Geotechnical Investigation
New Leitrim French Catholic Elementary School
3290 Findlay Creek Drive, Ottawa, Ontario

Client:
Conseil des Écoles Catholiques du Centre-Est (CECCE)
4000 rue Labelle
Ottawa, Ontario K1J 1A1

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Executive Summary

EXP Services Inc. (EXP) is pleased to present the results of the geotechnical investigation completed for the proposed New Leitrim Catholic Elementary School, to be located at the vacant parcel of land registered by the street address of 3290 Findlay Creek Drive, Ottawa, Ontario (Figure 1). Terms and conditions of this assignment were outlined in EXP Services Inc. (EXP) proposal number: OTT-25006966-A0 dated May 1, 2025, authorized by the CECCE via service agreement on May 5, 2025 for CECCE Project No. 2025LTR115.

Proposed Development

A site plan drawing prepared by Edward J. Cuhaci and Associates Architects Inc. and dated June 2, 2025, for the proposed catholic elementary school indicates that the proposed school will consist of a two (2) storey slab on grade building to be constructed at the northeast portion of the site with a future addition on the south side. Associated sports field, parking lot and playgrounds as well as underground services will be included as part of the proposed school construction. Design final site grade raise and elevation of the ground floor of the proposed school building were not available at the time of this investigation.

Fieldwork Program

The fieldwork for the geotechnical investigation was undertaken between October 2 and 6, 2025 and consists of 15 boreholes (Borehole Nos. 1 to 15) and 15 Test Pits (Test Pit Nos. 2 to 6, 8, and 10 to 18). Test Pit Nos. 1, 7, and 9 couldn't be excavated as Tomlinson was working in the area at time of the investigation. The test pits were advanced to termination or bucket refusal depths of 2.0 m to 3.3 m below the existing grade. The boreholes were advanced to termination or auger refusal depths of 3.0 m to 10.7 m below existing grade. The fieldwork was supervised on a full-time basis by a representative from EXP.

Subsurface Conditions

The borehole information indicates that the site is covered by heterogeneous fill to depths of 0.9 m to 3.0 m (Elevation 93.0 m to Elevation 90.3 m) over localized silt or compact to dense silty sand to sand and gravel deposit to depths ranging from 2.3 m to 3.8 m (Elevation 91.7 m to Elevation 89.3 m) overlying silty sand with gravel glacial till. The bedrock encountered at the site was Carlsbad shale with dolomitic layers as shallow as 4.6 m, however, as the site is located on the Gloucester fault, the rock type, quality, and depth can vary greatly throughout.

Geotechnical Comments and Recommendations

For seismic design, a comparison of the borehole information with Table 4.1.8.4.-B of the 2024 Ontario Building Code (OBC) indicates the site classification is **Class C** and the site designation is $\mathbf{X_C}$. The subsurface soils are not considered to be liquefiable during a seismic event.

Since compressible soils were not encountered on the site, there is no restriction to raising the grades at this site,

Based on the test hole information within the proposed building footprint, it is considered feasible to support the proposed school building on spread and strip footings founded on undisturbed native silty sand to sand and gravel deposit or glacial till, encountered at 1.5 m to 3.0 m depth (Elevation 92.5 m to Elevation 90.3 m) within the proposed building footprint, or on a properly constructed engineered fill pad constructed on undisturbed native soils. The existing fill is not considered suitable as a founding material and must be removed down to the silty sand to sand and gravel deposit or glacial till and replaced with well compacted engineered fill as described in the main body of the report.

Square pad footings having a maximum width and length of 3.0 m and strip footings having a maximum width of 1.5 m founded on approved native soil or on a properly constructed engineered fill pad constructed on the approved undisturbed native soil may be designed for a bearing capacity at serviceability limit state (SLS) of 150 kPa and factored geotechnical resistance at ultimate limit state (ULS) of 225 kPa. The factored geotechnical resistance value at ULS includes a resistance factor of 0.5. The total and differential settlements of well designed and constructed footings placed in accordance with the above recommendations are expected to be less than 25 mm and 19 mm respectively.

The ground floor of the proposed school building may be designed as a slab-on-grade placed on a well packed 200 mm thick 19 mm sized clear stone bed placed on a minimum 300 mm thick engineered fill pad set on the approved native soil subgrade constructed in accordance with Section 9 and 10 of this report. The clear stone would minimize the capillary rise of moisture

from the sub-soil to the floor slab. Alternatively, the clear stone may be replaced with a 200 mm thick bed of OPSS Granular A compacted to 98 percent SPMDD and overlain by a vapour barrier. Adequate saw cuts should be provided in the floor slabs to control cracking.

The proposed school building should have a perimeter drainage system. An underfloor drainage system is not required based on the measured groundwater levels however, the need for underfloor drainage should be re-evaluated once the design elevation of the ground floor is available and compared with the groundwater level.

The excavations may be undertaken by conventional heavy equipment capable of removing cobbles and boulders and debris from within the fill and glacial till. All excavations must be undertaken in accordance with the Occupational Health and Safety Act (OHSA), Ontario Reg. 213/91. Based on the definitions provided in OHSA, the subsurface soils on site are considered to be Type 3 and as such must be cut back at 1H:1V from the bottom of the excavation. Within zones of seepage, the excavation side slopes are expected to slough and eventually stabilize at 2H:1V to 3H:1V from the bottom of the excavation. The installation of the municipal underground services may be undertaken within the confines of a prefabricated support system (trench box) designed and installed in accordance with OHSA, provided the excavation is properly dewatered.

It is anticipated that the majority of the material required for backfilling purposes, interior and exterior to the proposed buildings and for service trench backfill would have to be imported and should preferably conform to Ontario Provincial Standard Specification (OPSS) Granular A, Granular B Type II and Select Subgrade Material (SSM) as described in Section14 of the report.

The pavement structure thicknesses for new parking lot are 65 mm Asphalt over 150 mm granular base over 300 mm of granular subbase constructed on approved subgrade. The pavement structure for the access roads should be 110 mm Asphalt over 150 mm of granular base over 450 mm of granular subbase constructed on approved subgrade. The pavement structure for the paved play area should be 50 mm Asphalt over 150 mm of granular base over 200 mm of granular subbase constructed on approved subgrade.

Since sensitive compressible silty clays were not encountered at the site, there are no restrictions to tree planting from a geotechnical perspective.

Closure

The above and other related considerations are discussed in greater detail in the attached geotechnical report.

This executive summary is a brief synopsis of the attached geotechnical report and should not be read in lieu of reading the geotechnical report in its entirety.

1. Introduction

EXP Services Inc. (EXP) is pleased to present the results of the geotechnical investigation completed for the proposed New Leitrim Catholic Elementary School, to be located at 3290 Findlay Creek Drive, Ottawa, Ontario (Figure 1). The terms and conditions of this assignment were outlined in EXP Services Inc. (EXP) proposal number: OTT-25006966-A0 dated May 1, 2025, authorized by the CECCE via service agreement on May 5, 2025 for CECCE Project No. 2025LTR115.

In conjunction with this geotechnical investigation, EXP completed a Phase I Environmental Site Assessment (ESA) and a preliminary Soil Characterization Report (SCR) for excess soil management. These reports are submitted under separate covers.

A site plan drawing prepared by Edward J. Cuhaci and Associates Architects Inc. and dated June 2, 2025, for the proposed catholic elementary school indicates that the proposed school will consist of a two (2) storey slab on grade building to be constructed at the northeast portion of the site with a future addition on the south side. Associated sports field, parking lot and playgrounds as well as underground services will be included as part of the proposed school construction. Design final site grade raise and elevation of the ground floor of the proposed school building were not available at the time of this investigation.

The geotechnical investigation was undertaken to:

a) Establish the subsurface soil and groundwater conditions at thirty (30) test hole locations including (fifteen (15) boreholes and fifteen (15) test pits);

b) Classify the site for seismic site response in accordance with the requirements of the 2024 Ontario Building Code and assess the potential for liquefaction of the subsurface soils during a seismic event;

c) Comment on grade-raise restrictions;

d) Make recommendations regarding the most suitable type of foundations, founding depth and bearing pressure at serviceability limit state (SLS) and factored geotechnical resistance at ultimate limit state (ULS) of the founding strata and comment on the anticipated total and differential settlements of the recommended foundation type;

e) Provide comments regarding slab-on-grade construction and the requirement for perimeter and underfloor drainage systems;

f) Comment on excavation conditions and de-watering requirements during construction;

g) Provide pipe bedding requirements for underground services;

h) Discuss backfilling requirements and suitability of on-site soils for backfilling purposes;

i) Recommend pavement structure thicknesses for access road and parking lot;

j) Comment on subsurface concrete requirements and corrosion potential of subsurface soils to buried metal structures/members; and

k) Provide comment regarding tree planting restrictions.

The comments and recommendations given in this report are based on the assumption that the above-described design concepts will proceed into construction. If changes are made either in the design phase or during construction, this office must be retained to review these modifications. The result of this review may be a modification of our recommendations or it may require additional field or laboratory work to check whether the changes are acceptable from a geotechnical viewpoint.

2. Background Information

EXP was provided with a geotechnical investigation report for the proposed residential development on the Kellam Lands in Ottawa, Ontario which surrounds the project site. The report was completed by Golder Associates in December 2013 under Project No. 12-1121-0286. No Test holes were completed on the subject site; however three boreholes (10-102 to 10-104) were completed along Findlay Creek Drive just north of the site. The boreholes identified no fill, with the original ground surface ranging from (Geodetic) Elevation 94.30 m in the west to Elevation 92.04 m in the east. The subsurface soils included topsoil over glacial till over shale bedrock. A clayey silt to silty sand deposit was identified at the east side of site, extending to 2.07 m depth over glacial till. Auger refusal was met between 2.57 m to 4.11 m depth (Elevation 91.73 m to 87.93 m) at all the three boreholes.

As part of the site history, it is understood that the site was used by the developer to store fill material which was placed in several piles throughout the site. The fieldwork was delayed until the developer removed the fill piles and leveled the site area. As a result, fill should be expected throughout the site and with variable quality and depth. The information presented in the test pits and boreholes represent the findings at these locations only and fill may be deeper or shallower as well as of different quality in other areas of the site.

3. Site Description

The site is rectangular in shape with an area of approximately 2.25 hectares. The site is bound to the north by Findlay Creek Drive, to the east by Placette Trident Mews and to the south and the west by low-rise residential properties. At the time of the investigation the site is cleared vacant land with pre-grade fill cover as described in Section 2.

Survey information from the Topographic Plan of Survey of Block 258 Registered Plan 4M-1659 and Block 224 Registered Plan 4M-1624, City of Ottawa surveyed by Annis, O'Sullivan, Vollebekk Ltd. And dated October 24, 2025 indicates that elevations generally ranged between Elevation 90.96 m to Elevation 94.59 m and generally slopes upwards from the southeast to the northwest, with the exception of a cut area at the west side of the property with bottom elevations between 91.36 m to 92.93 m.

4. Procedure

The fieldwork for the geotechnical investigation was undertaken in between October 2 and 6, 2025 and consists the drilling of of fifteen (15) boreholes (Borehole Nos. 1 to 15) and the excavation of fifteen (15) Test Pits (Test Pit Nos. 2 to 6, 8, and 10 to 18). Test Pit Nos. 1, 7, and 9 couldn't be excavated since Tomlinson was working in the area and already made some cuts. The test pits were advanced to termination or bucket refusal depths of 2.0 m to 3.3 m below the existing grade whereas the boreholes were advanced to termination or auger refusal depths of 3.0 m to 10.7 m below existing grade. The fieldwork was supervised on a full-time basis by a representative from EXP.

The locations of the test holes (boreholes and test pits) and the geodetic elevations of the test holes were established by Annis O'Sullivan Vollebekk Ltd. The test hole locations are shown on the test hole location plan, Figure 2.

The test hole locations were cleared of private and public underground services, prior to the start of drilling operations. The boreholes were drilled using a CME-55 track mounted drill rig equipped with continuous flight hollow stem augers and soil sampling capabilities. Standard penetration tests (SPTs) were performed in all the boreholes 0.75 m and 1.5 m depth intervals with soil samples retrieved by the split-barrel sampler. The presence of the bedrock was proven in one (1) borehole by conventional rock coring techniques using the N-size core barrel. A field record of wash water return, colour of wash water and any sudden drops of the core barrel were kept during rock coring operations.

Nineteen (19) mm diameter standpipes with slotted sections were installed in selected boreholes for long-term monitoring of the groundwater levels. The standpipes were installed in accordance with EXP standard practice, and the installation configuration is documented on the respective borehole logs. The boreholes were backfilled upon completion of drilling and installation of the standpipe.

Test pits were carried out with a CAT 336 excavator. Soil samples (grab samples) of the different soil types exposed in the test pits were retrieved and the soil conditions from the test pits were logged. The test pits were backfilled upon completion of excavating using the excavated test pit material.

The soil samples for the all the test holes were placed in labeled plastic bags and, on completion of the test hole fieldwork, the soil samples were transported to the EXP laboratory in Ottawa and the test hole logs prepared. The soils are classified by their main constituents in accordance with the Unified Soil Classification System (USCS) using the soil group name and symbol and by the modified Burmister soil classification method for the classification of the minor constituents using adjectives and modifiers such as trace and some.

Similarly, the bedrock cores were placed in boxes labelled accordingly and transported to the EXP laboratory in Ottawa where they were photographed and reviewed by a geotechnical engineer and logged in general accordance with the Fifth Edition Canadian Foundation Engineering Manual.

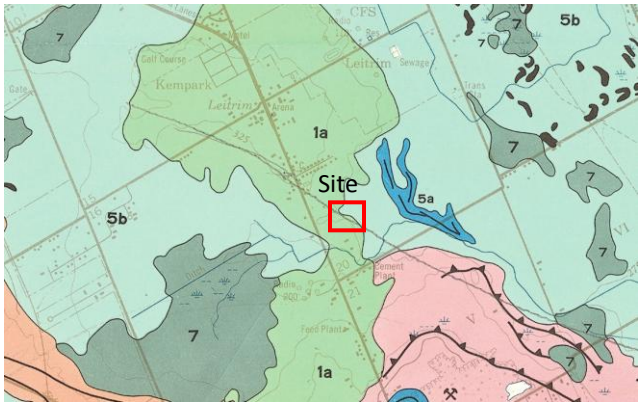
A summary of the soil sample laboratory testing program is shown in Table I.

Table I: Summary of Laboratory Testing Program	
Type of Test	Number of Tests Completed
Soil Samples	
Moisture Content Determination	137
Grain Size Analysis	11
Atterberg Limit Determination	8
Corrosion Analysis (pH, sulphate, chloride and resistivity)	4

5. Geology of the Site and Available Information

5.1 Surficial Geology Map

The surficial geology was reviewed from the Geological survey of Canada Map 1506 A Surficial Geology of Ottawa, Ontario and Quebec, 1995. The map indicates that the Site is underlain by glacial till on the west side and nearshore fine to medium grained sand deposit on the west side. The surficial deposits are shown in Image 1 below.



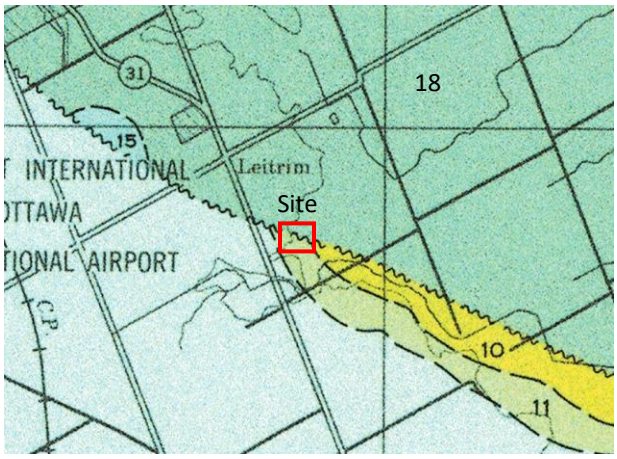
1a Till Plain; local relief <5 m

5b Fine to medium-grained sand calcareous and also commonly fossiliferous

Image 1 – Surficial Geology

5.2 Bedrock Geology Map

The bedrock geology was reviewed from Geological Survey of Canada Map 1508A Generalized Bedrock Geology of Ottawa-Hull, Ontario, Quebec, 1979. The map indicates that the site is located on the Gloucester Fault, and that the site is underlain by March formation sandstone and sandy dolomite on the west side, and Carlsbad formation grey shale or sandy shale, with dolomitic layers on the east side. The bedrock geology is show in Image 2 below.



10 Nepean Formation: sandstone

11 March Formation: Interbedded sandstone and sandy dolomite

18 Carlsbad Formation: grey shale, sandy shale, some dolomitic layers

Image 2 – Bedrock Geology

6. Subsurface Conditions and Groundwater Levels

A detailed description of the subsurface conditions and groundwater levels from the test holes are given on the attached Borehole and Test pit Logs, Figure Nos. 3 to 32. The borehole and test pit logs and related information depict subsurface conditions only at the specific locations and times indicated. Subsurface conditions and water levels at other locations may differ from conditions at the locations where sampling was conducted. The passage of time also may result in changes in the conditions interpreted to exist at the locations where sampling was conducted.

The test holes were carried out to provide a representation of subsurface conditions as part of a geotechnical exploration program and are not intended to provide evidence of potential environmental conditions. Reference is made to the Phase I ESA and a preliminary Soil Characterization Report prepared by EXP and presented under separate covers.

It should be noted that the soil boundaries indicated on the borehole and test pit logs are inferred from non-continuous sampling and observations during drilling operations. These boundaries are intended to reflect approximate transition zones for the purpose of geotechnical design and should not be interpreted as exact planes of geological change. The "Note on Sample Descriptions" preceding the borehole and test pit logs form an integral part of this report and should be read in conjunction with this report.

A review of the borehole and test pit logs indicates the following subsurface conditions with depth and groundwater level measurements.

6.1 Granular Fill

A 700 mm thick layer of crushed granular fill was encountered at the surface of Test Pit No. 25-04. The presence of this granular is localized to this test pit

6.2 Fill

Fill was contacted underlying the granular fill at Test Pit No. 25-04 and from the ground surface in all other test holes at the site. The fill extends to depths of 0.9 m to 3.0 m (Elevation 93.0 m to Elevation 90.3 m) and was variable in nature. Generally, the fill in the upper portion was silty sand and gravel with topsoil inclusions and occasional debris such as brick, concrete and wood pieces. The lower portion of the fill is composed of topsoil and tree matter (decomposing wood, roots, and rootlets) with sandy silt to silty sand, sometimes clayey, and occasional cobbles and boulders (refer to Section 2 for comment on the fill). Standard penetration test (SPT) N-values of the fill are 3 to 31 indicating the fill is in a very loose to dense state. The moisture content of the fill is 5 percent to 35 percent.

The results from the grain-size analysis conducted on seven (7) samples of the fill are summarized in Table II. The grain-size distribution curves are shown in Figures 33 to 39.

Table II: Summary of Results from Grain-Size Analysis and Atterberg Limits Determination - Fill Samples

Test hole (BH or TP) No., Sample (SS or GS) No.	Depth (m)	Grain-Size Analysis (%)				Plasticity Index	Soil Classification
		Gravel	Sand	Silt	Clay		
TP25-3, GS1	0.5 – 0.6	8	75	17	0	Non-Plastic	Silty Sand, Trace Gravel (SM)
BH25-4, SS3	1.5 – 2.1	6	51	31	12	Non-Plastic	Silty Sand, Some Clay, Trace Gravel (SM)
BH25-5, SS2	0.8 – 1.4	9	50	29	12	Non-Plastic	Silty Sand, Some Clay, Trace Gravel (SM)
BH25-8, SS1	0.0 – 0.6	2	23	67	8	Non-Plastic	Silt with Sand, Trace Clay and Gravel (ML)

Table II: Summary of Results from Grain-Size Analysis and Atterberg Limits Determination - Fill Samples							
Test hole (BH or TP) No., Sample (SS or GS) No.	Depth (m)	Grain-Size Analysis (%)				Plasticity Index	Soil Classification
		Gravel	Sand	Silt	Clay		
BH25-11, SS3	1.5 – 2.1	2	47	39	12	Non-Plastic	Sandy Silt, Some Clay, Trace Gravel (ML)
BH25-13, SS2	0.8 – 1.4	0	53	35	12	Non-Plastic	Silty Sand, Some Clay, (SM)
BH25-14, SS2	0.8 – 1.4	19	32	42	7	Non-Plastic	Silty Sand with Gravel, Trace Clay (SM)

Based on a review of the results from the grain size analyses, the fill may be classified as a sandy silt, some clay (ML) to silty sand with gravel, trace clay (SM).

6.3 Silty Sand to Sand and Gravel

A deposit of silty sand to sand and gravel was encountered beneath the fill in Borehole Nos. 1, 3, 10, 12, and 13 and Test Pit No. 18. This deposit extends to depths ranging from 2.3 m to 3.8 m (Elevation 91.7 m to Elevation 89.3 m) at Borehole No. 1, 3, 10, and 13, and the test holes BH25-12 and TP25-18 were terminated within the layer at depths of 3.6 m and 2.9 m respectively. The SPT N-values of the silty sand to sand and gravel are from 15 to 47 indicating a compact to dense state. The moisture content ranges from 6 percent to 16 percent.

The results from the grain-size analysis conducted on one (1) sample is summarized in Table III. The grain-size distribution curve is shown in Figure 40.

Table III: Summary of Results from Grain-Size Analysis – Silty Sand to Sand and Gravel						
Test hole (BH or TP) No. – Sample (SS or GS) No.	Depth (m)	Grain-Size Analysis (%)				Soil Classification
		Gravel	Sand	Silt	Clay	
BH25-10, SS5	3.0 - 3.6	24	54	22	0	Silty sand with Gravel (SM)

Based on a review of the results of the grain-size analysis, the soil may be classified as silty sand with gravel (SM).

6.4 Silt

A layer of silt was encountered beneath the fill in Test Pit No. 10. This test pit was terminated within the silt layer at a depth of 3.0 m (Elevation 91.0 m). The silt layer contains seams of sand. The moisture content is 23 percent.

6.5 Glacial Till

Glacial till was contacted beneath the fill and silty sand to sand and gravel at depths of 0.9 m to 3.8 m (Elevation 93.0 m to Elevation 89.3 m) in Borehole Nos. 1 to 11 and 13 to 15, and Test Pits Nos. 2 to 6, 8 and 11 to 17. The glacial till contains varying amounts of gravel, sand, silt and clay within the soil matrix as well as cobbles and boulders. The standard penetration test (SPT) N-values of the glacial till range from 28 to 154 indicating the glacial till is in a compact to very dense state. Higher N values with low sampler penetration such as N equal to 50 for 50 mm sampler penetration into the glacial till are likely a result of the split spoon sampler making contact with a cobble or boulder within the glacial till. The moisture content of the glacial till is 5 percent to 15 percent.

The results from the grain-size analysis conducted on three (3) samples of the glacial till are summarized in Table IV. The grain-size distribution curves are shown in Figures 41 to 43.

Table IV: Summary of Results from Grain-Size Analysis and Atterberg Limit Determination - Glacial Till Samples							
Test hole (BH or TP) No., Sample (SS or GS) No.	Depth (m)	Grain-Size Analysis (%) and Atterberg Limits					
		Gravel	Sand	Silt	Clay	Plasticity Index	Soil Classification (USCS)
TP25-6, GS2	1.2 - 1.3	0	86	14	0	--	Silty Sand (SM)
BH25-2, SS4	2.3 - 2.9	22	58	16	4	Non-plastic	Silty Sand with Gravel, Trace Clay (SM)
BH25-6, SS6	3.8 - 4.4	12	43	40	5	Non-plastic	Silty Sand, Some Gravel, Trace Clay (SM)

Based on a review of the results of the grain-size analyses, the glacial till ranges in classification as a silty sand to silty sand with gravel, trace clay (SM). The glacial till contains cobbles and boulders.

6.6 Auger/Bucket Refusal and Bedrock

Refusal to augers was encountered in Borehole Nos. 1 to 3, 5, 8, 9, and 11 at depths of 3.0 m to 6.4 m (Elevation 91.0 m to Elevation 87.3 m). The refusal to augers may indicate the bedrock surface or cobbles/boulders in the glacial till. Excavator bucket refusal was also encountered in Test Pit No. 3 at a depth of 2.2 m (Elevation 91.5 m). The excavator bucket refusal may indicate the bedrock surface or cobbles/boulders in the glacial till.

A summary of the auger refusal and excavator bucket refusal are shown in Table V.

Table V: Summary of Auger Refusal, Excavator Bucket Refusal and Bedrock Depths (Elevations)			
Test hole (BH or TP) No.	Ground Surface Elevation (m)	Auger/Excavator Refusal Depth (m) (Elevation)	Comment wrt to Depth (Elevation) of Bedrock Surface
BH25-1	93.98	3.0 (91.0)	Auger refusal at 3.0 m depth within glacial till
BH25-2	93.76	4.2 (89.6)	Auger refusal at 4.2 m depth within glacial till
BH25-3	93.13	4.3 (88.8)	Auger refusal at 4.3 m depth within glacial till
BH25-4	94.01	--	Borehole Terminated at 6.7 m depth (Elevation 87.3 m) in completely weathered shale bedrock without refusal to augers
BH25-5	93.44	6.1 (87.3)	Auger refusal at 6.1 m depth within completely weathered shale bedrock
BH25-6	94.41	--	Borehole Terminated at 8.2 m depth (Elevation 86.2 m) in completely weathered shale bedrock without refusal to augers
BH25-7	93.94	--	Borehole Terminated at 6.7 m depth (Elevation 87.2 m) in completely weathered shale bedrock without refusal to augers
BH25-8	93.28	4.5 (88.8)	Auger refusal at 4.5 m depth within glacial till
BH25-9	93.76	6.4 (87.4)	Auger refusal at 6.4 m depth within glacial till
BH25-10	93.44	5.5 (87.9)	Auger refusal at 5.5 m depth on highly weathered shale bedrock with dolomitic layers. Borehole extended by coring bedrock to 10.7 m depth (Elevation 82.7 m)
BH25-11	93.58	3.5 (90.1)	Auger refusal at 3.5 m depth within glacial till
TP25-3	93.71	2.2 (91.5)	Bucket refusal at 2.2 m within glacial till

Borehole Nos. 4, 5, 6, 7, and 10 were extended by auguring into completely weathered shale bedrock from depth of 4.6 m to 6.1 m and extending to termination and auger refusal depths of 5.5 m to 8.2 m (Elevation 87.3 m to Elevation 82.7 m).

Borehole No. 10 was extended past the depth of auger refusal through rock coring to a termination depth of 10.7 m (Elevation 82.7 m). The coring extended through highly fractured shale bedrock with dolomitic layers and completely weathered zones. Photographs of the bedrock cores are included in Appendix A.

The total core recovery (TCR) ranges between 58 percent and 100 percent and the rock quality designation (RQD) ranged between 0 percent and 54 percent indicating the bedrock is of a very poor to fair quality.

The recovered bedrock was confirmed to be Carlsbad formation shale bedrock with dolomitic layers as described in the Geological Survey of Canada Map 1508A Generalized Bedrock Geology of Ottawa-Hull, Ontario, Quebec, 1979. The map also indicates that the site is located on the Gloucester Fault, and that the site is underlain by March formation sandstone and sandy dolomite on the west side, and Carlsbad formation grey shale or sandy shale, with dolomitic layers on the east side.

6.7 Groundwater Level Measurements

A summary of the groundwater level measurements taken in the boreholes equipped with standpipes is shown in Table VI.

Table VI: Summary of Groundwater Level Measurements

Borehole No. (BH)	Ground Surface Elevation (m)	Screen Depth (m)	Date of Measurement (Elapsed Time in Days from Date of Installation)	Water Level Depth Below Ground Surface (Elevation), m
BH25-03	93.13	2.8 – 4.3	November 4, 2025 (33)	3.5 (89.6)
BH25-04	94.01	4.6 – 6.1	November 4, 2025 (29)	4.2 (89.8)
BH25-06	94.41	6.1 – 7.6*	November 4, 2025 (32)	7.2 (87.2)
BH25-07	93.94	4.6 – 6.1	November 4, 2025 (29)	4.2 (89.7)
BH25-08	93.28	3.0 – 4.5	November 4, 2025 (33)	3.8 (89.5)
BH25-09	93.76	4.6 – 6.1	November 4, 2025 (29)	4.1 (89.7)
BH25-10	93.44	9.2 – 10.7*	November 4, 2025 (32)	3.9 (89.54)

* Screen depth within the bedrock

The groundwater level was found to range from 3.5 m to 4.2 m depth (Elevation 89.8 m to 89.5 m) in standpipes screened within the overburden, and 3.9 m to 7.2 m depth (Elevation 89.5 m to 87.2 m) in standpipes screened within the bedrock.

The groundwater levels were determined in the boreholes at the time and under the condition stated in this report. Note that fluctuations in the level of groundwater may occur due to a seasonal variation such as precipitation, snowmelt, rainfall activities, and other factors not evident at the time of measurement and therefore may be at a higher level during wet weather periods.

7. Site Classification for Seismic Site Response and Liquefaction Potential of Soils

7.1 Site Classification for Seismic Site Response

The borehole information indicates that the subsurface conditions within the proposed building footprint consist of fill underlain by localised silty sand to sand and gravel deposits, overlying glacial till, overlying shale bedrock. The groundwater level was found to range from 3.5 m to 7.2 m depth (Elevation 89.8 m to 87.2 m).

Provided that the footings are placed on compact to very dense sand to sand and gravel or glacial till (native soils) or on engineered fill placed on compact to very dense native soils, then Table 4.1.8.4.-B of the 2024 Ontario Building Code (OBC) indicates that the site classification for seismic response is estimated to be **Class C** and the site designation is **Xc**.

7.2 Liquefaction Potential of Soils

The subsurface soils are not susceptible to liquefaction during a seismic event.

8. Grade Raise Restrictions

Compressible soils were not encountered on the site and therefore, there is no restriction to raising the grades at the site.

9. Site Grading

Site grading within the **proposed building footprint area** should consist of the removal of all existing fill and organic stained soils down to the native undisturbed silty sand to sand and gravel deposit or glacial till. The native soil subgrade should be examined by a geotechnician. Any loose/soft areas identified during the subgrade examination should be excavated, removed and replaced with Ontario Provincial Standard Specification (OPSS) Granular B Type II material compacted to 100 percent standard Proctor maximum dry density (SPMDD). Once the subgrade has been approved, the grades may be raised to the design underside of footing and floor slab elevation by the construction of an engineered fill pad, (if required), in accordance with Section 10 of this report.

Site grading within the **proposed portable areas** should consist of the removal of all existing fill and organic stained soils down to the native undisturbed material. The native subgrade should be examined and proof rolled in the presence of a geotechnician. Any loose/soft areas identified during the subgrade examination should be excavated, removed and replaced with Ontario Provincial Standard Specification (OPSS) Granular B Type II material compacted to 98 percent standard Proctor maximum dry density (SPMDD). Once the subgrade has been approved, the grades may be raised to the design subgrade level by the construction of an engineered fill pad constructed in accordance with the procedure in Section 10 of this report.

Site grading within the **proposed parking lot access roads and paved play areas** should consist of the removal of all existing fill and organic stained soils down to the native undisturbed material. The native subgrade should be proofrolled in the presence of a geotechnician. Any loose/soft areas identified during the proofrolling process should be excavated, removed and replaced with Ontario Provincial Standard Specification (OPSS) Granular B Type II or OPSS Select Subgrade Material (SSM) compacted to 95 percent standard Proctor maximum dry density (SPMDD). Alternatively, portions of the excavated and removed existing fill that is free of debris, cobbles, boulders and topsoil (organic soils), may be reused to raise the site grades to the design subgrade level. The suitability of re-using the existing fill to raise the grades will have to be further assessed at time of construction by examining the fill material and conducting additional tests on the material.

Site grading within the **proposed sports field** should consist of the removal of any existing topsoil down to compact fill material. The subgrade should be proofrolled in the presence of a geotechnician. Any loose/soft areas identified during the proofrolling process should be excavated, removed and replaced with Ontario Provincial Standard Specification (OPSS) Granular B Type II or OPSS Select Subgrade Material (SSM) compacted to 95 percent standard Proctor maximum dry density (SPMDD). Alternatively, portions of the excavated and removed existing fill that is free of debris, cobbles, boulders and topsoil (organic soils), may be reused to raise the site grades to the design subgrade level. The suitability of re-using the existing fill to raise the grades will have to be further assessed at time of construction by examining the fill material and conducting additional tests on the material.

In place density tests should be performed on each lift of placed material to ensure that it has been compacted to the project specifications.

10. Foundation Considerations

Design details of the development such the Final Floor Elevation (FFE) and the Underside of Footing (USF) elevations of the school building were not available at the time of writing this report. This report should be updated once the design details are known. It is understood that the proposed school will be a two-storey slab on grade school building with no basement.

Based on the test hole information within the proposed building footprint, it is considered feasible to support the proposed building by spread and strip footings founded on undisturbed native silty sand to sand and gravel deposit or glacial till, encountered at 1.5 m to 3.0 m depth (Elevation 92.5 m to Elevation 90.3 m) within the proposed building footprint, or on a properly constructed engineered fill pad constructed on undisturbed native soils. The existing fill is not considered suitable as a founding material and must be removed down to the silty sand to sand and gravel deposit or glacial till.

Square pad footings having a maximum width and length of 3.0 m and strip footings having a maximum width of 1.5 m founded on approved native soil or on a properly constructed engineered fill pad constructed on the approved undisturbed native soil may be designed for a bearing capacity at serviceability limit state (SLS) of 150 kPa and factored geotechnical resistance at ultimate limit state (ULS) of 225 kPa. The factored geotechnical resistance value at ULS includes a resistance factor of 0.5. The total and differential settlements of well designed and constructed footings placed in accordance with the above recommendations are expected to be less than 25 mm and 19 mm respectively.

The construction of engineered fill pad (where required) should consist of the removal of all existing fill, topsoil (organic) layers and organic stained soils down to the native undisturbed silty sand to sand and gravel deposit or glacial till. The native soil should be examined by a geotechnician. Any loose/soft areas identified during the subgrade examination should be excavated, removed and replaced with Ontario Provincial Standard Specification (OPSS) Granular B Type II material compacted to 100 percent standard Proctor maximum dry density (SPMDD). Once the native subgrade has been approved, the grades may be raised to the design underside footing and floor slab elevation by the construction of an engineered fill pad. The excavation for the removal of fill organic soil layers should extend to a sufficient distance beyond the limits of the proposed structure to accommodate a 1.0 m wide horizontal bench of engineered fill that extends beyond the perimeter of the proposed building on all sides, which should thereafter be sloped at an inclination of 1H to 1V down to the approved subgrade. The engineered fill should consist of OPSS Granular B Type II material that is placed in 300 mm thick lifts and each lift compacted to 100 percent SPMDD. The placement and compaction of the engineered fill can in this way be undertaken to the founding level of the footings. From the footing level to the underside of the floor slab, each lift of the Granular B Type II material should be compacted to 98 percent of SPMDD. The engineered fill should be placed under the full-time supervision of a geotechnician working under the direction of a geotechnical engineer. In-place density tests should be undertaken on each lift of the engineered fill to ensure that it is properly compacted prior to placement of subsequent lift.

All the footing beds should be examined by a geotechnical engineer to ensure that the founding surfaces are capable of supporting the design bearing pressure and that the footing beds have been properly prepared.

A minimum of 1.8 m of earth cover should be provided to the footings to protect them from damage due to frost penetration. The frost cover should be increased to 2.1 m for unheated structures if snow will not be removed from their vicinity. If snow will be removed from the vicinity of the unheated structures, the frost cover should be increased to 2.4 m. Rigid insulation thermally equivalent to the required soil cover may be used instead of the soil cover. Alternatively, a combination of rigid insulation and soil cover may be used to achieve the required frost protection for the footings.

The recommended factored geotechnical resistance at ULS and bearing pressure at SLS have been calculated by EXP from the borehole information for the design stage only. The investigation and comments are necessarily on-going as new information of underground conditions becomes available. For example, more specific information is available with respect to conditions between boreholes when foundation construction is underway. The interpretation between boreholes and the recommendations of this report must therefore be checked through field monitoring provided by an experienced geotechnical engineer to validate the information for use during the construction stage.

11. Floor Slab and Drainage Requirements

The ground floor of the proposed school building may be designed as a slab-on-grade placed on a well packed 200 mm thick 19 mm sized clear stone bed placed on a minimum 300 mm thick engineered fill pad set on the approved native soil subgrade constructed in accordance with Section 9 and 10 of this report. The clear stone would minimize the capillary rise of moisture from the sub-soil to the floor slab. Alternatively, the clear stone may be replaced with a 200 mm thick bed of OPSS Granular A compacted to 98 percent SPMDD and overlain by a vapour barrier. Adequate saw cuts should be provided in the floor slabs to control cracking.

The proposed school building should have a perimeter drainage system. An underfloor drainage system is not necessary based on the measured groundwater levels however, the need for underfloor drainage should be re-evaluated once the design elevation of the ground floor is available and compared with the groundwater level.

The finished floor slab should be set at least 150 mm higher than the finished exterior grade.

The finished exterior grade should be sloped away from the proposed school building to prevent ponding of surface water close to the exterior walls of the proposed school building.

12. Excavation and De-Watering Requirements

12.1 Excess Soil Management

Ontario Regulation 406/19 specifies protocols that are required for the management and disposal of excess soils. As set forth in the regulation, specific analytical testing protocols need to be implemented and followed based on the volume of soil to be managed and the requirements of the receiving site. The testing protocols are specific as to whether the soils are stockpiled or in situ. In either scenario, the testing protocols are far more onerous than have been historically carried out as part of standard industry practices. These decisions should be factored in and accounted for prior to the initiation of the project-defined scope of work. EXP would be pleased to assist with the implementation of a soil management and testing program that would satisfy the requirements of Ontario Regulation 406/19.

Reference is made to the preliminary Soil Characterization Report completed by EXP for management of any excess soils that will be generated from the site as part of the proposed school development. Depending on the excess soils that will be generated from the site, additional sampling and testing of excess soil in accordance with Ontario Regulation 406/19 may be required.

12.2 Excavation

Excavations for the construction of the foundations and installation the underground services for the proposed school development are expected to extend to a maximum depth of 3.0 below the existing grade into the fill, silty sand to sand and gravel, and glacial till. Excavations are anticipated to be above or near the groundwater surface. This should be confirmed once the proposed design details are known.

The excavations may be undertaken by conventional heavy equipment capable of removing cobbles and boulders within the fill and glacial till.

All excavations must be undertaken in accordance with the Occupational Health and Safety Act (OHSA), Ontario Reg. 213/91. Based on the definitions provided in OHSA, the subsurface soils on site are considered to be Type 3 and as such must be cut back at 1H:1V from the bottom of the excavation. Within zones of seepage, the excavation side slopes are expected to slough and eventually stabilize at 2H:1V to 3H:1V from the bottom of the excavation. The installation of the municipal underground services may be undertaken within the confines of a prefabricated support system (trench box) designed and installed in accordance with OHSA, provided the excavation is properly dewatered.

It is recommended that a pre-construction condition survey of adjacent buildings and infrastructure be undertaken prior to the start of construction activities and that vibration monitoring be conducted during construction activities.

Many geologic materials deteriorate rapidly upon exposure to meteorological elements. Unless otherwise specifically indicated in this report, walls and floors of excavations must be protected from moisture, desiccation, and frost action throughout the course of construction.

12.3 De-Watering Requirements

Seepage of surface and subsurface water into the excavations is anticipated and it should be possible to remove any water entering the excavations by pumping from sumps. In areas of high infiltration or in areas where more permeable soil layers may exist, a higher seepage rate should be anticipated requiring high-capacity pumps to keep the excavation dry.

For construction dewatering, an Environmental Activity and Sector Registry (EASR) approval shall be obtained for water takings greater than 50 m^3 per day. Since July of 2025, any volume of pumping at greater than 50 m^3/day will require to be registered as EASR. A hydrogeological assessment report, water taking and discharge plans are required for EASR registration. If the long-term foundation drainage pumping is required at rates more than 379 m^3/day then a Category 3 Permit to Take Water (PTTW) would be required from the Ministry of Environment Conservation and Parks (MECP) for the long-term dewatering operation.

Although this geotechnical investigation has estimated the groundwater levels at the time of the fieldwork, and commented on dewatering and general construction problems, conditions may be present which are difficult to establish from standard boring and excavating techniques and which may affect the type and nature of dewatering procedures used by the contractor in practice. These conditions include local and seasonal fluctuations in the groundwater table, erratic changes in the soil profile,

thin layers of soil with large or small permeabilities compared with the soil mass, etc. Only carefully controlled tests using pumped wells and observation wells will yield the quantitative data on groundwater volumes and pressures that are necessary to adequately engineer construction dewatering systems. A detailed hydrogeological study is required to assess the hydrogeological conditions which will provide better dewatering pumping volume estimates.

Depending on where the discharge is routed, a separate discharge agreement/permit may be required before discharge can be released. For example, the City of Ottawa sewer service now requires a discharge permit to release water into city sewers.

13. Pipe Bedding Requirements

For site servicing, it is anticipated that the subgrade for the proposed underground services will consist of engineered fill, silt, silty sand to sand and gravel or glacial till. Underground services should be founded on native soils or on engineered fill placed on top of the native soils.

It is recommended that the bedding for the underground services including material specifications, thickness of cover material and compaction requirements conform to the City of Ottawa requirements and/or Ontario Provincial Standard Specification and Drawings (OPSS and OPSD).

It is recommended that the pipe bedding should be 150 mm thick and consist of OPSS Granular A. The bedding material should be placed along the sides and on top of the pipe to provide a minimum cover of 300 mm. The bedding should be compacted to at least 98 percent of the SPMDD. The bedding thickness may be further increased in areas where the subgrade becomes disturbed.

Should paved surfaces be located over service trenches, it is recommended that the trench backfill material within the frost zone (up to 1.8 m below finished grade), should match the existing material in the roadway to minimize differential frost heaving of the subgrade. Otherwise, frost tapers will be required. The trench backfill should be placed in maximum 300 mm thick lifts and each lift should be compacted to 95 percent SPMDD.

14. Backfilling Requirements and Suitability of On-Site Soils for Backfilling Purposes

The materials to be excavated from the site will comprise of fill containing organic content (topsoil, tree matter) and construction debris, silt, silty sand to sand and gravel, and glacial till. From a geotechnical perspective, the fill has a high organic content and is not considered suitable for reuse as backfill material in the interior or exterior of the buildings and should be discarded. Portions of the non-organic fill (free of topsoil, tree matter, debris, cobbles and boulders), silt, silty sand to sand and gravel, and glacial till, free of organics, cobbles and boulders, and above the groundwater level may be re-used as fill in locations away from the proposed building as backfill in service trenches and subgrade fill in paved, outdoor sports field and landscaped areas, subject to further geotechnical examination and testing during construction. These soils are subject to moisture absorption due to precipitation and must be protected at all times from the elements.

Similarly, portions of the silt, silty sand to sand and gravel and glacial till, free of organics, cobbles and boulders and below the groundwater level, may be re-used as fill in locations away from the proposed building as backfill in service trenches and subgrade fill in paved and landscaped areas, but will likely require air-drying to reduce the moisture content to compact the materials to the specified degree of compaction. Air-drying may be difficult since it is weather dependent, and the soils are subject to moisture absorption from precipitation and must be protected at all times from the elements.

It is anticipated that the majority of the material required for backfilling will be imported and should conform to the following specifications:

- Engineered fill under slab-on-grade and footings for the proposed school building and portables – OPSS Granular B Type II placed in 300 mm thick lifts and each lift compacted to 98 percent SPMDD beneath the floor slab and 100 percent SPMDD beneath footings;
- Backfill material for footing trenches and against foundation walls located outside the building – OPSS 1010 Granular B Type II - Compacted to 95 percent of the SPMDD; and,
- Trench backfill and subgrade fill for access road, parking lot, bus loop and outdoor sports fields - OPSS Granular B Type I, Type II or Select Subgrade Material (SSM) or approved on site non-organic material (free of organics, debris, cobbles and boulders) placed in 300 mm thick lifts and each lift compacted to 95 percent SPMDD; and
- Landscaped areas - clean fill that is free of organics and deleterious material, debris, cobbles and boulders and is placed in 300 mm thick lifts with each lift compacted to 92 percent of the SPMDD.

15. Pavement Structures

Pavement structures for the parking lot, access roads, and paved play areas are given on Table VII for the anticipated engineered fill, on-site fill, silt, silty sand to sand and gravel, and glacial till subgrades. The pavement structures are based upon the assumption that the subgrade will be properly prepared and assumes a functional design life of 15 to 18 years. The proposed functional design life represents the number of years to the first rehabilitation, assuming regular maintenance is carried out.

Table VII: Recommended Pavement Structure Thicknesses				
Pavement Layer	**Compaction Requirements**	**Computed Pavement Structure**		
		Light Duty Parking (Cars Only)	**Light Duty Playground**	**Heavy Duty (Access Roads)**
Asphaltic Concrete	92-97 percent MRD	65 mm HL3/SP12.5 mm/ Cat. B (PG 58-34)	50 mm HL3 / SP12.5 Cat. B (PG58-34)	50 mm HL3/SP12.5 Cat. B 60 mm HL8/SP 19 Cat. B (PG 64-28)
OPSS 1010 Granular A Base (crushed limestone)	100 percent SPMDD	150 mm	150	150 mm
OPSS 1010 Granular B Type II Sub-base	100 percent SPMDD	300 mm	200	450 mm
	Notes: 1. SPMDD denotes standard Proctor maximum dry density, ASTM, D-698-12e2. **2.** MRD denotes Maximum Relative Density, ASTM D2041. **3.** The upper 300 mm of the subgrade fill must be compacted to 98% SPMDD.			

Additional comments on the construction of the parking lot, paved play areas and access road are as follows:

1. As part of the subgrade preparation, the proposed parking area, paved play areas and access road should be stripped of topsoil, organic-stained fill and other obviously unsuitable material. The subgrade should be properly shaped, crowned, then proofrolled with a heavy vibratory roller in the full-time presence of a representative of this office. Any soft or spongy subgrade areas detected should be sub excavated and properly replaced with suitable approved backfill compacted to 95 percent SPMDD (ASTM D698-12e2).
2. The long-term performance of the pavement structure is highly dependent upon the subgrade support conditions. Stringent construction control procedures should be maintained to ensure that uniform subgrade moisture and density conditions are achieved. The need for adequate drainage cannot be over-emphasized. Subdrains should be installed on both sides of the access roads, within the proposed parking area at low points, and should be continuous between catchbasins to intercept excess surface and subsurface moisture and to prevent subgrade softening. This will ensure no water collects in the granular course, which could result in pavement failure during the spring thaw. The location and extent of subdrains required within the paved areas should be reviewed by this office in conjunction with the proposed site grading.
3. To minimize the problems of differential movement between the pavement and catchbasins/manhole due to frost action, the backfill around the structures should consist of free-draining granular preferably conforming to OPSS Granular B Type II material. Weep holes should be provided in the catchbasins/manholes to facilitate drainage of any water that may accumulate in the granular fill.
4. The most severe loading conditions on light-duty pavement areas and the subgrade may occur during construction. Consequently, special provisions such as restricted lanes, half-loads during paving, temporary construction roadways, etc., may be required, especially if construction is carried out during unfavorable weather.

5. The finished pavement surface should be free of depressions and should be sloped (preferably at a minimum cross fall of 2 percent) to provide effective surface drainage towards catch basins. Surface water should not be allowed to pond adjacent to the outside edges of paved areas.
6. Relatively weaker subgrade may develop over service trenches at subgrade level. These areas may require the use of thicker/coarser sub-base material and the use of a geotextile at the subgrade level. If this is the case, it is recommended that additional 150 mm thick granular sub-base, OPSS Granular B Type II, should be provided in these areas, in addition to the use of a geotextile at the subgrade level.
7. The granular materials used for pavement construction should conform to Ontario Provincial Standard Specifications (OPSS 1010) for Granular A and Granular B Type II and should be compacted to 100 percent of the SPMDD.

The asphaltic concrete used, and its placement should meet OPSS 1150 or 1151 requirements. It should be compacted from 92 percent to 97 percent of the MRD (ASTM D2041). Asphalt placement should be in accordance with OPSS 310 and OPSS 313.

It is recommended that EXP be retained to review the final pavement structure design and drainage plans prior to construction to ensure they are consistent with the recommendations of this report.

16. Corrosion Potential

Chemical tests limited to pH, sulphate, chloride and resistivity were undertaken on four (4) soil samples. A summary of the results is shown in Table VIII. The laboratory certificates of analysis are shown in Appendix B.

Table VIII: Corrosion Test Results on Soil Samples

Borehole No., Sample No.	Soil Type	Depth (m)	pH	Sulphate (%)	Chloride (%)	Resistivity (ohm-cm)
BH25-01, SS3	Silty Sand	1.5 - 2.1	6.41	0.0031	0.0006	5000
BH25-08, SS4	Fill	2.3 - 2.9	6.47	0.0031	0.0006	4550
BH25-09, SS6	Glacial Till	3.8 - 4.4	TBD	0.0350	0.0005	2200
BH25-11, SS4	Fill	2.3 – 2.9	6.23	0.0025	0.0006	5710

The results indicate the on-site fill, native silty sand deposit, and glacial till have a negligible sulphate attack on subsurface concrete. The concrete should be designed in accordance with CSA A.23.1-24.

The results of the resistivity tests indicate that on-site fill, native silty sand deposit, and glacial till are mildly corrosive to bare steel as per the National Association of Corrosion Engineers (NACE). Appropriate measures should be taken to protect the buried bare steel from corrosion.

17. Tree Planting Restrictions

Since sensitive compressible silty clays were not encountered at the site, there are no restrictions to tree planting from a geotechnical perspective.

18. General Comments

The comments given in this report are intended only for the guidance of design engineers. The number of test holes required to determine the localized underground conditions between boreholes affecting construction costs, techniques, sequencing, equipment, scheduling, etc., would be much greater than has been carried out for the design purposes. Contractors bidding on or undertaking the works should, in this light, decide on their own investigations, as well as their own interpretations of the factual borehole results, so that they may draw their own conclusions as to how the subsurface conditions may affect them.

The environmental aspects of the soils at the site are discussed in the EXP Phase One ESA and Soil Characterization reports.

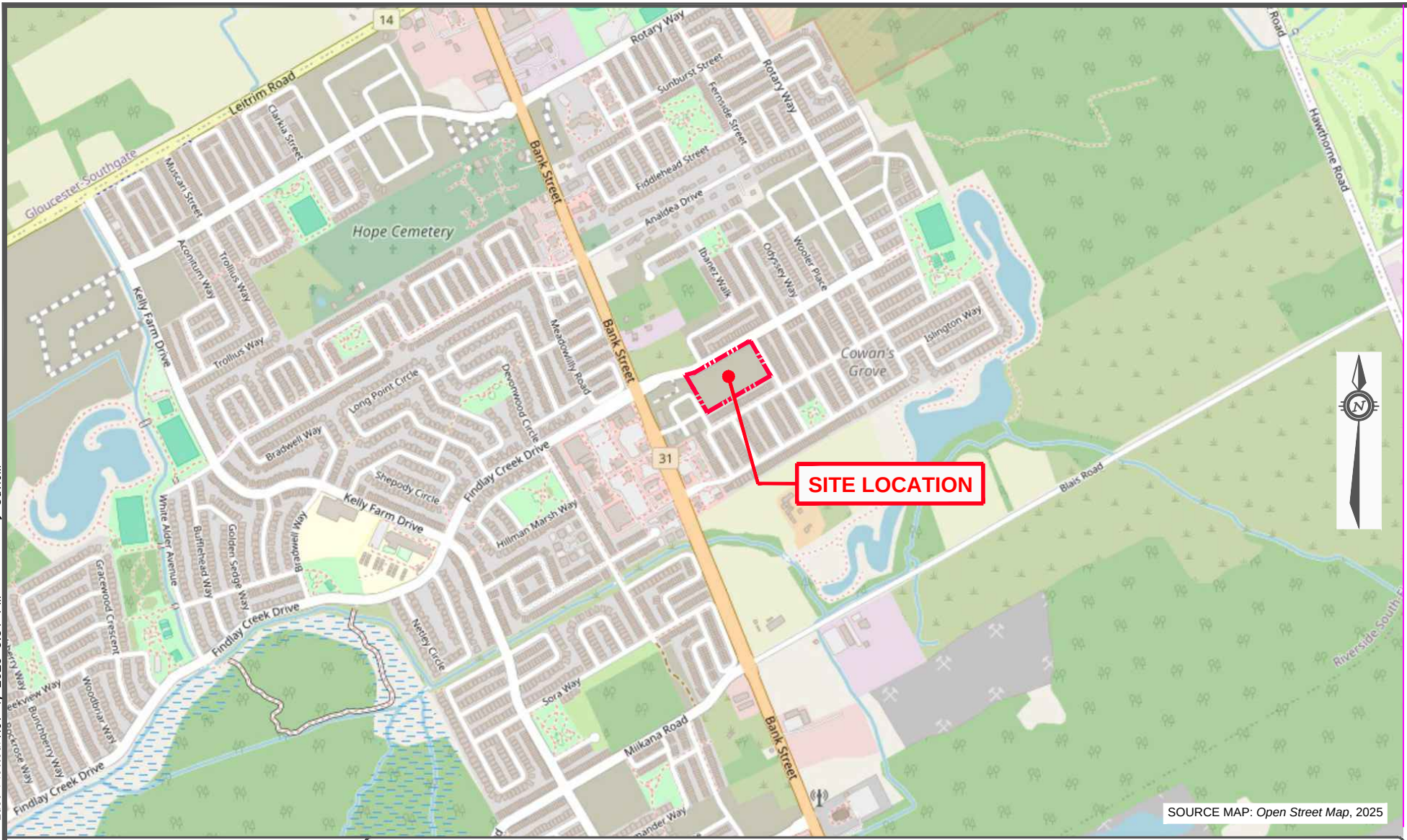
We trust that the information contained in this report will be satisfactory for your purposes. Should you have any questions, please do not hesitate to contact this office.

Sincerely,

Matthew Zammit, M.A.Sc., P.Eng.
Geotechnical Engineer
Earth & Environment

Ismail Taki, M. Eng., P.Eng.
Senior Manager, Eastern Region
Earth & Environment

Figures



SOURCE MAP: *Open Street Map*, 2025

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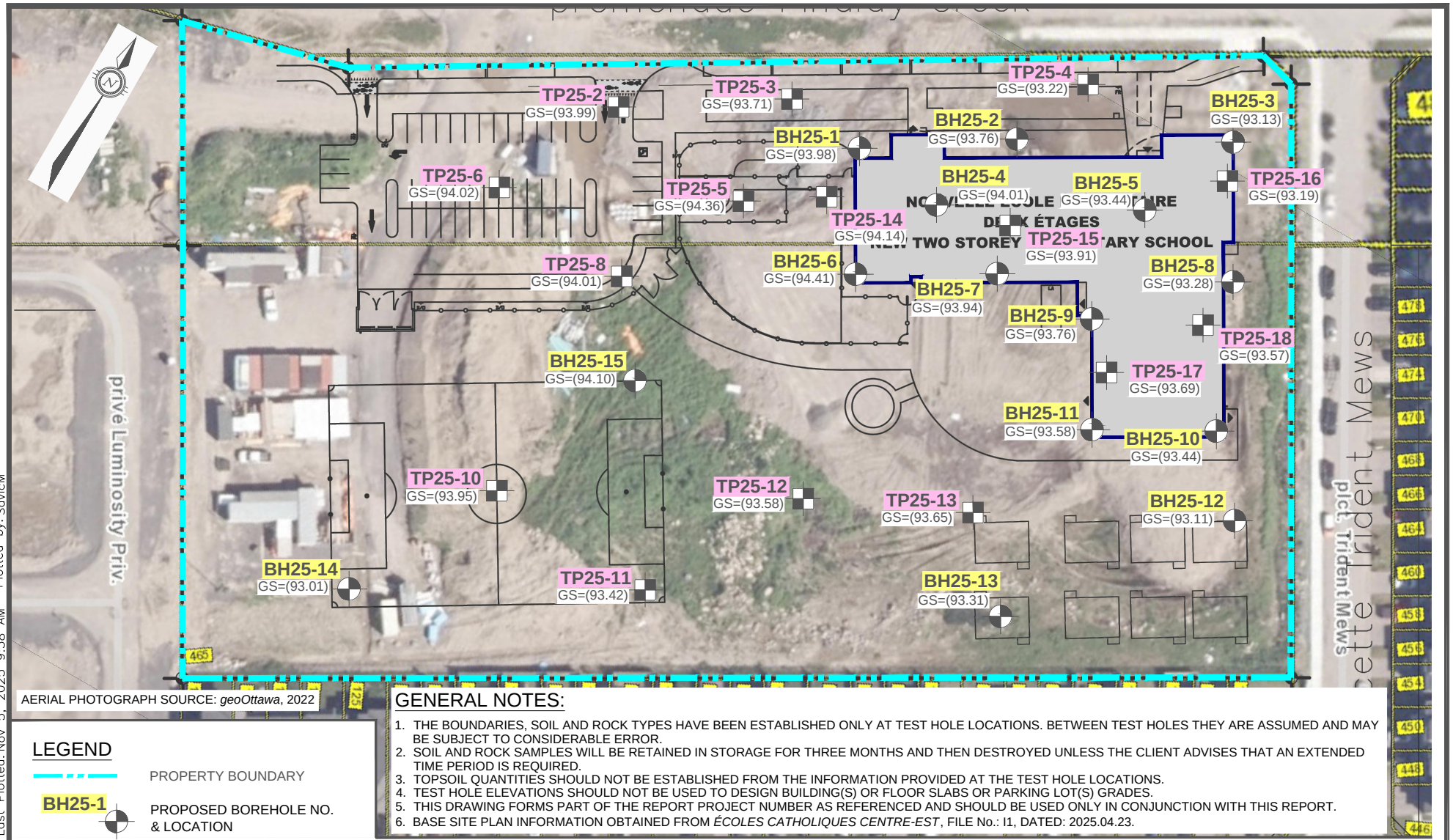
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

ORIGINAL SHEET SIZE = 11" x 8.5"

0 150m 300m 600m

HORIZONTAL 1:15,000

DATE: OCTOBER 2025	CLIENT:	CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST (CECCE)	project no. OTT-25006966-A0
DESIGN: IT / CHECKED: IT	PROJECT:	NEW LEITRIM FRENCH CATHOLIC ELEMENTARY SCHOOL	scale 1:15,000
DRAWN BY: MS	ADDRESS:	3290 FINDLAY CREEK DRIVE, OTTAWA, ONTARIO	
		SITE LOCATION PLAN	FIG 1



AERIAL PHOTOGRAPH SOURCE: *geoOttawa*, 2022

LEGEND

- PROPERTY BOUNDARY
- BH25-1 — PROPOSED BOREHOLE NO. & LOCATION
- TP25-1 — PROPOSED TEST PIT NO. & LOCATION
- (GS=XX.XXm) — GROUND SURFACE ELEVATION (m)

ORIGINAL SHEET SIZE = 11" x 8.5"

0 10m 20m 40m

HORIZONTAL 1:1000

GENERAL NOTES:

1. THE BOUNDARIES, SOIL AND ROCK TYPES HAVE BEEN ESTABLISHED ONLY AT TEST HOLE LOCATIONS. BETWEEN TEST HOLES THEY ARE ASSUMED AND MAY BE SUBJECT TO CONSIDERABLE ERROR.
2. SOIL AND ROCK SAMPLES WILL BE RETAINED IN STORAGE FOR THREE MONTHS AND THEN DESTROYED UNLESS THE CLIENT ADVISES THAT AN EXTENDED TIME PERIOD IS REQUIRED.
3. TOPSOIL QUANTITIES SHOULD NOT BE ESTABLISHED FROM THE INFORMATION PROVIDED AT THE TEST HOLE LOCATIONS.
4. TEST HOLE ELEVATIONS SHOULD NOT BE USED TO DESIGN BUILDING(S) OR FLOOR SLABS OR PARKING LOT(S) GRADES.
5. THIS DRAWING FORMS PART OF THE REPORT PROJECT NUMBER AS REFERENCED AND SHOULD BE USED ONLY IN CONJUNCTION WITH THIS REPORT.
6. BASE SITE PLAN INFORMATION OBTAINED FROM *ÉCOLES CATHOLIQUES CENTRE-EST*, FILE No.: I1, DATED: 2025.04.23.

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Ottawa, ON K2B 8H6, Canada

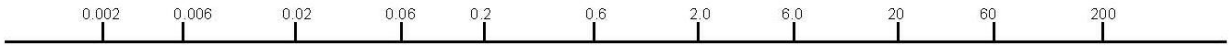
DATE: OCTOBER 2025	CLIENT:	CONSEIL DES ÉCOLES CATHOLIQUES DU CENTRE-EST (CECCE)	project no. OTT-25006966-A0
DESIGN: IT / CHECKED: IT	PROJECT:	NEW LEITRIM FRENCH CATHOLIC ELEMENTARY SCHOOL	scale 1:1,000
DRAWN BY: MS	ADDRESS:	3290 FINDLAY CREEK DRIVE, OTTAWA, ONTARIO	
		TEST HOLE LOCATION PLAN	FIG 2

Notes On Sample Descriptions

1. All sample descriptions included in this report follow the Canadian Foundations Engineering Manual soil classification system. This system follows the standard proposed by the International Societv for Soil Mechanics and Foundation Engineering. Laboratory grain size analyses provided by **exp** Services Inc. also follow the same system. Different classification systems may be used by others; one such system is the Unified Soil Classification. Please note that, with the exception of those samples where a grain size analysis has been made, all samples are classified visually. Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems.

ISSMFE SOIL CLASSIFICATION

CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE		



EQUIVALENT GRAIN DIAMETER IN MILLIMETRES

CLAY (PLASTIC) TO	FINE	MEDIUM	CRS.	FINE	COARSE
SILT (NONPLASTIC)	SAND			GRAVEL	

UNIFIED SOIL CLASSIFICATION

2. Fill: Where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc., none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional geotechnical site investigation.

3. Till: The term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (60 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

Log of Borehole BH 25-01

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 3

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits |—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth
		FILL Silty sand with gravel, rock fragments, augers grinding, brown, damp, no odours, no stains, (compact)	93.98	0
		FILL Topsoil with silty sand, some clay, trace gravel, roots and rootlets, brown and grey, damp, no odours, no stains, (compact)	93.4	
		SILTY SAND Trace to some gravel, brown, damp to moist, no odours, no stains, (dense)	92.5	1
		GLACIAL TILL Silty sand with gravel, cobbles and boulders, rock fragments, augers grinding, brown, damp, no odours, no stains (very dense)	91.7	2
		Auger Refusal at 3.0 m Depth	91.0	3

Standard Penetration Test N Value: 20 40 60 80
Shear Strength: 50 100 150 200 kPa
Combustible Vapour Reading (ppm): 250 500 750
Natural Moisture Content % Atterberg Limits (% Dry Weight): 20 40 60

11, 13 then 50 for 100 mm
30
47
142

SAMPLES	Natural Unit Wt. kN/m³
SS1	
SS2	
SS3	
SS4	

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:
1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Log of Borehole BH 25-02

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 4

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil and decomposed wood with silty sand with gravel, rock fragments, dark brown, damp, no odours, no stains, (compact)	93.76	0	18		SS1	
				1	31		SS2	
					18		SS3	
		GLACIAL TILL Silty sand with gravel, brown, moist, no odours, no stains, (very dense)	91.7	2	57		SS4	
				3	16, 66 then 100 for 100 mm		SS5	
				4	100 for 75 mm		SS6	
		Auger Refusal at 4.2 m Depth	89.6					

Standard Penetration Test N Value: 20 40 60 80

Shear Strength: 50 100 150 200 kPa

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % Atterberg Limits (% Dry Weight): 20 40 60

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-03

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 5

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ▮▯ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand and gravel, some clay, decomposed wood, rock fragments, brown, damp, organic odours, yellow stains, (compact)	93.13	0	24		SS1	
				1	16		SS2	
				2	13		SS3	
		SILTY SAND Trace to some gravel, brown, damp to moist, no odours, no stains (compact)	90.8	3	15		SS4	
			89.63		23		SS5	
		GLACIAL TILL Silty sand with gravel, grey, wet, no odours, no stains (very dense)	89.3	4	63		SS6	
		Auger Refusal at 4.3 m Depth	88.8					

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 20 40 60

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter standpipe was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	3.5	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-04

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 6

Page. 1 of 1

Date Drilled: 'October 06, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample | Auger Sample | SPT (N) Value | Dynamic Cone Test | Shelby Tube | Shear Strength by Vane Test (S)

Combustible Vapour Reading | Natural Moisture Content | Atterberg Limits | Undrained Triaxial at % Strain at Failure | Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand with gravel, concrete pieces, wood pieces, topsoil inclusions, decomposed wood, brown, moist, no odours, no stains, (compact)	94.01	0	26		SS1	
		FILL Topsoil and decomposed wood with silty sand inclusions, trace gravel, brown, moist, no odours, no stains, (compact)	93.2	1	12		SS2	
				2	12		SS3	
		GLACIAL TILL Silty sand with gravel, shale fragments, damp to moist, no odours, no stains, (dense to very dense)	91.7	2	36		SS4	
				3	118		SS5	
			89.81	4	154		SS6	
		HIGHLY WEATHERED SHALE Clay to gravel sized rock fragments, grey, wet, no odours, no stains, (very dense)	89.4	5	15, 45 then 50 for 75 mm		SS7	
				6	113		SS8	
			87.3					

Borehole Terminated at 6.7 m Depth

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter piezometer was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	4.2	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Log of Borehole BH 25-05

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 7

Page. 1 of 1

Date Drilled: 'October 03, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample | Auger Sample | SPT (N) Value | Dynamic Cone Test | Shelby Tube | Shear Strength by Vane Test (S)

Combustible Vapour Reading | Natural Moisture Content | Atterberg Limits | Undrained Triaxial at % Strain at Failure | Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand and gravel, brown, moist, no odours, no stains, (compact)	93.44	0	17		SS1	
				1	13		SS2	
				2	18		SS3	
		GLACIAL TILL Silty sand with gravel, rock fragments, cobbles and boulders, augers grinding, moist, no odours, no stains, (very dense)	91.3		116		SS4	
				3	80 for 125 mm		SS5	
		grey and damp below 3.8 m depth		4	55 then 50 for 75 mm		SS6	
			88.8		50 for 75 mm		SS7	
		HIGHLY WEATHERED SHALE BEDROCK Grey, damp, no odours, no stains, (very dense)		5	50 for 50 mm		SS8	
			87.3	6				
		Auger Refusal at 6.1 m Depth						

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-06

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 8

Page. 1 of 1

Date Drilled: 'October 03, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○⊣ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with sandy silt and gravel, decomposed wood, brown and black, moist, no odours, no stains	94.41	0	16	×	SS1	
				1	20	×	SS2	
				2	16	×	SS3	
		Gravelly, with clayey pockets below 2.3 m depth		2	13	×	SS4	
			91.4	3	17, 60 then 50 for 75 mm	×	SS5	
		GLACIAL TILL Silty sand with gravel, rock fragments, brown to grey, moist to wet, no odours, no stains, (dense to very dense) Grey below 3.8 m depth, wet below 4.6 m depth		4	56	×	SS6	
				5	38	×	SS7	
			89.1					
		HIGHLY WEATHERED SHALE BEDROCK Clay to gravel size rock fragments, grey, damp, no odours, no stains, (compact to very dense)		5	59	×	SS8	
				6	26	×	SS9	
			87.21	7				
				8	66	×	SS10	
			86.2					
		Borehole Terminated at 8.2 m Depth						

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter standpipe was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	7.2	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

Log of Borehole BH 25-07

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 9

Page. 1 of 1

Date Drilled: 'October 06, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)
Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand, trace gravel, decomposed wood, brown, moist, no odours, no stains, (loose to compact)	93.94	0	11		SS1	
				1	11		SS2	
				2	9		SS3	
			91.3		24		SS4	
		GLACIAL TILL Silty sand with gravel, rock fragments, brown, damp to moist, no odours, no stains, (very dense)		3	26, 70 then 50 for 75 mm		SS5	
		grey below 3.8 m depth	89.74	4	101		SS6	
				5	45, 45 then 50 for 50 mm		SS7	
			87.8	6				
		HIGHLY WEATHERED SHALE BEDROCK Clay to gravel sized rock fragments, grey, wet, (very dense)	87.2		169		SS8	
		Borehole Terminated at 6.7 m Depth						

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter standpipe was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	4.2	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-08

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 10

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits —○—
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand and gravel, rock fragments, roots and rootlets, brown and grey, moist, no odours, red and yellow stains, (loose to compact)	93.28	0	16	×	SS1	
				1	9	×	SS2	
				2	12	×	SS3	
					19	×	SS4	
▼		**GLACIAL TILL** Silty sand with gravel, rock fragments, brown to grey, wet, no odours, no stains, (dense to very dense) Grey below 3.8 m depth	90.3	3	55	×	SS5	
			89.48	4	44	×	SS6	
		Auger Refusal at 4.5 m Depth	88.8					

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:
1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter standpipe was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS		
Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	3.8	

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Log of Borehole BH 25-09

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 11

Page. 1 of 1

Date Drilled: 'October 06, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)
Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Sand and gravel, topsoil inclusions, brown, damp to moist, no odours, no stains, (compact)	93.76	0	27		SS1	
			93.2					
		FILL Topsoil with sandy silt, clayey pockets, some gravel, brown, moist, no odours, no stains, (compact)		1	14		SS2	
				2	16		SS3	
					14		SS4	
			90.8	3				
		GLACIAL TILL Silty sand with gravel, rock fragments, brown to grey, damp to moist, no odours, no stains, (very dense)			30 then 60 for 100 mm		SS5	
			89.66	4	60		SS6	
				5	79		SS7	
				6	70 then 50 for 50 mm		SS8	
			87.4					
		Auger Refusal at 6.4 m Depth						

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter standpipe was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS		
Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	4.1	

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Log of Borehole BH 25-10

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 12

Page. 1 of 1

Date Drilled: 'October 03, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample | Auger Sample | SPT (N) Value | Dynamic Cone Test | Shelby Tube | Shear Strength by Vane Test (S)

Combustible Vapour Reading | Natural Moisture Content | Atterberg Limits | Undrained Triaxial at % Strain at Failure | Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil mixed with silty sand and gravel, rootlets, decomposed wood, clayey pockets, brown, moist to wet, no odours, no stains, (loose to compact)	93.44	0	26		SS1	
				1	9		SS2	
				2	5		SS3	
					7		SS4	
		SAND AND GRAVEL Some silt, brown, moist to wet, no odours, no stains, (compact)	90.4	3	21		SS5	
		GLACIAL TILL Silty sand with gravel, shale fragments, brown to grey, moist to wet, no odours, no stains, (very dense)	89.6 / 89.54	4	77		SS6	
		HIGHLY WEATHERED SHALE BEDROCK Grey, wet, no odours, no stains, (very dense)	88.8	5	55		SS7	
		HIGHLY FRACTURED SHALE BEDROCK With limestone partings, completely weathered zones, grey	87.9		80 then 50 for 50 mm		SS8	
				6			RUN1	
				7			RUN2	
				8			RUN3	
				9				
				10			RUN4	
		Borehole Terminated at 10.7 m Depth	82.7					

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. A 19 mm diameter standpipe was installed as shown
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)
Nov. 4, 2025	3.9	

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %
1	5.5 - 6.2	100	25
2	6.2 - 7.7	58	0
3	7.7 - 9.2	100	54
4	9.2 - 10.7	68	10

Log of Borehole BH 25-11

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 13

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits ⊢○
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand, trace gravel, decomposed wood, rock fragments, roots and rootlets, brown and grey, moist, no odours, no stains, (compact)	93.58	0	21	×	SS1	
				1	10	×	SS2	
				2	11	×	SS3	
					14	×	SS4	
		GLACIAL TILL Silty sand with gravel, rock fragments, augers grinding, brown, moist, no odours, no stains, (very dense)	90.6	3	30, 28 then 100 for 100 mm	×	SS5	
		Auger Refusal at 3.5 m Depth	90.1					

Standard Penetration Test N Value: 20 40 60 80
Shear Strength kPa: 50 100 150 200
Combustible Vapour Reading (ppm): 250 500 750
Natural Moisture Content % / Atterberg Limits (% Dry Weight): 20 40 60

NOTES:
1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-12

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 14

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test ——— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand to sandy silt some gravel, rock fragmments, brown, damp to moist, no odours, no stains, (loose to compact)	93.11	0	30	×	SS1	
				1	7	×	SS2	
					5	×	SS3	
				2				
		SAND AND GRAVEL Brown, moist, no odours, no stains, (compact to dense)	90.5		29	×	SS4	
				3	31	×	SS5	
			89.5					
		Borehole Terminated at 3.6 m Depth						

Standard Penetration Test N Value: 20 40 60 80

Shear Strength kPa: 50 100 150 200

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % Atterberg Limits (% Dry Weight): 20 40 60

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-13

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 15

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: SA Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test ——— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with sandy silt to silty sand with gravel, silty clay pockets, roots and rootlets, decomposed wood, brown, moist, organic odours, no stains, (very loose to loose)	93.31	0	3	×	SS1	
				1	9	×	SS2	
				2	8	×	SS3	
			90.7	3	18	×	SS4	
		SAND Trace gravel, brown to grey, moist, no odours, no stains, (compact)	90.0		42	×	SS5	
		GLACIAL TILL Silty sand with gravel, grey, moist, no odours, no stains, (dense)	89.7					
		Borehole Terminated at 3.6 m Depth						

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS		
Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD			
Run No.	Depth (m)	% Rec.	RQD %

Log of Borehole BH 25-14

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 16

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)

Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with silty sand, trace gravel, concrete pieces, brown, moist, no odours, no stains, (compact)	93.01	0	15		SS1	
				1	23		SS2	
		GLACIAL TILL Silty sand with gravel, shale fragments, grey, moist, no odours, no stains, (very dense)	91.5	2	62		SS3	
					13, 25 then 50 for 125 mm		SS4	
		Borehole Terminated at 3.0 m Depth	90.0	3				

NOTES:

1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Borehole BH 25-15

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 17

Page. 1 of 1

Date Drilled: 'October 06, 2025

Drill Type: CME-55 Track-Mounted Drill Rig

Datum: Geodetic Elevation

Logged by: AN Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)
Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil with sand and gravel, clayey pockets, decomposed wood, brown, moist, no odours, no stains, (loose to compact)	94.1	0	7		SS1	
				1	13		SS2	
				2	9		SS3	
		GLACIAL TILL Silty sand with gravel, brown to grey, moist, no odours, no stains, (dense)	91.5	3	28		SS4	
			90.5		39		SS5	
		Borehole Terminated at 3.6 m Depth						

Standard Penetration Test N Value: 20 40 60 80
Shear Strength kPa: 50 100 150 200
Combustible Vapour Reading (ppm): 250 500 750
Natural Moisture Content % / Atterberg Limits (% Dry Weight): 20 40 60

NOTES:
1. Borehole data requires interpretation by EXP before use by others
2. Borehole backfilled upon completion
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. Log to be read with EXP Report OTT-25006966-A0

WATER LEVEL RECORDS

Date	Water Level (m)	Hole Open To (m)

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF BOREHOLE BH-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-02

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 18

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Sand and crushed gravel, brown, moist, no odours, no stains	93.99	0		×	GS1	
		FILL Topsoil with silty sand, metal and plastic pieces, brown, moist	93.3			×	GS2	
		GLACIAL TILL Silty sand and gravel, trace clay, occasional cobbles, brown, moist	93.0	1				
						×	GS2	
			91.9	2				
		Test Pit Terminated at 2.1 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-03

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 19

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)

Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand with gravel, cobbles and boulders, brick and concrete pieces, topsoil inclusions, brown, moist	93.71	0	20 40 60 80 / 50 100 150 200 kPa	250 500 750 / 20 40 60	GS1	
			92.8					
		GLACIAL TILL Sand and gravel with cobbles, brown, moist		1			GS2	
			91.5	2				
		Bucket Refusal at 2.2 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-04

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 20

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)

Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		GRANULAR FILL ~700 mm thick Crushed limestone	93.22	0				
		FILL Sand and gravel, rounded aggregates, pockets of topsoil, brown and grey, moist	92.5	1			GS1	
		Thin (~50 mm) organic layer at 1.3 m depth					GS2	
		GLACIAL TILL Silty sand with gravel, cobbles and boulders, brown to grey, moist to wet Wet and grey below 2.5 m depth	90.9	2			GS3	
		Test Pit Terminated at 2.8 m Depth	90.4					

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-05

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 21

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand with gravel, cobbles, brick and wood pieces, brown, moist	94.36	0		×	GS1	
			93.5					
		FILL Topsoil with silty clay, contains cobbles, roots, dark brown, moist, no odours, no stains		1		×	GS2	
			92.4	2		×	GS3	
		GLACIAL TILL Silty sand with gravel, brown, moist	92.1					
		Test Pit Terminated at 2.3 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-06

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 22

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits —⊖—
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % Atterberg Limits (% Dry Weight) (20 40 60)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Topsoil and decomposed wood with silty sand and gravel, cobbles and boulders, clayey pockets, plastic pieces, brown, moist, organic odour	94.02	0		×	GS1	
			92.8	1				
		GLACIAL TILL Silty sand with gravel, cobbles, light brown, moist				×	GS2	
			92.0	2				
		Test Pit Terminated at 2.0 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-08

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 23

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits |—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth
		FILL Silty sand with gravel, cobbles, plastic pieces, brown, moist	94.01	0
		FILL Topsoil with sandy silt, roots and branches, dark brown, moist	93.3	
		GLACIAL TILL Silty sand with gravel, cobbles and boulders, bucket grinding, brown, moist	91.4	1
		Test Pit Terminated at 3.0 m Depth	91.0	2
				3

Standard Penetration Test N Value: 20 40 60 80
Shear Strength: 50 100 150 200 kPa

Combustible Vapour Reading (ppm): 250 500 750
Natural Moisture Content % Atterberg Limits (% Dry Weight): 20 40 60

SAMPLES	Natural Unit Wt. kN/m³
GS1	
GS2	
GS3	

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-10

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 24

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits |—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand and gravel with bricks and plastic pieces, brown, moist	93.95	0	20 40 60 80 / 50 100 150 200	250 500 750 / 20 40 60	GS1	
		FILL Topsoil with silty clay, wood pieces, dark brown, moist, no odour	93.1	1			GS2	
		SILT With sand seams, brown, moist	91.2	2			GS3	
		Test Pit Terminated at 3.0 m Depth	91.0	3				

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-11

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 25

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits |—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand and gravel, brown, moist	93.42	0	20 40 60 80 / 50 100 150 200 kPa	250 500 750 / 20 40 60	GS1	
			92.5					
		FILL Topsoil with sandy silt, boulders and wood pieces, brown, moist		1			GS2	
				2				
			90.4	3				
		GLACIAL TILL Silty sand with gravel, light brown, moist	90.1				GS3	
		Test Pit Terminated at 3.3 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-12

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 26

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Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠
Auger Sample ◧
SPT (N) Value ○
Dynamic Cone Test ——
Shelby Tube ■
Shear Strength by Vane Test +S

Combustible Vapour Reading □
Natural Moisture Content ×
Atterberg Limits |—⊖
Undrained Triaxial at % Strain at Failure ⊕
Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand with gravel, brown, moist	93.58	0	20 40 60 80 50 100 150 200	250 500 750 20 40 60	GS1	
		FILL Topsoil with sandy silt, cobbles and wood pieces, brown, moist, manure odour	93.0	1			GS2	
		GLACIAL TILL Silty sand with gravel, brown, moist	91.3	2			GS3	
		Test Pit Terminated at 2.6 m Depth	91.0					

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-13

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 27

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits |—○—| | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand with gravel and cobbles, brown, moist	93.65	0	20 40 60 80 / 50 100 150 200	250 500 750 / 20 40 60	GS1	
		FILL Topsoil and sandy silt with cobbles, roots, wood pieces, dark brown, moist	92.8	1			GS2	
		GLACIAL TILL Silty sand with gravel, cobbles, possible boulders, brown, moist	90.8	3			GS3	
		Test Pit Terminated at 3.3 m Depth	90.4					

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-14

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 28

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand and gravel with cobbles, brick and wood pieces, brown, moist	94.14	0				
			93.5			×	GS1	
		FILL Topsoil mixed with sandy silt, wood pieces, dark brown, moist		1		×	GS2	
			92.3					
		GLACIAL TILL Silty sand with gravel, boulders, rock fragments, brown, moist	92.0	2		×	GS3	
		Test Pit Terminated at 2.1 m Depth						

Standard Penetration Test N Value: 20 40 60 80

Shear Strength: 50 100 150 200 kPa

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 20 40 60

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-15

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 29

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand with gravel, cobbles and boulders, brown, moist	93.91	0		×	GS1	
			93.4					
		FILL Topsoil with sandy silt, roots and branches, dark brown, moist		1				
				2		×	GS2	
			91.6					
		GLACIAL TILL Silty sand with gravel, cobbles, rock fragments, brown, moist	91.4			×	GS3	
		Test Pit Terminated at 2.5 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-16

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 30

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample
Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Shear Strength by Vane Test (S)

Combustible Vapour Reading
Natural Moisture Content
Atterberg Limits
Undrained Triaxial at % Strain at Failure
Shear Strength by Penetrometer Test

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa (20 40 60 80 / 50 100 150 200)	Combustible Vapour Reading (ppm) 250 500 750 / Natural Moisture Content % Atterberg Limits (% Dry Weight) 20 40 60	SAMPLES	Natural Unit Wt. kN/m³
		FILL Sand and gravel with cobbles and boulders, brown, moist	93.19	0			GS1	
		FILL Topsoil mixed with sandy silt, boulders and wood pieces, dark brown, moist	92.6	1			GS2	
		GLACIAL TILL Silty sand with gravel, shale and sandstone fragments, brown, moist	91.6	2			GS3	
		Test Pit Terminated at 2.2 m Depth	91.0					

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-17

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 31

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○⊣ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value (20 40 60 80) / Shear Strength kPa (50 100 150 200)	Combustible Vapour Reading (ppm) (250 500 750) / Natural Moisture Content % Atterberg Limits (% Dry Weight) (20 40 60)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand and gravel, cobbles and boulders, bricks, metal and wood pieces, brown, moist	93.69	0				
			93.0			×	GS1	
		FILL Topsoil with sandy silt, roots and branches, cobbles and boulders, wood and metal pieces, dark brown, moist		1				
						×	GS2	
				2				
			91.2					
		GLACIAL TILL Silty sand with gravel and cobbles, brown, moist	90.9			×	GS3	
		Test Pit Terminated at 2.8 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

Log of Test Pit TP 25-18

Project No: OTT-25006966-A0

Project: New CECCE Leitrim French Catholic Elementary School

Location: 3290 Findlay Creek Drive, Ottawa, Ontario

Figure No. 32

Page. 1 of 1

Date Drilled: 'October 02, 2025

Drill Type: CAT 336 Hydraulic Excavator

Datum: Geodetic Elevation

Logged by: MZ Checked by: MZ

Split Spoon Sample ⊠ | Auger Sample ◧ | SPT (N) Value ○ | Dynamic Cone Test —— | Shelby Tube ■ | Shear Strength by Vane Test +S

Combustible Vapour Reading □ | Natural Moisture Content × | Atterberg Limits ⊢○ | Undrained Triaxial at % Strain at Failure ⊕ | Shear Strength by Penetrometer Test ▲

GWL	SYMBOL	SOIL DESCRIPTION	Geodetic Elevation m	Depth	Standard Penetration Test N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Wt. kN/m³
		FILL Silty sand and gravel, brown, moist	93.57	0	20 40 60 80 / 50 100 150 200	250 500 750 / 20 40 60	GS1	
		FILL Topsoil with sandy silt, wood pieces, dark brown, moist	93.3					
				1			GS2	
				2				
			90.9					
		SAND With gravel and cobbles, brown, moist	90.7				GS3	
		Test Pit Terminated at 2.9 m Depth						

NOTES:
1. Borehole/Test Pit data requires Interpretation by exp. before use by others
2. Test Pit backfilled on completion of excavation
3. Field work was supervised by an EXP representative.
4. See Notes on Sample Descriptions
5. This Figure is to read with exp. Services Inc. report OTT-25006966-A0

WATER LEVEL RECORDS

Elapsed Time	Water Level (m)	Hole Open To (m)
Upon completion	no water	no cave-in

CORE DRILLING RECORD

Run No.	Depth (m)	% Rec.	RQD %

LOG OF TEST PIT TP-LOGS - 3290 FINDLAY CREEK DRIVE.GPJ TROW OTTAWA.GDT 12/4/25

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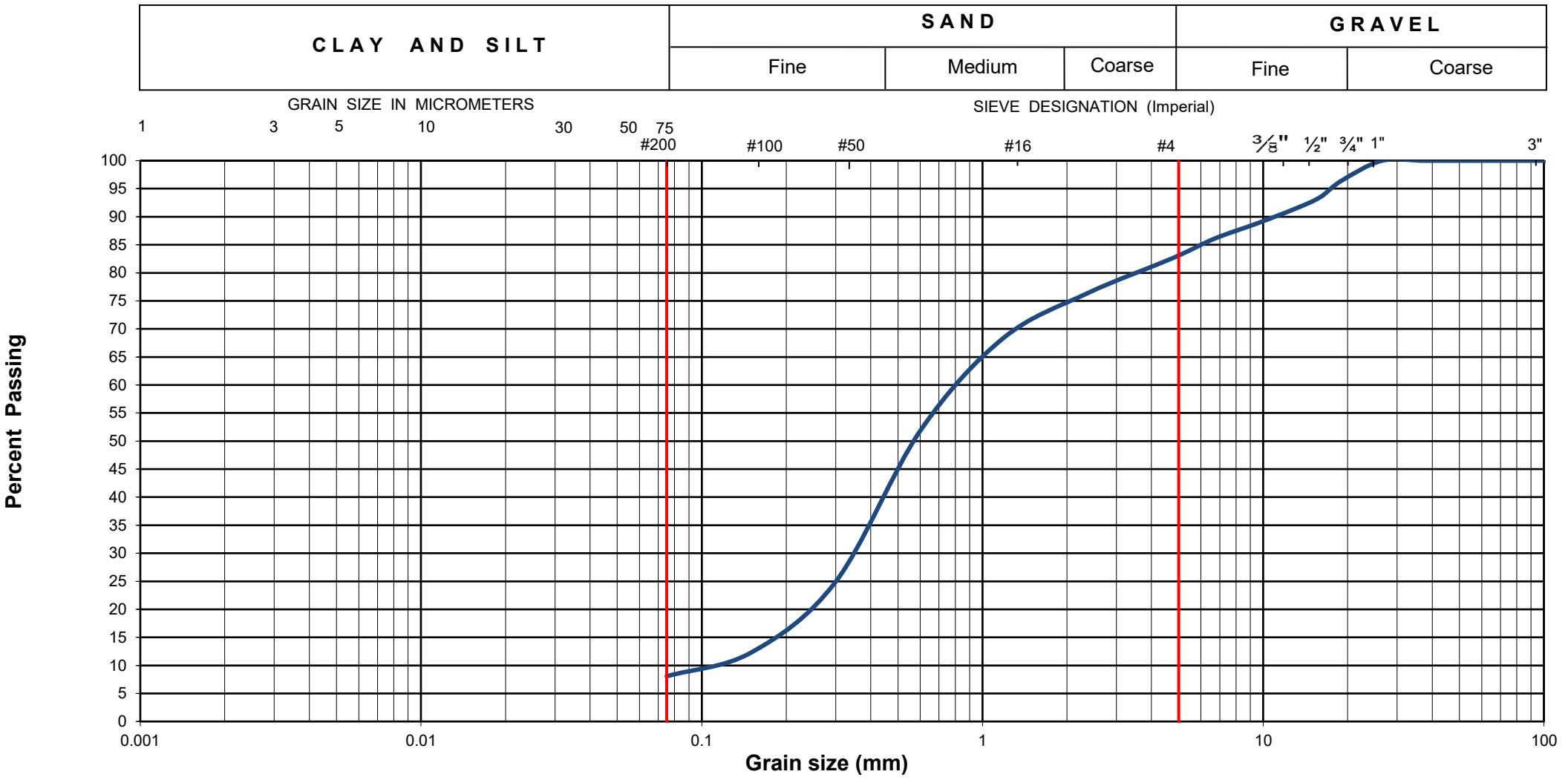
Grain-Size Distribution Curve
Method of Test For Sieve Analysis of Aggregate
ASTM C-136

Unified Soil Classification System



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Lietrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**TP 25-3**		**Sample:**	**GS-1**		**Depth (m) :**	**0.5 - 0.6**
Sample Composition :		**Gravel (%)**	**8**	**Sand (%)**	**75**	**Silt & Clay (%)**	**17**	**Figure :**	**33**
Sample Description :		**FILL: Silty Sand, Trace Gravel (SM)**							

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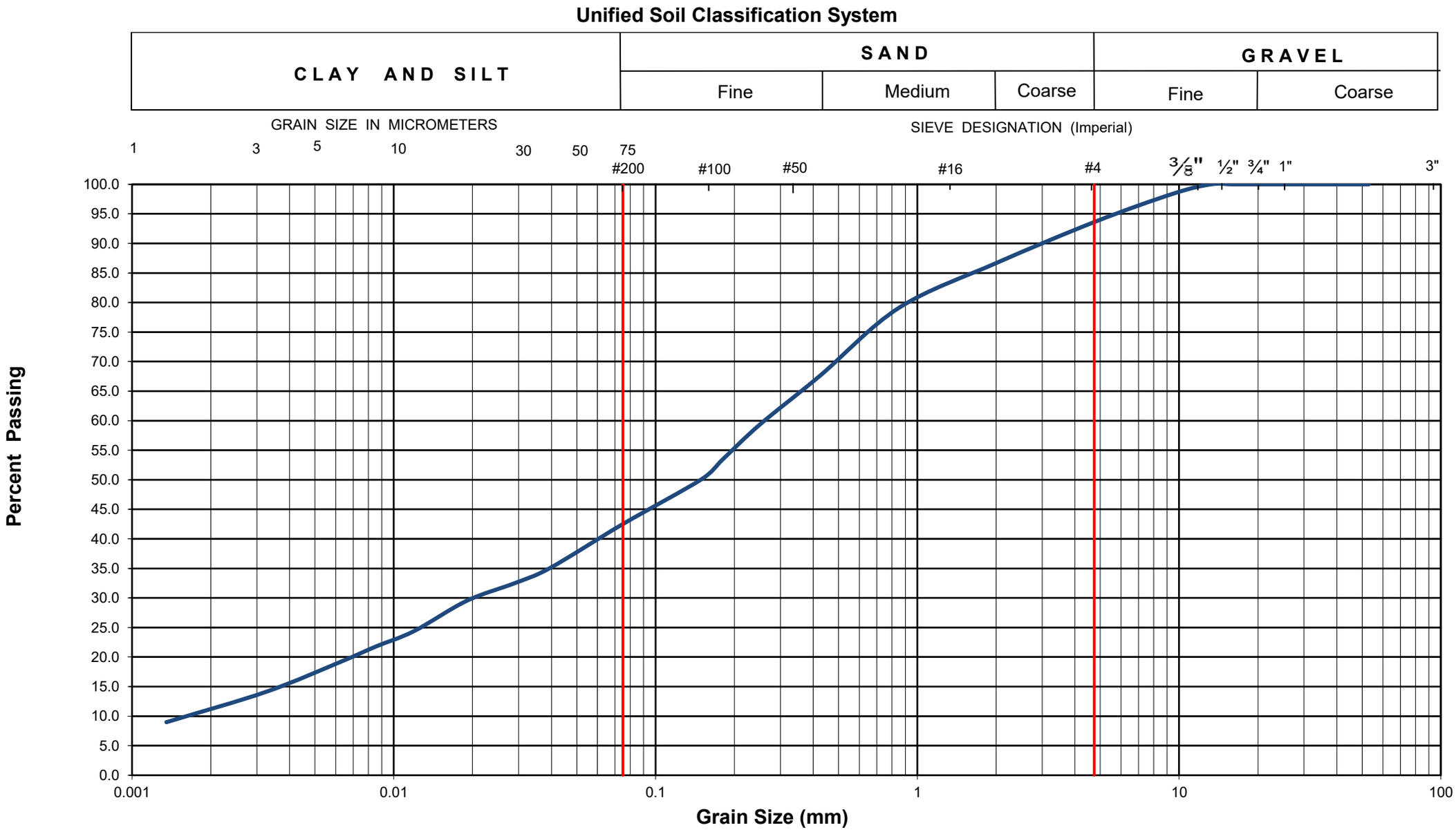
Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 6, 2025**	**Borehole No:**	**25-4**		**Sample No.:**	**SS3**		**Depth (m) :**	**1.5 - 2.1**
Sample Description :		**% Silt and Clay**	**43**	**% Sand**	**51**	**% Gravel**	**6**	**Figure :**	**34**
Sample Description :	**FILL: Silty Sand, Some Clay, Trace Gravel (SM)**								

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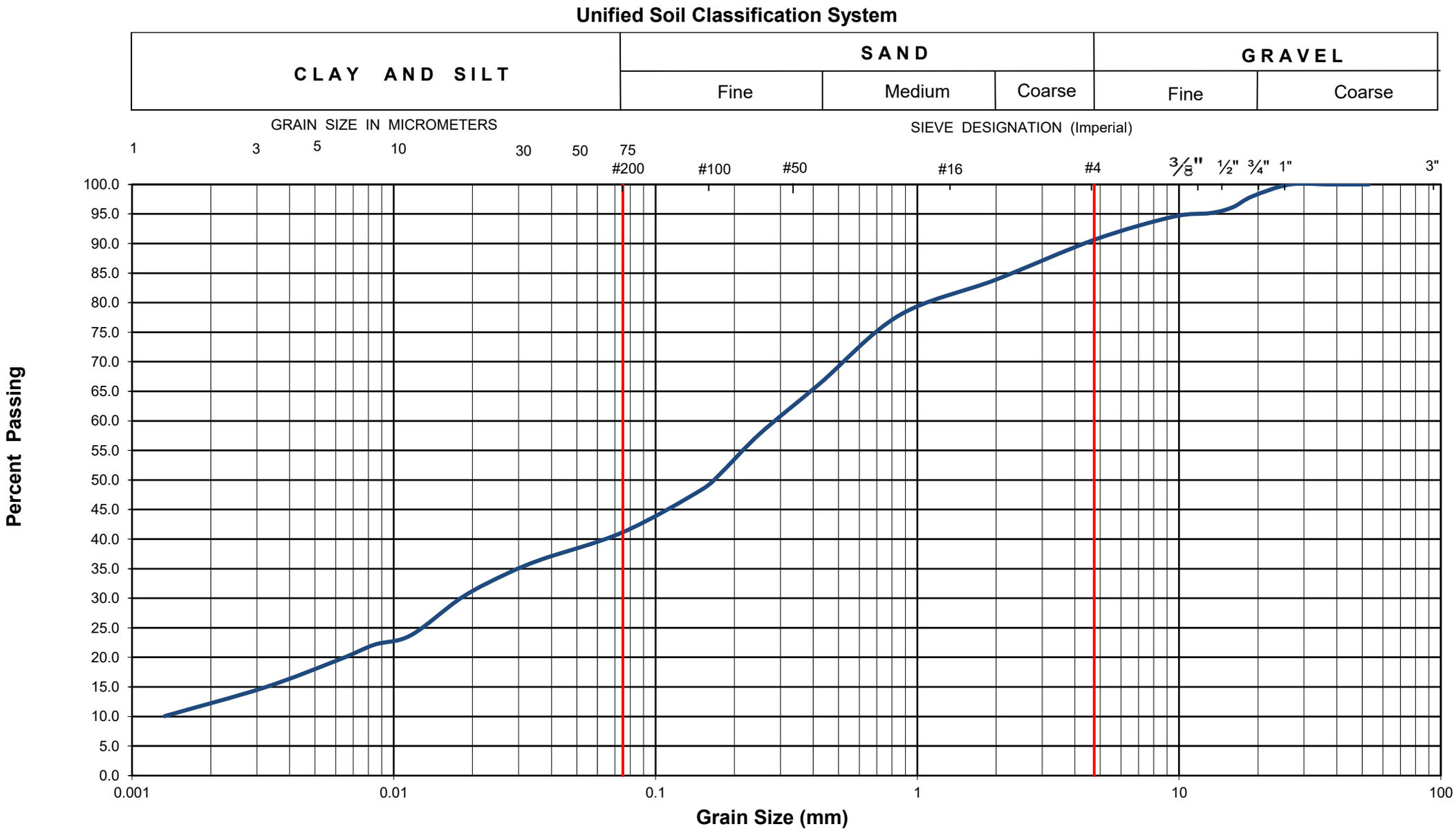
Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 3, 2025**	**Borehole No:**	**25-5**		**Sample No.:**	**SS2**		**Depth (m) :**	**0.8 - 1.4**
Sample Description :		**% Silt and Clay**	**41**	**% Sand**	**50**	**% Gravel**	**9**	**Figure :**	**35**
Sample Description :	**FILL: Silty Sand, Some Clay, Trace Gravel (SM)**								

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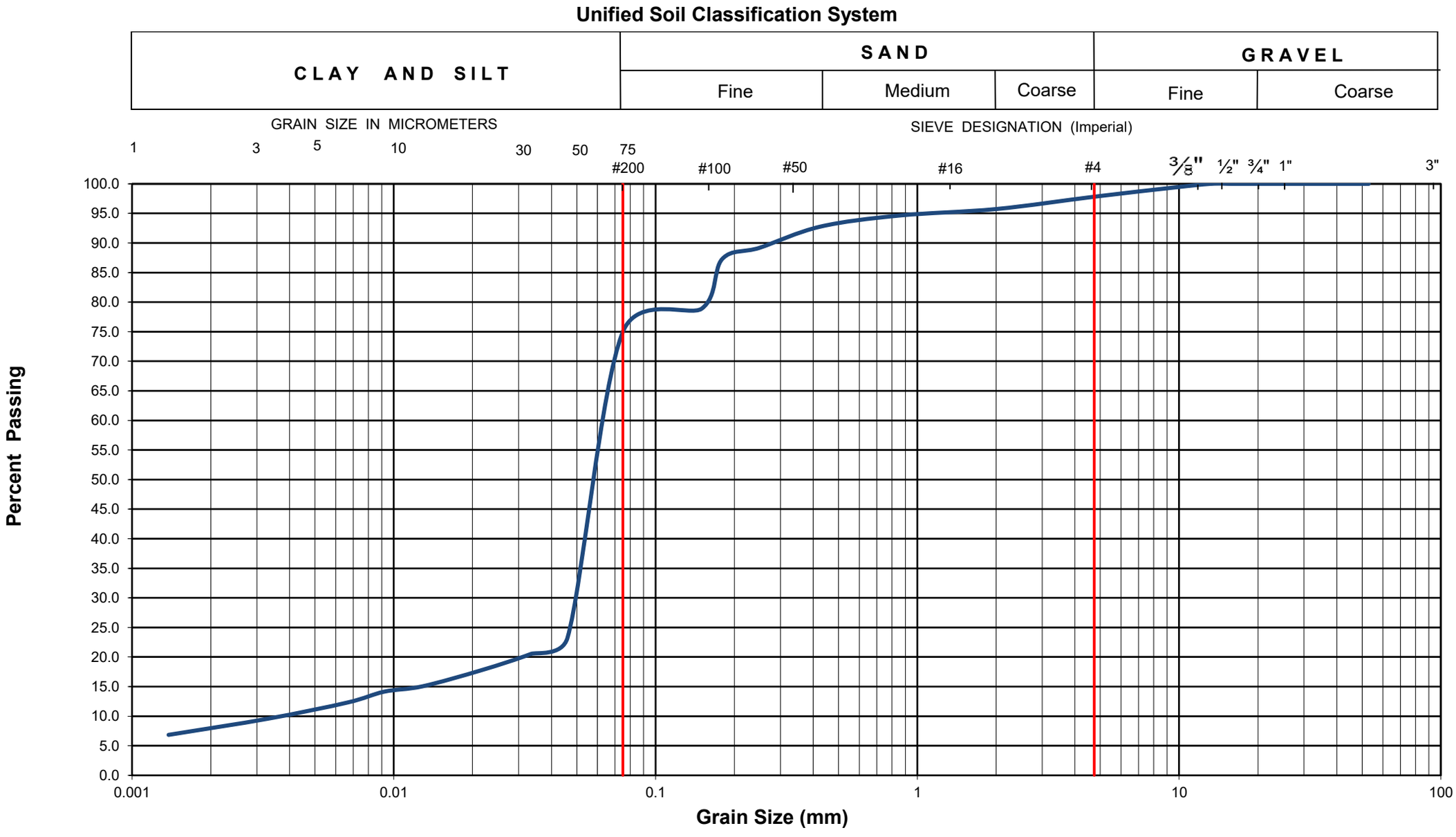
Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**25-8**		**Sample No.:**	**SS1**		**Depth (m) :**	**0.0 - 0.6**
Sample Description :		**% Silt and Clay**	**75**	**% Sand**	**23**	**% Gravel**	**2**	**Figure :**	**36**
Sample Description :	**FILL: Silt with Sand, Trace Clay and Gravel (ML)**								

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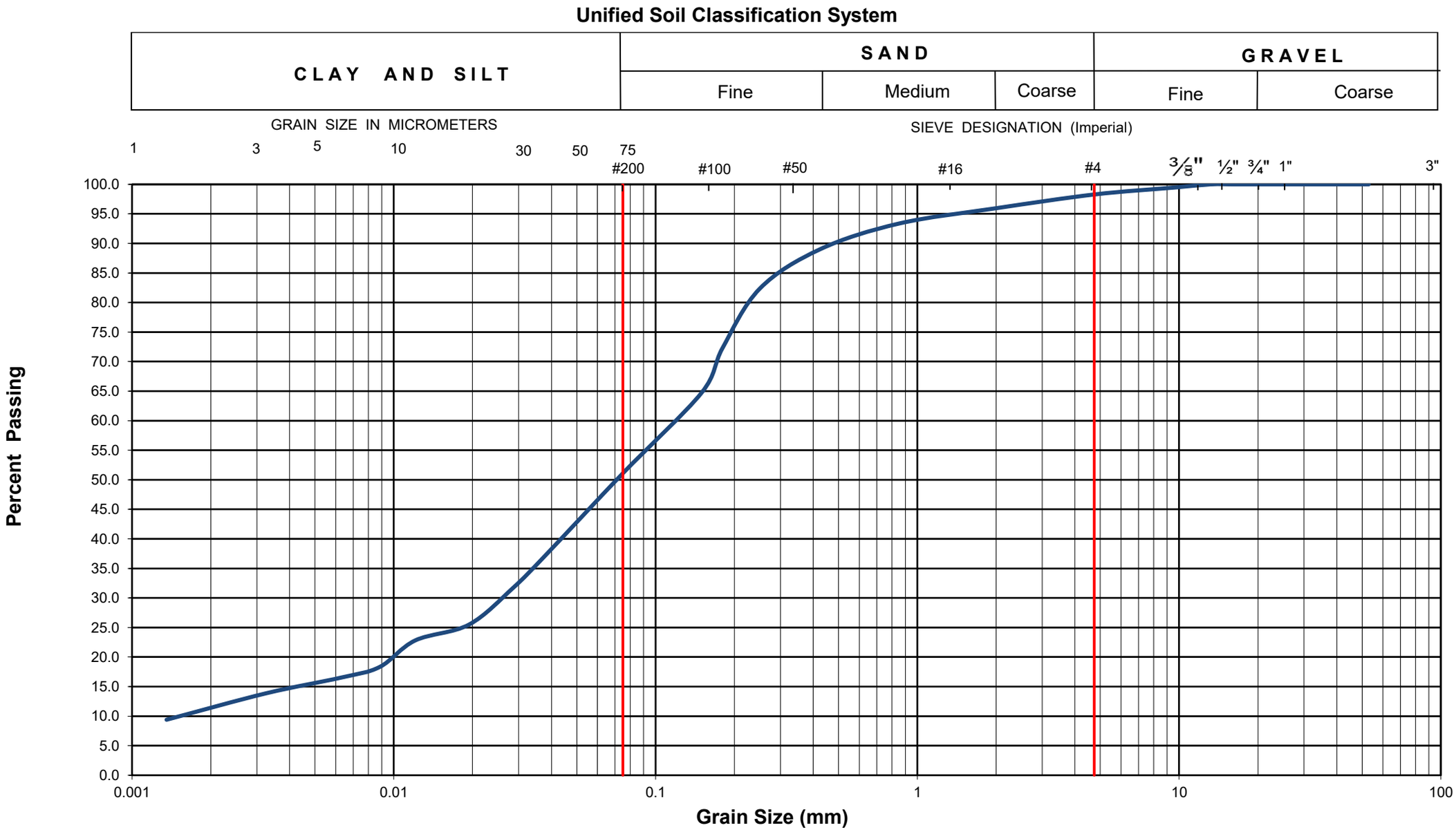
Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**25-11**		**Sample No.:**	**SS3**		**Depth (m) :**	**1.5 - 2.1**
Sample Description :		**% Silt and Clay**	**51**	**% Sand**	**47**	**% Gravel**	**2**	**Figure :**	**37**
Sample Description :	**FILL: Sandy Silt, Some Clay, Trace Gravel (ML)**								

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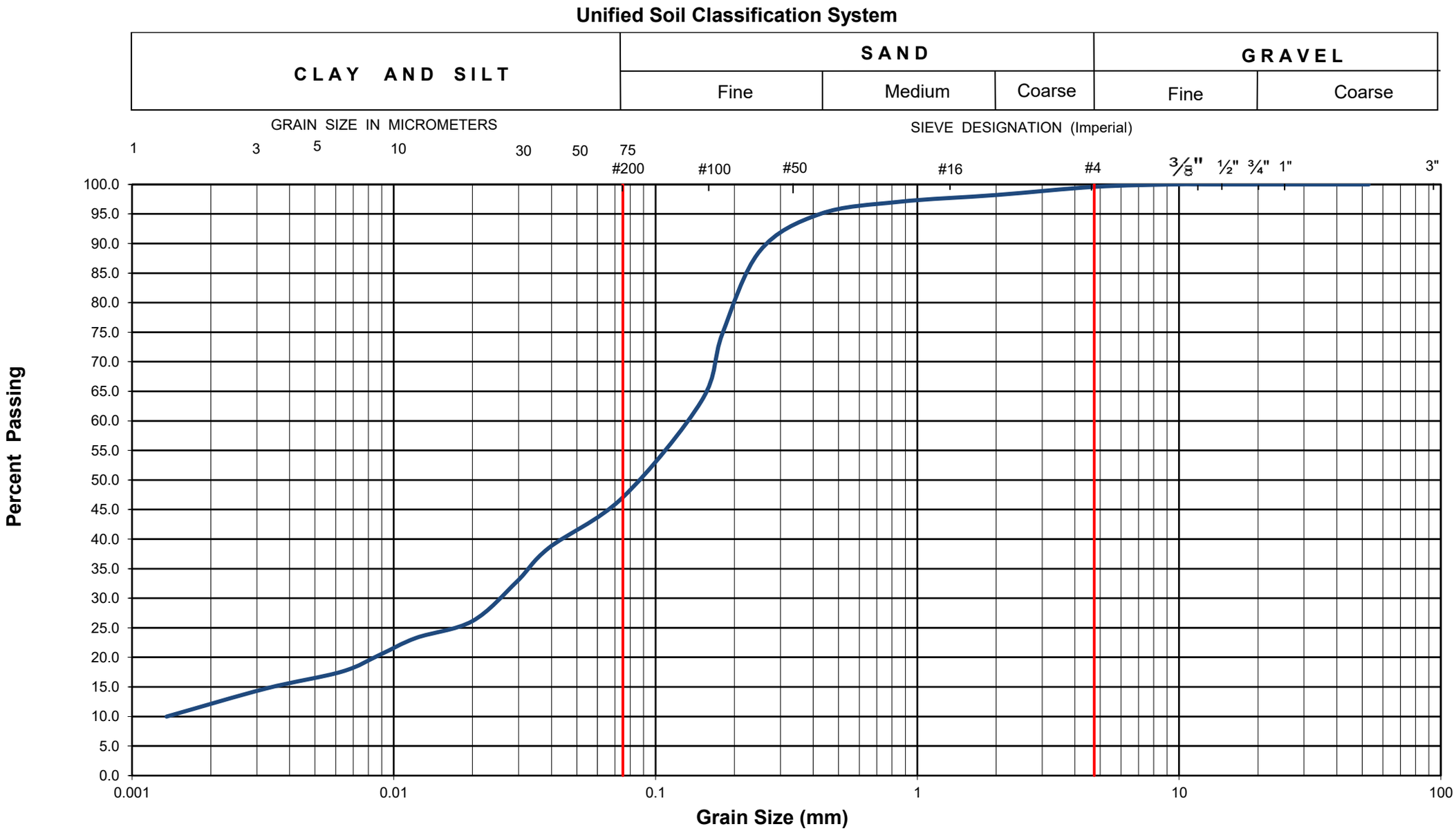
Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**25-13**		**Sample No.:**	**SS2**		**Depth (m) :**	**0.8 - 1.4**
Sample Description :		**% Silt and Clay**	**47**	**% Sand**	**53**	**% Gravel**	**0**	**Figure :**	**38**
Sample Description :		**FILL: Silty Sand, Some Clay (SM)**							

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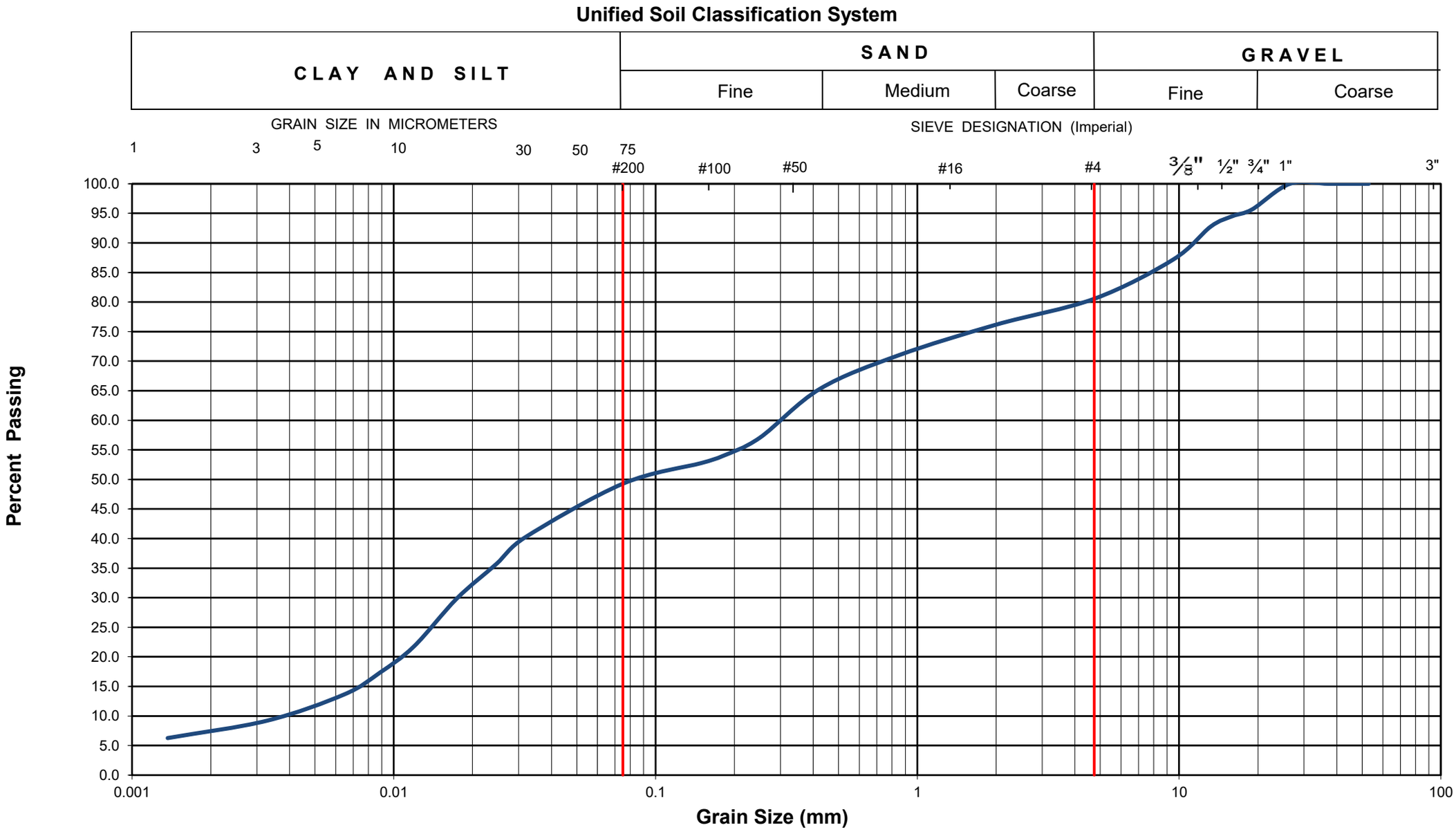
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**25-14**		**Sample No.:**	**SS2**		**Depth (m) :**	**0.8 - 1.4**
Sample Description :		**% Silt and Clay**	**49**	**% Sand**	**32**	**% Gravel**	**19**	**Figure :**	**39**
Sample Description :		**FILL: Silty Sand with Gravel, Trace Clay (SM)**							

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Grain-Size Distribution Curve
Method of Test For Sieve Analysis of Aggregate
ASTM C-136

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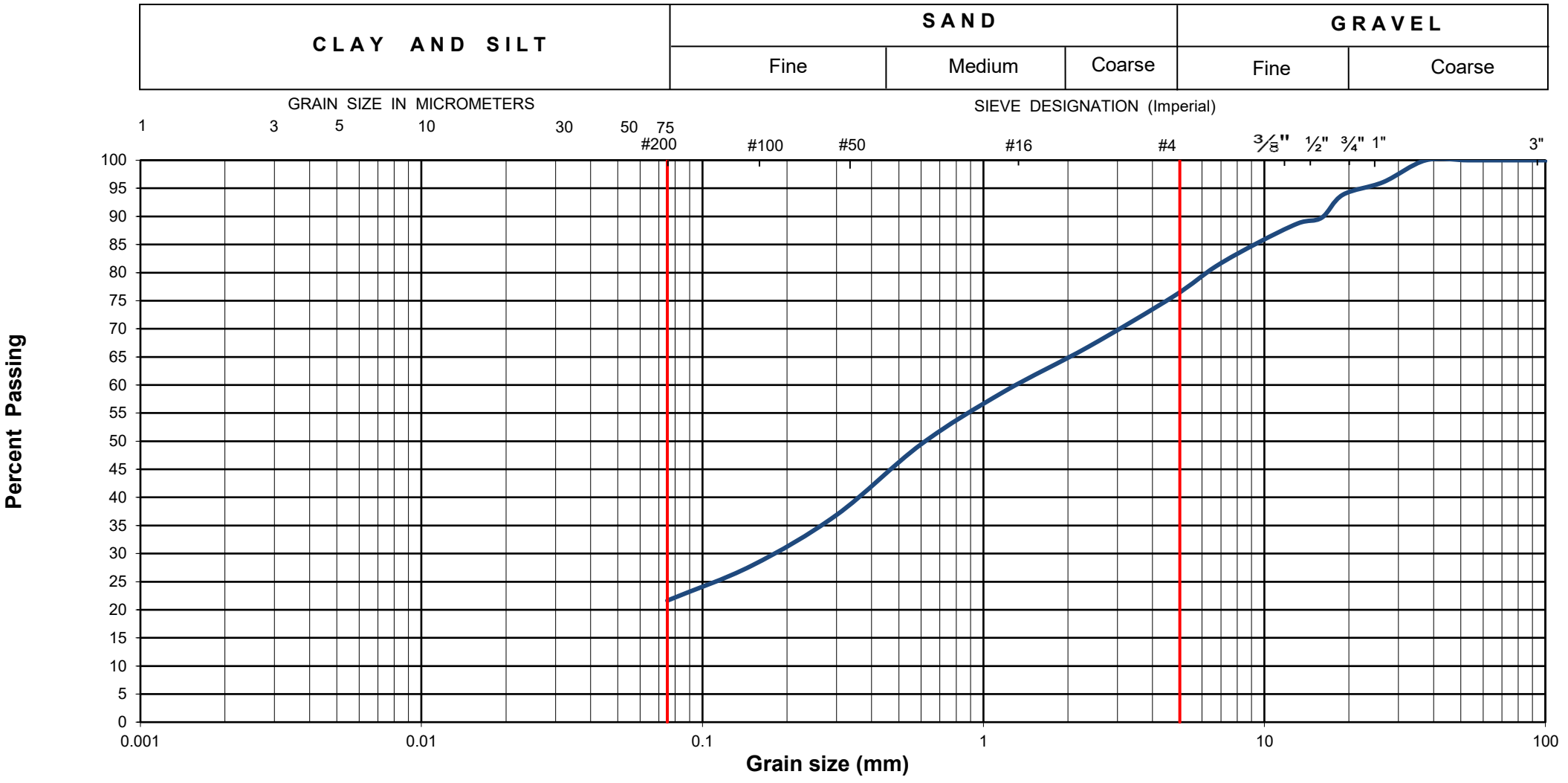

EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 3, 2025**	**Borehole No:**	**BH25-10**		**Sample:**	**SS5**		**Depth (m) :**	**3.0 - 3.6**
Sample Composition :		**Gravel (%)**	**24**	**Sand (%)**	**54**	**Silt & Clay (%)**	**22**	**Figure :**	**40**
Sample Description :		**Silty Sand with Gravel (SM)**							

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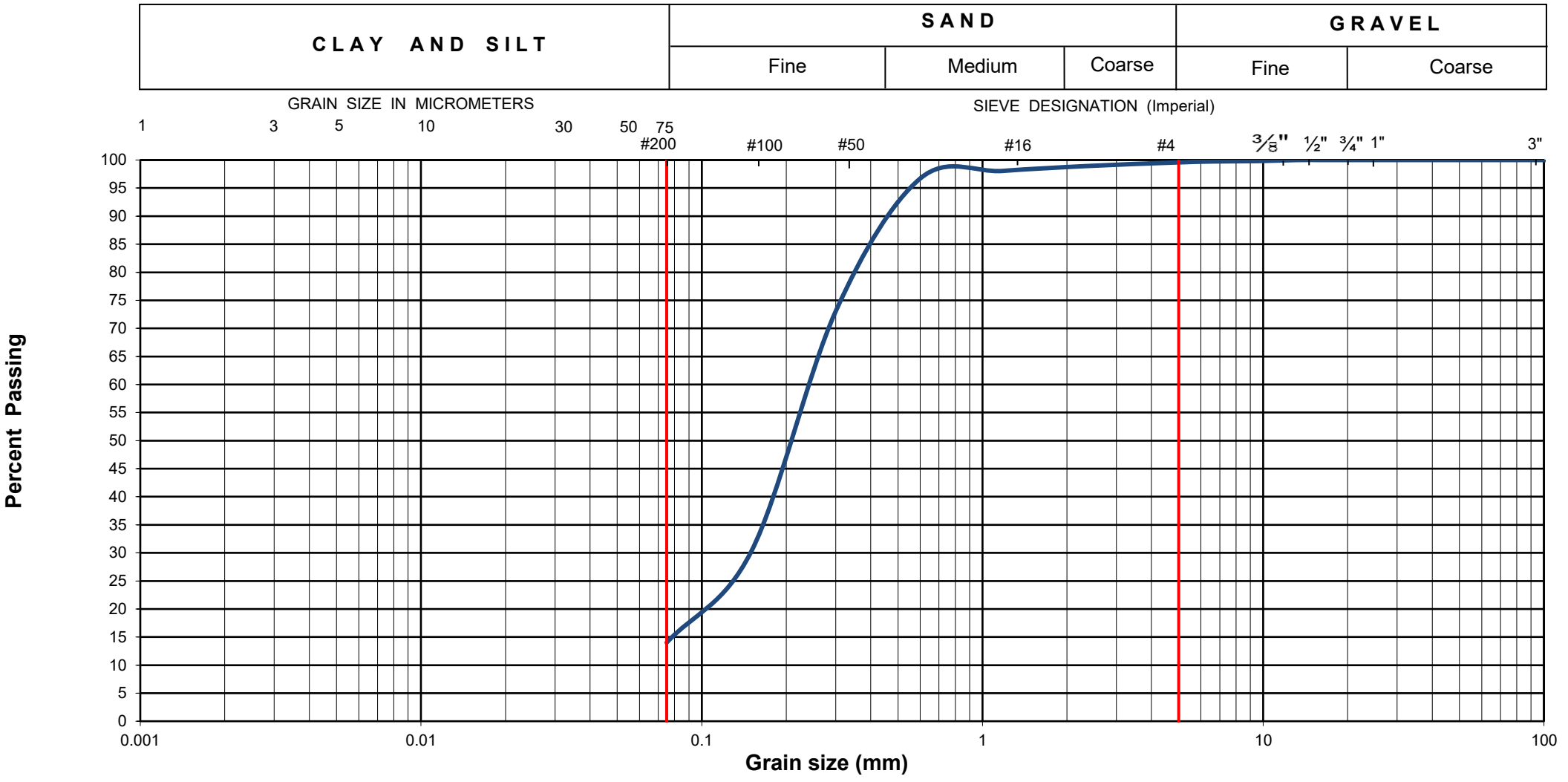
Grain-Size Distribution Curve
Method of Test For Sieve Analysis of Aggregate
ASTM C-136

Unified Soil Classification System



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**TP 25-6**		**Sample:**	**GS-2**		**Depth (m) :**	**1.2 - 1.3**
Sample Composition :		**Gravel (%)**	**0**	**Sand (%)**	**86**	**Silt & Clay (%)**	**14**	**Figure :**	**41**
Sample Description :		**GLACIAL TILL: Silty Sand (SM)**							

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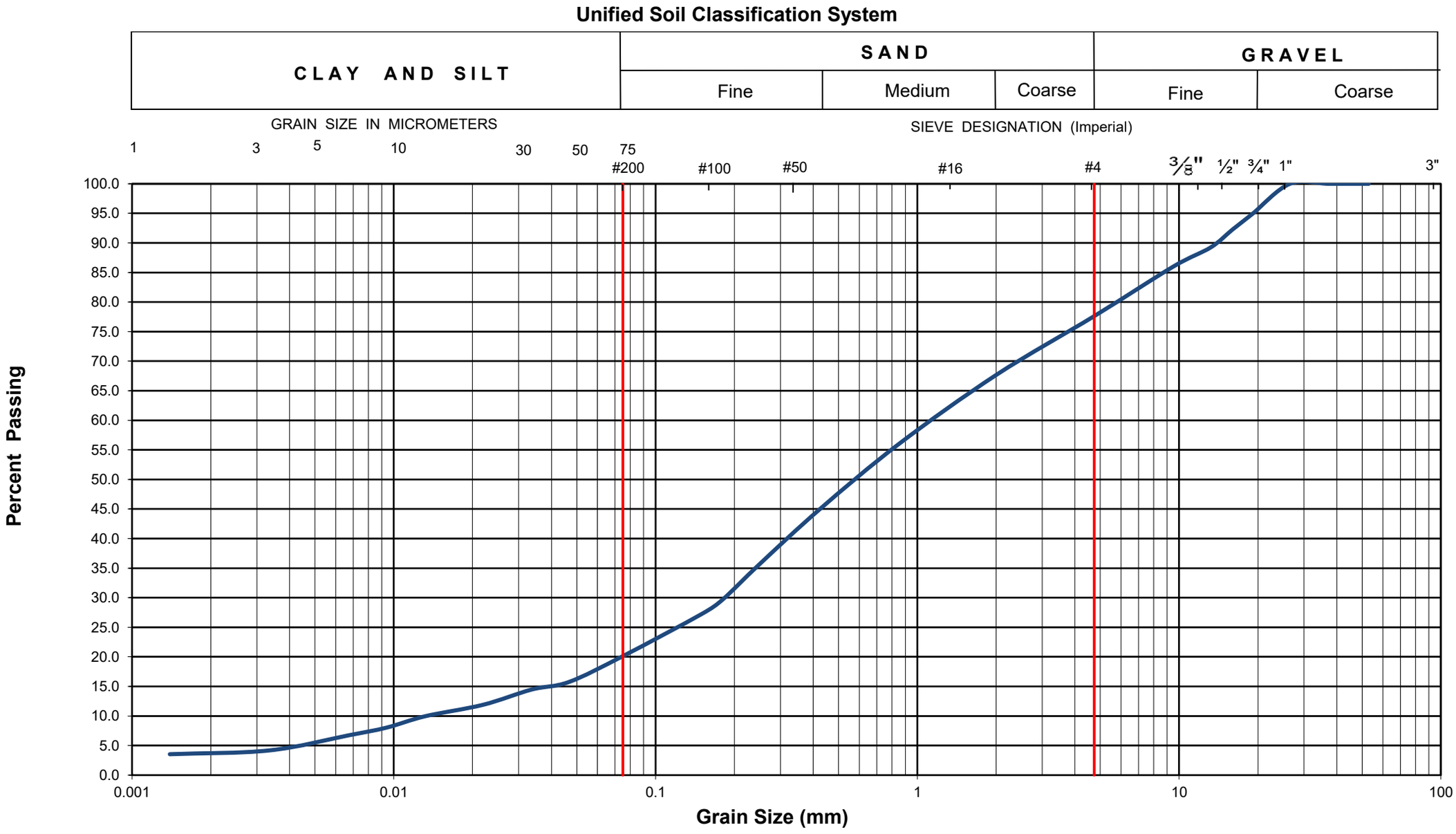
Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
ASTM C-136/ASTM D422



EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 2, 2025**	**Borehole No:**	**25-2**		**Sample No.:**	**SS4**		**Depth (m) :**	**2.3 - 2.9**
Sample Description :		**% Silt and Clay**	**20**	**% Sand**	**58**	**% Gravel**	**22**	**Figure :**	**42**
Sample Description :	**GLACIAL TILL: Silty Sand with Gravel, Trace Clay (SM)**								

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Grain-Size Distribution Curve
Method of Test For Particle Size Analysis of Soil
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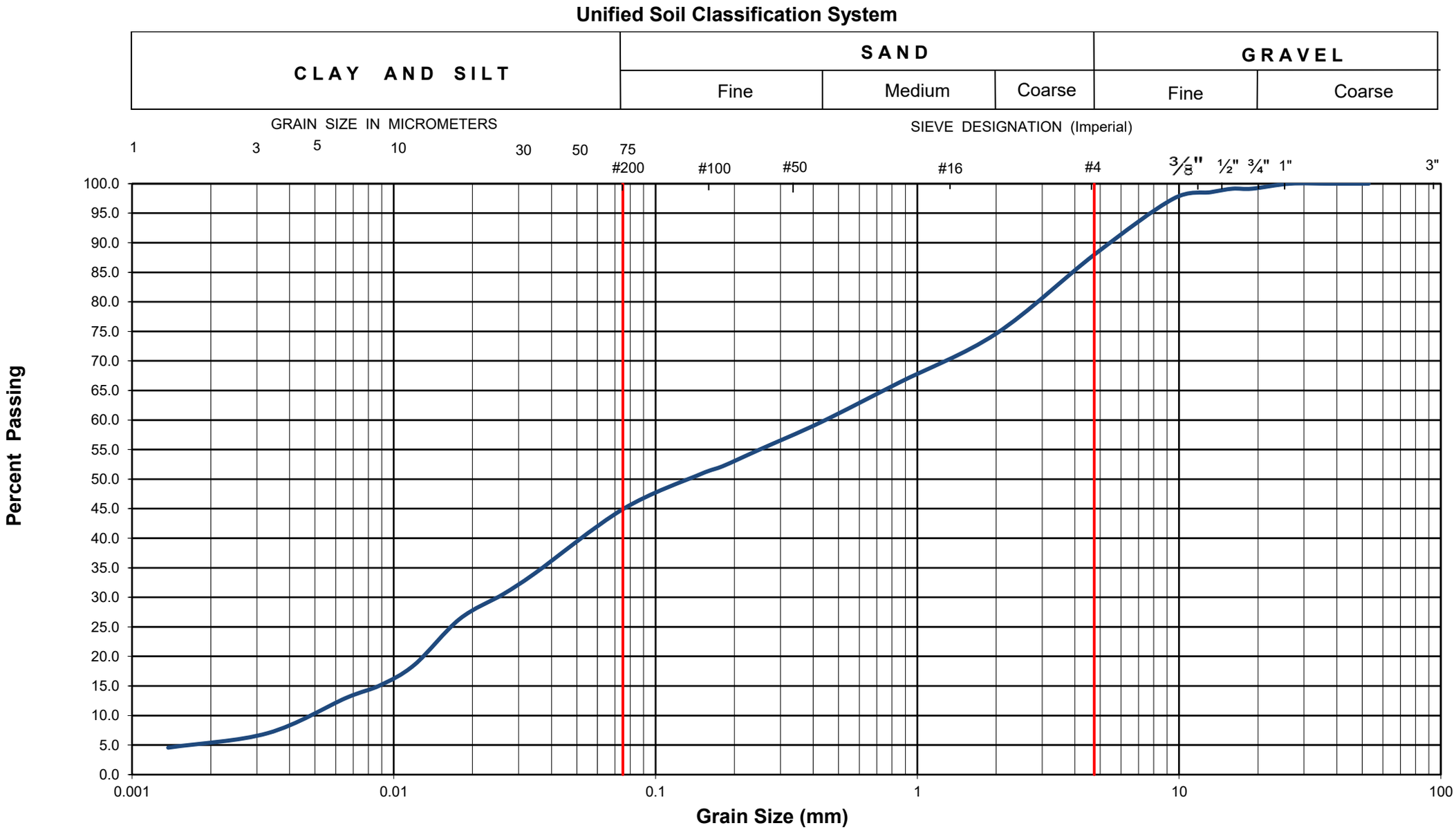


EXP Project No.:	**OTT-25006966-A0**	**Project Name :**	**New Leitrim French Catholic Elementary School**						
Client :	**CECCE**	**Project Location :**	**3290 Findlay Creek Drive, Ottawa, Ontario**						
Date Sampled :	**October 3, 2025**	**Borehole No:**	**25-6**		**Sample No.:**	**SS6**		**Depth (m) :**	**3.8 - 4.4**
Sample Description :		**% Silt and Clay**	**45**	**% Sand**	**43**	**% Gravel**	**12**	**Figure :**	**43**
Sample Description :	**GLACIAL TILL: Silty Sand, Some Gravel, Trace Clay (SM)**								

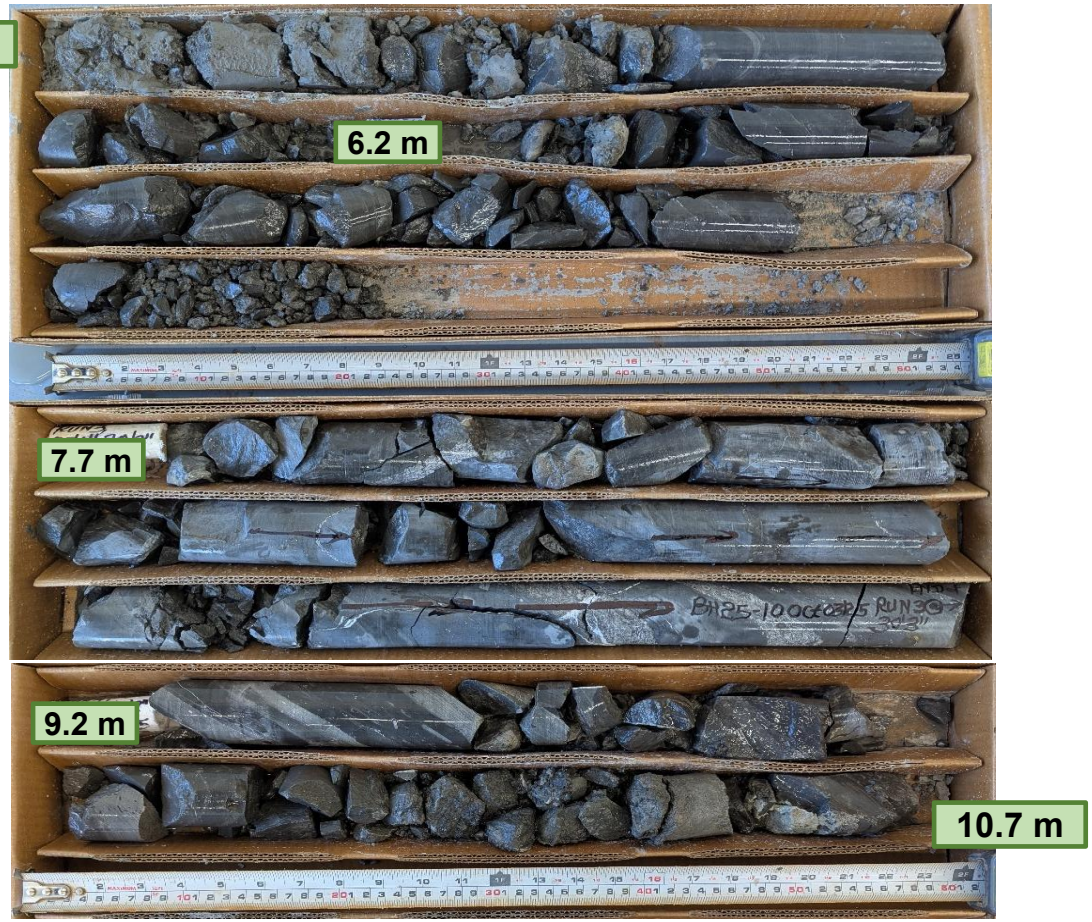
Appendix A – Rock Core Photographs

DRY BEDROCK CORES

EXP Services Inc. www.exp.com
t: +1.613.688.1899 | f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

Borehole No:	Core Runs	project	Project N0:
BH25-10	Run 1: 5.5 m to 6.2 m Run 2: 6.2 m to 7.7 m Run 3: 7.7 m to 9.2 m Run 4: 9.2 m to 10.7 m end of borehole	New CECCE Leitrim French Catholic Elementary School - 3290 Findlay Creek Drive, Ottawa, Ontario	OTT-25006966-A0
Date Cored October 3, 2025		Rock Core Photographs	A-1

WET BEDROCK CORES



EXP Services Inc. www.exp.com
t: +1.613.688.1899 | f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

Borehole No:	Core Runs	project	Project N0:
BH25-10	Run 1: 5.5 m to 6.2 m Run 2: 6.2 m to 7.7 m Run 3: 7.7 m to 9.2 m Run 4: 9.2 m to 10.7 m end of borehole	New CECCE Leitrim French Catholic Elementary School - 3290 Findlay Creek Drive, Ottawa, Ontario	OTT-25006966-A0
Date Cored October 3, 2025		Rock Core Photographs	A-2

Appendix B – Laboratory Certificate of Analysis

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: EXP SERVICES INC
2650 QUEENSVIEW DRIVE, UNIT 100
OTTAWA, ON K2B8H6
(613) 688-1899
ATTENTION TO: Ismail M. Taki
PROJECT: OTT-25006966-A0
AGAT WORK ORDER: 25Z360797
SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganic Team Lead
DATE REPORTED: Oct 31, 2025
PAGES (INCLUDING COVER): 5
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information is available on request from AGAT Laboratories, in accordance with ISO/IEC 17025:2017, ISO/IEC 17025:2005 (Quebec), DR-12-PALA and/or NELAP Standards.*
- *This document is signed by an authorized signatory who meets the requirements of the MELCCFP, CALA, CCN and NELAP.*
- *For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.*

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 25Z360797

PROJECT: OTT-25006966-A0

CLIENT NAME: EXP SERVICES INC

ATTENTION TO: Ismail M. Taki

SAMPLING SITE:Leitrim Road, Ottawa

SAMPLED BY:EXP

pH, Sulphate, Chloride, Resistivity in Soil

DATE RECEIVED: 2025-10-23

DATE REPORTED: 2025-10-31

				BH 25-1 SS3	BH 25-8 SS4	BH 25-11 SS4
		SAMPLE DESCRIPTION:		5'-7'	7.5'-9.5'	7.5'-9.5'
		SAMPLE TYPE:		Soil	Soil	Soil
		DATE SAMPLED:		2025-10-02	2025-10-02	2025-10-02
Parameter	Unit	G / S	RDL	7179415	7179416	7179417
Chloride (2:1)	µg/g		2	6	6	6
Sulphate (2:1)	µg/g		2	31	31	25
Electrical Conductivity (2:1)	mS/cm		0.005	0.200	0.220	0.175
pH, 2:1 CaCl2 Extraction	pH Units		NA	6.41	6.47	6.23
Resistivity (2:1) (Calculated)	ohm.cm		1	5000	4550	5710

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

7179415-7179417 EC, pH, Chloride, Sulphate and Redox Potential were determined on the extract obtained from the 2:1 leaching procedure (2 parts DI water: 1 part soil). Resistivity is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
CHARTERED
NIVINE BASILY
CHEMIST

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: EXP SERVICES INC

AGAT WORK ORDER: 25Z360797

PROJECT: OTT-25006966-A0

ATTENTION TO: Ismail M. Taki

SAMPLING SITE:Leitrim Road, Ottawa

SAMPLED BY:EXP

Soil Analysis

RPT Date: Oct 31, 2025			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
pH, Sulphate, Chloride, Resistivity in Soil															
Chloride (2:1)	7179415	7179415	6	6	NA	< 2	98%	70%	130%	96%	80%	120%	96%	70%	130%
Sulphate (2:1)	7179415	7179415	31	31	0.0%	< 2	101%	70%	130%	96%	80%	120%	98%	70%	130%
Electrical Conductivity (2:1)	7179415	7179415	0.200	0.194	3.0%	< 0.005	104%	80%	120%						
pH, 2:1 CaCl2 Extraction	7188240		7.14	7.07	1.0%	NA	103%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.

Duplicate NA: results are under 5X the RDL and will not be calculated.

Certified By:

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: EXP SERVICES INC

AGAT WORK ORDER: 25Z360797

PROJECT: OTT-25006966-A0

ATTENTION TO: Ismail M. Taki

SAMPLING SITE:Leitrim Road, Ottawa

SAMPLED BY:EXP

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Chloride (2:1)	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate (2:1)	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
pH, 2:1 CaCl2 Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE
Resistivity (2:1) (Calculated)	INOR-93-6036	McKeague 4.12, SM 2510 B,SSA #5 Part 3	EC METER

AGAT Laboratories

Have feedback? Scan here for a quick survey!

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webenquiry@agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Laboratory Use Only
Work Order #: 25736079?
Cooler Quantity: one - none
Arrival Temperatures: 20.2 | 19.8 | 19.9
HUS 2.7°C | 2.5°C | 2.3°C
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: B/Z IMED

Report Information:
Company: EXP Services Inc
Contact: Ismail Taki
Address: 2650 Queensview Drive Unit 100, Ottawa, ON, K2B 8H6
Phone: 613-688-1891 Fax:
Reports to be sent to:
1. Email: ismail.taki@exp.com
2. Email: jeff.macmillan@exp.com

Project Information:
Project: OTT-25006966-A0
Site Location: Leitrim Road, Ottawa
Sampled By: EXP
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email:

Regulatory Requirements:
(Please check all applicable boxes)

☐ Regulation 153/04
Table (Indicate One) ☐ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One) ☐ Coarse ☐ Fine

☐ Regulation 406
Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
(Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:
Regular TAT ☑ 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day
OR Date Required (Rush Surcharges May Apply):
Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*
For 'Same Day' analysis, please contact your AGAT CPM

Sample Matrix Legend
GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	VOC	PAHs	PCBs	PCBs: Aroclors ☐	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ Mer ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Regulation 406 SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Regulation 406 Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Corrosivity: ☐ Moisture ☐ Sulphide	pH	Sulphate	Chloride	Resistivity			Potentially Hazardous or High Concentration (Y/N)
1. BH 25-1 SS3 5'-7'	Oct. 2	AM PM	1	S														☑	☑	☑	☑			
2. BH 25-8 SS4 7.5'-9.5'	Oct. 2	AM PM	1	S														☑	☑	☑	☑			
3. BH 25-11 SS4 7.5'-9.5'	Oct. 2	AM PM	1	S														☑	☑	☑	☑			
4.		AM PM																						
5.		AM PM																						
6.		AM PM																						
7.		AM PM																						
8.		AM PM																						
9.		AM PM																						
10.		AM PM																						
11.		AM PM																						

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Jeff MacMillan	Oct. 23, 2025		[illegible]	2025/10/23	15:23
[illegible]	2025/10/24	15:00	[illegible]	10/25/25	10:50

Page 1 of 1

Pink Copy - Client | Yellow Copy - AGAT | White Copy - AGAT

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: EXP SERVICES INC
2650 QUEENSVIEW DRIVE, UNIT 100
OTTAWA, ON K2B8H6
(613) 688-1899

ATTENTION TO: Matthew Zammit

PROJECT: OTT-25006966-A0

AGAT WORK ORDER: 25Z364973

SOIL ANALYSIS REVIEWED BY: Sukhwinder Randhawa, Inorganic Team Lead

DATE REPORTED: Nov 06, 2025

PAGES (INCLUDING COVER): 5

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information is available on request from AGAT Laboratories, in accordance with ISO/IEC 17025:2017, ISO/IEC 17025:2005 (Quebec), DR-12-PALA and/or NELAP Standards.*
- *This document is signed by an authorized signatory who meets the requirements of the MELCCFP, CALA, CCN and NELAP.*
- *For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.*

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 25Z364973

PROJECT: OTT-25006966-A0

CLIENT NAME: EXP SERVICES INC

ATTENTION TO: Matthew Zammit

SAMPLING SITE:465 Trident Mews, Ottawa

SAMPLED BY:EXP

(Soil) Inorganic Chemistry

DATE RECEIVED: 2025-11-03 **DATE REPORTED: 2025-11-06**

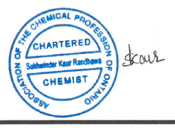
				BH25-9 SS6
		SAMPLE DESCRIPTION:		12.5'-14.5'
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2025-10-06
Parameter	Unit	G / S	RDL	7207013
Chloride (2:1)	µg/g		2	5
Sulphate (2:1)	µg/g		2	350
pH (2:1)	pH Units		NA	6.74
Resistivity (2:1) (Calculated)	ohm.cm		1	2200

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

7207013 pH, Chloride and Sulphate were determined on the extract obtained from the 2:1 leaching procedure (2 parts DI water: 1 part soil). Resistivity is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: EXP SERVICES INC

AGAT WORK ORDER: 25Z364973

PROJECT: OTT-25006966-A0

ATTENTION TO: Matthew Zammit

SAMPLING SITE:465 Trident Mews, Ottawa

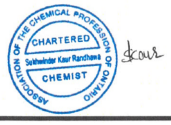
SAMPLED BY:EXP

Soil Analysis

RPT Date: Nov 06, 2025			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
(Soil) Inorganic Chemistry															
Chloride (2:1)	7204371		145	146	0.7%	< 2	101%	70%	130%	100%	80%	120%	94%	70%	130%
Sulphate (2:1)	7204371		122	124	1.6%	< 2	103%	70%	130%	100%	80%	120%	105%	70%	130%
pH (2:1)	7204310		7.92	8.08	2.0%	NA	101%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.

Certified By:



AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: EXP SERVICES INC

AGAT WORK ORDER: 25Z364973

PROJECT: OTT-25006966-A0

ATTENTION TO: Matthew Zammit

SAMPLING SITE:465 Trident Mews, Ottawa

SAMPLED BY:EXP

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Chloride (2:1)	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate (2:1)	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
pH (2:1)	INOR 93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER
Resistivity (2:1) (Calculated)	INOR-93-6036	McKeague 4.12, SM 2510 B,SSA #5 Part 3	CALCULATION

AGAT Laboratories

Have feedback? Scan here for a quick survey!

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Laboratory Use Only

Work Order #: 25236497 3

Cooler Quantity: one - MOE
Arrival Temperatures: MISS: 4.2 | 4.3 | 4.8 °C
Depot Temperatures: | |
Custody Seal Intact: ☐ Yes ☐ No ☑ N/A
Notes:

Report Information:

Company: EXP Services Inc
Contact: Matthew Zammit
Address: 2650 Queensview Drive, Suite 100
Ottawa, Ontario, K2B 8H6
Phone: 613-688-1899 Fax:
Reports to be sent to:
1. Email: matthew.zammit@exp.com
2. Email: ryan.digiuseppe@exp.com

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table (Indicate One): ☐ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One): ☐ Coarse ☐ Fine

☐ Regulation 406
Table (Indicate One): ☐ Ind/Com ☐ Res/Park ☐ Agriculture
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a **Record of Site Condition (RSC)**? ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

For 'Same Day' analysis, please contact your AGAT CSR

Project Information:

Project: OTT-25006966-A0
Site Location: 465 Trident Mews, Ottawa
Sampled By: EXP
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company:
Contact:
Address:
Email:

Legal Sample ☐

Sample Matrix Legend

GW	Ground Water	**SD**	Sediment
O	Oil	**SW**	Surface Water
P	Paint	**R**	Rock/Shale
S	Soil		

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	VOC	PAHs	PCBs: Arocolors ☐	O. Reg 406: Regulation 406 Characterization Package pH, Metals, BTEX, F1-F4	O. Reg 406: EC, SAR	O. Reg 406: Regulation 406 SPLP Rainwater Leach mSPLP: ☐ Metals ☐ VOCs ☐ SVOCs ☐ OC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Corrosivity: ☐ Moisture ☐ Sulphide	pH	Sulphates	Chlorides	Resistivity			Potentially Hazardous or High Concentration (Y/N)
1. BH25-9 SS6 12.5'-14.5'	Oct 6	AM PM	1															☑	☑	☑	☑			
2.		AM PM																						
3.		AM PM																						
4.		AM PM																						
5.		AM PM																						
6.		AM PM																						
7.		AM PM																						
8.		AM PM																						
9.		AM PM																						
10.		AM PM																						
11.		AM PM																						

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
			Linda Berthelet	2025/11/03	14h18
Samples Relinquished By (Print Name and Sign): Linda Berthelet to Puro	2025/11/03	15h45	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page ____ of ____

N°:

Pink Copy - Client | Yellow Copy - AGAT | White Copy - AGAT

Legal Notification

This report was prepared by EXP Services Inc. for the account of **Conseil des Écoles Catholiques du Centre-Est (CECCE).**

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

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