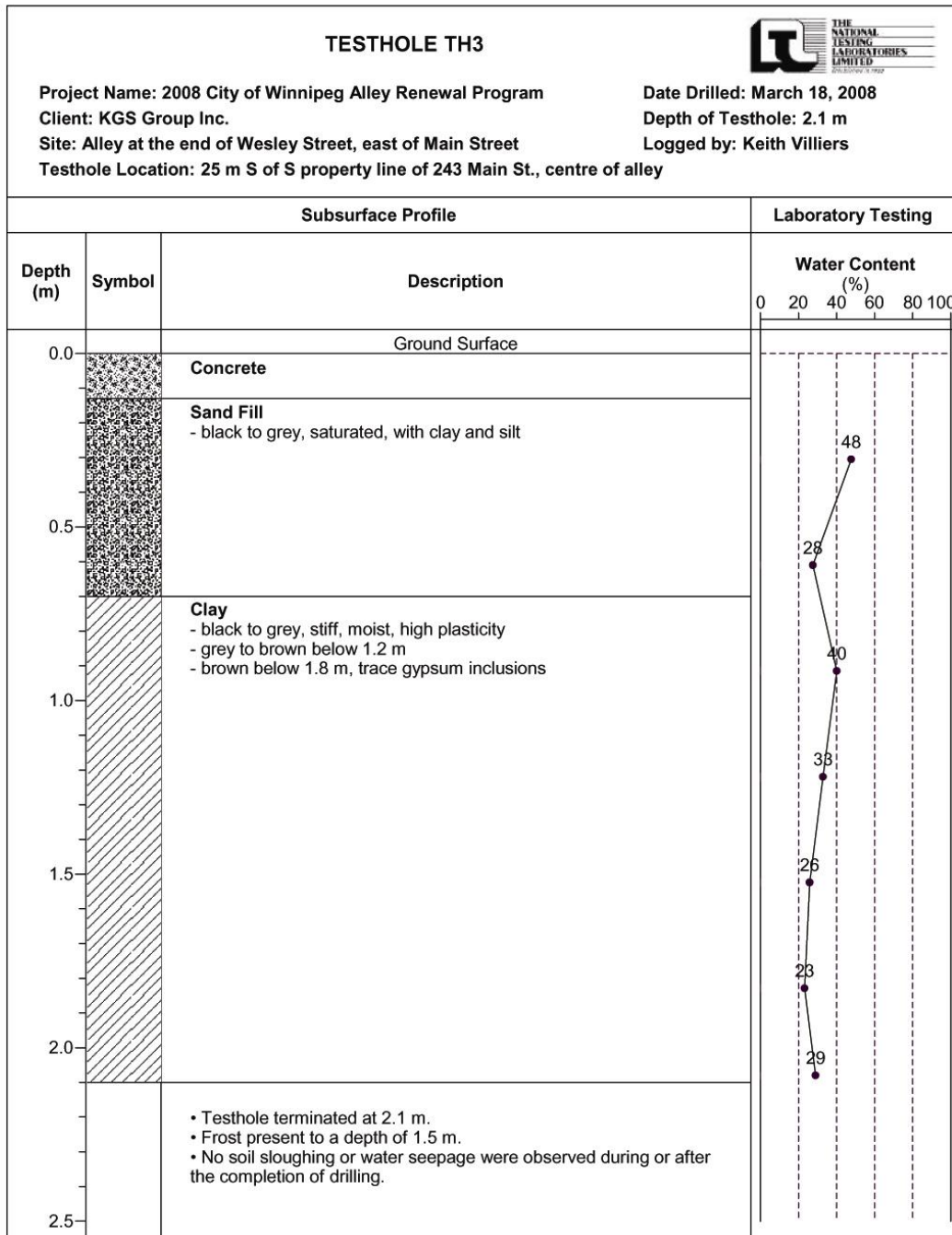
Test Hole Log for TH1



Test Hole Log for TH2



Test Hole Log for TH3



Pavement Core Photos

