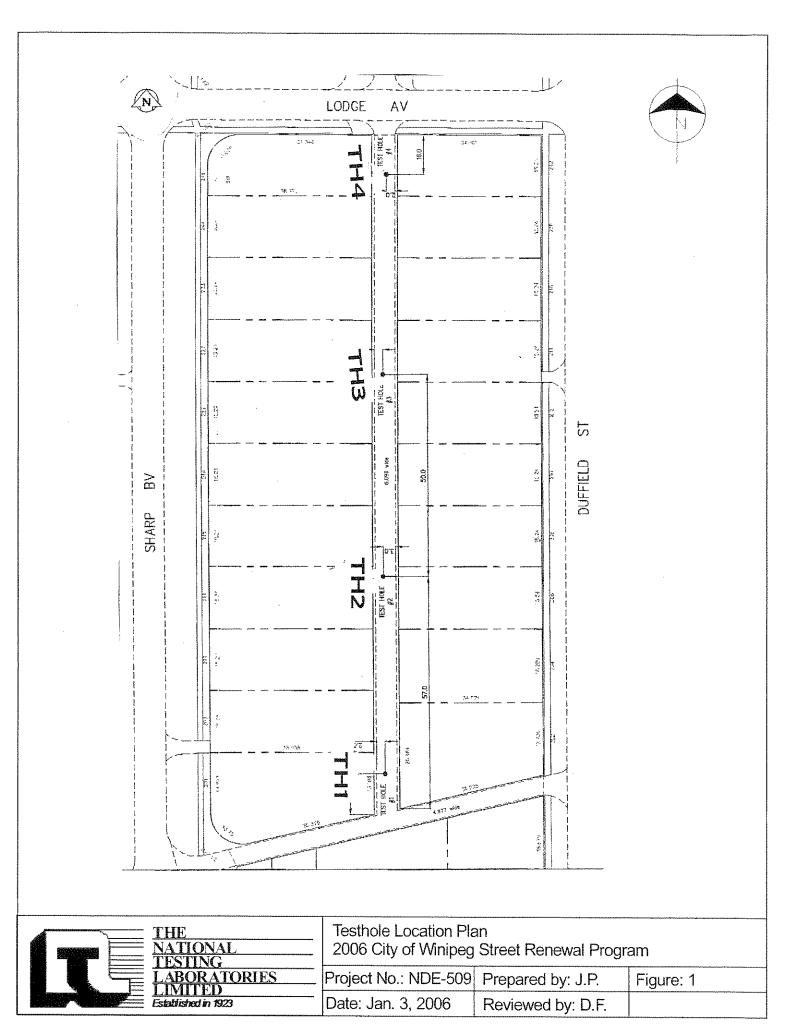


SHARP BLVD. AND DUFFIELD STREET ALLEY

PORTAGE AVENUE TO LODGE AVENUE

2006 STREET RENEWAL PROGRAM GEOTECHNICAL INVESTIGATION



City of Winnipeg 2006 Street Renewal Program Geotechnical Investigation

		Pavement Su	urface	Pavement Str	ucture Material		Sample	Moisture		Particle Siz	ze Analysis		At	tterberg Lim	nits
Testhole	Testhole		Thickness		Thickness	Sample	Depth	Content	Gravel	Sand	Silt	Clay	Liquid	Plastic	Plasticity
No.	Location	Туре	(mm)	Туре	(mm)	Description	(m)	(%)	(%)	(%)	(%)	(%)	Limit	Limit	Limit
1	Sharp/Duffield Alley	NA	NA	Granular	600										
2	Sharp/Duffield Alley	NA	NA	Granular	200	Clayey Silt	0.9	21.2	0.0	14.7	64.6	20.7	24	14	10
3	Sharp/Duffield Alley	NA	NA	Granular	200										
4	Sharp/Duffield Alley	NA	NA	Granular	200	Clay	1.8	41.2	0	0.8	14.8	84.4	90	27	63



Project Name: 2006 City of Winnipeg Street Renewal Program Client: ND LEA Engineers & Planners Inc. Site: Sharp/Duffield Alley

Date Drilled: December 16, 2005 Depth of Testhole: 2 m Logged by: Rob Brown

Testhole Location: 3 m East and 1 m North of SE fence corner at 201 Sharp Blvd.

Subsurface Profile						Laboratory Testing				
Depth	Symbol	Description	Water Content							
-			0	20	40	60	80 100			
0.0-	20202 00000 20000 20000	Ground Surface GRANULAR FILL - black, with topsoil								
0.5-	00000 20000 20000 20000				•					
- - - 1.0- -		CLAY - brown, moist, firm, high plasticity, some silt pockets			•					
- - 1.5- - -										
- - 2.0-		Frozen to 0.6 m below grade. End of testhole at 2.0 m below grade.								



Project Name: 2006 City of Winnipeg Street Renewal Program Client: ND LEA Engineers & Planners Inc.

Date Drilled: December 16, 2005

Depth of Testhole: 2 m

Site: Sharp/Duffield Alley

Logged by: Rob Brown

Testhole Location: 5 m East, 2 m South of Southeast Garage corner at 211 Sharp

		Subsurface Profile	Laboratory Testing						
Depth (m)	Symbol	Description	Moisture Content (%) (%) (%) PLLL (%) 3 8 0 25 50 75 100 125 5	Clay (%)					
		Ground Surface							
0.0-	20292 00000 00000 00000	GRANULAR FILL - tan, sand and gravel							
- - 0.5		TOPSOIL - black							
- - - 1.0-		SILT - tan, moist, soft, low plasticity	0.0 14.7 64.6 2	20.7					
- - 1.5- -	· · ·								
- - 2.0-		CLAY - brown, moist, firm, high plasticity							
2.0		Frozen to 0.6 m below grade.							
-		End of testhole at 2.0 m below grade.							



Project Name: 2006 City of Winnipeg Street Renewal Program Client: ND LEA Engineers & Planners Inc. Site: Sharp/Duffield Alley

Date Drilled: December 16, 2005 Depth of Testhole: 2 m Logged by: Rob Brown

Testhole Location: 4 m East, 7 m South of Northeast fence corner at 227 Sharp

	,	Laboratory Testing	
Depth	Symbol	Description	Water Content (%) 0 20 40 60 80 100
		Ground Surface	
0.0-	20292 000000 00000000000000000000000000	GRANULAR FILL - tan, sand and gravel	
-		TOPSOIL - black	
0.5-	$\sim \sim $		
- - 1.0- - -		SILT - tan, moist, soft, low plasticity	
- 1.5- - - -		CLAY - brown, moist, firm, high plasticity	
2.0-			
-		Frozen to 0.6 m below grade.	
_		End of testhole at 2.0 m below grade.	



Project Name: 2006 City of Winnipeg Street Renewal Program Client: ND LEA Engineers & Planners Inc.

Date Drilled: December 16, 2005

Depth of Testhole: 2 m

Site: Sharp/Duffield Alley

Logged by: Rob Brown

Testhole Location: 4 m East, 2 m North of Southeast garage corner at 247 Sharp

Subsurface Profile			Laboratory Testing						
Depth (m)	Symbol	Description	Moisture Content (%) (%) (%) PLLL (%) 25 50 75 100 125 Clay (%) Silt (%) 125 100 125 0 25 0						
0.0-		Ground Surface							
- 0.0	2000 0000 00000 00000	GRANULAR FILL - tan, sand and gravel							
- - 0.5-		TOPSOIL - black							
-		CLAY - brown, moist, firm, intermediate plasticity, with silt pockets - and silt below 1.8 m, soft							
- 1.0 - - -									
1.5- - -									
- 2.0-									
-	-	Frozen to 0.6 m below grade.							
-	-	End of testhole at 2.0 m below grade.							