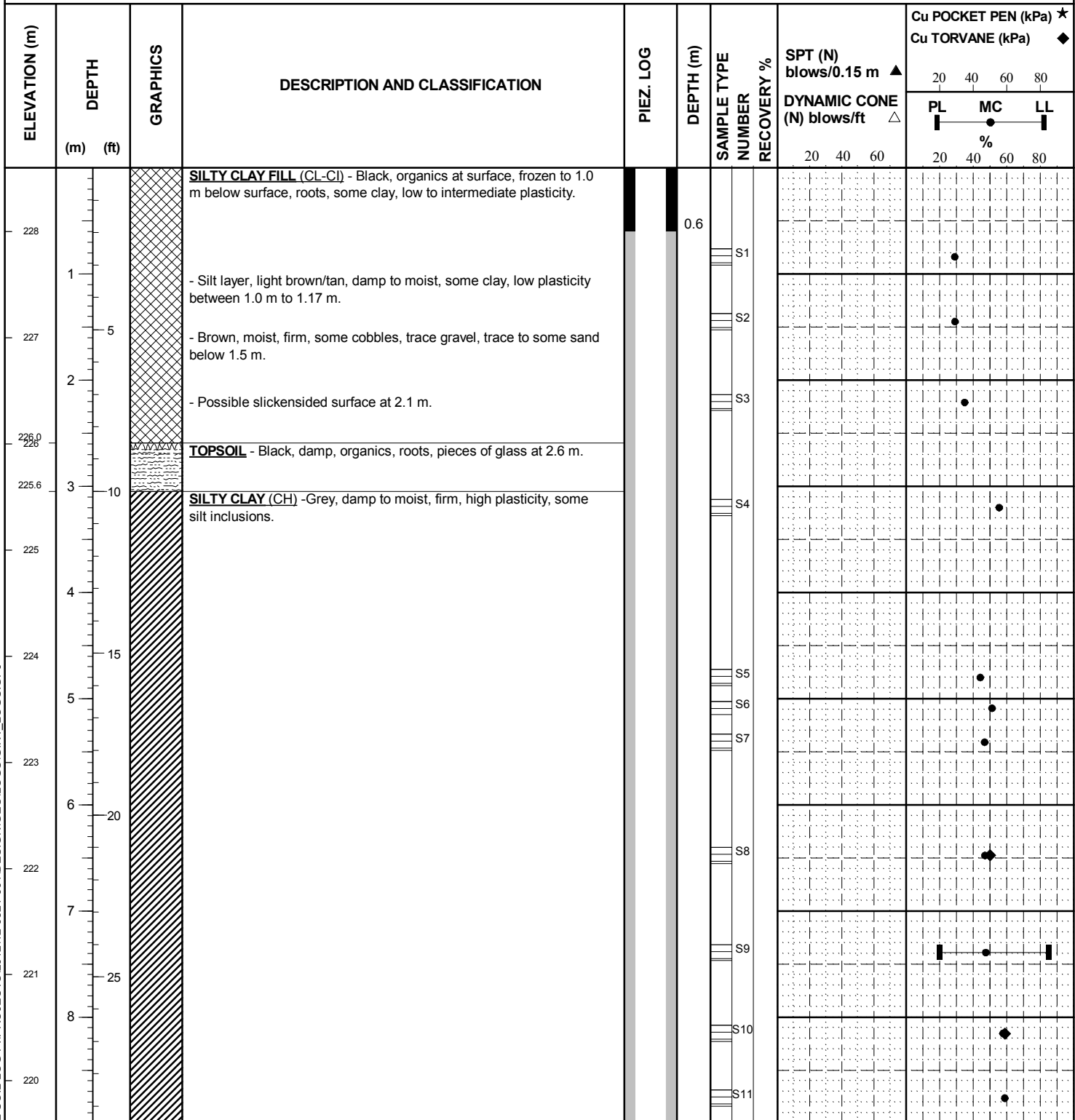



APPENDIX D

MORROW AVENUE SOIL LOG INFORMATION

CLIENT MANITOBA HOUSING AUTHORITY
PROJECT Manitoba Housing Authority
SITE 75 & 83 Morrow Avenue, Winnipeg, MB
LOCATION SE corner of 83 Morrow Ave (Upper Bank)
DRILLING METHOD 200 mm ø Hollow Stem Auger, ACKER SS Drill Rig

JOB NO. 12-0321-001
GROUND ELEV. 228.6
TOP OF PVC ELEV.
WATER ELEV.
DATE DRILLED 3/14/2012
UTM (m) N 5,524,157
 E 636,715



SAMPLE TYPE  Continuous

CONTRACTOR
Paddock Drilling Ltd.

INSPECTOR
J. CANNING

APPROVED
RD

DATE
23/11/12

ELEVATION (m)	DEPTH (m) (ft)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG	DEPTH (m)	SAMPLE TYPE NUMBER	RECOVERY %	SPT (N) blows/0.15 m ▲	DYNAMIC CONE (N) blows/ft △	Cu POCKET PEN (kPa) ★	Cu TORVANE (kPa) ◆
										20 40 60 80	20 40 60 80
										PL MC LL	%
								20 40 60	20 40 60 80		
219	10			PN	10.0	S12					
218	11		- Softer below 11.4 m.		10.2	S13					
217	12					S14					
216	13		- Increase in silt inclusions below 12.8 m.			S15					
215	14		- Trace cobbles and coarse sand below 13.4 m.	PN	14.0	S16					
214	15		- Increase in silt inclusions, cobbles and gravel below 14.5 m.		14.2	S17					
213.1	16		SILT TILL - No recovery between 15.5 m and 16.8 m. Hit boulder at 15.5 m.			S18					
213	17		AUGER REFUSAL at 16.8 m.		16.8	S19					
212	18		Notes: 1. Slope Inclinator (SI-1) was installed to a depth of 16.8 m. 2. PN-1 (034747) was installed to a depth of 12.2 m below grade and PN-2 (034749) was installed to a depth of 6.1 m below grade. 3. Testhole was backfilled with grout from 16.8 m to 0.6 m and bentonite chips from 0.6 m to ground surface.			S20					
211.8	19										
211											
210											
209											

SAMPLE TYPE Continuous

CONTRACTOR
Paddock Drilling Ltd.

INSPECTOR
J. CANNING

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RD

DATE
23/11/12

CLIENT MANITOBA HOUSING AUTHORITY
PROJECT Manitoba Housing Authority
SITE 75 & 83 Morrow Avenue, Winnipeg, MB
LOCATION SE corner of 83 Morrow Ave (Upper Bank)
DRILLING METHOD 200 mm ø Hollow Stem Auger, ACKER SS Drill Rig

JOB NO. 12-0321-001
GROUND ELEV. 228.6
TOP OF PVC ELEV.
WATER ELEV.
DATE DRILLED 3/14/2012
UTM (m) N 5,524,155
 E 636,715

ELEVATION (m)	DEPTH (m) (ft)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG	DEPTH (m)	SAMPLE TYPE NUMBER	RECOVERY %	SPT (N) blows/0.15 m ▲	DYNAMIC CONE (N) blows/ft △	Cu POCKET PEN (kPa) ★	Cu TORVANE (kPa) ◆
										20 40 60 80	PL MC LL %
228	1		SILTY CLAY FILL (CL-CI) - Black, organics at surface, frozen to 1.0 m below surface, roots, some clay, low to intermediate plasticity.								
227	5		- Silt layer, light brown/tan, damp to moist, some clay, low plasticity between 1.0 m to 1.17 m.								
226	2		- Brown, moist, firm, some cobbles, trace gravel, trace to some sand below 1.5 m.								
226.0			- Possible slickensided surface at 2.1 m.								
225.6	3		TOPSOIL - Black, damp, organics, roots, pieces of glass at 2.6 m.								
225	10		SILTY CLAY (CH) - Grey, damp to moist, firm, high plasticity, some silt inclusions.								
224	15										
223	20										
222	25										
221	30										
220											
219											

SAMPLE TYPE

CONTRACTOR
Paddock Drilling Ltd.

INSPECTOR
J. CANNING

APPROVED
RD

DATE
23/11/12

ELEVATION (m)	DEPTH (m) (ft)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG	DEPTH (m)	SAMPLE TYPE	NUMBER	RECOVERY %	SPT (N) blows/0.15 m ▲	DYNAMIC CONE (N) blows/ft △	Cu POCKET PEN (kPa) ★	Cu TORVANE (kPa) ◆
											20 40 60 80	PL MC LL % 20 40 60 80
218	35											
217	40		- Softer below 11.4 m.									
216	45		- Increase in silt inclusions below 12.8 m.									
215	50		- Trace cobbles and coarse sand below 13.4 m.									
214	55		- Increase in silt inclusions, cobbles and gravel below 14.5 m.									
213.1	54.4				15.4							
213	54.7		SILT TILL - No recovery between 15.5 m and 16.8 m. Hit boulder at 15.5 m.									
212	59.4				16.9							
211	64.1				17.7							
210	68.9		AUGER REFUSAL at 17.7 m.									
209	73.6		Notes: 1. Projected stratigraphy from TH12-01A. 2. Test hole caved to 16.9 m when augers were pulled. 3. Installed standpipe to a depth of 16.9 m. 4. Backfilled test hole with sand from 16.9 m to 15.4 m and bentonite chips from 15.4 m to ground surface.									
208	78.4											
207	83.1											

SAMPLE TYPE

CONTRACTOR
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