Geotechnical Investigation Report – 1209 Michael Street North, Ottawa

March 17, 2026

Prepared for:
Inside Edge Properties

Cambium Reference: 23852-001

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1.0 Introduction

Cambium Inc. (Cambium) was retained by Inside Edge Properties (Client) to complete a geotechnical investigation in support of the proposed development located at 1209 Micheal Street, Ottawa, Ontario (Site), as shown on the Site Location Plan on the attached Figure 1. The terms of reference for the geotechnical consulting services were included in Cambium's Proposal No. 23852-P, dated June 19, 2025.

The purpose of the field work and testing was to obtain information on the general subsurface soil and groundwater conditions at the site by means of a limited number of boreholes and laboratory tests. This report provides engineering comments, recommendations, and parameters for the geotechnical design aspects of the project, including selected construction considerations which could influence design decisions, based on the findings of the subsurface investigation program and subsequent analysis. A limited chemical testing program was also completed to assess the potential for corrosion of buried steel elements and sulphate attack against buried concrete elements at the Site.

The geotechnical borehole program was completed at the same time as the environmental investigation completed by Paterson Group (Paterson). Groundwater measurements were taken in monitoring wells installed by Paterson further inform the design from a geotechnical perspective.

This report provides the results of the geotechnical investigation and testing program and should be read in conjunction with the *"Standard Limitations"* in Section 8.0 which forms an integral part of this document. The reader's attention is specifically drawn to this information, as it is essential for the proper use and interpretation of this report. The data, interpretations and recommendations contained in this report pertain to the specific project as described in the report and are not applicable to any other project or site location. If the project is modified in concept, location or elevation, or if the project is not initiated within eighteen months of the date of the report, Cambium should be given an opportunity to confirm that the recommendations in this report are still valid.

1.1 Reviewed Documents

The following project-related documents were provided by the Client and reviewed during the preparation of this report:

[1] 1209 Michael St Ottawa – Concept Plan – Option 2, Drawing P2; Fotenn Planning and Design; Revised November 6th, 2024.

[2] Topographic Plan of Survey of Part of Lots 26 & 27 – Concession 2 (Ottawa Front) – Geographic Township of Gloucester – City of Ottawa, Farley Smith & Denis Surveying Ltd, November 13th, 2025

1.2 Standards and Guidelines

Applicable standards, guidelines and other normative documents utilized in preparing geotechnical engineering recommendations for this report are provided below.

[3] Canadian Foundation Engineering Manual – 5th Edition; Canadian Geotechnical Society; 2023.

[4] Ontario Building Code: 2024 Building Code Compendium – Volume 1, May 29, 2024 – Amalgamating O. Reg. 203/24 with Errata, Supersedes O. Reg. 163/24

2.0 Site Description

2.1 Site Description

The subject site is a commercial property located northeast of the intersection of Michael Street North and Labelle Street. The Site is bounded to the west and south by Michael Street and Labelle Street, respectively, to the north by commercial properties and to the east by Cyrville Road. The Site Location Plan is provided in Figure 1 of this report.

The site is currently divided into an east and west section. The west section is developed with a low-rise commercial building with driving lanes, access lanes and landscaping, and is accessible from Michael Street and Labelle Street. The east section consists of an asphalt surfaced parking lot accessible by Labelle Street. A wooden fence and landscaped area separates the east and west sections.

2.2 Project Description

It is understood that the proposed construction will consist of two high-rise towers 28 and 30 storeys tall, with connected mid-rise (6 storey) podium sections. It is also understood that the existing building will be demolished as part of the development [1]. Based on available plans and communications with the project team, it is Cambium's understanding at this time that four levels of underground parking will be needed to accommodate parking requirements, and that the underground parking levels will occupy all, or nearly all of the building footprint.

3.0 Methodology

3.1 Borehole Investigation

A borehole investigation was carried out at the site on November 3 and 4, 2025 to assess subsurface conditions. A total of 5 boreholes, designated BH101-25 through BH105-25, were advanced in the approximate locations shown on the attached Figure 2, to a maximum depth of 8.6 m below ground surface (bgs).

The ground elevation at each borehole location was surveyed by Farley, Smith & Denis Surveying Ltd. It is understood that the elevations are referenced to a geodetic datum.

Drilling and sampling was completed using a track-mounted drill rig operating under the supervision of a Cambium technician. The boreholes were advanced to the sampling depths by means of continuous hollow stem augers with 50 mm split spoon samplers, and NQ sized diamond drill rock coring equipment. Standard Penetration Test (SPT) N values were recorded for the sampled intervals as the number of blows required to drive a split spoon sampler 305 mm into the soil, using a 63.5 kg drop hammer falling 750 mm, as per ASTM D1586 procedures. The SPT N values are used in this report to assess the relative density of non-cohesive materials.

Rock core samples were recovered in successive “runs,” each generally approximately 1.5 m long. Rock core sample parameters including total core recovery (TCR), solid core recovery (SCR), and rock quality designation (RQD) were recorded at the time of drilling. These are defined as follows:

$$TCR = \left(\frac{\text{Total length of recovered core pieces}}{\text{Total length of core run}}\right) \times 100\%$$

$$SCR = \left(\frac{\text{Total length of core pieces with full core diameter}}{\text{Total length of core run}}\right) \times 100\%$$

$$RQD = \left(\frac{\text{Total length of core pieces} > 100 \text{ mm long}}{\text{Total length of core run}}\right) \times 100\%$$

Soil samples were collected at regular depth intervals. The encountered soil and bedrock units were logged in the field using visual and tactile methods. Soil samples were placed in watertight plastic bags and rock core samples wrapped in plastic for transport, future reference, laboratory testing, and storage. Open boreholes were checked for groundwater and general stability prior to backfilling. The boreholes were backfilled in accordance with O.Reg. 903, as amended and the Site was restored to pre-investigation conditions.

The borehole and rock core logs are provided in Appendix A. Site soil and groundwater conditions and our geotechnical recommendations are presented in the following sections of this report. Rock core samples were photographed prior to packaging and the photos are provided in Appendix B.

3.2 Soil Laboratory Testing

Laboratory soil testing included Natural Moisture Content Analysis on all soil samples (LS 701), as well as Particle Size Distribution Analyses (LS 702) on selected samples. Unconfined Compressive Strength (UCS) testing (ASTM D7012, Method C) was completed on five specimens of rock core sample. Results are summarized on the borehole logs and described in the subsequent sections of this report, and full results are presented in Appendix C.

In addition to the above physical laboratory testing, two samples were submitted to a qualified third-party laboratory to assess corrosion potential of buried steel elements and potential of sulphate attack against buried concrete elements. The Certificate of Analysis is provided in Appendix D.

4.0 Subsurface Conditions

The subsurface soil and groundwater conditions encountered in the boreholes are presented on the borehole logs provided in Appendix A. It should be noted that the conditions indicated on the borehole logs are for specific locations only and can vary between and beyond the borehole locations. The soil boundaries indicated on the borehole logs are inferred from non-continuous sampling and observations during drilling. These boundaries are intended to reflect approximate transition zones and should not be interpreted as exact planes of geological change. Although Cambium attempted to determine the changes in soil layers and their associated thicknesses, the actual thicknesses of the layers may vary from what is noted on the individual borehole logs. In addition, the descriptions provided in the borehole logs are inferred from a variety of factors, including visual observations of the soil samples retrieved, laboratory testing, measurements prior to and after drilling, and the drilling process itself (drilling speed, shaking/grinding of the augers, etc.). It should also be noted that soil samples are taken from a split spoon sampler; therefore, any particles larger than the internal diameter of the split spoons (approximately 35 mm) may not be fully represented in the collected samples.

The subsurface conditions encountered in the boreholes generally consist of asphalt and granular fill, overlying non- to slightly cohesive fill material, overlying native clayey sand overlying bedrock. The bedrock encountered consisted of shale which was weathered at the bedrock surface, generally increasing in quality with depth.

4.1 Pavement Structure

Asphalt concrete was encountered at ground surface in all borehole locations. The asphalt ranged in thickness from approximately 25 to 75 mm. Two layers of asphalt were encountered at borehole BH105-25, the first- and second-layer thickness was approximately 25 and 35 mm, respectively, which was separated by a 20 mm layer of granular material.

Granular material was encountered underlying the asphalt concrete at all boreholes locations and ranged in thickness from approximately 100 to 700 mm. The material generally consisted

of gravel and sand, gravel and silty sand, or gravelly silty sand. The granular fill was moist at the time of sampling and grey to brown in colour.

The natural moisture content of the granular fill samples ranged from 3.1 to 8.9 percent based on laboratory testing results.

SPT N values obtained during sampling of this material ranged from 12 to 40 blows per 300 mm of penetration, indicating a compact to dense relative density.

A summary of the pavement structure thicknesses at the borehole locations is provided in Table 1.

Table 1 Summary of Pavement Structure Thickness

Borehole No.	Asphalt Thickness (mm)	Granular Material Thickness (mm)		Total Thickness (mm)
		Granular Base Thickness	Granular Subbase Thickness	
BH101-25	50	150	560	760
BH102-25	65	700		765
BH103-25	70	150	530	750
BH104-25	70	100		170
BH105-25	25/35*	20/110*		190

**First and second layer thicknesses, respectively*

Laboratory particle size distribution was completed on two samples of the granular fill material, and the results are summarized in Table 2.

Table 2 Particle Size Distribution Results – Granular Fill Material

Sample Location	Depth (mbgs)	Soil	% Gravel	% Sand	% Silt and Clay	% Moisture
BH102-25 SS3	0.2 – 0.8	Gravelly Silty Sand	25	56	19	3.7
BH103-25 SS1B	0.2 – 0.8	Silty Sand and Gravel	43	42	15	4.2

4.2 Cohesive Fill Material

Cohesive fill material was encountered beneath the pavement structure in boreholes BH101-25 to BH103-25. The material extended to depths ranging from approximately 1.5 to 2.1 mbgs and generally consisted of gravel and clayey silt, sandy gravel and clayey silt, to gravelly clayey silt with varying amounts of concrete debris. The cohesive fill material was about the plastic limit (ATPL) at the time of sampling and dark brown with black staining.

SPT N values obtained during sampling of this material ranged from 4 to 35 blows per 300 mm of penetration, indicating a firm to hard consistency.

The natural moisture content of the samples of the reworked native soils ranged from 8.8 to 13.1 percent based on laboratory testing results.

4.3 Non-Cohesive Fill Material

Non-cohesive fill material was encountered beneath the slightly cohesive fill material in BH101-25. The material extended to bedrock surface at approximately 2.1 mbgs and consisted of silty sand and gravel with varying amounts of clay content. The non-cohesive fill material was moist and dark brown at the time of sampling.

One SPT N was obtained during sampling of this material of 20 blows per 300 mm of penetration, indicating a compact relative density.

The natural moisture content of the sample of the non-cohesive fill material was 4.5 percent based on laboratory testing results.

Laboratory particle size distribution was completed on one sample of the non-cohesive fill material, and the results are summarized in Table 3.

Table 3 Particle Size Distribution Results – Non-Cohesive Fill Material

Sample Location	Depth (mbgs)	Soil	% Gravel	% Sand	% Silt	% Clay	% Moisture
BH101-25 SS3	1.5 – 2.1	Silty Sand and Gravel, trace Clay	37	46	13	4	4.5

4.4 Clayey Sand

Clayey sand soils were encountered beneath the pavement structure or cohesive fill material in boreholes BH103-25 to BH105-25. Where encountered, the material extended to bedrock surface, at depths ranging from approximately 1.5 to 1.9 mbgs and generally consisted of clayey sand with silt and some gravel. The clayey sand soils were about the plastic limit (ATPL) and black or dark brown with black staining at the time of sampling.

The natural moisture content of the samples of the reworked native soils ranged from 12.4 to 14.6 percent based on laboratory testing results.

SPT N values obtained during sampling of this material ranged from 8 to 20 blows per 300 mm of penetration, indicating a firm to very stiff consistency.

Laboratory particle size distribution was completed on one sample of the clayey sand with silt soil and the results are summarized in Table 4.

Table 4 Particle Size Distribution Results – Clayey Sand with Silt Soils

Sample Location	Depth (mbgs)	Soil	% Gravel	% Sand	% Silt	% Clay	% Moisture
BH105-25 SS2	0.8 – 1.4	Clayey Sand with Silt, some gravel	8	45	30	17	13.3

4.5 Bedrock

Bedrock was encountered in all borehole locations, at depths ranging from approximately 1.5 to 2.1 mbgs, below the clayey sand with silt or fill material soil layers. All boreholes were terminated within the bedrock.

The bedrock appeared to consist predominantly of grey to black shale, which ranged in quality from very poor to good, generally increasing in quality with depth. In general, the upper 0.3 to 1.5 m was weathered to highly weathered, and brown to grey in colour. Bedding measurements varied from approximately 25 to 60 degrees from horizontal with occasional calcite infilling. A clay seam was observed within borehole BH103-25 at depth of approximately 4.0 mbgs.

Based on available geological mapping, the local bedrock appears to consist of shale of the Billings Formation. This type of shale is known to degrade upon exposure to oxygen; the bedrock samples were therefore wrapped with plastic to maintain the in-situ moisture content and as-recovered condition as much as possible.

Photographs of the bedrock core samples are provided in Appendix B. A summary of bedrock depths at the borehole locations is provided in Table 5.

Table 5 Summary of Ground Surface and Bedrock Elevations

Borehole No.	Ground Surface Elevation (mASL)	Bedrock Elevation (mbgs / mASL)
BH101-25	71.25	2.06 / 69.19
BH102-25	71.42	2.08 / 69.34
BH103-25	71.63	1.93 / 69.70
BH104-25	71.55	1.52 / 70.03
BH105-25	71.47	1.52 / 69.95

Unconfined compressive strength (UCS) testing was completed by a qualified third-party laboratory, on five selected specimens of bedrock core samples. A summary of the UCS testing results are summarized in Table 6, and full results are provided in Appendix C.

Table 6 Summary of UCS Testing Results

Borehole No.	Sample Depth (mbgs)	Sample Depth (mASL)	Unconfined Compressive Strength (MPa)
BH101-25	7.14 – 7.32	64.11 – 63.93	13.7
BH102-25	8.08 – 8.20	63.34 – 63.22	5.4
BH103-25	8.46 – 8.61	63.17 – 63.02	8.0
BH104-25	6.55 – 6.76	65.00 – 64.79	18.6
BH105-25	5.69 – 5.82	65.78 – 65.65	7.7

4.6 Groundwater

Borehole side wall instability (caving) depth, groundwater depth and standing water depth were recorded in the open boreholes, if observed. Borehole caving was observed in borehole BH102-25 at 2.1 mbgs. Groundwater and standing water were not observed in any of the open boreholes at the time of drilling.

Cambium returned to the Site on November 26, 2025 to obtain water level measurements from the monitoring well installed in borehole BH103-25, as well as boreholes BH-A and BH-B installed by Paterson Group as part of the environmental investigation for the subject site. The groundwater observations are summarized in Table 7.

Table 7 Summary of Groundwater Measurements

Borehole	Depth of well (mbgs)	November 26, 2025	
		Groundwater Level (mbgs)	Elevation (mASL)
BH103-25	8.5	2.2	69.43
BH-A (Paterson)	6.2	3.2	67.83*
BH-B (Paterson)	6.2	3.2	68.15*

*Elevations for monitoring wells installed by Paterson Group obtained from site survey [2].

It should be noted that groundwater level measurements herein represent momentary observations. Groundwater levels at the Site may fluctuate on a seasonal basis and in response to significant precipitation or snowmelt events.

4.7 Corrosivity Analysis

Two soil samples were submitted to a certified third-party laboratory for chemical corrosivity analysis. The Certificate of Analysis is presented in Appendix D. The samples were analysed for pH, electrical conductivity, resistivity, redox potential, and for chloride, sulphate and sulphide concentrations.

To determine the potential for corrosion, the laboratory results were compared to the ANSI/AWWA corrosivity rating system, as shown in Table 8. Based on the total points scored,

the soil is determined to be potentially corrosive to buried steel elements, a protective coating should be used that are in direct contact with soil or in undrained areas.

Table 8 Corrosivity Testing Results

Parameter	BH102-25		BH105-25	
	Test Results	ANSI/AWWA Point Rating	Test Results	ANSI/AWWA Point Rating
Resistivity (Ω·cm)	670	10	560	10
pH	7.82	0	7.58	0
Redox Potential (mV)	344	0	344	0
Sulphide	Trace	2	Trace	2
Moisture Condition	Fair Drainage, Generally Moist	1	Fair Drainage, Generally Moist	1
Total Points		**13**		**13**

Though not included in the ANSI/AWWA assessment method, it should be noted that the chloride content of the tested samples indicates that the soil is potentially corrosive to buried steel elements. This should be accounted for as required.

The laboratory test results also indicate that the soluble sulphates concentration of the tested samples ranged from 84 to 212 parts per million (ppm) or micrograms per gram (µg/g). Based on this concentration, there is a negligible potential for sulphate attack on concrete. Accordingly, normal Type 10 Portland cement can be used in buried concrete elements.

Please note that there may be other overriding factors in the assessment of corrosion potential, such as the application of de-icing salts on any nearby access roads and subsequent leaching into the subsoils and stray currents.

5.0 Geotechnical Design Considerations

This section of the report provides engineering information on, and recommendations for, the geotechnical design aspects of the project based on our interpretation of the borehole information, the laboratory test data, and our understanding of the current project requirements. The information in this portion of the report is provided for planning and design purposes for the guidance of the design engineers and architects. Where comments are made on construction, they are provided only to highlight aspects of construction which could affect the design of the project.

Contractors bidding on or undertaking any work at the Site should examine the factual results of the investigation, satisfy themselves as to the adequacy of the information for construction and make their own independent interpretation of the factual data as it affects their proposed construction techniques, schedule, equipment capabilities, costs, sequencing, and the like. Cambium will not assume any responsibility for construction-related decisions made by contractors based on this report. It is possible that subsurface conditions beyond the borehole locations may vary from those observed. If significant variations are found before or during construction, Cambium should be contacted to reassess findings and recommendations, as needed.

The proposed development is understood to include the demolition of the existing building, followed by new construction of a two-tower high-rise residential building up to 30 storeys tall, with four levels of underground parking. It is assumed that the basement floor elevation (FFE) for the underground parking levels will be approximately 12 mbgs.

5.1 Site Preparation

Existing organic materials, any fill, loose or softened reworked/disturbed native materials, and any deleterious material encountered should be excavated and removed from beneath the proposed building footprint prior to construction. Additionally, this material should be excavated and removed to a minimum distance of 3 m around proposed building footprints. Any topsoil

and materials with significant quantities of organics and deleterious materials are not considered appropriate for use as fill within building footprints.

Where soil subgrades are exposed, such as below utilities or areas to be paved, exposed subgrade surfaces should be inspected by a qualified geotechnical engineer prior to placement of any granular fill. Any loose/soft soils identified at the time of the inspection that are unable to uniformly be compacted should be sub-excavated and removed. The excavations created through the removal of these materials should be backfilled with approved engineered fill consistent with the recommendations provided in this report.

The near surface soils can become unstable if wet or saturated. Such conditions are common in the spring and late fall. Under these conditions, temporary use of granular fill, and possible separating/reinforcing geotextiles, may be required to prevent severe rutting on construction access routes.

5.2 Excavations

All excavations must be carried out in accordance with the latest edition of the Occupational Health and Safety Act (OHSA) and Ontario Health and Safety Regulations for Construction Projects (O. Reg 213). The existing cohesive and non-cohesive fill materials may be classified as Type 3 soils above the groundwater table in accordance with OHSA. Below the groundwater table these soils may be classified as Type 4 soils.

Type 3 soils may be excavated with side slopes no steeper than 1H:1V starting at the base of excavation, while Type 4 soils may be excavated with side slopes no steeper than 3H:1V. Excavation side slopes should be protected from exposure to precipitation and associated ground surface runoff and should be inspected regularly for signs of instability. If localized instability is noted during excavation or if wet conditions are encountered, the side slopes should be flattened as required to maintain safe working conditions or the excavation sidewalls must be fully supported (shored).

Excavation in bedrock could be accomplished using mechanical methods (such as hoe ramming) for shallow excavation depths. For deeper excavations or where large quantities of

bedrock are to be removed, line drilling and blasting may be required. A preconstruction impact assessment should be carried out and the City should be consulted if blasting is considered as an excavation method to ensure minimal disruption to surrounding buildings and the public (Section 5.2.1). Attenuation methods, such as perimeter trenching prior to blasting, should be considered to reduce vibration transmission to neighbouring properties as much as possible.

Temporary excavation in sound bedrock may be carried out at near vertical slopes (10H:1V), provided the trench sides are cleared of loose rock prior to workers entering the trench. Bedrock excavation sidewalls adjacent to existing building foundations should be supported to ensure the stability of the existing buildings. Pre and post condition surveys are recommended on structures that could be impacted by the construction activities. Weathered portions of the bedrock, as well as any overburden soils, should be kept away from the upper edge of the sound bedrock a minimum of at least 1 m to ensure worker safety.

5.2.1 Vibration Monitoring

The anticipated excavations within bedrock will generate some vibrations that will be perceptible to nearby residents. The vibrations are expected to be greatest during bedrock excavation by mechanical methods or blasting; any vibrations should be limited as much as possible to avoid disturbing neighbouring properties and residents. Preconstruction surveys are recommended for all existing structures adjacent to the Site; any structures in the area that may be particularly sensitive to vibrations should be identified and appropriate specifications developed for the excavation plan by a contractor specializing in vibration monitoring.

5.2.2 Bedrock Protection

Shale bedrock of the Billings Formation is known to undergo rapid weathering and near-surface fracturing upon exposure to oxygen. This process begins as soon as bedrock is exposed and can cause sound bedrock to become weathered within a matter of days. Therefore, it is crucial to plan accordingly; any horizontal bedrock surfaces at finished excavation elevations must be covered within maximum 24 hours of exposure using a concrete

mud mat or similar moisture barrier material. Bedrock excavation sidewalls should be similarly protected using rolled on or sprayed on waterproofing material for this purpose.

Care should also be taken not to over-dewater the site, as excessive removal of water could cause inadvertent exposure of bedrock to air.

5.3 Dewatering

Groundwater observations made during the investigation are shown in Table 7.

Water takings in excess of 50 m^3/day are regulated by the (Ministry of the Environment, Conservation and Parks (MECP). Certain takings of groundwater and storm water for construction site dewatering purposes with a combined total less than 400 m^3/day qualify for self-registration on the MECP's Environmental Activity and Sector Registry ("EASR"). A Category 3 PTTW is required where the proposed water taking is greater than 400 m^3/day. At a minimum, an EASR is likely required for this site. An EASR posting should be obtained in advance of construction to avoid possible delays.

Although soil and bedrock permeability measurements were not included as part of this investigation, it is expected that dewatering of open excavations will be possible by pumping from filtered sumps and/or perimeter ditch drains.

Dewatering requirements will be governed by the time of the year the construction is performed. It is often best practice to carry out excavations outside of those times that water levels are expected to be highest (e.g., spring). It is generally the responsibility of the contractor to propose a suitable dewatering plan based on the time of construction and seasonal groundwater levels. However, as noted in Section 5.2.2, care must be taken to not over-dewater the site and risk impacting the bedrock integrity.

5.4 Frost Penetration

Based on OPSD 3090.101, the typical frost penetration depth at the site is estimated to be approximately 1.8 m. Foundation footings should be situated at or below this depth for frost

protection, or should be provided with a thermal equivalent combination of soil cover and insulation.

The bedrock at the site is considered potentially susceptible to frost action / heaving. Any exposed bedrock surfaces should be protected from freezing using insulated tarpaulins or other similar means.

5.5 Backfill and Compaction

Foundation wall backfill should consist free-draining imported granular material. Excavated site soils such as existing granular fill, cohesive and non-cohesive fill, and clayey sand soils are not anticipated to be appropriate for backfill against foundation elements without significant treatment (separation of fine materials, moisture treatment, etc.). Backfill material should therefore consist of engineered fill conforming to OPSS 1010 Granular A or Granular B Type I or II.

Engineered fill used for backfill against foundation elements must be free of frozen, loose, contaminated, organic or otherwise deleterious materials, placed in maximum 200 mm thick loose lifts and compacted to minimum 98% of the material's SPMDD at a water content within ±2% of optimum. Placement of engineered fill should be verified by onsite compaction testing during construction.

If engineered fill is placed over dissimilar material such as silty or clayey soil, it may be necessary to separate the engineered fill from the finer-grained soils and prevent long-term fine particle migration into the engineered fill. A non-woven geotextile, such as Terrafix 270R or an approved equivalent, should be used for this purpose. The exposed subgrade surfaces below engineered fill should be verified onsite by qualified geotechnical personnel prior to backfilling to ensure subgrade suitability and that appropriate treatments are applied as needed.

Additional recommendations for backfilling of buried utilities are provided in Section 5.12.

5.6 Foundation Design

Based on subsurface conditions, the foundation footings for the proposed building can consist of strip or spread footings founded directly on sound bedrock, or extended to bedrock using concrete.

Footings placed directly on sound, unweathered bedrock may be designed using a factored bearing resistance of **2,500 kPa** at Ultimate Limit States (ULS). The geotechnical reaction at Serviceability Limit States (SLS) generally does not apply for footings placed on bedrock, as settlement is expected to be negligible. Footings placed on bedrock must be cleared of any loose or fractured rock for the above to apply. Consideration should be given to completing pilot holes in the rock to identify any near-surface fractures or planes of weakness to verify the design bearing capacity values.

Footings placed on the weathered portion of bedrock can be designed using a bearing resistance value of **300 kPa at SLS**, and a factored bearing resistance of **500 kPa at ULS**, incorporating a geotechnical resistance factor of 0.5.

The above bearing resistance values at SLS assume acceptable total and differential settlements of 25 mm and 10 mm, respectively.

5.6.1 Uplift Resistance

Rock anchors should be installed in any footings placed on bedrock surface to provide uplift resistance. Pilot holes should be completely flushed to ensure adequate removal of rock flour, and grout should be installed surrounding the rock anchors with a tremie tube to ensure grout reaches the bottom of the pilot holes.

Typically, the bonded length of anchors should not exceed 50% of the total anchor length; this will provide resistance to the rock anchor within the upper portion of the rock mass. The contractor should develop a pull testing plan for rock anchors to confirm capacity. Pull tests should be carried out under supervision of the geotechnical engineer.

5.7 Seismic Site Classification

The Ontario Building Code (OBC) specifies that the structures should be designed to withstand forces due to earthquakes. For the purpose of earthquake design, geotechnical information shall be used to determine the “Site Class”. Based on the explored soil properties and in accordance with Table 4.1.8.4.A and Table 4.1.8.4.B of the OBC [4], it is recommended that **Site Designation “X_{760}”** and **Site Class “B”** (rock) be applied for structural design at the Site. A higher seismic site class (Class A) may be possible; however, this must be confirmed by site-specific shear wave velocity testing to verify the average shear wave velocity of the upper 30 m below the proposed footings (V_{s30}) exceeds 1,500 m/s.

5.8 Floor Slab Design

It is anticipated that the floor slabs can be designed as a concrete slab-on-grade, and based on the anticipated FFE would likely be supported on engineered fill placed on the bedrock.

The floor slabs should be structurally separate from the foundation walls and columns. Sawcut control joints should be provided at regular intervals and along column lines to minimize shrinkage cracking.

The deflections and the resulting forces and bending moments in the slab to be used in its structural design could be determined by structural analysis using a Wetergaard’s modulus of subgrade reaction, K_v, for the subgrade. However, the modulus of subgrade reaction is not a fundamental soil property, and its value depends, in part, on the size and shape of the slab. For the analysis of the contact stress distribution beneath a slab, its value would depend on the size of the areas over which increased/concentrated contact stresses are anticipated; the size of these areas is in turn related to the value the modulus of subgrade reaction. Accordingly, the analysis of the slab should involve an iterative analysis between the determination of the contact stress distribution by the structural engineer and the geotechnical determination of the modulus of subgrade reaction value, until these two are consistent with each other.

For initial analyses, the moduli of subgrade reaction appropriate for slab on grade design at the site can be taken as **50 MPa/m**.

It is necessary that the building floor slab be provided with a capillary moisture barrier and drainage layer. This is made by placing the slab on a minimum 300 mm layer of 19 mm clear stone (OPSS.MUNI 1004) compacted by vibration to a dense state. Basement drainage is required as discussed in Section 5.9.

5.9 Underfloor and Basement Drainage

The approximate amount of daily permanent groundwater collection and drainage will require the completion of a hydrogeological investigation. Based on groundwater level readings taken in the monitoring wells installed at the Site (Table 6), the basement is expected to extend below the stabilized groundwater table elevation until the long-term groundwater level re-stabilizes following construction.

Provision of subfloor drainage is required in conjunction with the perimeter drainage of the structure, to collect and remove the water that infiltrates at the building perimeter and under the floor. Perimeter and subfloor drainage is required throughout below grade areas.

It is recommended that the subfloor drainage system consists of minimum 100 mm diameter perforated pipes spaced at maximum 6 m. The pipes must be surrounded by a minimum of 100 mm of 19 mm clear stone per OPSS.MUNI 1004, and the pipe inverts should be a minimum 300 mm below the base of the slab. The elevator pits can be drained separately with an independent lower pumping sump or can be designed as waterproof structures which are below the drainage level. It is recommended to cut the rock subgrade neatly to 300 mm beneath the floor slab and place subdrains directly on the subgrade. The subfloor drainage layer would then be comprised of 300 mm of 19 mm clear stone.

A drainage layer such as prefabricated drainage composites should be incorporated between the excavation side walls and the cast-in-place concrete foundation wall to make a drained cavity. Drainage from the cavity must be collected at the base of the wall in non-perforated pipes and conveyed directly to the sumps. The flow to the building sump from the subsurface

drainage will be governed largely by the building perimeter drainage collection during rainfall and runoff events. A compressible layer is also required to accommodate rock squeeze of the exposed shale.

The drainage system is a critical structural element, since it keeps water pressure from acting on the basement floor slab or on the foundation walls. As such, the sump that ensures the performance of this system must have a duplexed pump arrangement for 100% pumping redundancy and these pumps must be on emergency power. The size of the pump should be adequate to accommodate the anticipated ground water and storm event flows. The anticipated volume of water should be determined prior to design.

Alternatively, the structure may be completely waterproofed to avoid ongoing drainage. Uplift forces from hydrostatic pressure would have to be considered for design; reference should be made to Section 5.6.1.

5.10 Basement Walls

Fluctuations in the groundwater table should be expected over time, and therefore basement walls should be provided with appropriate waterproofing. This should consist of exterior sealing treatment and application of a waterproofing membrane, such as Delta Drain 6000 or an approved equivalent, applied from the bottom of the foundation upward to minimum 300 mm above the anticipated high water table. The membrane should connect to the perimeter foundation drainage pipe and be installed according to the manufacturer’s instructions.

For basement walls constructed below the bedrock, blindside waterproofing should be implemented. In this regard, foundation waterproofing should be applied directly to the vertical or near-vertical bedrock face, and perimeter foundation drainage pipes placed prior to pouring of concrete for the basement walls. This will ensure groundwater within the bedrock is properly conducted to the perimeter drains and does not allow water pressure buildup against the basement walls.

5.11 Earth Pressure Design

The design of the foundation walls, if required, should consider the horizontal soil loads, as well as surcharge loads that may occur during or after construction. The backfill materials should consist of imported free-draining granular soils (e.g. OPSS Granular B, Type I or Granular A and Granular B Type II) as approved by a Geotechnical Engineer. The backfill materials should be placed in lifts not exceeding 200 mm thick. The layers should be compacted to at least 95% of SPMDD. Lateral earth pressure coefficients (K) are shown in Table 9.

Table 9 Lateral Earth Pressure Coefficients

Soil	Bulk Unit Weight γ (kN/m^3)	Internal Friction Angle Φ' (°)*	Active earth pressure coefficient Ka (Rankine)	Passive earth pressure coefficient K_p (Rankine)	At-rest earth pressure coefficient K_o (Rankine)
Compacted Engineered Fill	21	32	0.31	3.25	0.47

**Values derived from empirical relationships based on soil types and SPT N-values*

The earth pressure coefficient adopted will depend on whether the retaining structure is restrained, or some movement can occur such that the active state of earth pressure can develop. The use of vibratory compaction equipment immediately adjacent to foundation walls should be restricted in size.

The coefficients provided in Table 9 assume that the surface of the granular backfill is horizontal against any proposed wall, and the wall is vertical and smooth. Cambium should be contacted to provide updated lateral earth pressure coefficients should the assumptions differ to those noted.

The following formula may be used to calculate active lateral thrust (P_a) on yielding retaining structures.

$$P_a = (H/2)(K_a)(\gamma H + 2q)$$

where,

H = Height of retaining structure (m)

γ = unit weight of retained soil (kN/m³)

q = surcharge (kPa)

Unit weights found in Table 9 should be used for compacted loadings of the appropriate material.

Where traffic loads are expected within 3 meters of the foundation walls, a vehicle surcharge pressure of at least 3 and up to 6 kPa should be applied; the actual surcharge pressure should depend on the type of traffic.

5.11.1 Rock Pressure

Time dependent rock swell is anticipated for foundation walls constructed abutting the shale bedrock of the site. Sufficient time between cutting the rock face and construction of the building structure to allow the rock to de-stress and swell should be allocated. It is recommended that a 150-day period be provided after the rock cut, but before the rock is restrained by the structure. This should allow for sufficient swell and no significant stresses to be imposed on the structural wall. Some provision for compressible material at the foundation perimeter in rock should also be incorporated. In a typical excavation and construction progression, it should be expected that there will be a crushable layer provided behind the parking level wall.

Careful consideration should be given to rock squeeze effects for the design of elevator pits and sump pits.

5.11.2 Sliding Resistance

The factored geotechnical resistance to sliding of foundation elements is developed by friction between the base of the concrete footing and the bedrock. This friction (**R**) depends on the normal load at the soil contact (**N**) and the frictional resistance of the soil (**tan φ**) expressed as $\boldsymbol{R_f = N\,tan\varphi}$, which is the unfactored resistance. The factored geotechnical resistance at ULS

is $R_f = 0.4\ N\ tan\varphi$ for foundations on unweathered bedrock. A value of **30°** can be used for the internal angle of friction (φ) for unweathered sound bedrock encountered at this site.

5.12 Buried Utilities

Cambium should be retained to review site servicing plan to confirm the following recommendations.

5.12.1 Frost Protection for Underground Services

It is recommended to place water services at a minimum depth of 300 mm below the frost penetration depth with the top of the pipe located at 1.8 mbgs or lower as dictated by municipal service requirements. If a minimum of 1.8 m of soil cover cannot be provided, then the pipe should be insulated with a rigid polystyrene insulation (DOW Styrofoam HI40, or equivalent) or a pre-insulated pipe be installed.

5.12.2 Excavation and Dewatering

Excavation and dewatering for trenches should adhere to the recommendations provided in Sections 5.2 and 5.3, respectively.

5.12.3 Pipe Bedding and Cover Materials

Bedding and cover material for any services should conform to Ontario Provincial Standard Drawings (OPSD) 802.010 and 802.013 (flexible pipes) and OPSD 802.031 to 802.033 (rigid pipes). The pipe bedding should consist of 200 mm of OPSS.MUNI 1010 Granular A. The bedding and cover material shall be placed in maximum 200 mm thick lifts and should be compacted to at least 95% SPMDD. The cover material shall extend a minimum of 300 mm above the top of the pipe and be compacted to a minimum of 95% of SPMDD, taking care not to damage the utility pipes during compaction. The use of clearstone should not be permitted.

Where bedding and cover material is placed against dissimilar soils, a non-woven geotextile separator should be used, consisting of Terrafix 270R (or an approved equivalent) to limit fine particle migration into the pipe bedding and cover materials.

5.12.4 Pipe Backfill

Above the pipe cover material, the pipe can be backfilled by using imported granular fill material such as OPSS.MUNI 1010 Granular B, Type I. The existing fill materials at this site may be used as well, provided that the material is approved by Cambium prior to use. The soils should be placed in maximum 300 mm thick lifts compacted to 95% SPMDD.

5.13 Pavement Design

The performance of the pavement is dependent upon a properly prepared and well-drained subgrade. All topsoil and organic materials should be removed down to native material and backfilled with approved engineered fill or native material, compacted to 95 percent SPMDD. The subgrade should be proof rolled and inspected by a Geotechnical Engineer. Any areas where rutting or appreciable deflection is noted should be subexcavated and replaced with suitable fill. The fill should be compacted to at least 95 percent SPMDD.

The recommended minimum pavement structure design has been developed for two traffic loading scenarios; light duty and heavy duty. The heavy-duty design is appropriate for areas where truck, bus or emergency vehicle traffic is anticipated while the light duty design is appropriate for areas where no heavy vehicle traffic is anticipated. The recommended minimum pavement structure is provided in Table 10.

Table 10 Recommended Minimum Pavement Structure

Pavement Layer	Light Duty	Heavy Duty
Surface Course Asphalt	50 mm HL3 or SP12.5	40 mm HL3 or SP12.5
Binder Course Asphalt	--	50 mm HL8 or SP19.0
Granular Base	150 mm OPSS 1010 Granular A	150 mm OPSS 1010 Granular A
Granular Subbase	300 mm OPSS 1010 Granular B	450 mm OPSS 1010 Granular B

Material and thickness substitutions must be approved by the Design Engineer.

The thickness of the subbase layer could be increased at the discretion of the Engineer, to accommodate site conditions at the time of construction, including soft or weak subgrade soil replacement.

To maintain a relatively dry subgrade condition and prevent subgrade softening, subdrains are recommended to be installed. These should consist of 150 mm diameter perforated, corrugated plastic pipe, surrounded by 150 mm of 19 mm clear crushed stone with pipe inverts placed 300 mm below the top of subgrade. The subdrains should connect to a positive outlet such as a catch basin or storm sewer.

Transitions between differing pavement structures should be provided with minimum slopes of 10H:1V to limit differential movement due to frost heave.

Compaction of the subgrade should be verified by the Engineer prior to placing the granular fill. Granular layers should be placed in 150 mm maximum loose lifts and compacted to at least 98 percent of SPMDD (ASTM D698) standard. The granular materials specified should conform to OPSS standards, as confirmed by appropriate materials testing.

The final asphalt surface should be sloped at a minimum of 2 percent to shed runoff. Abutting pavements should be sawcut to provide clean vertical joints with new pavement areas.

If Superpave mixes are used, Performance Graded Asphalt Cement (PGAC) 58-34 and Traffic Category C should be used in the design.

5.14 Winter Construction

If work is planned during freezing temperatures, excavations and subgrade soils should be exposed for as short a time as practicable to maintain adequate performance of the founding soils and subgrades. Excavations for site services should be carried out only in lengths which allow all construction operations, including backfilling, to be fully completed in one working day. The materials on the sides of the excavations, including bedrock, should not be allowed to freeze (Section 5.4).

Stockpiles of materials should be stored and replaced without being disturbed by frost or contaminated by snow or ice. For excavations below foundations, soils should be protected

immediately from frozen conditions using heaters, insulated tarps, straw, or other appropriate methods. Provisions should be arranged to prevent freezing or frost build up within soils or rock situated below the level of any existing structures or services. Frozen soil or shale may heave and settle upon thawing, resulting in damages to structures or services.

6.0 Limitations and Use of Report

6.1 Design Review and Inspections

Testing and inspections should be carried out during construction operations to test concrete and to examine and approve subgrade conditions, placement and compaction of fill materials, granular base courses, and asphaltic concrete.

We should be contacted to review and approve design drawings, prior to tendering or commencing construction, to ensure that all pertinent geotechnical-related factors have been addressed. It is important that onsite geotechnical supervision be provided at this site for excavation and backfill procedures, deleterious soil removal, subgrade inspections and compaction testing.

6.2 Changes in Site and Project Scope

Subsurface conditions can be altered by the passage of sufficient time, natural occurrences, and human intervention.

The design parameters provided, and the engineering advice offered in this report are intended for use by the owner and its retained design consultants. If there are changes to the project scope and development features, these interpretations made of the subsurface information, for geotechnical design parameters, advice, and comments relating to constructability issues and quality control may not be complete for the project. Cambium should be retained to conduct further review to interpret the implications of such changes with respect to this report.

7.0 Closing

Please note that this work program and report are governed by the attached Qualifications and Limitations. If you have questions or comments regarding this document, please do not hesitate to contact the undersigned at (613) 696-6221.

Respectfully submitted,

Cambium Inc.

Signed by:
C9B14AB31D954A0...

Rory Ryan, EIT
Geotechnical Technologist

Signed by:
61E8638C183444F...

Nathan Christie, P.Eng.
Senior Project Manager – Geotechnical

DS

2026-03-18

NC/rr

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8.0 Standard Limitations

Limited Warranty

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

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A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

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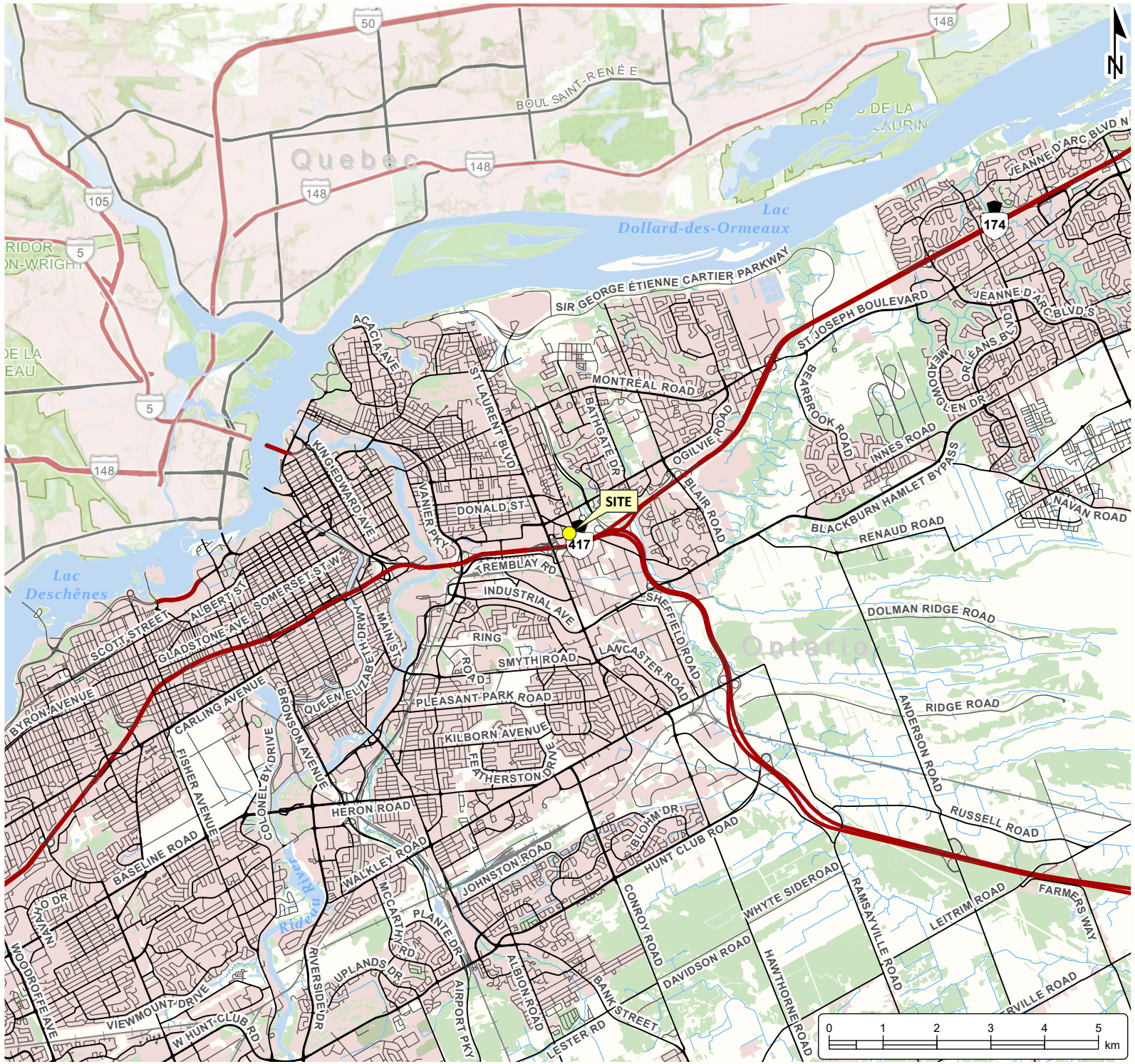
The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.

Appended Figures



GEOTECHNICAL INVESTIGATION

INSIDE EDGE PROPERTIES
1209 Michael Street North
Ottawa, Ontario

LEGEND

- Highway
- Major Road
- Minor Road
- Railway
- Watercourse
- Water Area
- Wooded Area
- Built Up Area

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SITE LOCATION PLAN

Project No.: 23852-001	Date: March 2026
Scale: 1:100,000	Projection: NAD 1983 UTM Zone 18N
Created by: DS / Checked by: NC	Figure: 1

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GEOTECHNICAL INVESTIGATION

INSIDE EDGE PROPERTIES
1209 Michael Street North
Ottawa, Ontario

LEGEND

- Borehole
- Site (approximate)

Notes:
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BOREHOLE LOCATION PLAN

Project No.:	23852-001	Date:	March 2026
Scale:	1:1,000	Projection:	NAD 1983 UTM Zone 18N
Created by:	DS	Checked by:	NC
Figure:	2		

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Appendix A

Borehole Logs

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.25 mASL
UTM: 18T **N:** 5030094.00 **E:** 450538.90

Log of Borehole: BH101-25
Page: 1 of 3
Date Completed: Nov. 3, 2025

Elevation (m)	Depth	Description	Elevation / Depth	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI — 25 50 75 / % Moisture 25 50 75	Shear Strength Cu, kPa nat V. rem V. — 20 40 60 80 / SPT (N) 20 40 60 80	Well Installation	Log Notes
71.2	0	**ASPHALT:** 50 mm	71.20 / 0.05	1A	SS			3.1%			
70.8	0.5	**(SW) SAND and GRAVEL:** some silt; dark grey; non-cohesive, moist, compact [BASE]	71.05 / 0.20	1B	SS	50	24	3.9%	24		
70.2	1	**(SM) SILTY SAND and GRAVEL:** dark brown; non-cohesive; moist, compact [SUBBASE]	70.49 / 0.76	2	SS	17	4	9.9%	4		
69.8	1.5	**(GW) sandy GRAVEL and CLAYEY SILT:** dark brown: cohesive, w~PL, firm [FILL]	69.73 / 1.52								
69.2	2	**(SM) SILTY SAND and GRAVEL:** trace clay; dark brown; non-cohesive, moist, compact [FILL]	69.19 / 2.06	3	SS	67	20	4.5%	20		
68.8	2.5	**Shale:** weathered, brown, very weak, crumbles in fingers	68.86 / 2.39	4	SS	100	50 / 100 mm	4.2%	50		Borehole caving not encountered. Groundwater not observed. Standing water not encountered.
68.2	3	**Shale:** see bedrock core logs for details									
67.8	3.5										
67.2	4										
66.8	4.5										
66.2	5										
65.8	5.5										
65.2	6										
64.8	6.5										
64.2	7										
63.8			63.75 / 7.50								

GRAINSIZE DISTRIBUTION

SAMPLE	GRAVEL	SAND	SILT	CLAY
SS3	37	46	13	4

Logged By: RR
Input By: RR

Client:	Inside Edge Properties	**Project Name:**	1209 Michael Street N, Ottawa	**Log of Borehole:**	BH101-25
Contractor:	George Downing Estate Drilling Ltd	**Method:**	Truck Mounted Hollow Stem Auger	Page:	2 of 3
Project No.:	23852-001	**Elevation:**	71.25 mASL	**Date Completed:**	Nov. 3, 2025
Location:	1209 Michael Street N, Ottawa	**UTM:**	18T **N:** 5030094.00 **E:** 450538.90		

Elevation (m)	Depth	Lithology	Description	Elevation / Depth	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI — 25 50 75 / % Moisture 25 50 75	Shear Strength Cu, kPa (nat V., rem V.) 20 40 60 80 / SPT (N) 20 40 60 80	Well Installation	Log Notes
63.8	7.5		**Shale:** see bedrock core logs for details	63.63								
63.2	8		Borehole terminated @ 7.6 mbgs due to target depth achieved.	7.62								
62.8	8.5											
62.2	9											
61.8	9.5											
61.2	10											
60.8	10.5											
60.2	11											
59.8	11.5											
59.2	12											
58.8	12.5											
58.2	13											
57.8	13.5											
57.2	14											
56.8	14.5											
56.2												

GRAINSIZE DISTRIBUTION	SAMPLE	GRAVEL	SAND	SILT	CLAY
	SS3	37	46	13	4

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties **Project Name:** 1209 Michael Street N, Ottawa **Log of Borehole:** BH101-25

Contractor: George Downing Estate Drilling Ltd **Method:** Truck Mounted Hollow Stem Auger Page: 3 of 3

Project No.: 23852-001 **Ground Elevation:** 71.25 mASL **Date Completed:** Nov. 3, 2025

Location: 1209 Michael Street N, Ottawa **UTM:** 18 T **N:** 5030094.00 **E:** 450538.90

SUBSURFACE PROFILE

Elevation (m)	Depth	Lithology	Description	Elevation / Depth	Core Run	UCS (MPa) 10 50 100 250	Natural Fractures	Lab Notes	Log Notes
68.9	2.4		**Shale:** grey to dark grey, weak to moderate field strength, thinly bedded to laminated, moderately fractured, fair to good quality [BILLINGS FORMATION] fair quality, bedding dipping approximately 25° from horizontal.		Run 1 TCR = **0%** SCR = **0%** RQD = **0%**		2		
68.4	2.9						4		
					Run 2 TCR = **88%** SCR = **68%** RQD = **51%**		2		
67.9	3.4						8		
67.4	3.9						4		
							4		
66.9	4.4						2		
					Run 3 TCR = **95%** SCR = **95%** RQD = **55%**		5		
66.4	4.9						2		
							3		
65.9	5.4						2		
65.4	5.9						1		
			good quality		Run 4 TCR = **100%** SCR = **98%** RQD = **76%**		3		
64.9	6.4						0		
							2		
64.4	6.9					13.7 MPa			
					Run 5 TCR = **96%** SCR = **96%** RQD = **75%**		1		
63.9	7.4			63.63			3		
63.4	7.9		Rock core terminated @ 7.6m due to due to target depth achieved.	7.62					
62.9	8.4								
62.4	8.9								
61.9									

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties
Project Name: 1209 Michael Street N, Ottawa
Log of Borehole: BH102-25
Contractor: George Downing Estate Drilling Ltd
Method: Truck Mounted Hollow Stem Auger
Page: 1 of 3
Project No.: 23852-001
Elevation: 71.42 mASL
Date Completed: Nov. 3, 2025
Location: 1209 Michael Street N, Ottawa
UTM: 18T **N:** 5030098.90 **E:** 450568.21

Elevation (m)	Depth	Description	Elevation / Depth	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI 25 50 75 / % Moisture 25 50 75	Shear Strength Cu, kPa nat V. rem V. 20 40 60 80 / SPT (N) 20 40 60 80	Well Installation	Log Notes
71.4	0	**ASPHALT:** 65 mm	71.36 / 0.06								
70.9	0.5	**(SM) gravelly SILTY SAND:** dark brown; non-cohesive, moist, dense [BASE/SUBBASE]	70.66 / 0.76	1	SS	58	40	3.7%	40		
70.4	1	**(ML) gravelly CLAYEY SILT:** trace sand; dark brown with black staining; cohesive, w~PL, very stiff [FILL]		2	SS	100	15	12.6%	15		
69.9	1.5										
69.4	2			3	SS	100	34	8.8%	34		
		Shale: weathered, brown, very weak, crumbles in fingers	69.34 / 2.08								
68.9	2.5	**Shale:** see bedrock core logs for details	69.03 / 2.39								Borehole caving encountered at 2.1 mbgs. Groundwater not observed. Standing water not encountered.
68.4	3										
67.9	3.5										
67.4	4										
66.9	4.5										
66.4	5										
65.9	5.5										
65.4	6										
64.9	6.5										
64.4	7										
63.9			63.92 / 7.50								

GRAINSIZE DISTRIBUTION	SAMPLE	GRAVEL	SAND	SILT	CLAY
	SS1	25	56	19	

Logged By: RR
Input By: RR

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.42 mASL
UTM: 18T **N:** 5030098.90 **E:** 450568.21

Log of Borehole: BH102-25
Page: 2 of 3
Date Completed: Nov. 3, 2025

SUBSURFACE PROFILE			SAMPLE							
Elevation (m) / Depth	Lithology	Description (Elevation / Depth)	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI — 25 50 75; % Moisture 25 50 75	Shear Strength Cu, kPa (nat V., rem V.) 20 40 60 80; SPT (N) 20 40 60 80	Well Installation	Log Notes
63.9 / 7.5		**Shale:** see bedrock core logs for details								
63.4 / 8										
62.9 / 8.5		62.86								
		Borehole terminated @ 8.6 mbgs due to target depth achieved. 8.56								
62.4 / 9										
61.9 / 9.5										
61.4 / 10										
60.9 / 10.5										
60.4 / 11										
59.9 / 11.5										
59.4 / 12										
58.9 / 12.5										
58.4 / 13										
57.9 / 13.5										
57.4 / 14										
56.9 / 14.5										
56.4										

GRAINSIZE DISTRIBUTION	SAMPLE	GRAVEL	SAND	SILT	CLAY
	SS1	25	56	19	

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties **Project Name:** 1209 Michael Street N, Ottawa **Log of Borehole:** BH102-25

Contractor: George Downing Estate Drilling Ltd **Method:** Truck Mounted Hollow Stem Auger Page: 3 of 3

Project No.: 23852-001 **Ground Elevation:** 71.42 mASL **Date Completed:** Nov. 3, 2025

Location: 1209 Michael Street N, Ottawa **UTM:** 18 T **N:** 5030098.90 **E:** 450568.21

SUBSURFACE PROFILE

Elevation (m) / Depth	Lithology	Description (Elevation / Depth)	Core Run	UCS (MPa) 10 50 100 250	Natural Fractures	Lab Notes	Log Notes
69 — 2.4		**Shale:** grey to dark grey, very weak to moderate field strength, thinly bedded to laminated, very intensely to moderately fractured, fair to good quality [BILLINGS FORMATION]	Run 1 TCR = **67%** SCR = **42%** RQD = **12%**		5		
68.5 — 2.9					6		
68 — 3.4		calcite infilled jointing approximately 30° from horizontal, bedding dipping at approximately 25° from horizontal			5		
67.5 — 3.9					10		
67 — 4.4					10		
66.5 — 4.9		very intensely fractured, very weak field strength	Run 2 TCR = **28%** SCR = **25%** RQD = **0%**		10		
66 — 5.4					10		
65.5 — 5.9					10		
65 — 6.4			Run 3 TCR = **67%** SCR = **47%** RQD = **8%**		10		
64.5 — 6.9					10		
64 — 7.4					10		
63.5 — 7.9			Run 4 TCR = **98%** SCR = **71%** RQD = **16%**	5.4 MPa ●	4		
63 — 8.4		moderately fractured			7		
62.5 — 8.9		62.86 Rock core terminated @ 8.6m due to due to target depth achieved. 8.56			3		
62					3		

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.63 mASL
UTM: 18T **N:** 5030086.70 **E:** 450593.26

Log of Borehole: BH103-25
Page: 1 of 3
Date Completed: Nov. 4, 2025

Elevation (m)	Depth	Description	Elevation / Depth	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI / % Moisture (25 50 75)	Shear Strength Cu, kPa (nat V. rem V.) (20 40 60 80) / SPT (N) (20 40 60 80)	Well Installation
71.6	0	**ASPHALT:** 70 mm	71.55 / 0.08	1A	SS			4%		Cap
71.1	0.5	**(SW) SAND and GRAVEL:** some silt; grey; non-cohesive, moist, compact [BASE]	71.40 / 0.23	1B	SS	46	29	4.2%	29	
70.6	1	**(SM) SILTY SAND and GRAVEL:** brown with cobbles; non-cohesive, moist, compact [SUBBASE]	70.87 / 0.76	2	SS	58	35	13.1%	35	
70.1	1.5	**(GP) GRAVEL and CLAYEY SILT:** some sand; dark brown with concrete fill debris; cohesive, w~pl, hard [FILL]	70.11 / 1.52	3	SS	100	50 / 100 mm	12.4%	50	
69.6	2	**(SC) CLAYEY SAND:** with silt; some gravel; dark brown with black staining; slightly cohesive, moist/w~PL, very dense/hard	69.70 / 1.93							
69.1	2.5	**Shale:** weathered, very weak	69.34 / 2.29							Bentonite Plug
68.6	3	**Shale:** see bedrock core logs for details								Riser
68.1	3.5									
67.6	4									
67.1	4.5									
66.6	5									
66.1	5.5									
65.6	6									Sand Pack
65.1	6.5									PVC Screen
64.6	7									
64.1			64.13 / 7.50							

Borehole caving, groundwater, and standing water not measured due to monitoring well install inside hollow steam augers.

Groundwater measured at 2.15 mbgs on Nov. 26, 2025.

GRAINSIZE DISTRIBUTION

SAMPLE	GRAVEL	SAND	SILT	CLAY
SS1B	43	42	15	

Logged By: RR
Input By: RR

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.63 mASL
UTM: 18T **N:** 5030086.70 **E:** 450593.26

Log of Borehole: BH103-25
Page: 2 of 3
Date Completed: Nov. 4, 2025

Elevation (m)	Depth	Lithology	Description	Elevation / Depth
64.1	7.5		**Shale:** see bedrock core logs for details	
63.6	8			
63.1	8.5			63.04
			Borehole terminated @ 8.6 mbgs due to target depth achieved.	8.59
62.6	9			
62.1	9.5			
61.6	10			
61.1	10.5			
60.6	11			
60.1	11.5			
59.6	12			
59.1	12.5			
58.6	13			
58.1	13.5			
57.6	14			
57.1	14.5			
56.6				

SAMPLE: Number; Type; % Recovery; SPT (N)

Atterberg Limits (%) LL PL PI — 25 50 75
% Moisture — 25 50 75

Shear Strength Cu, kPa (nat V., rem V.) — 20 40 60 80
SPT (N) — 20 40 60 80

Well Installation: Sand Pack; PVC Screen; Cap

Log Notes

GRAINSIZE DISTRIBUTION	SAMPLE	GRAVEL	SAND	SILT	CLAY
	SS1B	43	42	15	

Logged By: RR
Input By: RR

CAMBIUM

Client: Inside Edge Properties **Project Name:** 1209 Michael Street N, Ottawa **Log of Borehole:** BH103-25

Contractor: George Downing Estate Drilling Ltd **Method:** Truck Mounted Hollow Stem Auger Page: 3 of 3

Project No.: 23852-001 **Ground Elevation:** 71.63 mASL **Date Completed:** Nov. 4, 2025

Location: 1209 Michael Street N, Ottawa **UTM:** 18 T **N:** 5030086.70 **E:** 450593.26

SUBSURFACE PROFILE							
Elevation (m) / Depth	Lithology	Description (Elevation / Depth)	Core Run	UCS (MPa) 10 50 100 250	Natural Fractures	Lab Notes	Log Notes
69.3 / 2.3		**Shale:** grey to dark grey, very weak to moderate field strength, thinly bedded to laminated, very intensely to moderately fractured, very poor to poor quality [BILLINGS FORMATION]			10		
68.8 / 2.8		50 mm quartz vein, 100 mm limestone core, intensely fractured	Run 1 TCR = **17%** SCR = **9%** RQD = **0%**		10		
					10		
68.3 / 3.3					10		
					10		
67.8 / 3.8		50 mm clay seam at 4.0 mbgs			10		
67.3 / 4.3					10		
			Run 2 TCR = **49%** SCR = **8%** RQD = **0%**		10		
66.8 / 4.8					10		
					10		
66.3 / 5.3					4		
					4		
65.8 / 5.8					6		
		bedding dipping at approximately 25° from horizontal	Run 3 TCR = **85%** SCR = **70%** RQD = **25%**		10		
65.3 / 6.3					7		
					9		
64.8 / 6.8					10		
64.3 / 7.3					2		
		intensely fractured at 7.3 mbgs and 8.2 mbgs	Run 4 TCR = **81%** SCR = **57%** RQD = **46%**		10		
63.8 / 7.8					7		
				8.0 MPa			
63.3 / 8.3		63.04					
		Rock core terminated @ 8.6m (8.59) due to due to target depth achieved.					
62.8 / 8.8							
62.3							

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.55 mASL
UTM: 18T **N:** 5030115.72 **E:** 450597.63

Log of Borehole: BH104-25
Page: 1 of 3
Date Completed: Nov. 4, 2025

Elevation (m)	Depth	Description	Elevation / Depth	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI — 25 50 75 / % Moisture 25 50 75	Shear Strength Cu, kPa (nat V. rem V.) 20 40 60 80 / SPT (N) 20 40 60 80	Well Installation	Log Notes
71.6	0	**ASPHALT:** 70 mm	71.47 / 0.08	1A	SS			5.8%			
71	0.5	**(SM) SILTY SAND and GRAVEL:** brown; non-cohesive, moist, compact [BASE/SUBASE]	71.37 / 0.18	1B	SS	50	12	14%	12		
70.6	1	**(SC) CLAYEY SAND:** with silt; some gravel; dark brown with black staining; cohesive, w~PL, stiff increase in gravel content		2	SS	71	20	13.2%	20		
70	1.5	**Shale:** weathered, brown, very weak, crumbles in fingers	70.03 / 1.52	3	SS	100	50 /150 mm	7.4%	50		
69.6	2										
69	2.5	**Shale:** see bedrock core logs for details	69.16 / 2.39	4	SS	100	50 / 100 mm	7.4%	50		Borehole caving not encountered. Groundwater not observed. Standing water not encountered.
68.6	3										
68	3.5										
67.6	4										
67	4.5										
66.6	5										
66	5.5										
65.6	6										
65	6.5										
64.6	7										
64			64.05 / 7.50								

GRAINSIZE DISTRIBUTION: SAMPLE | GRAVEL | SAND | SILT | CLAY

Logged By: RR
Input By: RR

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.55 mASL
UTM: 18T **N:** 5030115.72 **E:** 450597.63

Log of Borehole: BH104-25
Page: 2 of 3
Date Completed: Nov. 4, 2025

SUBSURFACE PROFILE			SAMPLE							
Elevation (m) / Depth	Lithology	Description (Elevation / Depth)	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI — 25 50 75; % Moisture 25 50 75	Shear Strength Cu, kPa (nat V., rem V.) 20 40 60 80; SPT (N) 20 40 60 80	Well Installation	Log Notes
64 / 7.5		**Shale:** see bedrock core logs for details (63.68)								
63.6 / 8		Borehole terminated @ 7.9 mbgs due to target depth achieved. (7.87)								
63 / 8.5										
62.6 / 9										
62 / 9.5										
61.6 / 10										
61 / 10.5										
60.6 / 11										
60 / 11.5										
59.6 / 12										
59 / 12.5										
58.6 / 13										
58 / 13.5										
57.6 / 14										
57 / 14.5										
56.6										

GRAINSIZE DISTRIBUTION: SAMPLE | GRAVEL | SAND | SILT | CLAY

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties **Project Name:** 1209 Michael Street N, Ottawa **Log of Borehole:** BH104-25

Contractor: George Downing Estate Drilling Ltd **Method:** Truck Mounted Hollow Stem Auger Page: 3 of 3

Project No.: 23852-001 **Ground Elevation:** 71.55 mASL **Date Completed:** Nov. 4, 2025

Location: 1209 Michael Street N, Ottawa **UTM:** 18 T **N:** 5030115.72 **E:** 450597.63

SUBSURFACE PROFILE

Elevation (m)	Depth	Lithology	Description	Elevation / Depth	Core Run	UCS (MPa) 10 50 100 250	Natural Fractures	Lab Notes	Log Notes
68.9	2.7		**Shale:** grey to dark grey, very weak to moderate field strength, thinly bedded to laminated, very intensely to moderately fractured, very poor to fair quality [BILLINGS FORMATION]		Run 1 TCR = **65%** SCR = **53%** RQD = **0%**		10		
68.4	3.2						6		
							10		
67.9	3.7						7		
			bedding dipping at approximately 25° from horizontal, joint measuring approximately 60° from horizontal with calcite infilling				10		
67.4	4.2						1		
66.9	4.7				Run 2 TCR = **98%** SCR = **97%** RQD = **67%**		4		
			bedding measuring 45° from horizontal with calcite infilling, fair quality				4		
66.4	5.2						4		
							1		
65.9	5.7						0		
65.4	6.2				Run 3 TCR = **80%** SCR = **79%** RQD = **75%**	18.6 MPa ●	4		
							3		
64.9	6.7						2		
							5		
64.4	7.2				Run 4 TCR = **97%** SCR = **97%** RQD = **73%**		1		
63.9	7.7			63.68			3		
			Rock core terminated @ 7.9m due to due to target depth achieved.	7.87					
63.4	8.2								
62.9	8.7								
62.4	9.2								
61.9									

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties
Project Name: 1209 Michael Street N, Ottawa
Log of Borehole: BH105-25
Contractor: George Downing Estate Drilling Ltd
Method: Truck Mounted Hollow Stem Auger
Page: 1 of 3
Project No.: 23852-001
Elevation: 71.47 mASL
Date Completed: Nov. 4, 2025
Location: 1209 Michael Street N, Ottawa
UTM: 18T **N:** 5030120.42 **E:** 450630.76

Elevation (m)	Depth	Description	Elevation / Depth	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI — 25 50 75 / % Moisture 25 50 75	Shear Strength Cu, kPa (nat V. rem V.) 20 40 60 80 / SPT (N) 20 40 60 80	Well Installation	Log Notes
71.5	0	**ASPHALT:** 25 mm	71.44 / 0.03	1A	SS			8.2%			
71	0.5	**(SM) SILTY SAND and GRAVEL:** dark brown; non-cohesive, moist	71.42 / 0.05	1B	SS	58	12	14.6%	12		
		ASPHALT: 35 mm	71.38 / 0.09								
70.5	1	**(SW) SAND and GRAVEL:** some silt; brown; non-cohesive, moist, compact [BASE/SUBBASE]	71.27 / 0.20	2	SS	75	8	13.3%	8		
70	1.5	**(SC) CLAYEY SAND:** with silt; some gravel; black; cohesive, w~PL, firm	69.95 / 1.52								
		Shale: weathered, brown, very weak, crumbles in fingers		3	SS	75	35	8.9%	35		
69.5	2										
69	2.5			4	SS	100	48	4.9%	48		Borehole caving not encountered. Groundwater not observed. Standing water not encountered.
68.5	3		68.42 / 3.05								
		Shale: see bedrock core logs for details									
68	3.5										
67.5	4										
67	4.5										
66.5	5										
66	5.5										
65.5	6										
65	6.5										
64.5	7										
64			63.97 / 7.50								

GRAINSIZE DISTRIBUTION	SAMPLE	GRAVEL	SAND	SILT	CLAY
	SS2	8	45	30	17

Logged By: RR
Input By: RR

CAMBIUM

Client: Inside Edge Properties
Contractor: George Downing Estate Drilling Ltd
Project No.: 23852-001
Location: 1209 Michael Street N, Ottawa

Project Name: 1209 Michael Street N, Ottawa
Method: Truck Mounted Hollow Stem Auger
Elevation: 71.47 mASL
UTM: 18T **N:** 5030120.42 **E:** 450630.76

Log of Borehole: BH105-25
Page: 2 of 3
Date Completed: Nov. 4, 2025

SUBSURFACE PROFILE			SAMPLE							
Elevation (m) / Depth	Lithology	Description (Elevation / Depth)	Number	Type	% Recovery	SPT (N)	Atterberg Limits (%) LL PL PI; 25 50 75; % Moisture 25 50 75	Shear Strength Cu, kPa (nat V., rem V.); 20 40 60 80; SPT (N) 20 40 60 80	Well Installation	Log Notes
64 / 7.5		**Shale:** see bedrock core logs for details (63.62 / 7.85)								
63.5 / 8		Borehole terminated @ 7.8 mbgs due to target depth achieved.								
63 / 8.5										
62.5 / 9										
62 / 9.5										
61.5 / 10										
61 / 10.5										
60.5 / 11										
60 / 11.5										
59.5 / 12										
59 / 12.5										
58.5 / 13										
58 / 13.5										
57.5 / 14										
57 / 14.5										
56.5										

GRAINSIZE DISTRIBUTION	SAMPLE	GRAVEL	SAND	SILT	CLAY
	SS2	8	45	30	17

Logged By: RR **Input By:** RR

CAMBIUM

Client: Inside Edge Properties
Project Name: 1209 Michael Street N, Ottawa
Log of Borehole: BH105-25
Contractor: George Downing Estate Drilling Ltd
Method: Truck Mounted Hollow Stem Auger
Page: 3 of 3
Project No.: 23852-001
Ground Elevation: 71.47 mASL
Date Completed: Nov. 4, 2025
Location: 1209 Michael Street N, Ottawa
UTM: 18 T **N:** 5030120.42 **E:** 450630.76

SUBSURFACE PROFILE

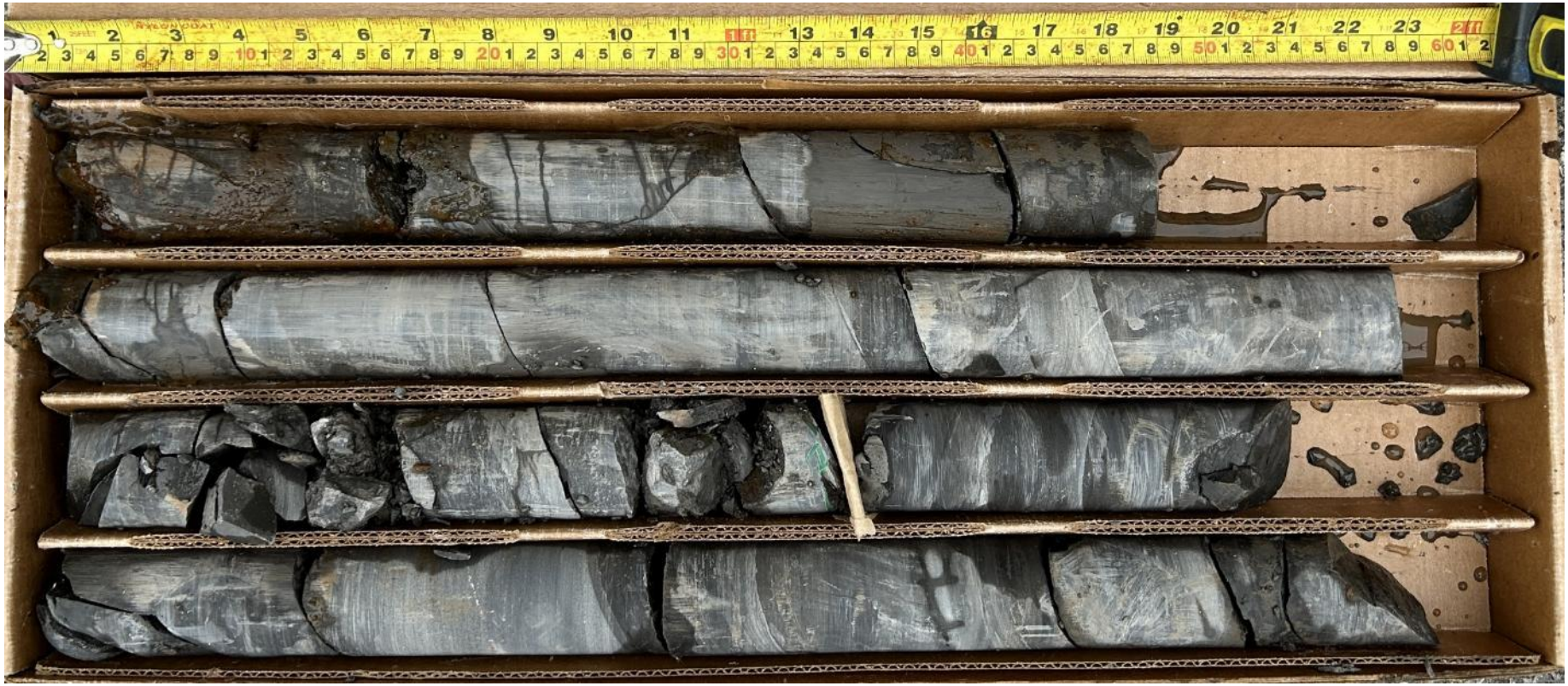
Elevation (m)	Depth	Lithology	Description	Core Run	UCS (MPa) 10 50 100 250	Natural Fractures	Lab Notes	Log Notes
68.3	3.1		**Shale:** grey to dark grey, very weak to moderate field strength, thinly bedded to laminated, intensely to moderately fractured, very poor to fair quality [BILLINGS FORMATION]	Run 1 TCR = **88%** SCR = **75%** RQD = **60%**		3		
67.8	3.6					4		
						1		
67.3	4.1		bedding dipping at approximately 30° from horizontal			6		
				Run 2 TCR = **78%** SCR = **50%** RQD = **25%**		9		
66.8	4.6					4		
66.3	5.1					8		
			intensely fractured			10		
65.8	5.6				7.7 MPa	3		
						4		
65.3	6.1		calcite veins throughout	Run 3 TCR = **95%** SCR = **83%** RQD = **25%**		6		
			very weak field strength			4		
64.8	6.6					3		
64.3	7.1			Run 4 TCR = **88%** SCR = **77%** RQD = **0%**		7		
63.8	7.6		63.62			7		
			Rock core terminated @ 7.8m due to due to target depth achieved. 7.85					
63.3	8.1							
62.8	8.6							
62.3	9.1							
61.8	9.6							
61.3								

Logged By: RR
Input By: RR

Appendix B

Rock Core Photographs

BH101-25
Cored length of 2.57 to 4.75 mbgs
Core Box 1 of 3



CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-03
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 101-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B1-1

BH101-25
Cored length of 4.75 to 7.01 mbgs
Core Box 2 of 3

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-03
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 101-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B1-2

BH101-25
Cored length of 7.01 to 7.62 mbgs
Core Box 3 of 3

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-03
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 101-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B1-3

BH102-25
Cored length of 2.39 to 6.22 mbgs
Core Box 1 of 2

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-03
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 102-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B2-1

BH102-25
Cored length of 6.22 to 8.56 mbgs
Core Box 2 of 2

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-03
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 102-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B2-2

BH103-25
Cored length of 2.23 to 7.09 mbgs
Core Box 1 of 2

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 103-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B3-1

BH103-25
Cored length of 7.09 to 8.59 mbgs
Core Box 2 of 2

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 103-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B3-2

BH104-25
Cored length 2.69 to 5.00 mbgs
Core Box 1 of 3

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 104-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B4-1

BH104-25
Cored length 5.00 to 7.11 mbgs
Core Box 2 of 3

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

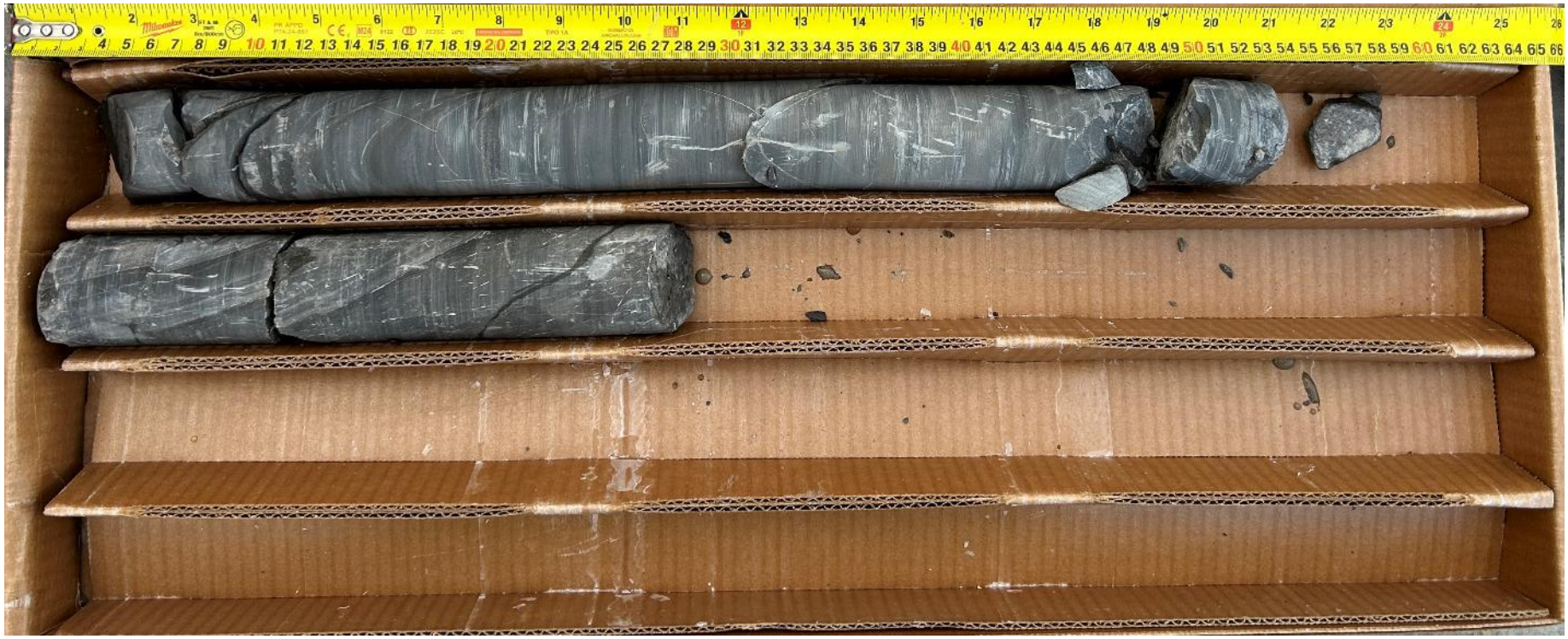
CAMBIUM

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 104-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B4-2

BH104-25
Cored length 7.11 to 7.87 mbgs
Core Box 3 of 3



CLIENT
Inside Edge Properties

PROJECT
Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 104-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B4-3

BH105-25
Cored length 3.15 to 5.69 mbgs
Core Box 1 of 2

CLIENT	Inside Edge Properties
PROJECT	Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

CAMBIUM

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 105-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B5-1

BH105-25
Cored length 5.69 to 7.85 mbgs
Core Box 2 of 2

CLIENT
Inside Edge Properties

PROJECT
Geotechnical Investigation – 1209 Micheal Street N, Ottawa, ON

YYYY-MM-DD	2025-11-04
PREPARED	RR
DESIGN	
REVIEW	NC
APPROVED	

TITLE
BOREHOLE 105-25
ROCK CORE PHOTOGRAPHS

PROJECT No.	PHASE	Rev.	FIGURE
23852	001		B5-2

Appendix C

Laboratory Testing Results

Moisture Content

Project Number: 23852-001
Project Name: 1209 Michael Street N, Ottawa
Client: Inside Edge Properties
Date Taken: 2025-11-03

Lab Number: S-25-1705
Date Tested: 2025-11-10
Tested By: I. Meldrum and T. Uddin

Borehole Number	Sample Number	Sample Depth (m)	Water Weight (g)	Water Content (%)	Additional Observations
101	1A	0.15-0.20	4.7	3.1	NR
101	1B	0.20-0.76	6.3	3.9	NR
101	2	0.76-1.37	18.7	9.9	NR
101	3	1.52-2.13	20.6	4.5	NR
101	4	2.29-2.59	5.8	4.2	NR
102	1	0.15-0.76	14.0	3.7	NR
102	2	0.76-1.37	27.9	12.6	NR
102	3	1.52-2.13	19.3	8.8	NR
103	1A	0.08-0.23	6.9	4.0	NR
103	1B	0.23-0.76	11.8	4.2	NR
103	2	0.76-1.37	25.7	13.1	NR
103	3	1.52-1.93	27.4	12.4	NR
104	1A	0.08-0.18	3.9	5.8	NR
104	1B	0.18-0.76	23.4	14.0	NR
104	2	0.76-1.37	28.4	13.2	NR
104	3	1.52-1.68	10.4	7.4	NR
104	4	2.29-2.39	10.5	7.4	NR,1
105	1A	0.10-0.20	6.3	4.9	NR
105	1B	0.20-0.76	29.2	14.6	NR
105	2	0.76-1.37	88.6	13.3	NR
105	3	1.52-2.13	12.9	8.9	NR
105	4	2.29-2.59	12.4	8.2	NR

1 – Contains organics
2 – Contains rubble
3 – Hydrocarbon Odour
4 – Unknown Chemical Odour
5 – Saturated – free water visible
6 – Very moist – near optimum moisture content
7 – Moist – below optimum moisture
8 – Dry – dry texture – powdery
9 – Very small – caution may not be representative
10 – Hold sample for gradation analysis

Grain Size Distribution Chart

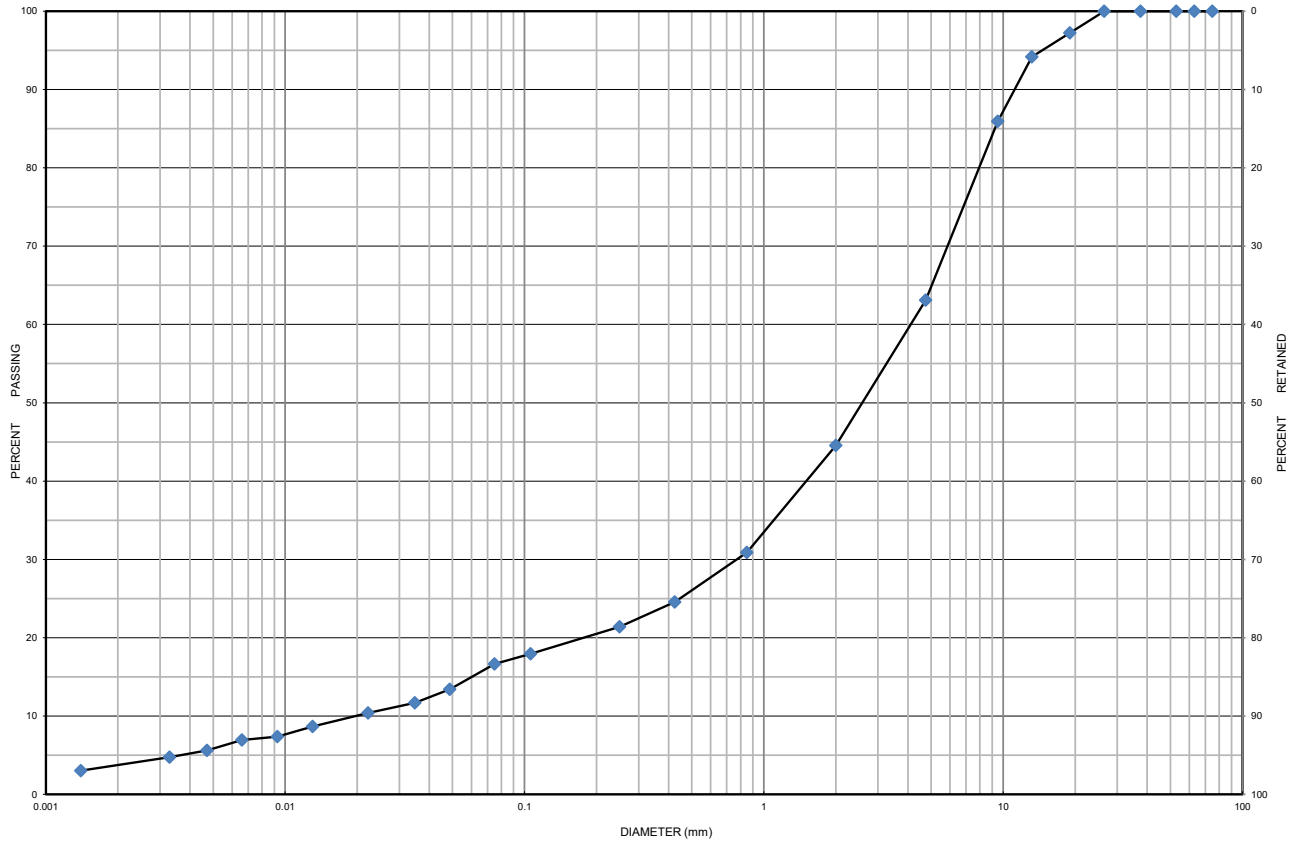
Project Number: *23852-001* **Client:** *Inside Edge Properties*

Project Name: *1209 Michael Street N, Ottawa*

Sample Date: *November 3 & 4, 2025* **Sampled By:** *Rory Ryan - Cambium Inc.*

Location: *BH 101-25 SS 3* **Depth:** *1.5 m to 2.1 m* **Lab Sample No:** *S-25-1706*

UNIFIED SOIL CLASSIFICATION SYSTEM					
CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDERS
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
BH 101-25	SS 3	1.5 m to 2.1 m	37	46	13	4	4.5

Description	Classification	D_{60}	D_{30}	D_{10}	C_u	C_c
Silty Sand and Gravel trace Clay	SM	4.115	0.780	0.020	205.75	7.39

Additional information available upon request

Issued By: _____ *Date Issued:* *November 13, 2025*

(Senior Project Manager)

Cambium Inc. (Laboratory)
866.217.7900 | cambium-inc.com
194 Sophia St. | Peterborough | ON | K9H 1E5

Grain Size Distribution Chart

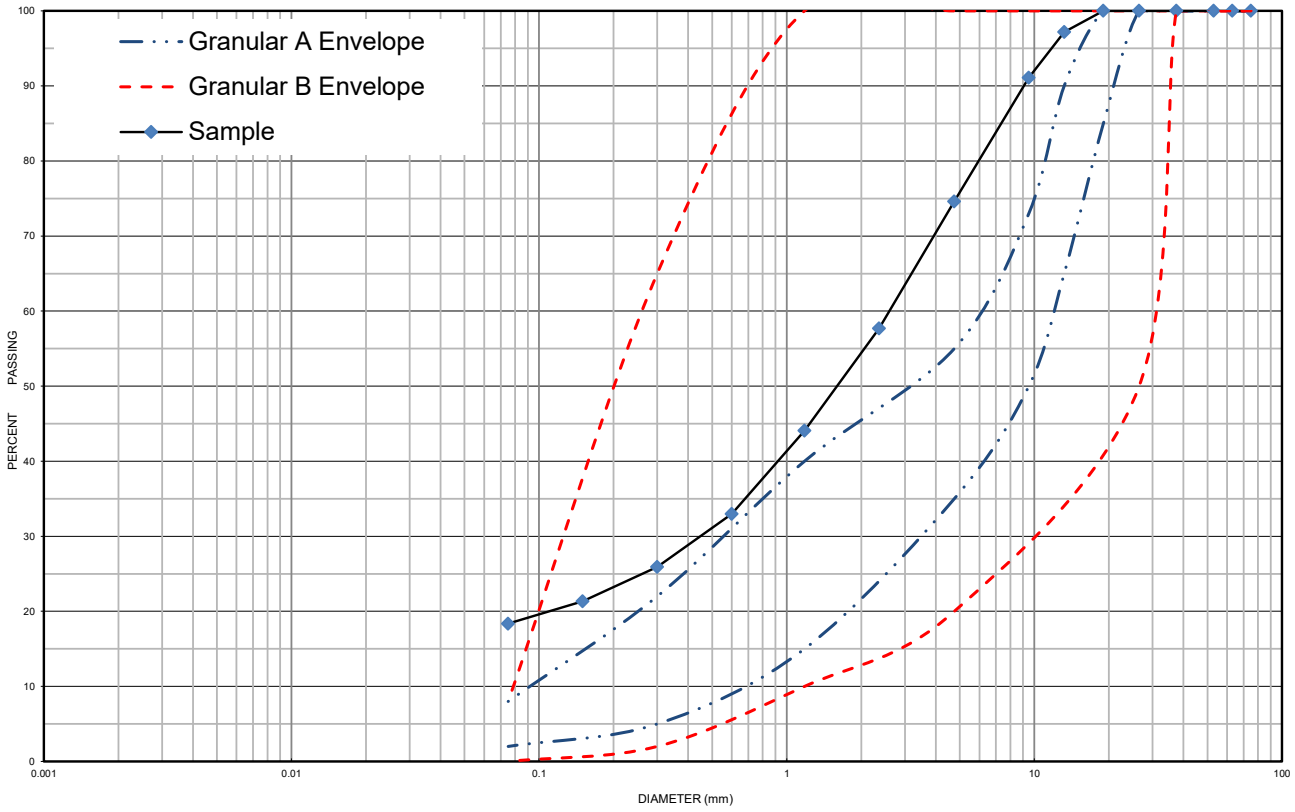
Project Number: *23852-001* **Client:** *Inside Edge Properties*

Project Name: *1209 Michael Street N, Ottawa*

Sample Date: *November 3 & 4, 2025* **Sampled By:** *Rory Ryan - Cambium Inc.*

Location: *BH 102-25 SS 1* **Depth:** *0.2 m to 0.8 m* **Lab Sample No:** *S-25-1707*

UNIFIED SOIL CLASSIFICATION SYSTEM					
CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDERS
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
BH 102-25	SS 1	0.2 m to 0.8 m	25	56	19		3.7

Description	Classification	D_{60}	D_{30}	D_{10}	C_u	C_c
Gravelly Silty Sand	SM	2.600	0.450	-	-	-

Additional information available upon request

Issued By: _____ *Date Issued:* *November 13, 2025*

(Senior Project Manager)

Cambium Inc. (Laboratory)
866.217.7900 | cambium-inc.com
194 Sophia St. | Peterborough | ON | K9H 1E5

Grain Size Distribution Chart

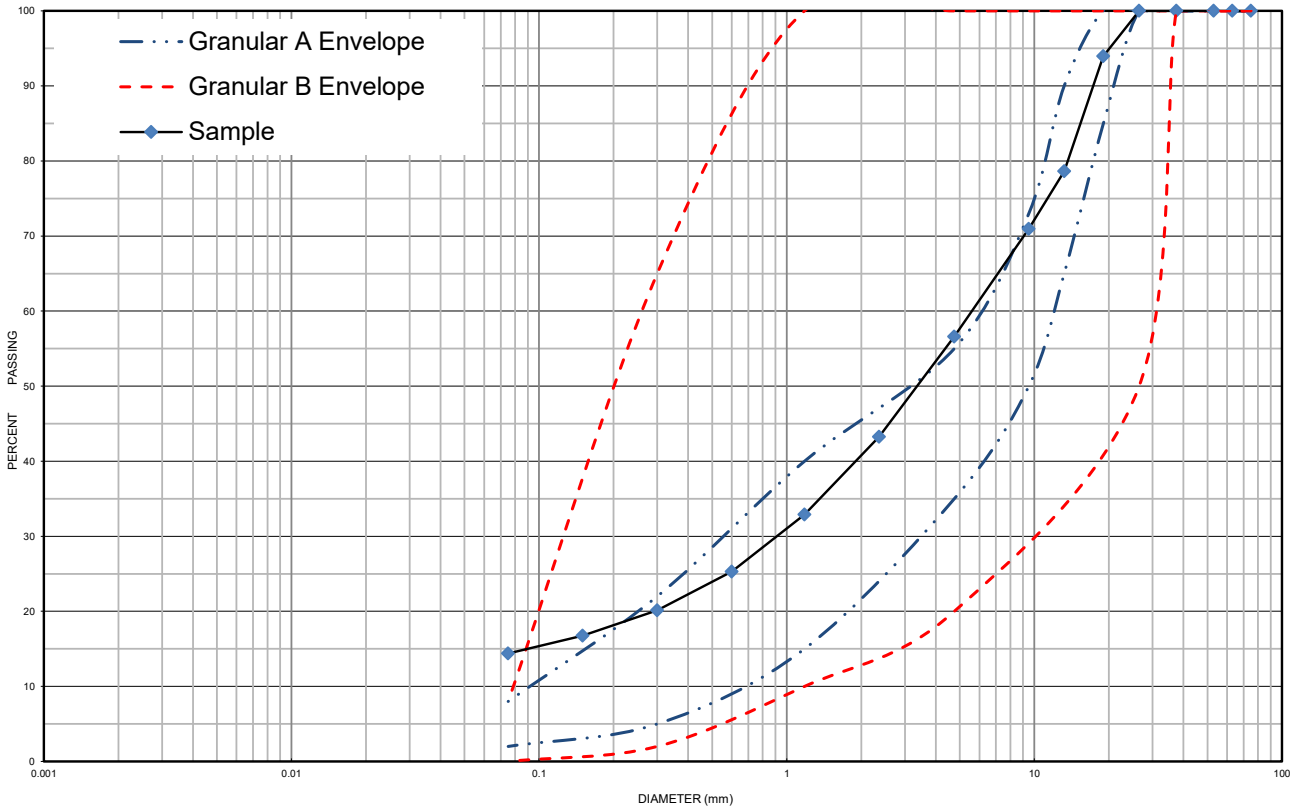
Project Number: *23852-001* **Client:** *Inside Edge Properties*

Project Name: *1209 Michael Street N, Ottawa*

Sample Date: *November 3 & 4, 2025* **Sampled By:** *Rory Ryan - Cambium Inc.*

Location: *BH 103-25 SS 1B* **Depth:** *0.2 m to 0.8 m* **Lab Sample No:** *S-25-1708*

UNIFIED SOIL CLASSIFICATION SYSTEM					
CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDERS
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
BH 103-25	SS 1B	0.2 m to 0.8 m	43	42	15		4.2

Description	Classification	D_{60}	D_{30}	D_{10}	C_u	C_c
Silty Gravel and Sand	SM	5.600	0.900	-	-	-

Additional information available upon request

Issued By: _____ *Date Issued:* *November 13, 2025*

(Senior Project Manager)

Cambium Inc. (Laboratory)
866.217.7900 | cambium-inc.com
194 Sophia St. | Peterborough | ON | K9H 1E5

Grain Size Distribution Chart

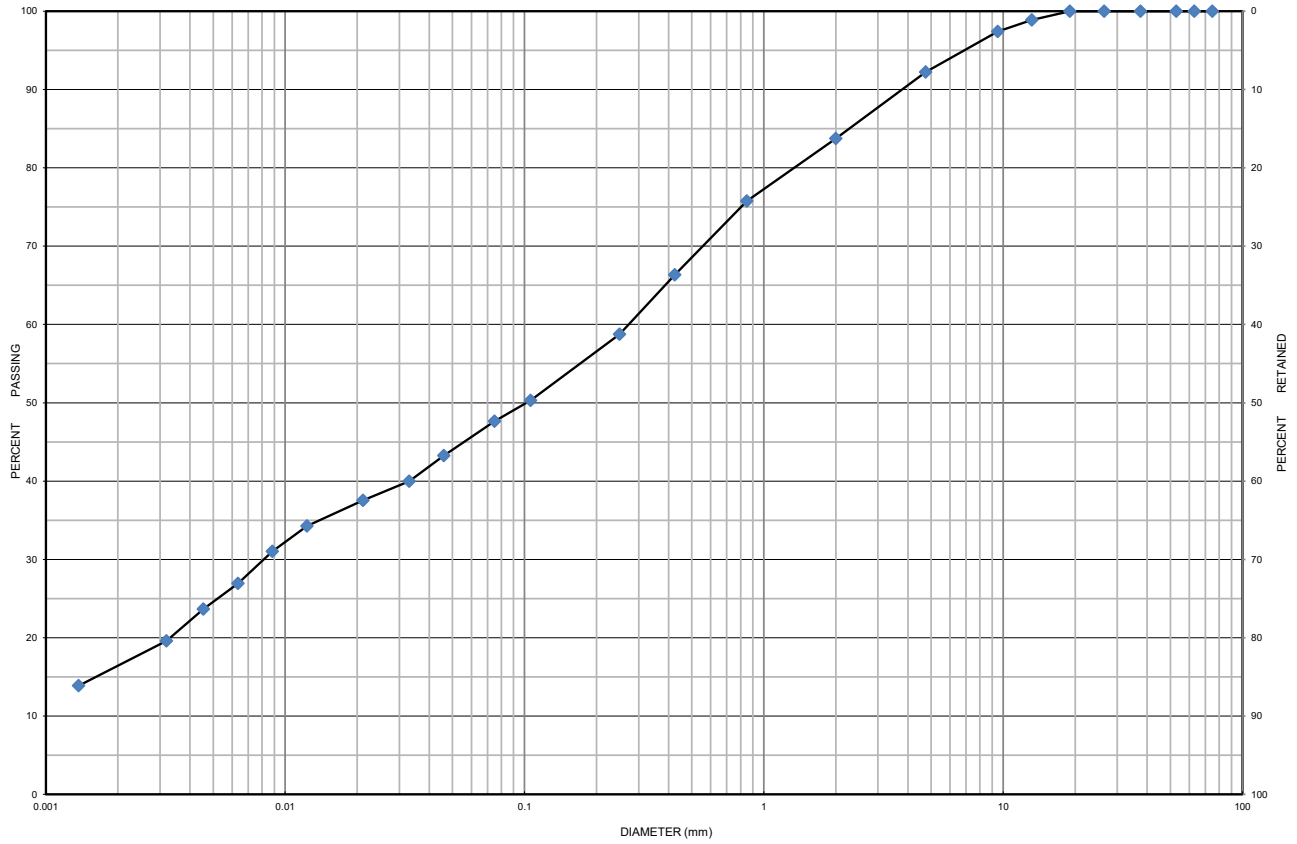
Project Number: *23852-001* **Client:** *Inside Edge Properties*

Project Name: *1209 Michael Street N, Ottawa*

Sample Date: *November 3 & 4, 2025* **Sampled By:** *Rory Ryan - Cambium Inc.*

Location: *BH 105-25 SS 2* **Depth:** *0.8 m to 1.4 m* **Lab Sample No:** *S-25-1709*

UNIFIED SOIL CLASSIFICATION SYSTEM					
CLAY & SILT (<0.075 mm)	SAND (<4.75 mm to 0.075 mm)			GRAVEL (>4.75 mm)	
	FINE	MEDIUM	COARSE	FINE	COARSE



MIT SOIL CLASSIFICATION SYSTEM								
CLAY	SILT	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	BOULDERS
		SAND			GRAVEL			

Borehole No.	Sample No.	Depth	Gravel	Sand	Silt	Clay	Moisture
BH 105-25	SS 2	0.8 m to 1.4 m	8	45	30	17	13.3

Description	Classification	D_{60}	D_{30}	D_{10}	C_u	C_c
Silty Clayey Sand some Gravel	SM	0.2650	0.0082	-	-	-

Additional information available upon request

Issued By: _____ *Date Issued:* *November 13, 2025*

(Senior Project Manager)

Cambium Inc. (Laboratory)
866.217.7900 | cambium-inc.com
194 Sophia St. | Peterborough | ON | K9H 1E5

Appendix D

Laboratory Certificate of Analysis for Corrosivity Testing

PARACEL LABORATORIES LTD.

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www.paracellabs.com

Certificate of Analysis

Cambium Inc. (Ottawa)
102-343 Preston Street
Ottawa, ON K7K 7G3
Attn: Nathan Christie

Client PO:
Project: 23852-001
Custody: 78385

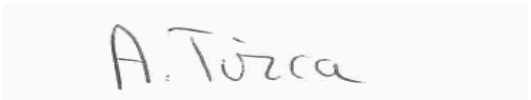
Report Date: 14-Nov-2025
Order Date: 10-Nov-2025

Order #: 2546039

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2546039-01	BH105-25_0.75-1.5
2546039-02	BH102-25_1.5-2.0

Approved By:



Adriana Tirca, B.Eng (Chem)
Supervisor

PARACEL LABORATORIES LTD.

Order #: 2546039

Certificate of Analysis

Report Date: 14-Nov-2025

Client: **Cambium Inc. (Ottawa)**

Order Date: 10-Nov-2025

Client PO:

Project Description: 23852-001

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Anions	EPA 300.1 - IC, water extraction	12-Nov-25	13-Nov-25
pH, soil	MOE E3137 - probe @25 °C, CaCl2 ext	12-Nov-25	12-Nov-25
Resistivity	EPA 120.1 - probe, water extraction	11-Nov-25	11-Nov-25
Solids, %	CWS Tier 1 - Gravimetric	10-Nov-25	11-Nov-25

PARACEL LABORATORIES LTD.

Order #: 2546039

Certificate of Analysis

Report Date: 14-Nov-2025

Client: **Cambium Inc. (Ottawa)**

Order Date: 10-Nov-2025

Client PO:

Project Description: 23852-001

	Client ID:	BH105-25_0.75-1.5	BH102-25_1.5-2.0	-	-		
	Sample Date:	04-Nov-25 11:00	03-Nov-25 11:30	-	-	-	-
	Sample ID:	2546039-01	2546039-02	-	-		
	Matrix:	Soil	Soil	-	-		
	MDL/Units						
Physical Characteristics							
% Solids	0.1 % by Wt.	86.7	91.5	-	-	-	-
General Inorganics							
pH	0.05 pH Units	7.58	7.82	-	-	-	-
Resistivity	0.1 Ohm.m	5.6	6.7	-	-	-	-
Anions							
Chloride	10 ug/g	889	670	-	-	-	-
Sulphate	10 ug/g	84	212	-	-	-	-

PARACEL LABORATORIES LTD.

Order #: 2546039

Certificate of Analysis

Report Date: 14-Nov-2025

Client: **Cambium Inc. (Ottawa)**

Order Date: 10-Nov-2025

Client PO:

Project Description: 23852-001

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions								
Chloride	ND	10	ug/g					
Sulphate	ND	10	ug/g					
General Inorganics								
Resistivity	ND	0.1	Ohm.m					

PARACEL LABORATORIES LTD.

Order #: 2546039

Certificate of Analysis

Report Date: 14-Nov-2025

Client: **Cambium Inc. (Ottawa)**

Order Date: 10-Nov-2025

Client PO:

Project Description: 23852-001

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	ND	10	ug/g	ND			NC	35	
Sulphate	ND	10	ug/g	ND			NC	35	
General Inorganics									
pH	8.84	0.05	pH Units	8.79			0.6	2.3	
Resistivity	7.98	0.1	Ohm.m	8.02			0.5	20	
Physical Characteristics									
% Solids	90.8	0.1	% by Wt.	90.9			0.1	25	

PARACEL LABORATORIES LTD.

Order #: 2546039

Certificate of Analysis

Report Date: 14-Nov-2025

Client: **Cambium Inc. (Ottawa)**

Order Date: 10-Nov-2025

Client PO:

Project Description: 23852-001

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	101	10	ug/g	ND	101	82-118			
Sulphate	98.7	10	ug/g	ND	98.7	80-120			

PARACEL LABORATORIES LTD.

Order #: 2546039

Certificate of Analysis

Report Date: 14-Nov-2025

Client: **Cambium Inc. (Ottawa)**

Order Date: 10-Nov-2025

Client PO:

Project Description: 23852-001

Qualifier Notes:

Login Qualifiers :

Sample - One or more parameter received or added past hold time. Directed by client to proceed with analysis - Redox Potential

Applies to Samples: BH105-25_0.75-1.5, BH102-25_1.5-2.0

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unlesss otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

PARACEL LABORATORIES LTD.

Paracel ID: 2546039

Paracel Order Number (Lab Use Only): 2546039

Chain Of Custody (Lab Use Only) № 78385

Client Name: Cambium Inc	Project Ref: # 23852-001
Contact Name: Nathan Christie	Quote #:
Address: 301 Moodie Drive, Suite 100, Ottawa, ON	PO #:
Telephone: 613-808-4182	E-mail: nathan.christie@cambium-inc.com; james.sullivan@cambium-inc.com

Page 1 of 1

Turnaround Time

☐ 1 day ☐ 3 day ☐ 2 day ☒ Regular

Date Required:

☐ REG 153/04 ☐ REG 406/19

☐ Table 1 ☐ Agri/Other ☐ Med/Fine
☐ Table 2 ☐ Res/Park ☐ Coarse
☐ Table 3 ☐ Ind/Comm
☐ Table ___
For RSC: ☐ Yes ☐ No

Other Regulation

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analysis

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Field Filtered	Sample Taken: Date	Sample Taken: Time	Corrosivity	Sulphides	Redox
1	BH105-25_0.75-1.5	S		3		Nov 4, 2025	11:00 AM	X	X	X
2	BH102-25_1.5-2.0	S		3		Nov 3, 2025	11:30 AM	X	X	X
3										
4										
5										
6										
7										
8										
9										
10										

Comments:

Method of Delivery: Drop Box

Relinquished By (Sign):	Received at Depot:	Received at Lab: LTJ	Verified By: LTJ
Relinquished By (Print): Rory Ryan	Date/Time: Nov 10 25 8:30	Date/Time: 10/11/25; 10:35	Date/Time: 10/11/25; 13:58
Date/Time: Nov. 10, 2025 8:00 AM	Temperature: 4.2 °C	Temperature: 4.0 °C	pH Verified: ☐ By:

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Subcontracted Analysis

Cambium Inc. (Ottawa)
102-343 Preston Street
Ottawa, ON K7K 7G3
Attn: Nathan Christie

Paracel Report No.	**2546039**
Client Project(s):	**23852-001**
Client PO:	
Reference:	**SO Cambium - ENV**
CoC Number:	**78385**

Order Date:	10-Nov-25
Report Date:	14-Nov-25

Sample(s) from this project were subcontracted for the listed parameters. A copy of the subcontractor's report is attached

Paracel ID	Client ID	Analysis
2546039-01	BH105-25_0.75-1.5	Redox potential, soil Sulphide, solid
2546039-02	BH102-25_1.5-2.0	Redox potential, soil Sulphide, solid

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

18-November-2025

Paracel Laboratories
Attn : Dale Robertson

300-2319 St.Laurent Blvd.
Ottawa, ON
K1G 4K6, Canada

Phone: 613-731-9577
Fax:613-731-9064

Date Rec. : 11 November 2025
LR Report: **CA12347-NOV25**
Reference: Project#: 2546039

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Sample ID	Sample Date & Time	Sulphide (Na2CO3) %
1: Analysis Start Date		18-Nov-25
2: Analysis Start Time		11:16
3: Analysis Completed Date		18-Nov-25
4: Analysis Completed Time		12:38
5: RL		0.01
6: BH105-25_0.75-1.5	04-Nov-25 11:00	0.13
7: BH102-25_1.5-2.0	05-Nov-25 11:30	0.14

RL - SGS Reporting Limit

Kimberley Didsbury
Project Specialist,
Environment, Health & Safety

OnLine LIMS

0004332403

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

LR Report : **CA12347-NOV25**

Quality Control Report

Inorganic Analysis														
Parameter	Reporting Limit	Unit	Method Blank	Duplicate				LCS / Spike Blank			Matrix Spike / Reference Material			
				Result 1	Result 2	RPD	Acceptance Criteria	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)		
							%		Low	High		Low	High	
Carbon/Sulphur - QCBatchID: ECS0068-NOV25														
Sulphide (Na2CO3)	0.01	%	< 0.01											

TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Client:	Mark Foto	Work Order Number:	603836
Company:	Paracel Laboratories Ltd. - Ottawa	PO #:	
Address:	300-2319 St. Laurent Blvd. Ottawa, ON, K1G 4J8	Regulation: Project #:	Information not provided 2546039
Phone/Fax:	(613) 731-9577 / (613) 731-9064	DWS #:	
Email:	mfoto@paracellabs.com	Sampled By:	
Date Order Received:	11/11/2025	Analysis Started:	11/12/2025
Arrival Temperature:	19.3 C	Analysis Completed:	11/12/2025

WORK ORDER SUMMARY

ANALYSES WERE PERFORMED ON THE FOLLOWING SAMPLES. THE RESULTS RELATE ONLY TO THE ITEMS TESTED.

Sample Description	Lab ID	Matrix	Type	Comments	Date Collected	Time Collected
BH105-25_0.75-1.5	2225650	Soil	None		11/4/2025	11:00 AM
BH105-25_1.5-2.0	2225651	Soil	None		11/3/2025	11:30 AM

METHODS AND INSTRUMENTATION

THE FOLLOWING METHODS WERE USED FOR YOUR SAMPLE(S):

Method	Lab	Description	Reference
RedOx - Soil (T06)	Mississauga	Determination of RedOx Potential of Soil	Modified from APHA-2580B

REPORT COMMENTS

Non-testmark containers received, AV,11/11/25
Sample received past hold times, proceed with analysis as per clients note.

6820 Kitimat Road Unit 4, Mississauga, ON, L5N 5M3
Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

TESTMARK Laboratories Ltd.
Committed to Quality and Service

CERTIFICATE OF ANALYSIS

Paracel Laboratories Ltd. - Ottawa

Work Order Number: 603836

This report has been approved by:

Aline de Chevigny
Production Coordinator CET

WORK ORDER RESULTS

Sample Description	BH105 - 25 _ 0.75 - 1.5		BH105 - 25 _ 1.5 - 2.0		
Sample Date	11/4/2025 11:00 AM		11/3/2025 11:30 AM		
Lab ID	2225650		2225651		
General Chemistry	Result	MDL	Result	MDL	Units
RedOx (vs. S.H.E.)	344	N/A	344	N/A	mV

LEGEND

Dates: Dates are formatted as mm/dd/year throughout this report.
MDL: Method detection limit or minimum reporting limit.
Quality Control: All associated Quality Control data is available on request.
LCL: Lower Control Limit.
UCL: Upper Control Limit.
QAQCID: This is a unique reference to the quality control data set used to generate the reported value. Contact our lab for this information, as it is traceable through our LIMS.
Field Data: Reports containing Field Parameters represent data that has been collected and provided by the client. Testmark is not responsible for the validity of this data which may be used in subsequent calculations.
Sample Condition Deviations: A noted sample condition deviation may affect the validity of the result. Results apply to the sample(s) as received.
Reproduction of Report: Report shall not be reproduced, except in full, without the approval of Testmark Laboratories Ltd.
Regulation Comparisons: Disclaimer: Please note that regulation criteria are provided for comparative purposes, however the onus on ensuring the validity of this comparison rests with the client.

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Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

CERTIFICATE OF ANALYSIS

Paracel Laboratories Ltd. - Ottawa

Work Order Number: 603836

QUALITY CONTROL DATA

THIS SECTION REPORTS QC RESULTS ASSOCIATED WITH THE TEST BATCH; THESE ARE NOT YOUR SAMPLE RESULTS.
QAQC details include only values where sufficient sample data allowed measurement.

General Chemistry

Positive Control: Lab Control - 200 (7)

Parameter	MDL	Units	LCL	Result	UCL	QAQCID
RedOx (vs. S.H.E.)	N/A	mV	175	210	225	20251112.TM-M.A6B

Positive Control: ORP - Soil Control 90 (8)

Parameter	MDL	Units	LCL	Result	UCL	QAQCID
RedOx (vs. S.H.E.)	N/A	mV	75	88.1	105	20251112.TM-M.A6B

Sample Replicate: % RPD (9)

Parameter	MDL	Units	LCL	Result	UCL	QAQCID
RedOx (vs. S.H.E.)	N/A	%	0	0	10	20251112.TM-M.A6B

THIS INDEX SHOWS HOW YOUR SAMPLES ARE ASSOCIATED TO THE CONTROLS INCLUDED IN THE IDENTIFIED BATCHES.

Sample Description	Lab ID	Method	QAQCID	Prep QAQCID
BH105 - 25 _ 0.75 - 1.5	2225650	RedOx - Soil (T06)	20251112.TM-M.A6B	
BH105 - 25 _ 1.5 - 2.0	2225651	RedOx - Soil (T06)	20251112.TM-M.A6B	

6820 Kitimat Road Unit 4, Mississauga, ON, L5N 5M3
Phone: (905) 821-1112 Fax: (905) 821-2095 Web: www.testmark.ca

PARACEL LABORATORIES LTD.

Paracel ID: 2546039

Paracel Order Number (Lab Use Only): 2546039

Chain Of Custody (Lab Use Only) № 78385

Client Name: Cambium Inc	Project Ref: # 23852-001
Contact Name: Nathan Christie	Quote #:
Address: 301 Moodie Drive, Suite 100, Ottawa, ON	PO #:
Telephone: 613-808-4182	E-mail: nathan.christie@cambium-inc.com; james.sullivan@cambium-inc.com

Page 1 of 1

Turnaround Time

☐ 1 day ☐ 3 day ☐ 2 day ☒ Regular

Date Required:

☐ REG 153/04 ☐ REG 406/19

☐ Table 1 ☐ Agri/Other ☐ Med/Fine
☐ Table 2 ☐ Res/Park ☐ Coarse
☐ Table 3 ☐ Ind/Comm
☐ Table ___
For RSC: ☐ Yes ☐ No

Other Regulation

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Field Filtered	Sample Taken: Date	Sample Taken: Time	Required Analysis: Corrosivity	Sulphides	Redox
1	BH105-25_0.75-1.5	S		3		Nov 4, 2025	11:00 AM	X	X	X
2	BH102-25_1.5-2.0	S		3		Nov 3, 2025	11:30 AM	X	X	X
3										
4										
5										
6										
7										
8										
9										
10										

Comments:

Method of Delivery: Drop Box

Relinquished By (Sign):	Received at Depot:	Received at Lab: LTJ	Verified By: LTJ
Relinquished By (Print): Rory Ryan	Date/Time: Nov 10/25 8:30	Date/Time: 10/11/25, 10:35	Date/Time: 10/11/25, 13:58
Date/Time: Nov. 10, 2025 8:00 AM	Temperature: 4.2 °C	Temperature: 4.0 °C	pH Verified: ☐ By: