



**St. Lawrence Testing
& Inspection Co. Ltd.**

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March 31, 2021

Mr. Scott Winch
City Wye'd Electric Ltd.
140 Reis Rd.
Kanata, ON
K0A 1L0

**RE: Proposed New Building, 140 Reis Rd., Kanata, ON
Geotechnical Subsurface Investigation
Report No. 21C413**

Dear Mr. Winch:

In accordance with verbal and e-mail correspondence received from you, this report is submitted, outlining the results of a geotechnical subsurface investigation carried out at 140 Reis Rd. in Kanata, ON.

A) DESCRIPTION OF FIELD WORK

Prior to drilling, service locates were done.

Drilling and sampling were done on March 11, 2021 using a CME 55 track drill from Eastern Ontario Diamond Drilling of Hawkesbury, ON. Supervision was by the undersigned geotechnical engineer.

A total of 2 boreholes were put down on diagonal corners of the proposed building. The borehole locations are shown on the plan attached to the report.

The boreholes were advanced by split spoon sampling. Standard Penetration tests were carried out along with the split spoon sampling. The samples were

placed in glass jars for later detailed lab examination and lab gradation tests. The results are found in the attached borehole logs and gradation data sheets.

B) STRATIGRAPHY

The stratigraphy is somewhat different at each borehole. Borehole 1 has 250mm of topsoil at the surface and was underlain by a brown, moist, loose sand and gravel with silt. This became compact below 1.2m. Sampler and auger refusal were noted on bedrock at 2.11m below the surface.

Borehole 2 had 410mm of gravel at the surface. This was underlain by the brown, moist, loose sand and gravel with silt. This became dense below 1.1m. A layer of cobbles was noted at 1.37m. We hit sampler refusal in the cobbles at 1.70m below grade. We then augered to refusal at 2.34m on the bedrock.

We noted that the water table at Borehole 1 was at 1.1m below the surface at the conclusion of drilling.

For the specific stratigraphy at each borehole, the borehole logs should be referred to.

C) GEOTECHNICAL DISCUSSION

1) General

It is our understanding that it is proposed to put up a one story building at this site such as shown on the attached sketch.

2) Foundations

The building can be supported on normal spread footings using a bearing capacity of 200 KPa S.L.S. and 300 KPa U.L.S. at or below 1.5m below the surface. The seismic factor is Site Class C.

3) Slab on Grade

A normal slab on grade can be designed.

The topsoil should be removed throughout. The base gravel should consist of 150mm of Granular "A" compacted to 95% Standard Proctor Density. Where additional gravel is needed, such as adjacent to the foundation wall, this can be Granular "A" or Granular "B" Type 2 and compacted in maximum 200mm lifts to 95% Standard Proctor Density. The final 150mm should be Granular "A" compacted to 95% Standard Proctor Density.

4) Parking Areas

In all the parking areas and roadways, the topsoil should be removed.

The subbase should consist of 300mm of Granular "B" Type 2 and the base should consist of 150mm of Granular "A", each compacted to 100% Standard Proctor Density.

The asphalt should consist of 50mm of HL3 compacted to 96% Marshall Density.

D) CONSTRUCTION CONTROL

In order to ensure that the recommendations of this report are adhered to, it is recommended that our firm be engaged to test, inspect and report accordingly.

Respectfully submitted

ST. LAWRENCE TESTING & INSPECTION CO. LTD.

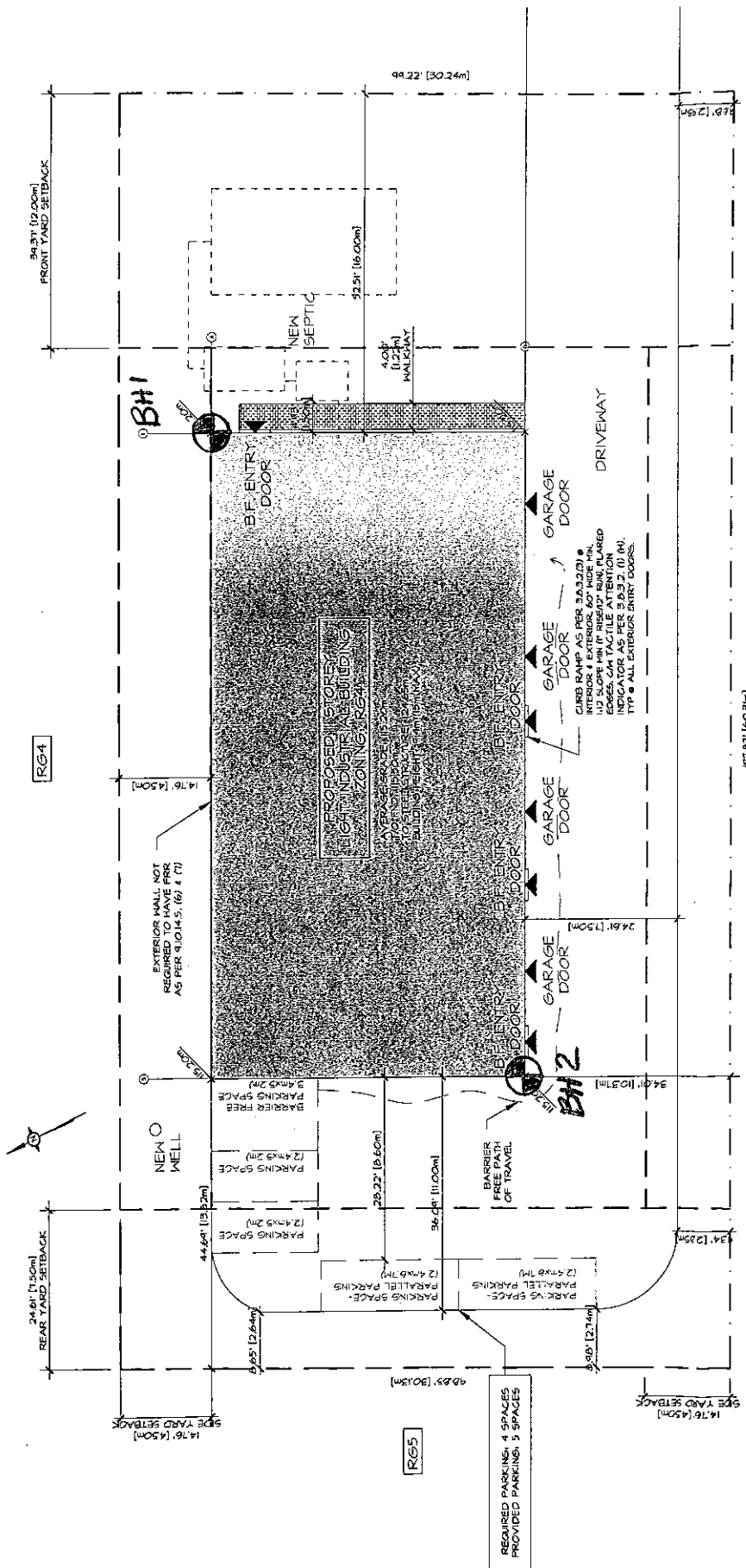


G.G. McIntee, P. Eng.

GGM:mm

Attachments





REIS ROAD

LOT AREA: 19552 SQFT
 BUILDING AREA: 5000 SQFT
 LOT COVERAGE: 25%

SP1.0

GRANT+HENLEY
 DESIGN GROUP

140 REIS ROAD
 FEB 2021
 FOR PERMIT

St. Lawrence Testing
Report No 21C413
March 2021

SITE PLAN
 PROPOSED LIGHT INDUSTRIAL BUILDING
 1/8"=1'-0"

REQUIRED PARKING: 4 SPACES
 PROVIDED PARKING: 5 SPACES

CLIENT City Wye'd Electric Ltd.

REPORT NO. 21C413

LOCATION 140 Reis Rd., Kanata, ON

BOREHOLE NO. 1

DATE OF BORING March 11, 2021

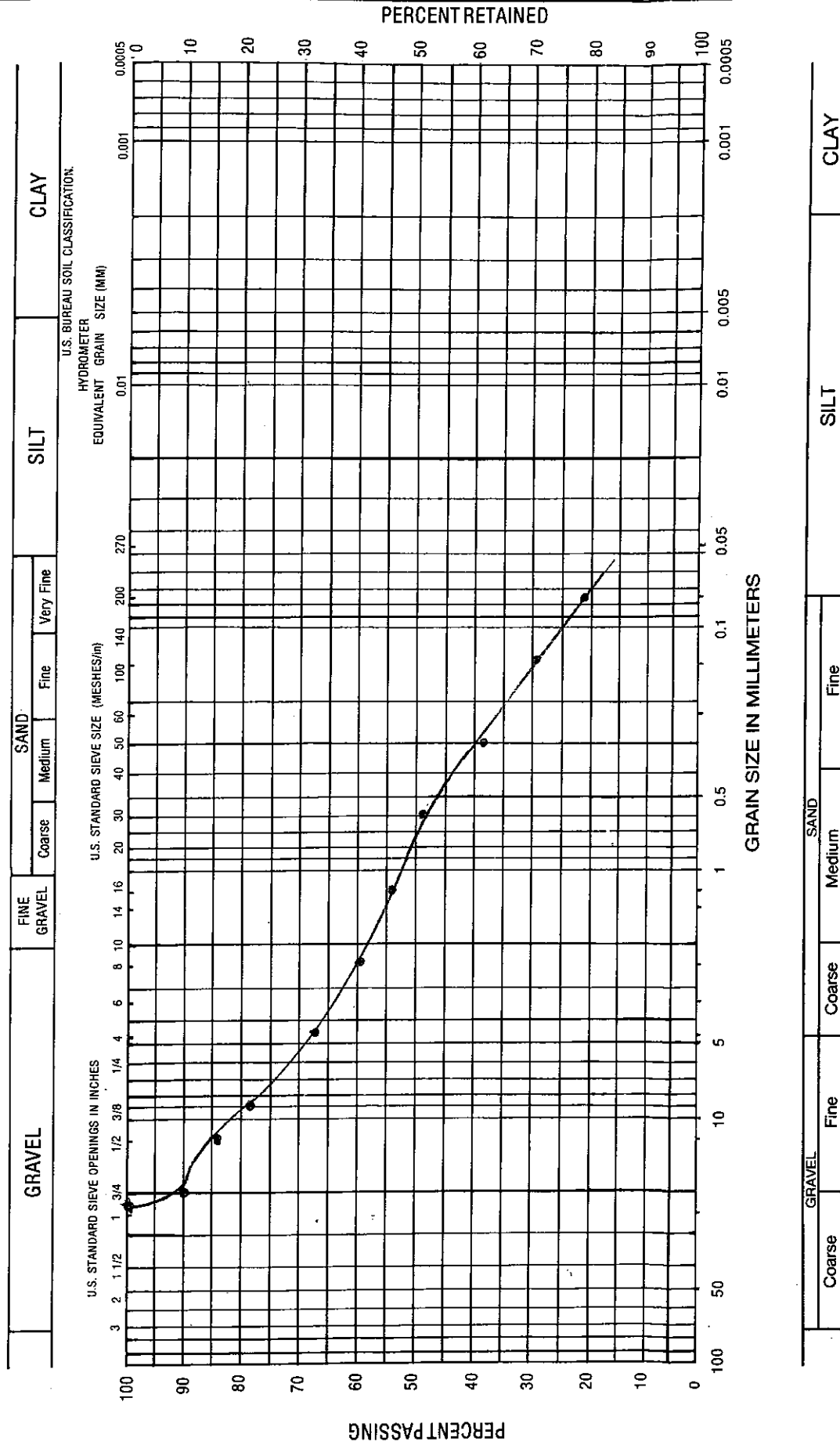
DATE OF WL READING March 11, 2021

CASING HF Auger

DATUM _____

SOIL PROFILE				SAMPLES				LABORATORY TESTS PERFORMED	LAB TEST RESULTS						
DEPTH	ELEVATION	DEPTH	SOIL DESCRIPTION	STRAT. PLOT	WATER CONDITIONS	CONDITION	TYPE		NUMBER	RECOVERY	N - VALUE	WATER CONTENT & ATTERBERG LIMITS.	WP	W	WL
0			Topsoil								DYNAMIC PENETRATION TEST BLOWS PER FOOT. K ...				
.25			Sand and Gravel Brown, moist, loose, with silt becoming compact below 1.2m		1.1										
1									SS	1	65	9			
2			Sampler and auger refusal												
2.11								SS	2	90	28				
3															

APPENDIX



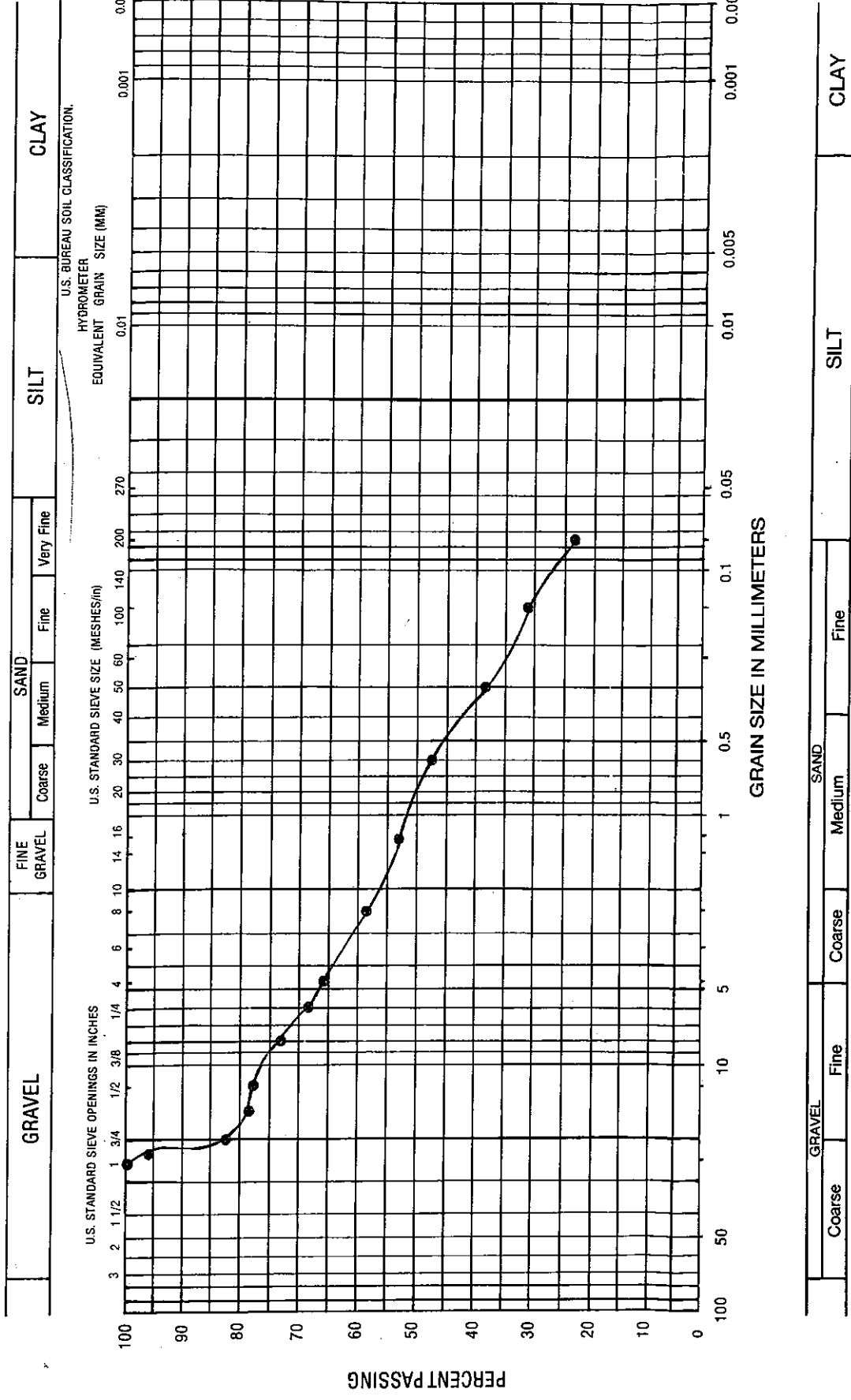
UNIFIED CLASSIFICATION (ASTM D 2487)

BOREHOLE No. 1

SAMPLE No. 1

DEPTH 0.76 to 1.37m

DESCRIPTION Sand and gravel with silt



BOREHOLE NO. 1

SAMPLE No. 2

DEPTH 1.52 to 2.13m

DESCRIPTION Sand and gravel with silt