1055 Bloor Street, Mississauga

Hydrogeological Investigation

Project Location:
1055 Bloor Street, Mississauga, ON

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1.0 INTRODUCTION

1.1 Project Description

MTE Consultants Inc. (MTE) was retained by CAPREIT Limited Partnership (the "Client") to conduct a Hydrogeological Investigation to support the proposed development of the site located at 1055 Bloor Street, Mississauga, Ontario (Site).

The site is located at the north quadrant of the intersection of Bloor Street and Riverspray Crescent, in City of Mississauga, Ontario. The Site is currently occupied by a 17-storey apartment building with paved parking area and landscape area.

Based on the architectural drawings prepared by Kohn Partnership Architects Inc. (Kohn), dated January 23, 2026, it is understood that the proposed re-development includes four (4) stacked townhouse blocks. The locations of the proposed townhouses are within development site area as presented on Figure 6. No new underground parking is proposed, and the lowest level of the partial below-grade basement of each block is 3.13 m below proposed level 1 finished floor elevation.

The development site area (north and south) is irregularly shaped and measures approximately 7,594 m^2 in size. The site has a gross site area of approximately 28,234 m^2. Currently, the development area is covered by paved parking lots, tennis courts and landscaping.

The following investigations were previously completed by others and provided to MTE for review:

a) Preliminary Hydrogeological Investigation, 1055 Bloor Street, Mississauga, Ontario, prepared by EXP Services Inc. (EXP), dated January 17, 2020; and

b) Phase Two Environmental Site Assessment, 1055 Bloor Street, Mississauga, Ontario, prepared by Premier Environmental Services Inc. (PREMIER), dated May 25, 2020.

This report addresses the hydrogeological aspects of the proposed project. The report for the Geotechnical Investigation will be issued under separate cover. The field investigation for the geotechnical and hydrogeological investigations was carried out concurrently.

1.2 Project Objectives

The main objectives of the Hydrogeological Investigation were to:

a) Establish the local hydrogeology settings of the site;

b) Provide preliminary assessment of anticipated construction dewatering flow rates for a generic construction scenario;

c) Assess groundwater quality and compare the results to both Storm and Sanitary Sewer Use Bylaw for the City of Mississauga/Region of Peel Sewer Use By-Law;

d) Qualitatively assess the potential impact to any waterbody and comment on future regulatory agency involvement;

e) Develop a water balance for pre- and post-development conditions;

f) Provide water balance deficits between pre- and post-development conditions; and

g) Prepare a Hydrogeological Investigation Report.

1.3 Scope of Work

To achieve the investigation objectives, MTE proposed and initiated the following scope of work:

a) Review available geological and hydrogeological information of for the subject Site;

b) Review of the Ministry of Environment, Conservation and Parks (MECP) Water Well Records;

c) Utilizing pre-existing monitoring wells drilled at the Site by EXP to investigate the subsurface groundwater conditions;

d) The advancement of four (4) boreholes (MW101-25 to MW104-25) to maximum depth of 4.8 m below ground surface (bgs) and installation of monitoring wells (MW101-25 to MW104-25;

e) Conduct single well response tests (SWRT) at selected monitoring wells to estimate the hydraulic conductivities of the saturated soils at the Site;

f) Collection of one (1) groundwater sample for laboratory testing and compare it against the City of Mississauga/Region of Peel Sewer Use By-Law parameters;

g) Review of additional groundwater sample data from Premier Environmental Services Inc. and compare it against the City of Mississauga/Region of Peel Sewer Use By-Law parameters;

h) Evaluate the information of groundwater level measurements and groundwater quality;

i) Assess existing infiltration rates based on 30 years of climatic data and provided water balance deficit between pre- and post-development conditions;

j) Assess groundwater discharges during construction phases;

k) Assess foundation sub-drain discharge volumes; and

l) The preparation of a Hydrogeological Investigation Report.

1.4 Previous Reports

1.4.1 Preliminary Hydrogeological Investigation

EXP completed a Preliminary Hydrogeological Investigation dated January 17, 2020, that consisted of the advancement of eleven (11) boreholes (BH1 to BH11) to total depth of 12.5 m bgs and installation of five (5) monitoring wells (BH1, BH5, BH6, BH9, BH10).

1.4.2 Phase Two Environmental Site Assessment

PREMIER completed a Phase Two Environmental Site Assessment dated May 25, 2020, that consisted of the advancement of four (4) boreholes (MW20-01 to MW20-04) to total depth of 5.9 m bgs and installation of three (3) monitoring wells (MW20-02 to MW20-04).

2.0 REGIONAL SETTING

2.1 Regional Physiography

The Ontario Geological Survey Map P. 2204, indicates the Site lies within the South Slope and is characterized as till plains (drumlinized). Figure 2 shows the physiographic regions of Southern Ontario around the Site.

The overburden immediately below ground surface within the South Slope generally consists of clayey silt till and silty clay till and at depth consists of alternating deposits of dense lacustrine sands and silts and over consolidated lacustrine clays and clay tills overlying the bedrock.

2.2 Regional Geology

The surficial geology of the immediate area around the Site is described as coarse-textured glaciolacustrine deposits consisting of sand, gravel, minor silt and clay foreshore and basinal deposits. The surficial geology for the Site and surrounding areas is shown on Figure 3.

Bedrock of the region corresponds to the shale, limestone, dolostone and siltstone and is part of the Georgian Bay Formation, Blue Mountain formation, Billings Formation, Collingwood Member and Eastview Member. The contact between the bedrock and the overlying overburden is expected to fall at approximately 4.7 m bgs.

2.3 Regional Hydrogeology

Groundwater movement through the subsurface is controlled by hydraulic gradients, the physical characteristics of the sediments, and the interconnectedness of lithological formations. Fine grained sediments restrict lateral movement of groundwater and induce vertical infiltration, while coarse grained sediments allow vertical flow with increased transmissivity.

The regional shallow groundwater flow is expected to follow the local topography and discharge to local area creeks and streams. Local deviation from the regional groundwater flow directions may occur in response to changes in topography and/or soil stratigraphy, as well as the presence of surface water features and/or existing subsurface infrastructure.

No local aquifers were identified that could negatively impact the subject Site.

3.0 SITE SETTING

3.1 Site Topography and Drainage

The Site is irregular in shape and has an area of approximately 28,234 m^2. The Site is currently occupied by a 17-storey apartment building. The topography of the Site was sloping from southwest to northeast and based on the borehole logs, the ground elevation ranges from 132.23 m to 130.08 m above sea level (asl). The land slopes towards the northeast and does not feature any surface water bodies.

3.2 Local Surface Water Features

The Site does not feature any surface water bodies on or adjacent to the Site. The closest surface water body to the Site is Little Etobicoke Creek, approximately 260 m northeast of the Site. Lake Ontario is located approximately 5.6 km southeast of the Site. The Site is situated within the Etobicoke Creek Watershed and is not within a Toronto Regional Conservation Authority (TRCA) Regulated Area.

3.3 Ministry of Environment, Conservation and Parks Water Well Review

Well Records from the Ministry of Environment, Conservation and Parks (MECP) Water Well Record Database (WWR) were reviewed to determine the number of water wells and locations present within a 500 m radius of the Site boundaries.

The MECP WWR database indicated 40 well records within 500 m radius of the Site. All identified wells are shown on Figure 4. A summary of the Water Well Records is included in Appendix B, Table B-1. A review of the records indicated that wells the majority of the wells were classified as monitoring/test hole wells, observation wells and abandoned wells within 500 m radius of the Site. No supply water wells were identified within 500 m of radius.

3.4 Permit to Take Water and Environmental Activity and Sector Registry Search

The MECP also maintains a database of all active and expired Permit to Take Water (PTTW) and Environmental Activity and Sector Registry (EASR) items related to construction dewatering and pumping test. There are one (1) active and three (3) expired PTTW registrations within 1 km of the Site and are summarized in Table B-2, Appendix B. The location for each registration is shown on Figure 5.

4.0 FIELD PROGRAM

4.1 Borehole and Monitoring Well Details

MTE advanced four (4) boreholes (MW101-25 to MW104-25) to a maximum depth of 4.8 m bgs on April 28, 2025 and instrumented all four (4) boreholes with a monitoring well (MW101-25 to MW104-25). The boreholes were advanced by using a truck mounted, power operated solid stem continuous flight auger, supplied, and operated by a specialist drilling contractor, working under the full-time supervision of an experienced MTE geotechnical personnel. Soil samples were retrieved at regular intervals with a 50 mm outside diameter split barrel sampler drive and accordance with the Standard Penetration Test Procedure (ASTM D1586). The samples were logged in the field and returned to the MTE laboratory for detailed visual examination. The borehole records and monitoring well construction details are included in Appendix A.

The following monitoring wells were previously installed at the Site:

a) Five (5) monitoring wells (BH1, BH5, BH6, BH9, BH10) were installed by EXP in 2020.

b) Three (3) monitoring wells (MW20-02 to MW20-04) were installed by PREMIER in 2020.

Figure 6 is a detailed Borehole/Monitoring Well Location Map of the Site. The borehole logs are attached in Appendix A.

4.2 Site Specific Overburden Geology

The borehole locations are shown on Figure 6 and detailed subsurface conditions are presented on the borehole logs in Appendix A. The following table is provided in addition to the borehole descriptions to provide a general summary of the soil conditions. The soil boundaries indicated on the borehole logs and discussed herein are inferred from the visual observations and auger resistance and should not be regarded as exact planes of geological change.

The soil conditions encountered at the borehole locations are summarized below. A stratigraphic cross-section across the property as aligned on Figure 6 is included as Figure 7.

Table 4-1: Soil Description

Layer	Description
Topsoil	Topsoil was encountered surficially in MW101-25 and MW102-25, with a thickness of 160 and 110 mm, respectively.
Asphalt Pavement	MW103-25 and MW104-25 were advanced through the existing asphalt pavement, consisting of approximately 100 to 140 mm thick asphaltic concrete and 80 to 100 mm thick granular base.
Fill	Fill materials were encountered below topsoil and asphalt pavement in all boreholes and extended to depths ranging from approximately 1.5 to 1.8 m bgs. The fill is typically comprised of clayey silt with some sand and a trace of gravel. Organics and rootlets were also observed within the fills.
Silt Till	Deposits of silt till were encountered below fills in all boreholes, and extended to depths ranging from approximately 2.3 to 3.1 m bgs.
Silt Till/Shale Complex	A stratum of silt till/shale complex was encountered below silt till in all boreholes, and extended to a depth of approximately 4.6 m bgs.
Shale	Highly weathered shale was encountered/inferred below silt till/shale complex in all boreholes, and extended to terminal depths ranging from approximately 4.7 to 4.8 m bgs.

4.3 Water Level Monitoring

Water levels at all monitoring well locations were recorded after installation. A summary of all available water level observations is included in Table 4-2. Groundwater was observed in all monitoring wells on May 14, 2025, and depths to the groundwater ranged from 2.10 m to 3.45 m bgs. Groundwater produces a continuous surface across the Site that is situated at an elevation between 130.01 m and 127.82 m asl.

An interpreted groundwater contour map for the water level measurements recorded on May 14, 2025, is included as Figure 8. Based on the water level measurements obtained, the inferred direction of groundwater flow across the Site is interpreted to be to the northeastern direction.

Seasonal variability can produce significant changes to the static water level. It has been observed that groundwater can rise and lower in response to changing weather and climate.

Table 4-2: Monitoring Well Details and Water Levels Elevations

Well ID	Consultant	Elevation (m asl)	Well Depth(m)	May 14, 2025	
				Water Level (m bgs)	Elevation (m asl)
MW101-25	MTE	131.64	4.6	3.06	128.58
MW102-25	MTE	132.23	4.6	3.09	129.14
MW103-25	MTE	131.90	4.6	2.17	129.73
MW104-25	MTE	130.75	4.6	2.77	127.98
BH5	EXP	132.11	5.2	2.10	130.01
BH9	EXP	131.51	9.2	3.45	128.06
BH10	EXP	130.87	6.0	3.05	127.82

4.4 Hydraulic Conductivity Testing

The hydraulic conductivity test was completed to estimate the saturated hydraulic conductivity (K) of the soil at the well screen depth at selected monitoring well locations.

In advance of performing SWRT, the monitoring well was developed to remove the potential presence of fine sediments. The development process involved purging of the monitoring wells to induce the flow of fresh formation water through the screen. The monitoring well water level was permitted to fully recover prior to performing SWRTs.

During the SWRT, a slug of water was instantaneously removed from the well and the response to the water level is recorded. The Hydraulic Conductivity values for each of the tested wells were calculated from the SWRT data using Aqtesolv Software and the Hvorslev solutions for unconfined conditions. The semi-log plots for normalized drawdown versus time are included in Appendix C.

The summary of the hydraulic conductivity (K) values estimated from the SWRTs are provided below in Table 4-3:

Table 4-3: Summary of Hydraulic Conductivity (K) Testing Results

Monitoring Well	Well Depth (m bgs)	Hydraulic Conductivity (m/s)
MW102-25	4.6	2.32×10^{-8}
MW103-25	4.6	9.65×10^{-9}
MW104-25	4.6	2.88×10^{-8}
BH5	5.2	1.19×10^{-8}
BH9	9.2	4.36×10^{-7}

The SWRT provides an estimate of K for the geological formation in the immediate media zone surrounding the well screen and may not be representative of bulk formation hydraulic conductivities.

4.5 Groundwater Sampling

To assess the suitability for discharge of pumped groundwater to the City of Mississauga/Region of Peel Storm and Sanitary Sewer Use By-Law parameters during dewatering activities, a groundwater sample was collected from MW104-25 on May 1, 2025.

Prior to collection of the samples, approximately three (3) standing well volumes of groundwater were purged from the well. The sample was collected and placed into pre-cleaned laboratory-supplied vials and/or bottles provided with analytical test group specific preservatives, as required.

The sample was not field filtered. Dedicated nitrile gloves were used during sample handling. The groundwater sample was submitted to an independent laboratory, Bureau Veritas Laboratories, of Mississauga, Ontario, for analysis.

For the assessment purposes, the analytical results were compared to Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel and Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga.

The laboratory Certificate of Analysis (CofAs) and chain of custody are enclosed in Appendix D.

The laboratory CofAs show that there were no exceedances against the Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel.

When compared against the more stringent Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga, the sample indicated exceedances for total aluminum (Al). A summary of the exceedances is provided in Table 4-4.

Table 4-4: Summary of Analytical Results

Parameter	Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel (mg/L)	Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga (mg/L)	Concentration for MW104-25 (mg/L) (May 1, 2025)
Total Aluminum (Al)	50	1	**1.7**

Notes:
***Bold** indicates concentration exceeds the City of Mississauga Storm Sewer Discharge Limit.*

Further to the groundwater sample collected from MW104-25 on May 1, 2025 an additional groundwater sample was collected on March 4, 2026 by Premier Environmental Services Inc. at BH5, in addition to the unfiltered analysis, a sample was analysed for dissolved metals (BH5 - F). The sample was collected using the low flow purge and sample technique in accordance with ASTM D4448-01(2019). The groundwater sample was submitted to an independent laboratory, Eurofins Environment Testing Canada Inc, of Ottawa, Ontario, for analysis.

For the assessment purposes, the analytical results were compared to Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel and Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga.

The results are summarized below. The results are enclosed in Appendix D.

The laboratory CofAs show that there were no exceedances against the Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel.

When compared against the more stringent Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga, the sample indicated exceedances for Total suspended solids (TSS) and total aluminum (Al). When analyzed for dissolved metals, no exceedances were identified.

A summary of the exceedances is provided in Table 4-5.

Table 4-5: Summary of Analytical Results

Parameter	Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel (mg/L)	Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga (mg/L)	Concentration for BH5 / *BH5 - F* (mg/L) (March 4, 2026)
Total Suspended Solid (TSS)	350	15	**46**
Total Aluminum (Al)	50	1	**2.84**
Aluminum (Dissolved)	-	-	*<0.01*

If the groundwater encountered during excavation activities is discharged to the City of Mississauga Storm Sewer, it will require pre-treatment prior to discharge. Discharge water to the Regional Municipality of Peel sanitary sewer does not require pre-treatment prior to discharge.

It should be noted that the filtered metals results (BH5 – F) show no exceedance of the applicable limits, indicating that the elevated Aluminum concentrations observed in the unfiltered samples are likely attributable to suspended solids. Based on this, any required treatment would be anticipated to be sediment control only.

It is noted that an agreement to discharge to the City of Mississauga or Regional Municipality of Peel will be required prior to discharging dewatering effluent, which includes both storm and groundwater.

5.0 TEMPORARY CONSTRUCTION DEWATERING

5.1 Construction Dewatering Requirements

Based on the architectural drawings prepared by Kohn, dated January 23, 2026, it is understood that the proposed re-development includes four (4) stacked townhouse blocks. No new underground parking is proposed, and the lowest level of the partial below-grade basement of each block is 3.13 m below proposed level 1 finished floor elevation (FFE). The footing elevation is assumed approximately 1.5 m below the lowest level elevation.

The stabilized groundwater level measurements observed on May 14, 2025, were found to be varying between elevations of 130.01 m and 127.82 m asl. The highest groundwater elevation for each development area (north or south) was utilized for the dewatering calculation. For conservative purposes, the construction dewatering calculation is based on open cut excavations at the present time. To excavate under dry conditions, the water level is anticipated to be lowered approximately 1.0 m below the footing elevation.

Additional dewatering capacity may be required to maintain dry conditions within the excavation during and following significant precipitation events. It should be noted that the dewatering estimates provided in this report are based on the conceptual building information available at this time. If design details are changed (including any changes to excavation depth), the dewatering estimates must be revised to include the final layout of the development.

5.2 Construction Dewatering Flow Rate Assumptions

The assumptions used to the calculation of the dewatering rate for each block is presented in Table 5-1.

Table 5-1: Dewatering Estimate Assumptions

Input Parameter	Block A	Block B	Block C	Block D	Notes
Proposed Level 1 Elevation (m asl)	133.08	133.60	133.48	132.47	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Basement Elevation (m asl)	129.95	130.47	130.35	129.34	Based on drawing A412 and A413 Overall Building Sections, prepared by Kohn, dated January 23, 2026, basement elevation is 3.13 m below level 1 elevation

Input Parameter	Block A	Block B	Block C	Block D	Notes
Footing Elevation (m asl)	128.45	128.97	128.85	127.84	Assumed 1.5 m below the basement elevation
Dewatered Elevation Target (m asl)	127.45	127.97	127.85	126.84	Approximate 1.0 m below footing elevation
Highest Groundwater Elevation (m asl)	129.73	129.73	130.01	130.01	Highest groundwater elevation for each development area (May 14, 2025)
Excavation Area	39.84 m x 18.07 m	39.84 m x 18.07 m	53.04 m x 18.07 m	53.04 m x 18.07 m	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Hydraulic Conductivity (m/s)	2.88×10^{-8}	2.88×10^{-8}	1.19×10^{-8}	1.19×10^{-8}	Highest K value for each development area

5.3 Dewatering Flow Rate Equation

The Dupuit equation for steady flow from a linear source on both sides of a rectangular slot of an excavation through an unconfined aquifer resting on a horizontal impervious surface was used to obtain a flow rate estimate and is expressed as follows:

$$Q_w = \frac{K(x + a)(H^2 - h^2)}{Lo}$$

Where:

Q_w = Rate of pumping (m^3/s)
x = Length of excavation (m)
a = Width of excavation (m)
K = Hydraulic conductivity (m/s)
H = Head beyond the influence of pumping (static groundwater elevation) (m)
h = Head above base of aquifer at the excavation (m)
Lo = Distance to Line Source (m)

It is expected that the initial dewatering rate will be higher in order to remove groundwater from within the overburden formation. The dewatering rates are expected to decrease once the target water level is achieved in the excavation footprint as groundwater will have been removed locally from storage resulting in lower seepage rates into the excavation.

5.4 Radius of Influence

The Radius of Influence (ROI) for the construction dewatering is based on the empirical Sichardt Equation. This equation is used to predict the distance at which the drawdown resulting from pumping is negligible. This equation is empirical and was developed to provide representative flow rates using the steady state flow dewatering equations, as discussed below.

It is noted that in steady state conditions, the radius of influence of pumping will extend until boundary flow conditions are reached and provide sufficient water inputs to the aquifer, such as recharge and surface water bodies.

The ROI of pumping (dewatering) for linear flow is calculated based on the Sichardt equation, which is described as follows:

$$Lo = 1750\ (H - h)\sqrt{K}$$

Where:

K = Hydraulic conductivity (m/s)

H = Static Saturated Head (m)

h = Dynamic Saturated Head (m)

Based on the Sichardt equation and the highest K value, the ROI is approximately between 0.41 m and 0.68 m from the side of the excavation for linear flow (Lo=Ro/2). The ROI calculation is provided in Appendix E.

The ROI calculation is a conservative methodology and is calculated based on the assumption of active pumping during the construction dewatering. It should be noted that most of the water will be pumped during the first stage of the construction period or when a rain event occurs. Although the ROI was conservatively predicted as between 0.41 m and 0.68 m from the side of the excavation, over a period of time, the drawdown curve will be very close to the bottom of the excavation and thus resulting in negligible ROI. The likelihood for impacts to the nearby structures are negligible.

5.5 Results of Construction Dewatering Flow Rate Estimates

Based on the assumptions provided in this report, the results of the dewatering rate estimate are as follows:

Table 5-2: Summary of Construction Dewatering Flow Rate Estimate

Location	Construction Dewatering Flow Rate Without Safety Factor (L/day)	Peak Construction Dewatering Flow Rate Including Safety Factor of 3 (L/day)
Block A	3,000	9,000
Block B	2,800	8,400
Block C	2,400	7,200
Block D	2,700	8,100

Construction dewatering flow rate estimates are provided in Table E-1, in Appendix E.

The peak construction dewatering flow rate includes a factor of safety of 3 to account for seasonal fluctuations in the groundwater table, flow from beddings of existing sewers, and variation in hydrogeological properties beyond those encountered during the course of this study.

Please note that it is the responsibility of the contractor to ensure dry conditions are maintained within the excavation at all times. The dewatering contractor should ensure that silt removal or replacement from subsoil be eliminated and monitored during construction dewatering at all times.

Additional pumping capacity may be required to maintain dry conditions within the excavation during and following significant precipitation events. Additionally, the presence of near-surface fill material could hold significant groundwater.

The maximum flow calculation is intended to provide a conservative estimate to account for unforeseeable conditions that may arise during construction. It should be noted that the dewatering estimate provided in this report are based on the proposed development information available at this time. If changes to the design are implemented (e.g., increase to planned excavation depths, widening of excavations, etc.), the dewatering estimates must be revised to include and reflect future changes.

6.0 LONG TERM DISCHARGE ESTIMATE

6.1 Long-Term Dewatering Assumptions

Given that the highest groundwater level in the development area (south) is greater than 0.5 m below the basement elevation of the proposed stacked townhouse block B, a permanent foundation sub-drain for proposed stacked townhouse block B is not required. The anticipated basement floor slab of the proposed stacked townhouse block B is deemed with dry conditions, as such, long term dewatering rate estimate is not required for the proposed stacked townhouse block B given the overburden conditions at this time.

Given that the highest groundwater level in each development area (north or south) is less than 0.5 m below the basement elevation of the proposed stacked townhouse block A and C, and above the proposed basement elevation of the proposed stacked townhouse block D, a permanent foundation sub-drain for proposed stacked townhouse block A, C and D is recommended. It is assumed that the below grade structure will feature a perimeter drain and foundation sub-drain system installed at approximately 0.5 m below the basement elevation. The permanent foundation sub-drain system should be kept separate from the perimeter drainage system.

Table 6-1 presents the assumptions used to calculate the long-term drainage rate estimates. Subject to final design, grading and placement of below grade structure, the dewatering rates estimated in this report must be re-assessed.

Table 6-1: Dewatering Estimate Assumptions

Input Parameter	Block A	Block C	Block D	Notes
Proposed Level 1 Elevation (m asl)	133.08	133.48	132.47	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Basement Elevation (m asl)	129.95	130.35	129.34	Based on drawing A412 and A413 Overall Building Sections, prepared by Kohn, dated January 23, 2026, basement elevation is 3.13 m below level 1 elevation
Highest Groundwater Elevation (m asl)	129.73	130.01	130.01	Highest groundwater elevation for each development area (May 14, 2025)
Sub-drain Elevation Target (m asl)	129.45	129.85	128.84	Assumed 0.5 m below basement elevation

Input Parameter	Block A	Block C	Block D	Notes
Drainage Dimensions	39.84 m x 18.07 m	53.04 m x 18.07 m	53.04 m x 18.07 m	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Hydraulic Conductivity (m/s)	2.88×10^{-8}	1.19×10^{-8}	1.19×10^{-8}	Highest K value for development area

6.2 Radius of Influence

The ROI calculation is a conservative methodology and is calculated based on the assumption of active pumping during long-term dewatering. It should be noted that there will be no active pumping during long-term dewatering. The foundation drains will be constructed below the floor slab and/or near the foundation and the groundwater would passively drain into these sub drains and discharged directly to sumps. Due to the nature of overburden material, the groundwater will flow through the natural gradient that exists on the Site and passively flow into the foundation sub-drains and will not be actively pumped. Although, the ROI which was conservatively predicted was at 1.57 m to 2.50 m from the side of the sub-drain for block A, C and D, over a period of time, the drawdown curve will be very close to the foundation walls and thus resulting in negligible ROI.

6.3 Long-Term Foundation Sub-Drain Flow Rate Estimate

Based on the assumptions provided in this report (outlined in Section 6.1), the results of the long-term discharge volume estimate are summarized below:

Table 6-2: Summary of Long-Term Discharge Flow Rate

Location	Long-Term Peak Flow Rate (L/day)	Notes
Block A	270	Long term sub-drain flow value rounded based on Dupuit's equation including flow from all sides. Safety factor of 3 was used.
Block C	120	
Block D	870	

The results for the estimate are available in Appendix F, Table F-1. The maximum flow rate estimates represent short term events and are not indicative of long-term continuous contributions to the drainage system. Intermittent cycling of sump pumps and seasonal fluctuation in groundwater regimes should be considered for pump specifications.

It should be noted that the dewatering estimates provided in this report are based on the proposed building information available at this time. Subject to final design, grading and placement of below grade structure, the dewatering rates estimated in this report must be re-assessed.

Regional Municipality of Peel/ City of Mississauga should be consulted regarding the management of long-term groundwater into the municipal sewer system. If the Regional Municipality of Peel/ City of Mississauga do not allow long-term discharge, then the long-term drainage rates do not apply.

7.0 POTENTIAL GROUNDWATER IMPACTS

7.1 Impacts to Nearby Groundwater Users

The Site lies within a heavily urbanized area of Mississauga, based on the MECP WWR database, no supply water wells were identified within 500 m. Given the area is serviced by municipal system, no private well water user is expected. There are no expected impacts to nearby groundwater users due to active dewatering.

7.2 Impacts Due to Construction Dewatering

As discussed in Section 5, the ROI calculation is a conservative methodology and is calculated based on the assumption of active pumping during the construction dewatering. It should be noted that most of the water will be pumped during the first stage of the construction period or when a rain event occurs. Although the ROI was conservatively predicted as between 0.41 m and 0.68 m from the side, over a period of time, the drawdown curve will be very close to the bottom of the excavation and thus resulting in negligible ROI. The likelihood for impacts to the nearby structures are negligible.

7.3 Impacts Due to Long-Term Foundation Sub-Drain Dewatering

As discussed in Section 6, the ROI calculation is a conservative methodology and is calculated based on the assumption of active pumping during long-term dewatering. It should be noted that there will be no active pumping during long-term dewatering. The foundation drains will be constructed below the floor slab and/or near the foundation and the groundwater would passively drain into these sub drains and discharged directly to sumps. Due to the nature of overburden material, the groundwater will flow through the natural gradient that exists on the Site and passively flow into the foundation sub-drains and will not be actively pumped. Although, the ROI which was conservatively predicted was at 1.57 m to 2.50 m from the side of the sub-drain for block A, C and D, over a period of time, the drawdown curve will be very close to the foundation walls and thus resulting in negligible ROI.

8.0 WATER TAKING AND DISCHARGE PERMITS

8.1 EASR and PTTW

During the active construction dewatering phase, the volume of water expected to be pumped is within the daily limit on groundwater taking under the Ontario Water Resources Act (50,000 L/day). Given the cumulative construction discharge rate is within the limit, EASR for construction dewatering would not be required.

Given that the predicted long-term dewatering volume is within the 379,000 L/day limit, a PTTW as per O.Reg.387/04 for long-term discharge is not required.

8.2 Regional Municipality of Peel or City of Mississauga Sewer Discharge Agreement

If the groundwater encountered during excavation activities and long-term dewatering is to be discharged into a Regional Municipality of Peel sanitary or City of Mississauga storm sewer, a sewer discharge permit under the Regional Municipality of Peel Sewer Use By-law 53-2010 or City of Mississauga Storm Sewer Use By-law 0046-2022 must be granted prior to discharge.

Given the current consideration for short-term and long-term discharges, sewer discharge permits will be required for both short-term and long-term discharges.

Regional Municipality of Peel/ City of Mississauga should be consulted regarding the management of long-term groundwater into the municipal sewer system.

9.0 PRE- AND POST- DEVELOPMENT WATER BALANCE

A water balance assessment has been conducted for proposed development site area (north and south) to develop a water balance for pre- and post-development conditions and assess water balance deficit between pre- and post-development conditions. Based on the architectural drawings prepared by Kohn, dated January 23, 2026, the proposed development site area is approximately 7,594 m^2.

9.1 Methodology

The hydrologic cycle includes the components of precipitation (P), evapotranspiration (ET), runoff (R), infiltrate (I) and change in groundwater storage (S) presented in the following equation:

$$\mathbf{P = ET + R + I + S}$$

Where:

P = precipitation

ET = evapotranspiration

R = run-off

I = Infiltration

S = change in groundwater storage

Temperature and precipitation data is obtained from Canadian Climate Normals Pearson International Airport station (Climate ID 6158733) as the average data from 1983 to 2012 (Appendix F). The Pearson International Airport station is located 6.5 km north of the Site.

The evapotranspiration and water surplus are calculated from the Thornthwaite and Mather (1957) model, which is an accounting type method used to analyze the allocation of water among various components of hydrologic cycle.

Infiltration is governed by the surficial soil types, topography and land cover. Infiltration and runoff are the two components of water surplus. The infiltration and runoff are calculated separately for pre and post development conditions. The difference between pre and post development infiltrations is the infiltration deficit.

Change in groundwater storage could occur annually, however, when the long-term average historical data of P, ET, R and I are used in the above hydrologic cycle, there is no net change in groundwater storage.

9.2 Pre-Development Water Balance

The pre-development site condition is shown in Figure 9 and the area of each category is presented in Table 9-1. The pre-development site condition is based on Google Earth image dated 2025.

Table 9-1: Pre-development Site Condition

Land Use	Area (m^2)
Paved Surface	1,195
Landscape	6,399
TOTAL	**7,594**

Based on the Pearson International Airport station data from 1983 to 2012, the average annual precipitation is 786.9 mm. The Thornthwaite and Mather (1957) model utilized the monthly average temperature and precipitation data, estimate the actual evapotranspiration as 568.0 mm and water surplus as 217.3 mm (Appendix F).

According to the MECP SWM Planning Design Manual (MECP, 2003), the pre-development infiltration factor is calculated in Table 9-2. The topography condition is rolling land. The soil type at site is Silt Till. The land cover is cultivated land.

Table 9-2: Pre-development Infiltration Factor

Category	Infiltration Factor
Topography/Slope	0.20
Soil Type (Silt Till)	0.20
Cover (Cultivated Land)	0.10
Total Infiltration factor	**0.50**

The annual pre-development water balance is presented in Table 9-3. The pre-development annual volume of infiltration is estimated as approximately 695 m^3/year or unit rate of approximately 92 mm/year.

Table 9-3: Annual Pre-development Water Balance

Land Use	Area (m^2)	P (m^3)	AET (m^3)	Infiltration (m^3)	Run-off (m^3)
Paved Surface	1,195	940	0	0	940
Landscape	6,399	5,035	3,634	695	705
Total	**7,594**	**5,975**	**3,634**	**695**	**1,646**

9.3 Post-Development Water Balance

The post-development site condition is shown in Figure 10 and the area of each category is presented in Table 9-4. The post-development site condition is based on the architectural drawings prepared by Kohn, dated January 23, 2026.

Table 9-4: Post-development Site Condition

Land Use	Area (m^2)
Building Roofs	3,412
Paved Surface	2,175
Landscape	2,007
TOTAL	**7,594**

Based on the Pearson International Airport station data from 1983 to 2012, the average annual precipitation is 786.9 mm. The Thornthwaite and Mather (1957) model utilized the monthly average temperature and precipitation data, estimate the actual evapotranspiration as 568.0 mm and water surplus as 217.3 mm (Appendix F).

According to the MECP SWM Planning Design Manual (MECP, 2003), the post-development infiltration factor is calculated in Table 9-5. The topography condition is rolling land. The soil type at site is Silt Till. The land cover is cultivated land.

Table 9-5: Post-Development Infiltration Factor

Category	Infiltration Factor
Topography/Slope	0.20
Soil Type (Silt Till)	0.20
Cover (Cultivated Land)	0.10
Total Infiltration factor	**0.50**

The annual post-development water balance is presented in Table 9-6. The post-development annual volume of infiltration is estimated as approximately 218 m^3/year or unit rate of approximately 29 mm/year.

Table 9-6: Annual Post-development Water Balance

Land Use	Area (m^2)	P (m^3)	AET (m^3)	Infiltration (m^3)	Run-off (m^3)
Building Roofs	3,412	2,685	0	0	2,685
Paved Surface	2,175	1,711	0	0	1,711
Landscape	2,007	1,579	1,140	218	221
TOTAL	**7,594**	**5,975**	**1,140**	**218**	**4,617**

Based on the water balance calculations, the pre and post development infiltration deficit is 477 m^3/year. The infiltration deficit was predicted based on the parameters that support the Site-specific conditions.

The design of low impact development (LID) or mitigation measures to minimize the pre and post development infiltration deficit will be addressed during the detailed design stage.

10.0 CONCLUSIONS

Based on the findings of the Hydrogeological Investigation, the following summary of conclusions are provided:

a) Based on the architectural drawings prepared by Kohn Partnership Architects Inc. (Kohn), dated January 23, 2026, it is understood that the proposed re-development includes four (4) stacked townhouse blocks with lowest level of the partial below-grade basement of each block at 3.13 m below proposed level 1 finished floor elevation;

b) The Site is located within a physiographic region within the South Slope and is characterized as till plains (drumlinized);

c) The surficial geology around the Site is comprised of till consisting of coarse-textured glaciolacustrine deposits consisting of sand, gravel, minor silt and clay foreshore and basinal deposits;

d) The MECP WWR database indicate that there are 40 well records registered with the database within 500 m of the Site. No supply water wells were identified within 500 m of radius. Given the area is serviced by municipal system, no private well water user is expected;

e) Groundwater was observed in all monitoring wells on May 14, 2025, and depths to the groundwater ranged from 2.10 m to 3.45 m bgs. Groundwater produces a continuous surface across the Site that is situated at an elevation between 130.01 m and 127.82 m asl;

f) Based on the water level measurements obtained, the inferred direction of groundwater flow across the Site is interpreted to be to the northeastern direction;

g) The estimated hydraulic conductivity of the soil ranges from 4.36×10^{-7} m/s to 9.65×10^{-9} m/s;

h) Based on the assumptions outlined in this report, the estimated peak construction dewatering flow rate for the proposed construction activity is 9,000 L/day for Block A, 8,400 L/day for Block B, 7,200 L/day for Block C and 8,100 L/day for Block D;

i) During the active construction dewatering phase, the volume of water expected to be pumped is within the daily limit on groundwater taking under the Ontario Water Resources Act (50,000 L/day). Given the cumulative construction discharge rate is within the limit, EASR for construction dewatering would not be required;

j) Given that the highest groundwater level in the development area (south) is greater than 0.5 m below the basement elevation of the proposed stacked townhouse block B, a permanent foundation sub-drain for proposed stacked townhouse block B is not required. The anticipated basement floor slab of the proposed stacked townhouse block B is deemed with dry conditions, as such, long term dewatering rate estimate is not required for the proposed stacked townhouse block B given the overburden conditions at this time;

k) Given that the highest groundwater level in each development area (north or south) is less than 0.5 m below the basement elevation of the proposed stacked townhouse block A and C, and above the proposed basement elevation of the proposed stacked townhouse block D, a permanent foundation sub-drain for proposed stacked townhouse block A, C and D is recommended. Based on the assumptions outlined in this report, the cumulative contribution to the foundation sub-drains is 270 L/day for Block A, 120 L/day for Block C and 870 L/day for Block D;

l) Given that the predicted long-term dewatering volume is within the 379,000 L/day limit, a PTTW as per O.Reg.387/04 for long-term discharge is not required;

m) The laboratory CofAs show that there were no exceedances against Limits for Sanitary Sewer Discharge (By-Law No. 53-2010) of the Regional Municipality of Peel;

n) When compared against the more stringent Limits for Storm Sewer Discharge (By-Law No 0046-2022) of City of Mississauga, the sample indicated exceedances for Total suspended solids (TSS) and total aluminum (Al). When analyzed for dissolved metals, no exceedances were identified;

o) If the groundwater encountered during excavation activities is discharged to the City of Mississauga Storm Sewer, it will require pre-treatment prior to discharge. Discharge water to the Regional Municipality of Peel sanitary sewer does not require pre-treatment prior to discharge;

p) It should be noted that the filtered metals results (BH5 – F) show no exceedance of the applicable limits, indicating that the elevated Aluminum concentrations observed in the unfiltered samples are likely attributable to suspended solids. Based on this, any required treatment would be anticipated to be sediment control only;

q) If the groundwater encountered during excavation activities and long-term dewatering is to be discharged into a Regional Municipality of Peel sanitary or City of Mississauga storm sewer, a sewer discharge permit under the Regional Municipality of Peel Sewer Use By-law 53-2010 or City of Mississauga Storm Sewer Use By-law 0046-2022 must be granted prior to discharge;

r) Regional Municipality of Peel/ City of Mississauga should be consulted regarding the management of long-term groundwater into the municipal sewer system. If the York Region/ City of Markham and TRCA do not allow long-term discharge, then the long-term drainage rates do not apply; and

s) Based on the water balance calculations, the pre and post development infiltration deficit is 477 m^3/year. The infiltration deficit was predicted based on the parameters that support the Site-specific conditions. The design of low impact development (LID) or mitigation measures to minimize the pre and post development infiltration deficit will be addressed during the detailed design stage.

It should be noted that the comments and recommendations in this report are based on the assumption that the present design concept described throughout the report will proceed to construction. Any changes to the design concept may result in a modification to the recommendations provided in this report. It is noted that these conclusions and recommendations should be read in conjunction with the entirety of the report.

11.0 LIMITATIONS

Services performed by **MTE Consultants Inc. (MTE)** were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the Environmental Engineering & Consulting profession. No other warranty or representation expressed or implied as to the accuracy of the information, conclusions or recommendations is included or intended in this report.

This report was completed for the sole use of MTE and the Client. The assignment was carried out in accordance with the Scope of Work described in Section 1.1 as reviewed with and agreed to by the Client. MTE makes no representation that the present report has dealt with all of the important environmental issues, except as provided in the Scope of Work. This report is not intended to be exhaustive in scope or to imply a risk-free facility. As such, this report may not deal with all issues potentially applicable to the Site and may omit aspects which are or may be of interest to the reader.

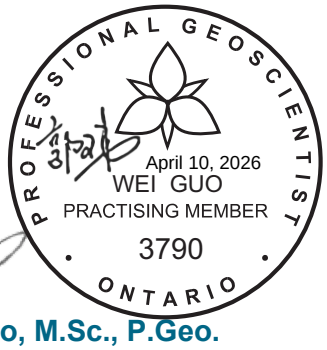
In addition, it should be recognized that a soil sample or groundwater level measurement represents one discrete portion of the Site at the time it is collected, and that the findings of this report are based on conditions as they existed during the time period of the investigation.

Any use which another party makes of this report, or any reliance on, or decisions to be made based upon it, are the responsibility of such parties. MTE accepts no responsibility for liabilities incurred by or damages, if any, suffered by another party as a result of decisions made or actions taken, based upon this report. Others with interest in the Site should undertake their own investigations and studies to determine how or if the condition affects them or their plans.

It should be recognized that the passage of time may affect the views, conclusions, and recommendations (if any) provided in this report because environmental conditions of a property can change, along with regulatory requirements. Should additional or new information become available, MTE recommends that it be brought to our attention in order that we may determine whether it affects the contents of this report.

All of which is respectfully submitted,

MTE Consultants Inc.



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https://mte85.sharepoint.com/sites/62263_004/Shared Documents/03- Reports/HG/62263_004_2026-04-10_rpt_Hydrogeological Investigation_1055 Bloor Street, Mississauga_REV.docx

12.0 REFERENCES

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Figures

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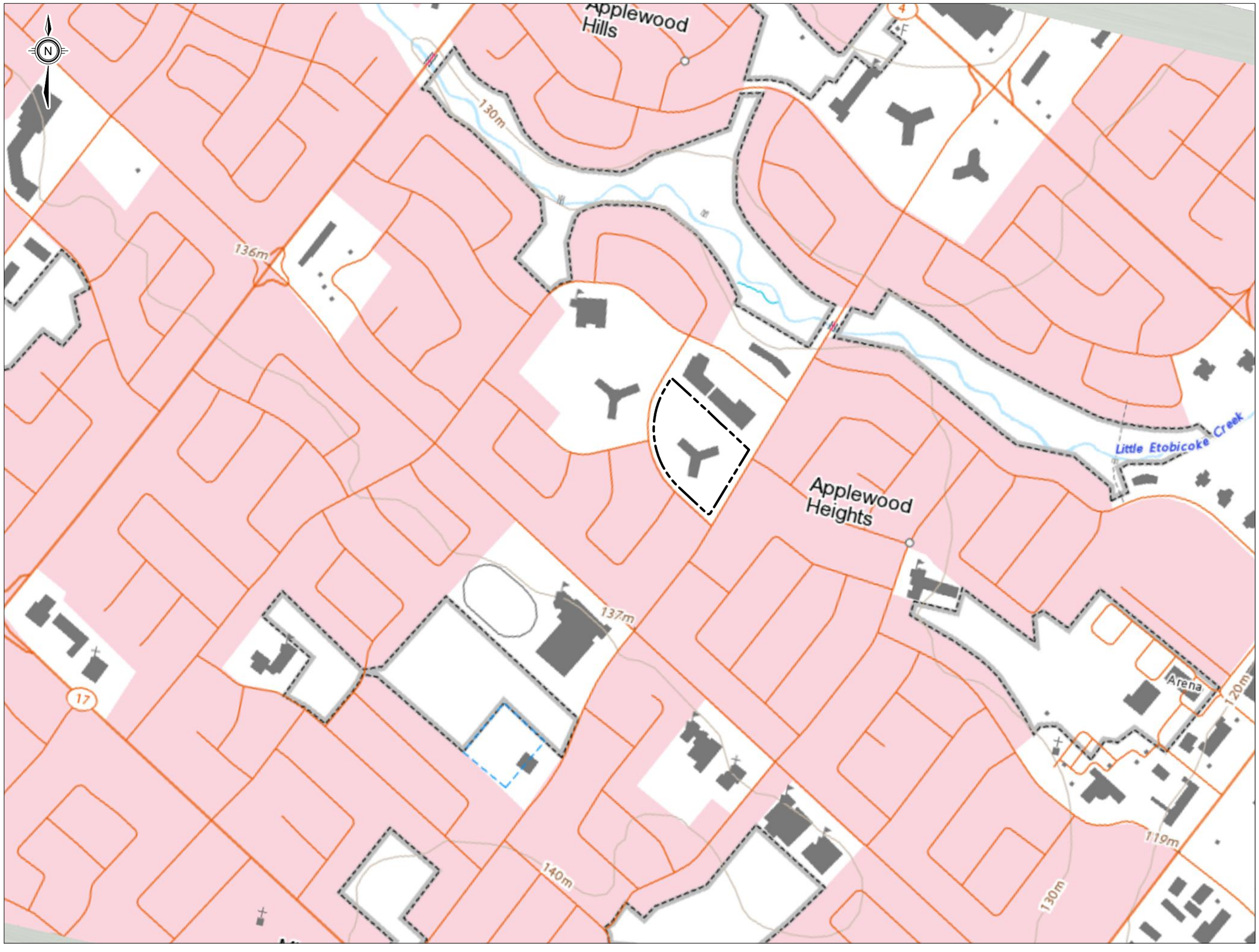



KEY PLAN (nts)

LEGEND

SITE

REFERENCES

IMAGERY OBTAINED FROM TOPORAMA, NATURAL RESOURCES CANADA, 2025.

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

0 75 150 225 300

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PROJECT
HYDROGEOLOGICAL INVESTIGATION
1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
SITE LOCATION PLAN

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Checked	Project No. 62263_001	
Date 2025-05-12	Rev No. 0	

Plot Date: May 16, 2025 - 6:35 PM



LEGEND

- SITE
- STUDY AREA (500m Buffer from Site)
- 6 Till Plains
- 11 Sand Plains
- 14 Beaches

REFERENCES

BING IMAGERY AS MAY 8, 2025 (IMAGE DATE UNKNOWN); AND CITY OF MISSISSAUGA, PARCEL, ROAD, RAIL, AND WATER NETWORK, OPEN DATA SET; AND ONTARIO GEOLOGICAL SURVEY 2010, SURFICIAL GEOLOGY OF SOUTHERN ONTARIO, ONTARIO GEOLOGICAL SURVEY MISCELLANEOUS RELEASE-128-REVISED.

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1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
PHYSIOGRAPHIC REGIONS OF SOUTHERN ONTARIO

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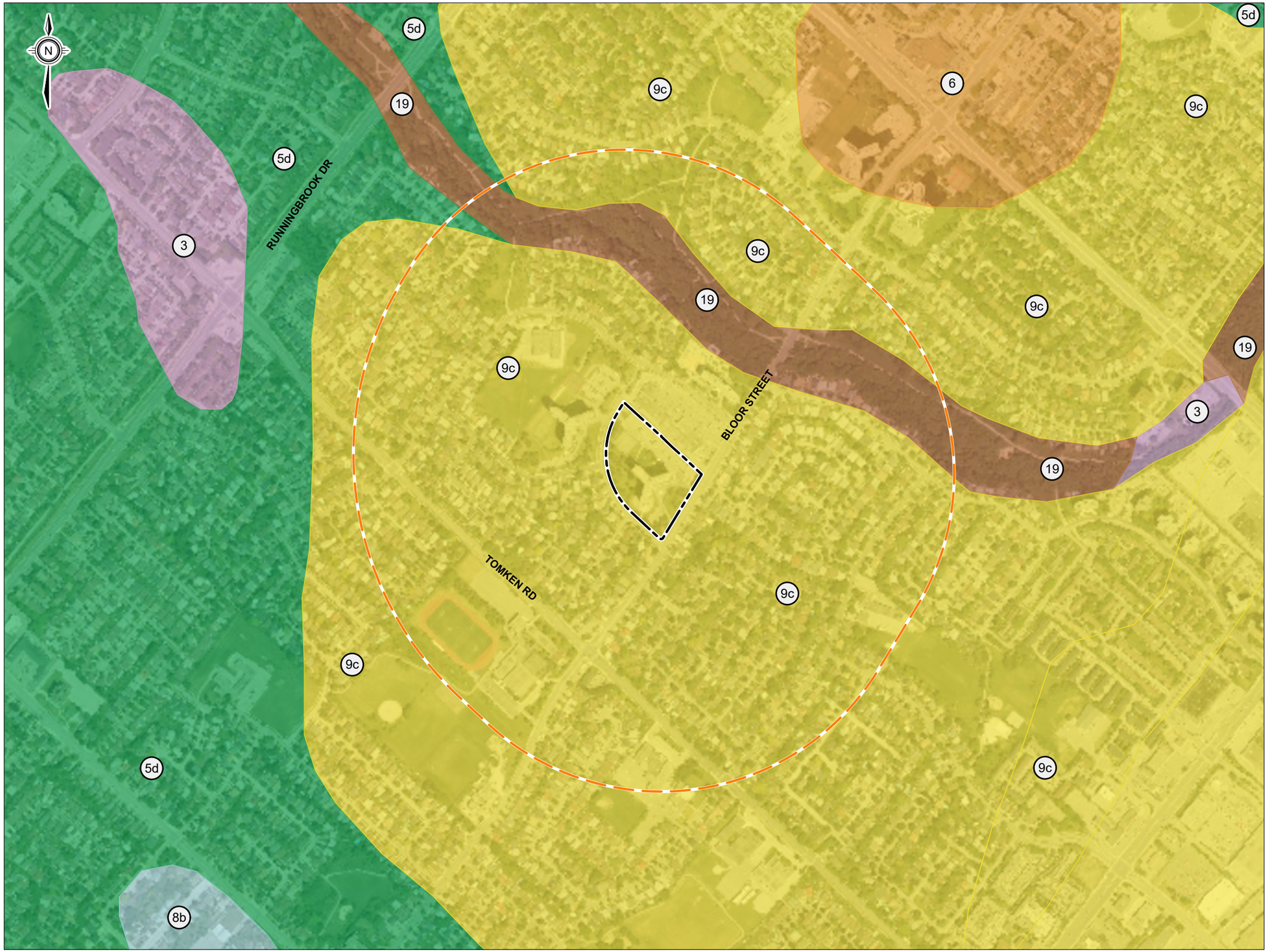

LEGEND

- SITE
- STUDY AREA (500m Buffer from Site)

- 3 — Exposed Or Thin Drift Covered Shale And Dolostone
- 5d — Red To Brown Gritty Silt To Clayey Silt Till
- 6 — Predominantly Poorly Sorted Gravel
- 8b — Massive To Laminated Silt And Clay, May Contain Poorly Sorted Diamicton Layers
- 9b — Beach Gravel
- 9c — Predominantly Gravelly Sand And Silty Sand
- 19 — Undifferentiated Gravel, Sand, Silt, Clay, Muck

REFERENCES

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1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
QUATERNARY GEOLOGY

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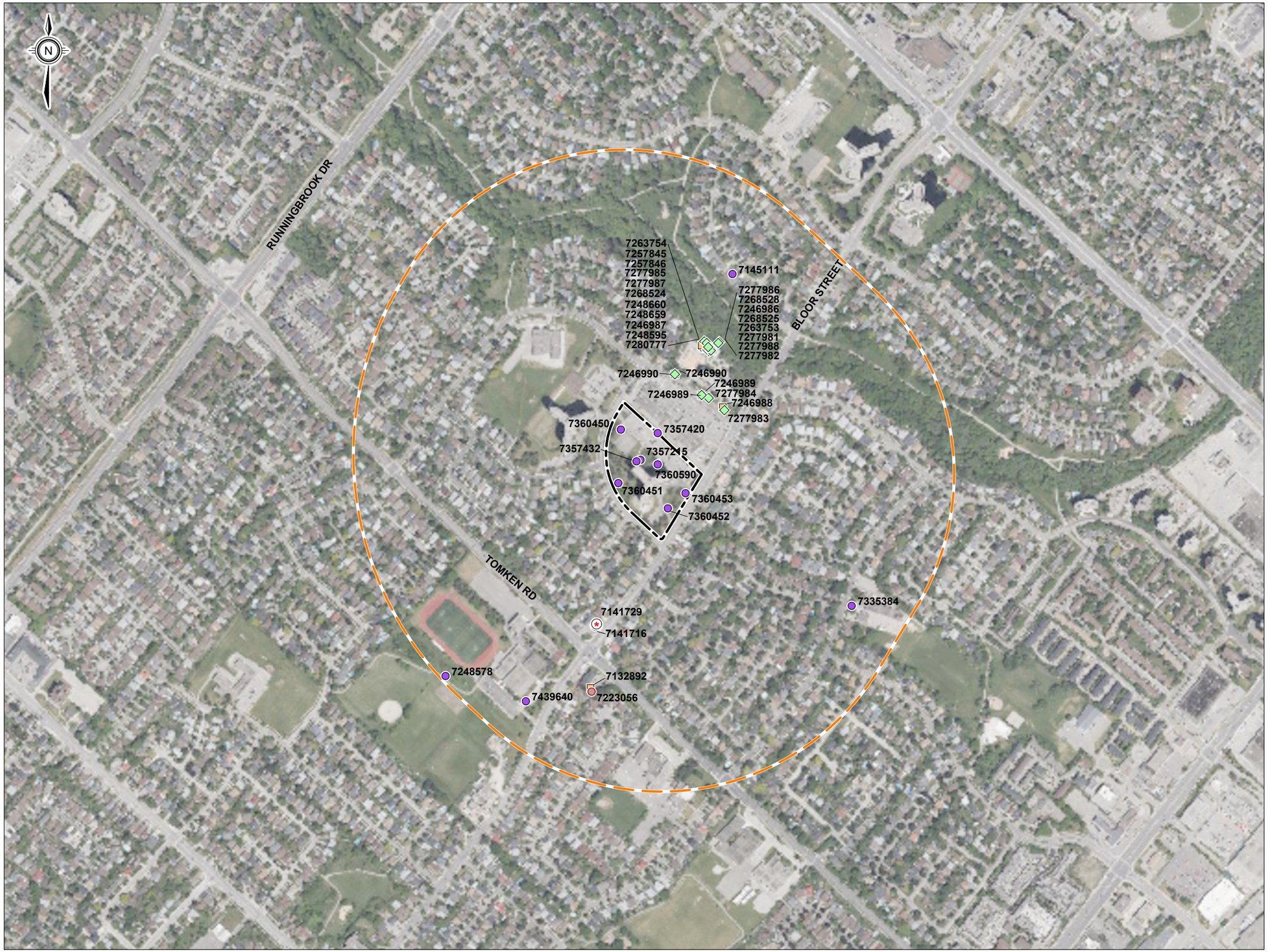

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- SITE
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- ABANDONED
- OBSERVATION WELL
- MONITORING WELL / TEST HOLE
- RECHARGE WELL
- TEST HOLE
- UNKNOWN

REFERENCES

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1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
WATER WELL RECORDS

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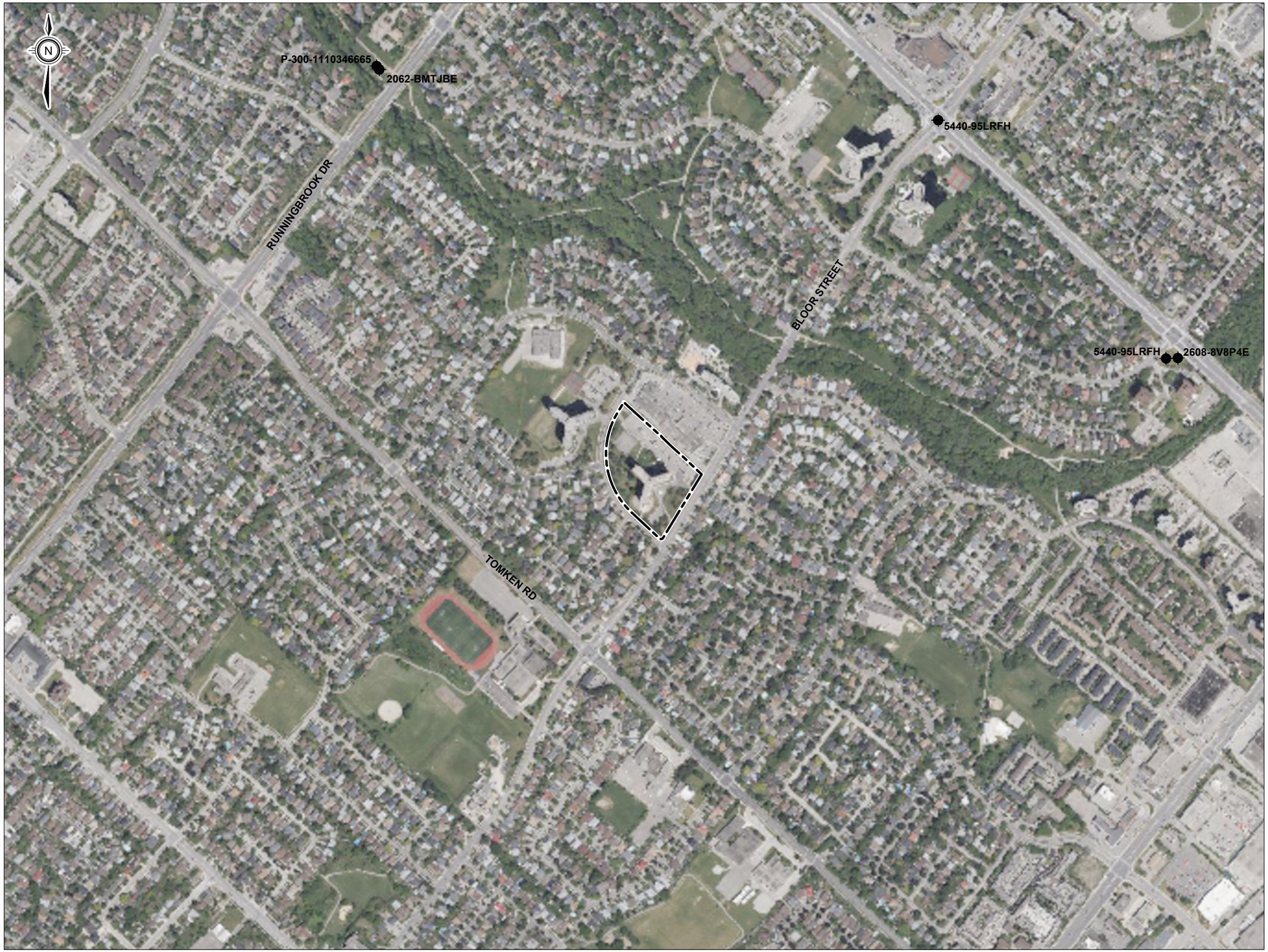

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SITE

PTTW RECORD

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1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
PTTW AND EASR RECORD LOCATIONS

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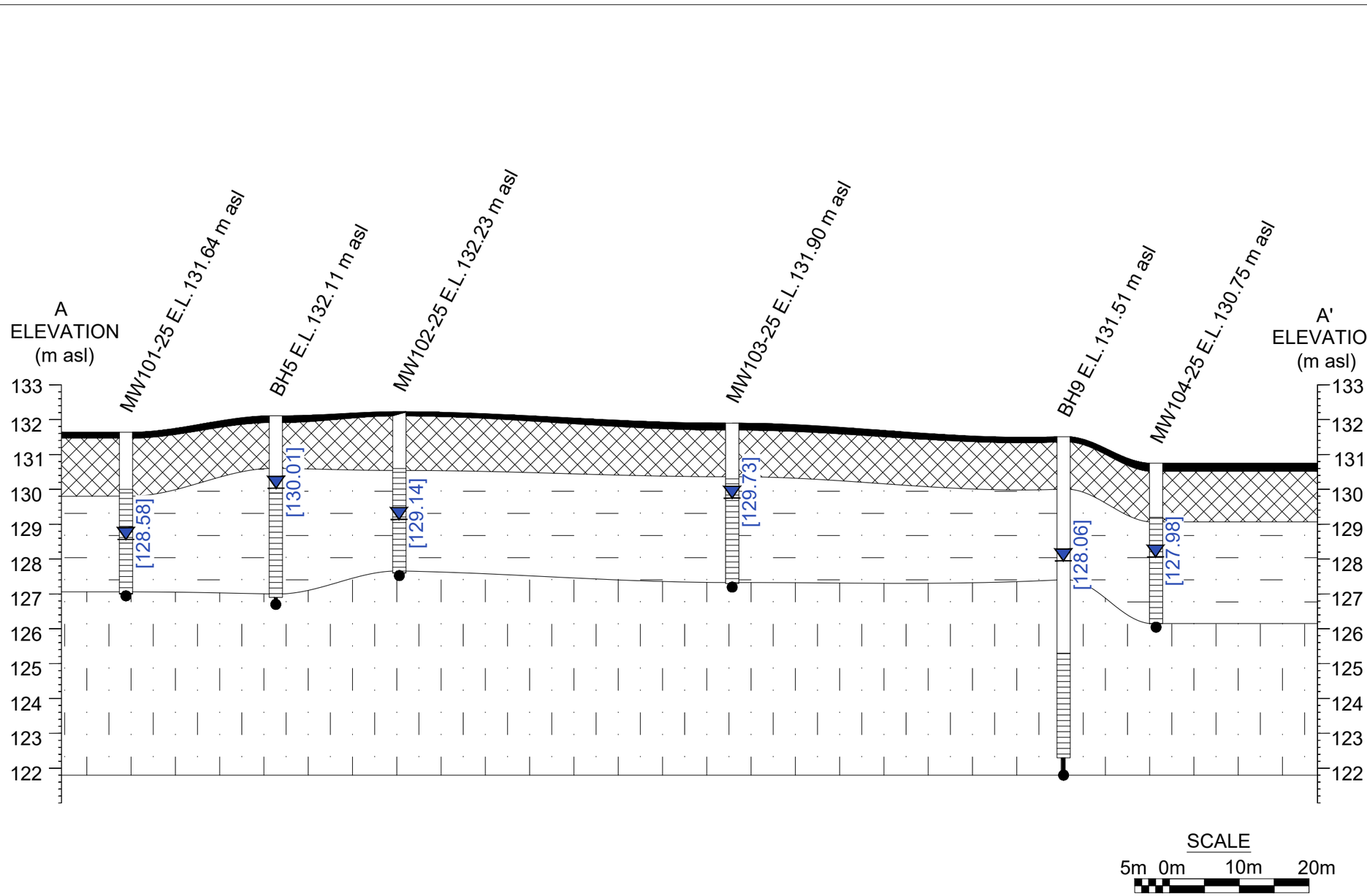

SCALE

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LEGEND

- TOPSOIL
- FILL
- SILT TILL / SHALE COMPLEX
- SHALE BEDROCK
- WELL SCREEN
- WATER LEVEL
- [XX.XX] WATER LEVEL MEASUREMENT (m asl) (APRIL 22, 2025)

NOTES

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1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
GEOLOGICAL CROSS SECTION A-A'

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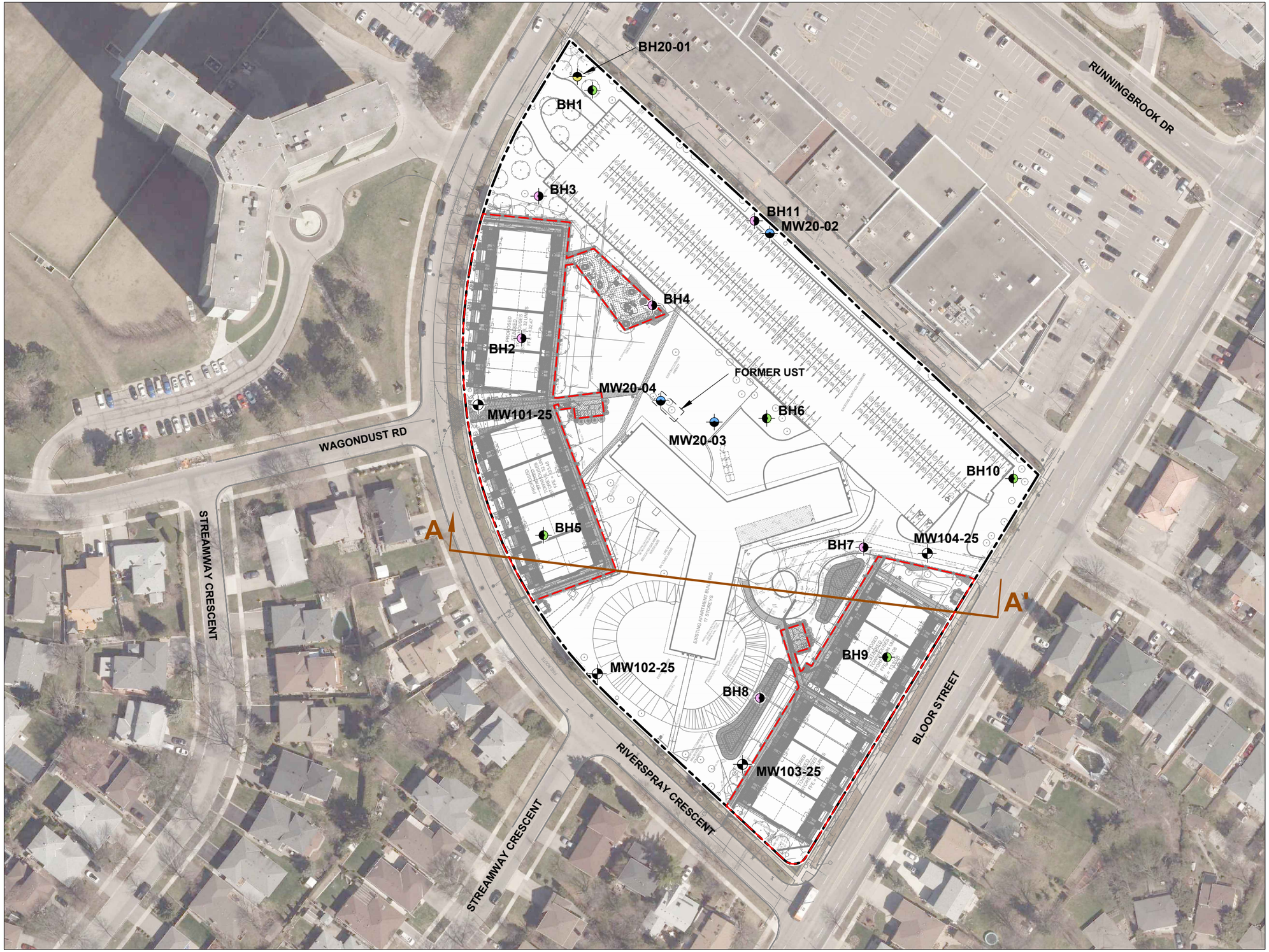

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LEGEND

- SITE
- BOREHOLE/MONITORING WELL
- MONITORING WELL (PREMIER,2020)
- MONITORING WELL (EXP,2019)
- BOREHOLE (PREMIER,2020)
- BOREHOLE (EXP,2019)
- A A' CROSS-SECTION

REFERENCES

2020 AERIAL IMAGE, PARCEL, ROAD, RAIL, AND WATER NETWORK, CITY OF MISSISSAUGA, OPEN DATA SET;
PREMIER ENVIRONMENTAL SERVICES INC, SITE PLAN SHOWING BOREHOLES AND MONITORING WELL LOCATIONS, PROJECT NO. 620017.CE, MAY 2020, IN PDF FORMAT.
EXP SERVICES INC, BOREHOLE LOCATION PLAN, PROJECT NO. BRM-00607430-AO, DEC 2019, IN PDF FORMAT.
SITE PLAN AND SITE STATISTICS, KOHN PARTNERSHIP ARCHITECTS INC, DRAWING NO. A 100, JANUARY 23 - 2026, IN PDF FORMAT.

NOTES

THIS FIGURE IS SCHEMATIC ONLY AND TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

0 12.5 25 37.5 50m

MTE
Engineers, Scientists, Surveyors

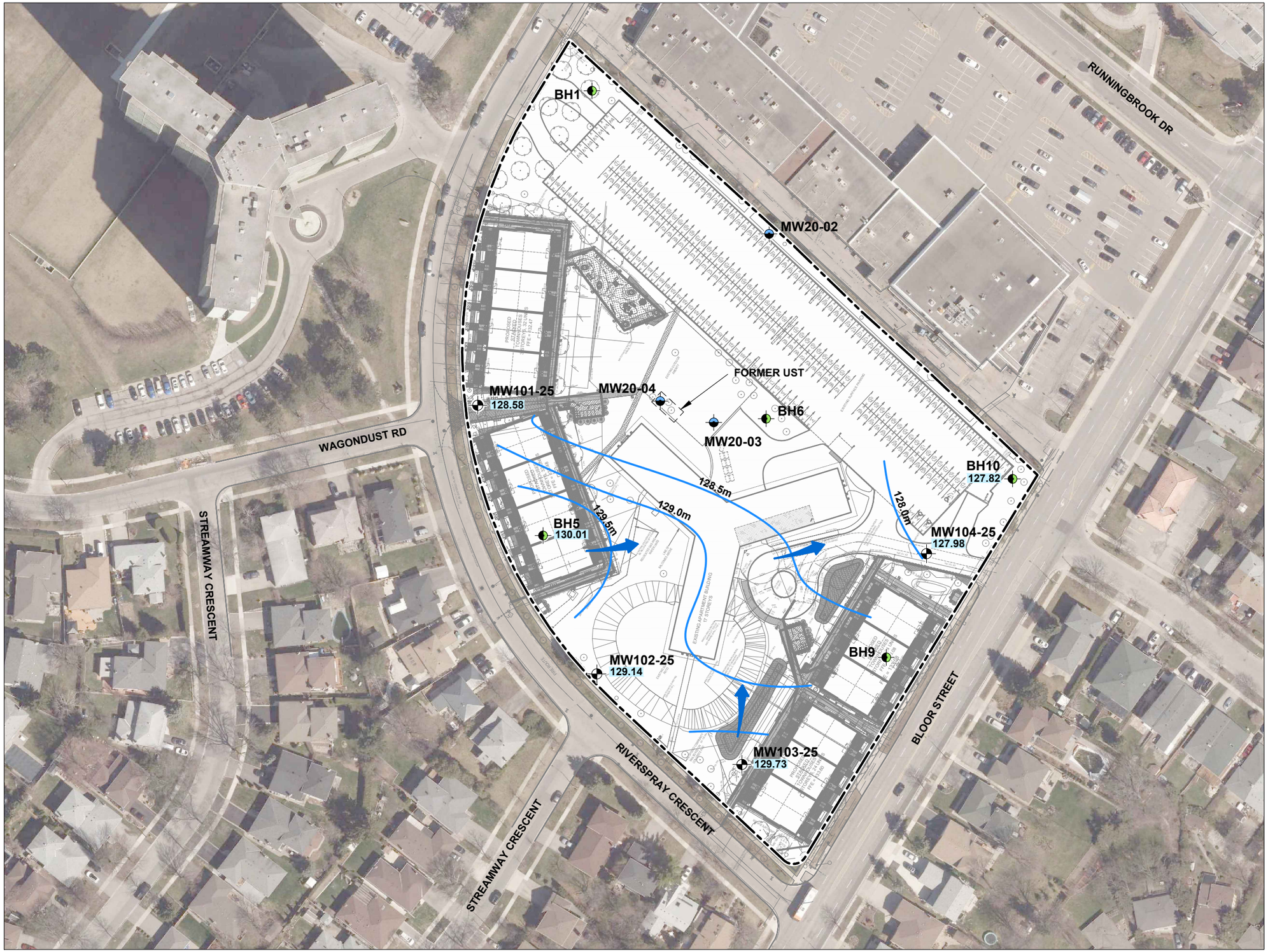
PROJECT
HYDROGEOLOGICAL INVESTIGATION
1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
SITE PLAN

Drawn	Scale	Figure
IC/DCH	1:1,250	6
Checked	Project No. 62263_001	
Date 2026-04-08	Rev No. 0	

CAD: \\10.1.0.25\DWG_P\P\62263_001\62263_001-HYG1.6.DWG

Plot Date: April 8, 2026 - 4:01 PM



N

LEGEND

- SITE
- MONITORING WELL
- MONITORING WELL (PREMIER,2020)
- MONITORING WELL (EXP,2019)
- 128.58 — MEASURED WATER LEVEL MAY 14, 2025 (m AMSL)
- 130m — INTERPRETED WATER TABLE ELEVATION (m AMSL)
- INFERRED GROUNDWATER FLOW DIRECTION

REFERENCES

BING IMAGERY AS MAY 8, 2025 (IMAGE DATE UNKNOWN); AND CITY OF MISSISSAUGA, PARCEL, ROAD, RAIL, AND WATER NETWORK, OPEN DATA SET.
PREMIER ENVIRONMENTAL SERVICES INC, SITE PLAN SHOWING BOREHOLES AND MONITORING WELL LOCATIONS, PROJECT NO. 620017.CE, MAY 2020, IN PDF FORMAT.
EXP SERVICES INC, BOREHOLE LOCATION PLAN, PROJECT NO. BRM-00607430-AO, DEC 2019, IN PDF FORMAT.
SITE PLAN AND SITE STATISTICS, KOHN PARTNERSHIP ARCHITECTS INC, DRAWING NO. A 100, JANUARY 23 - 2026, IN PDF FORMAT.

NOTES

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ALL LOCATIONS ARE APPROXIMATE.

0 12.5 25 37.5 50m

MTE
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PROJECT
HYDROGEOLOGICAL INVESTIGATION
1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
GROUNDWATER FLOW DIRECTION (May 14 - 2025)

Drawn: IC/DCH	Scale: 1:1,250	Figure: 8
Checked:	Project No.: 62263_001	
Date: 2026-04-08	Rev No.: 0	

CAD: \\10.1.0.25\DWG_P\P\62263_001\62263_001-HYG1.8.DWG

Plot Date: April 8, 2026 - 4:00 PM

CAD: \\10.1.0.25\DWG_P\P\62263_001\62263_001-HYG1.9.DWG



N

LEGEND

- SITE
- DEVELOPMENT SITE AREA
- PAVED SURFACE
- LANDSCAPED AREA

REFERENCES

2020 AERIAL IMAGE, PARCEL, ROAD, RAIL, AND WATER NETWORK, CITY OF MISSISSAUGA, OPEN DATA SET;
PREMIER ENVIRONMENTAL SERVICES INC, SITE PLAN SHOWING BOREHOLES AND MONITORING WELL LOCATIONS, PROJECT NO. 620017.CE, MAY 2020, IN PDF FORMAT.
EXP SERVICES INC, BOREHOLE LOCATION PLAN, PROJECT NO. BRM-00607430-AO, DEC 2019, IN PDF FORMAT.
SITE PLAN AND SITE STATISTICS, KOHN PARTNERSHIP ARCHITECTS INC, DRAWING NO. A 100, JANUARY 23 - 2026, IN PDF FORMAT.

NOTES

THIS FIGURE IS SCHEMATIC ONLY AND TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

0 12.5 25 37.5 50m

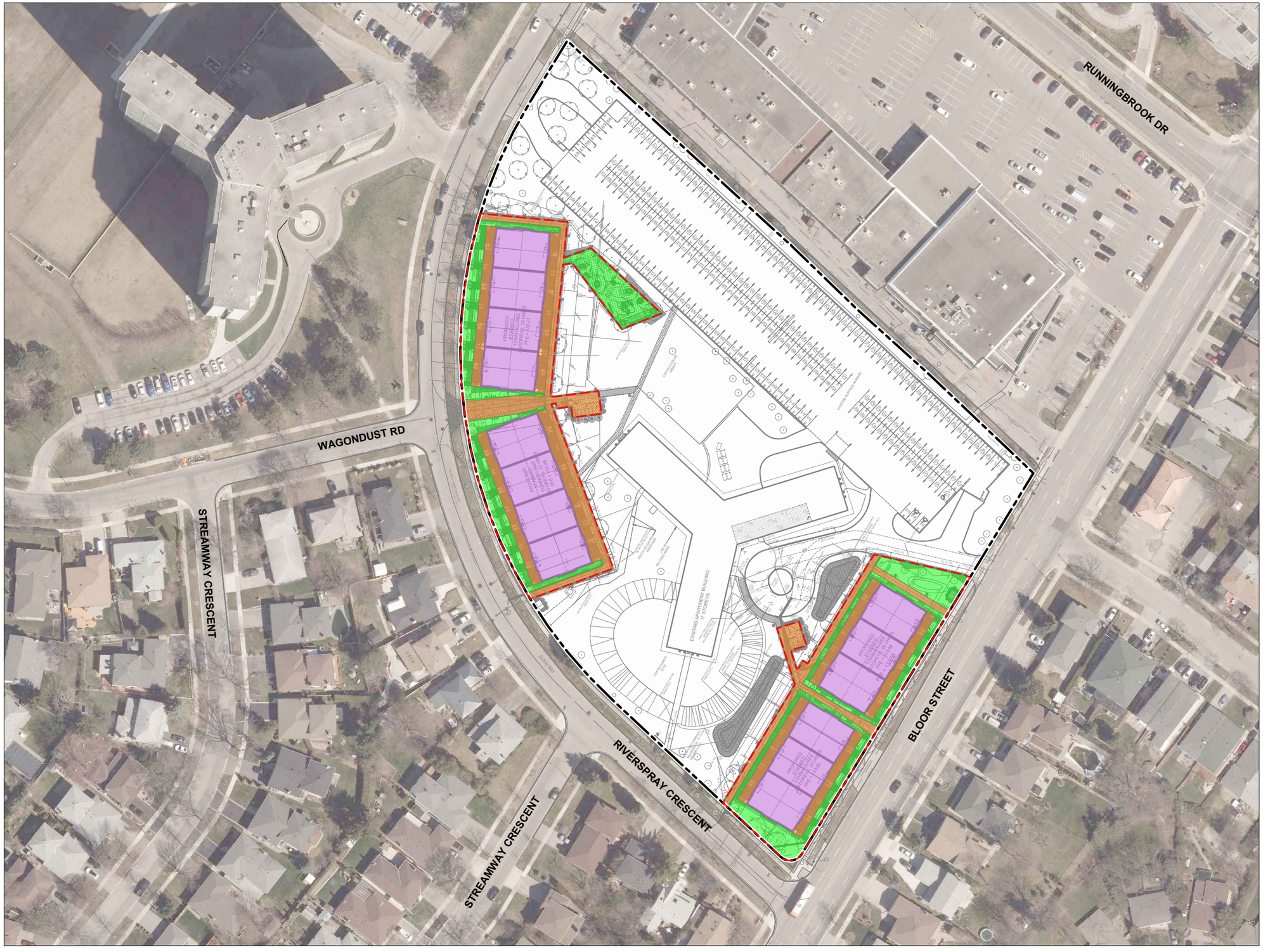
MTE
Engineers, Scientists, Surveyors

PROJECT
HYDROGEOLOGICAL INVESTIGATION
1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
EXISTING LAND USE

Drawn	Scale	Figure
IC/DCH	1:1,250	9
Checked	Project No. 62263_001	
Date 2026-04-08	Rev No. 0	

Plot Date: April 8, 2026 - 4:01 PM



N

LEGEND

- SITE
- DEVELOPMENT SITE AREA
- BUILDING ROOF
- PAVED SURFACE
- LANDSCAPED AREA

REFERENCES

2020 AERIAL IMAGE, PARCEL, ROAD, RAIL, AND WATER NETWORK, CITY OF MISSISSAUGA, OPEN DATA SET;
PREMIER ENVIRONMENTAL SERVICES INC, SITE PLAN SHOWING BOREHOLES AND MONITORING WELL LOCATIONS, PROJECT NO. 620017.CE, MAY 2020, IN PDF FORMAT.
EXP SERVICES INC, BOREHOLE LOCATION PLAN, PROJECT NO. BRM-00607430-AO, DEC 2019, IN PDF FORMAT.
SITE PLAN AND SITE STATISTICS, KOHN PARTNERSHIP ARCHITECTS INC, DRAWING NO. A 100, JANUARY 23 - 2026, IN PDF FORMAT.

NOTES

THIS FIGURE IS SCHEMATIC ONLY AND TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

0 12.5 25 37.5 50m

MTE
Engineers, Scientists, Surveyors

PROJECT
HYDROGEOLOGICAL INVESTIGATION
1055 BLOOR STREET EAST,
MISSISSAUGA, ONTARIO

TITLE
PROPOSED LAND USE

Drawn IC/DCH	Scale 1:1,250	Figure **10**
Checked	Project No. 62263_001	
Date 2026-04-09	Rev No. 0	

CAD: P:\P\62263_001\62263_001-HYG1.10.DWG

Plot Date: April 9, 2026 - 10:09 AM

Appendix A

Borehole Logs

RECORD OF BOREHOLE No. MW101-25

Project Number:	62263_001	Drilling Location:	See BH Location Plan	Logged by:	FJ
Project Client:	CAPREIT	Drilling Method:	100 mm Solid Stem Augering	Compiled by:	FJ
Project Name:	Geotechnical and Hydrogeological Investigations	Drilling Machine:	Truck Mounted Drill	Reviewed by:	AC
Project Location:	1055 Bloor Street, Mississauga, ON	Date Started:	Apr 28, 25	Date Completed: Apr 28, 25	Revision No.: 0, 5/16/25

Geodetic Ground Surface Elevation: 131.64 m

Depth (m)	Description	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	Elevation (m)	Field Testing (Penetration / Vane)	Lab Testing (pH / Vapour / LEL / Plastic / Liquid)	Instrumentation Installation
	TOPSOIL: 160 mm thick								
0	131.48								
	FILL: clayey silt, some sand, trace gravel, trace rootlets, brown, moist, stiff	SS	1	79	8			23	
0.2						131			
1		SS	2	92	8			15	
						130			
	129.81	SS	3	100	31			15	
	SILT TILL: some clay, some sand, trace gravel, brown, moist, dense								
1.8									
2	129.35								
	SILT TILL/SHALE COMPLEX: trace clay, trace sand, trace gravel, brown to grey, moist, dense to very dense	SS	4	92	44	129		12	
2.3									
3		SS	5	95	66	128		12	
	- auger grinding at 3.96 m bgs								
4	127.07								
	INFERRED SHALE: highly weathered, grey, dry	SS	6	53	60/15 cm	127	60 / 15 cm		
4.6	126.92								
	End of Borehole								
4.7									

Notes:
1. Borehole was open upon completion of drilling.
2. Borehole was dry upon completion of drilling.
3. Ground water level reading at 3.06 m bgs on May 14, 2025.

MTE Consultants Inc.
970 Lawrence Avenue West, Suite 600
Toronto, Ontario M6A 3B6
Canada
T: 416-489-7888
F: 416-489-7666

Groundwater depth on completion of drilling: Dry m.

Groundwater depth observed on 5/14/2025 at a depth of: 3.06 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

RECORD OF BOREHOLE No. MW102-25

Project Number:	62263_001	Drilling Location:	See BH Location Plan	Logged by:	FJ
Project Client:	CAPREIT	Drilling Method:	100 mm Solid Stem Augering	Compiled by:	FJ
Project Name:	Geotechnical and Hydrogeological Investigations	Drilling Machine:	Truck Mounted Drill	Reviewed by:	AC
Project Location:	1055 Bloor Street, Mississauga, ON	Date Started:	Apr 28, 25	Date Completed: Apr 28, 25	Revision No.: 0, 5/16/25

Geodetic Ground Surface Elevation: 132.23 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	TOPSOIL: 110 mm thick (132.12)						
	FILL: clayey silt, some sand, trace gravel, trace rootlets, brown, dry to moist, stiff (0.1 – 130.55)	SS	1	33	9		132
		SS	2	84	10	1	131
	SILT TILL: some clay, some sand, trace gravel, brown, moist, compact (1.7 – 129.94)	SS	3	100	16	2	130
	SILT TILL/SHALE COMPLEX: trace clay, trace sand, trace gravel, brown to grey, moist, very dense (2.3)	SS	4	83	82		
		SS	5	93	89	3	129
	- auger grinding from 3.35 m bgs to 3.66 m bgs						
	- auger grinding from 4.27 m bgs to 4.57 m bgs					4	128
	(127.66)						
	INFERRED SHALE: highly weathered, grey, (127.46 – 4.7)	SS	6	80	50/10 cm		
	End of Borehole						

Notes:
1. Borehole was open upon completion of drilling.
2. Borehole was dry upon completion of drilling.
3. Ground water level reading at 3.09 m bgs on May 14, 2025.

FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa): 20 40 60 80

50 / 10 cm

LAB TESTING

★ Rinse pH Values: 2 4 6 8 10 12

Soil Vapour Reading: △ parts per million (ppm): 100 200 300 400

▲ Lower Explosive Limit (LEL): W_P W W_L — Plastic — Liquid: 20 40 60 80

12 11 18 12

INSTRUMENTATION INSTALLATION

COMMENTS

MTE Consultants Inc.
970 Lawrence Avenue West, Suite 600
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Canada
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F: 416-489-7666

▽ Groundwater depth on completion of drilling: Dry m.

▼ Groundwater depth observed on 5/14/2025 at a depth of: 3.09 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

RECORD OF BOREHOLE No. MW103-25

Project Number:	62263_001	Drilling Location:	See BH Location Plan	Logged by:	FJ
Project Client:	CAPREIT	Drilling Method:	100 mm Solid Stem Augering	Compiled by:	FJ
Project Name:	Geotechnical and Hydrogeological Investigations	Drilling Machine:	Truck Mounted Drill	Reviewed by:	AC
Project Location:	1055 Bloor Street, Mississauga, ON	Date Started:	Apr 28, 25	Date Completed: Apr 28, 25	Revision No.: 0, 5/16/25

Geodetic Ground Surface Elevation: 131.90 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 100 mm asphalt over 100 mm granular base (131.70)										
	FILL: clayey silt, some sand, trace gravel, brown, moist, firm to stiff (0.2)	SS	1	71	6				18		
		SS	2	62	9	1	131		18		
	(130.38)										
	SILT TILL: some clay, some sand, trace gravel, brown, moist, dense (1.5)	SS	3	100	33				11		
	(129.61)					2	130				
	SILT TILL/SHALE COMPLEX: trace clay, trace sand, trace gravel, brown to grey, moist, very dense (2.3)	SS	4	84	56				14		
							129				
		SS	5	100	50/13 cm	3		50 / 13 cm			
	- auger grinding from 3.05 m bgs to 3.35 m bgs										
							128				
	- auger grinding from 4.11 m bgs to 4.57 m bgs					4					
	(127.33)										
	INFERRED SHALE: highly weathered, grey, (127.26)	SS	6	63	50/8 cm			50 / 8 cm			
	End of Borehole (4.7)										

Notes:
1. Borehole was open upon completion of drilling.
2. Borehole was dry upon completion of drilling.
3. Ground water level reading at 2.17 m bgs on May 14, 2025.

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Groundwater depth on completion of drilling: Dry m.

Groundwater depth observed on 5/14/2025 at a depth of: 2.17 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

RECORD OF BOREHOLE No. MW104-25

Project Number:	62263_001	Drilling Location:	See BH Location Plan	Logged by:	FJ
Project Client:	CAPREIT	Drilling Method:	100 mm Solid Stem Augering	Compiled by:	FJ
Project Name:	Geotechnical and Hydrogeological Investigations	Drilling Machine:	Truck Mounted Drill	Reviewed by:	AC
Project Location:	1055 Bloor Street, Mississauga, ON	Date Started:	Apr 28, 25	Date Completed: Apr 28, 25	Revision No.: 0, 5/16/25

Geodetic Ground Surface Elevation: 130.75 m

Depth (m)	Description	Elevation (m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	Field Testing	Lab Testing	Instrumentation Installation	Comments
	ASPHALT PAVEMENT: 140 mm asphalt over 80 mm granular base (130.53)									
0.2	**FILL:** clayey silt, some sand, trace gravel, some organics, black to dark grey, moist/damp, firm		SS	1	87	6		23		
1		130	SS	2	70	6		18		
	(129.07)									
1.7	**SILT TILL:** some clay, some sand, trace gravel, brown, moist, compact	129	SS	3	100	18		14		Gr: 5%, Sa: 17%, Si: 50%, Cl: 18%
2			SS	4	100	25		13		
	(127.70)	128								
3.1	**SILT TILL/SHALE COMPLEX:** trace clay, trace sand, trace gravel, brown to grey, moist, very dense - auger grinding from 3.35 m bgs to 3.66 m bgs		SS	5	100	81		13		
3										
	- auger grinding from 3.96 m bgs to 4.72 m bgs	127								
4										
	(126.18)									
4.6	**INFERRED SHALE:** highly weathered, grey, dry (126.00)		SS	6	44	50/3 cm	50 / 3 cm			
4.8	**End of Borehole**	126								

Notes:
1. Borehole was open upon completion of drilling.
2. Borehole was dry upon completion of drilling.
3. Ground water level reading at 2.77 m bgs on May 14, 2025.

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Groundwater depth on completion of drilling: Dry m.

Groundwater depth observed on 5/14/2025 at a depth of: 2.77 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Log of Borehole 1

Project No. BRM-00607430-A0

Project: Geotechnical and Hydrogeological Investigation

Location: 1055 Bloor Street, Mississauga, Ontario

Drawing No. 2

Sheet No. 1 of 1

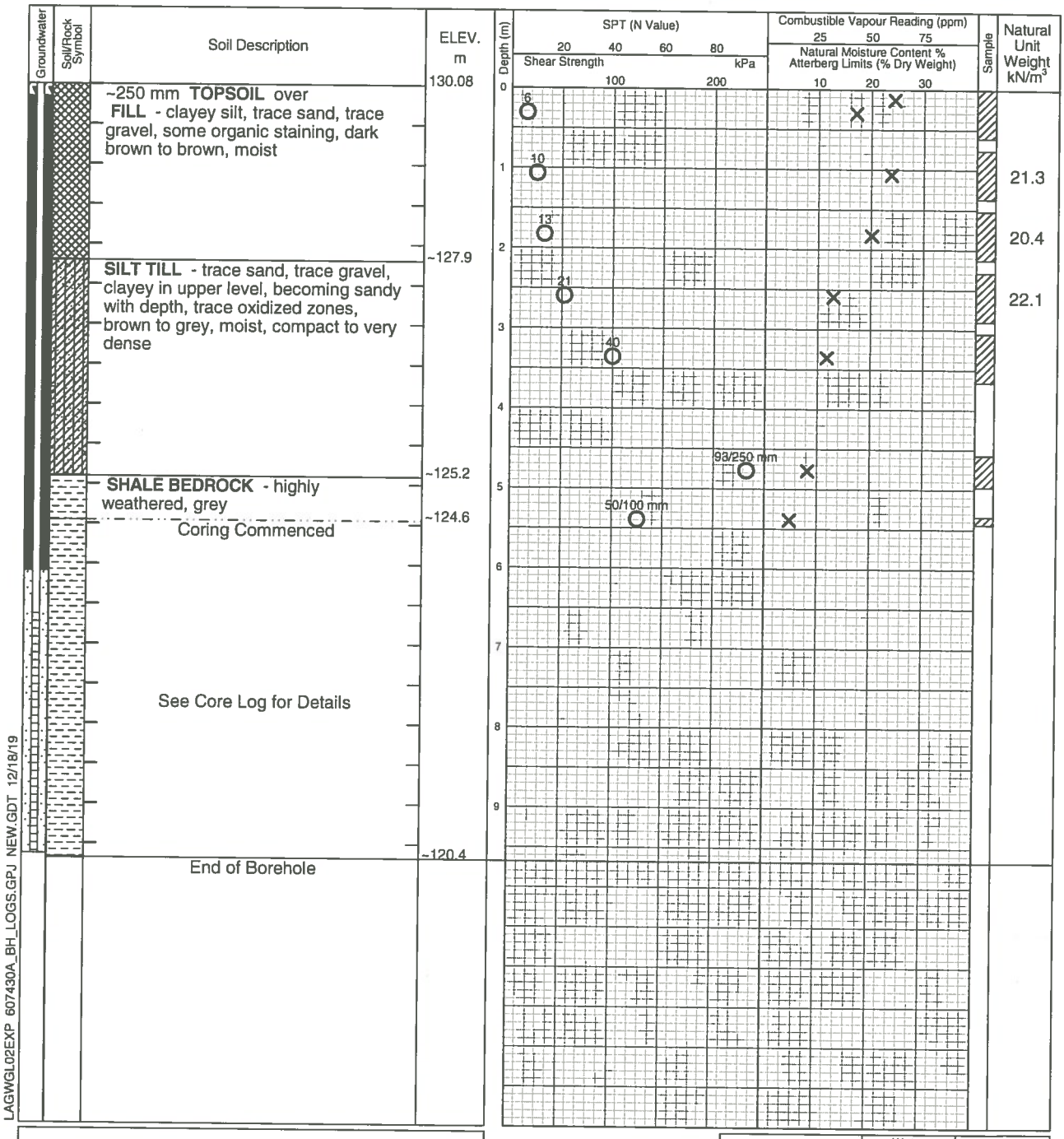
Date Drilled: December 2, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



LAGWGL02EXP 607430A_BH_LOGS.GPJ NEW.GDT 12/18/19

Notes:
1. Borehole advanced to completion at ~9.7 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

exp.
Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)
December 7, 2019	~3.5	Well
December 12, 2019	~3.6	Well

ROCK CORE LOG

BH 1

PROJECT Geotechnical and Hydrological Investigations	**ORIENTATION** Vertical	**ELEVATION (m)** 130.1	**DATUM** Geodetic	**PROJECT NUMBER** BRM-00607430-A0
LOCATION 1055 Bloor Street, Mississauga, Ontario	**DATE STARTED** 12/02/19	**COMPLETED** 12/02/19	**LOGGED BY** D. Panchal	**DRAWING NUMBER** 2A
CLIENT CAPREIT	**DRILLER** Davis	**DRILL TYPE** CME 55 - Track	**CORE BARREL** HQ	**SHEET** 1 of 1

ELEVATION (m)	DEPTH (m)	SYMBOL	GENERAL DESCRIPTION	JOINT CHARACTERISTICS: NO. OF SETS	JOINT TYPE	ORIENTATION	SPACING	ROUGHNESS	FILLING	APERTURE (mm)	WEATHERING	STRENGTH	FRACTURE FREQUENCY	RUN NUMBER	RECOVERY (%)	RQD	WATER RECOVERY (%)	WATER COLOUR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
125.1	5																	
			See Borehole Log for Details															
124.6		///	**GEORGIAN BAY FORMATION**															
124.4					F	V												
124.4					F	V												
124.4			Shale with interbedded siltstone, and clay layers.		F	D												
124.3	6			1	B	F	VC	RU						1	94	71	95	Grey
124.2							C	RP										
124.0			Shale (89%) thinly bedded or laminated, grey, low strength, alternating between highly and slightly weathered to ~8.2 m and between moderately weathered and unweathered below.															
123.8																		
123.6																		
123.6					F	D												
123.4					F	V												
123.4	7		Limestone (2%) fine grained, grey, medium strength, unweathered.															
123.3																		
123.1			Siltstone (9%) fine grained, grey, medium strength, unweathered.															
122.9				1	B	F	VC	RP						2	100	75	100	Grey
122.6					F	V	C	SU										
122.6			Discontinuities: bedding joints are rough planar to smooth undulating and at wide to very close intervals.															
122.5																		
122.4	8																	
122.4			Vertical fractures were noted at ~5.67, 5.70, 6.74, 7.56, 8.09 and 8.22 m.		F	V												
122.1					F	V												
122.0			Dipping fractures were noted at ~5.75 and 6.70 m.															
122.0																		
121.9																		
121.8			Rubble layers were noted at ~5.56 (190 mm), 7.69 (80 mm) and 8.76 m (30 mm).															
121.7	9			1	B	F	C	SU						3	99	91	100	Grey
121.6							M	SP										
121.4																		
121.3																		
121.3																		
120.8			End of Borehole at 9.7 m															
120.4	10																	
	11																	
	12																	
	13																	

EXP_ROCKCORE 1055 BLOOR ST ROCK LOG.GPJ CORE_LOG.GDT 12/18/19

exp.

Log of Borehole 2

Project No. BRM-00607430-A0

Project: Geotechnical and Hydrogeological Investigation

Location: 1055 Bloor Street, Mississauga, Ontario

Drawing No. 3

Sheet No. 1 of 1

Date Drilled: November 28, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample ⊠
SPT (N) Value ○ ▨
Dynamic Cone Test ——
Shelby Tube ■
Field Vane Test ✚ S

Combustible Vapour Reading □
Natural Moisture ×
Plastic and Liquid Limit ⊢—○
Undrained Triaxial at % Strain at Failure ⊕
Penetrometer ▲

Groundwater	Soil/Rock Symbol	Soil Description	ELEV. m	Depth (m)	SPT (N Value) / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	Sample	Natural Unit Weight kN/m³
		~150 mm **TOPSOIL** over **FILL** - clayey silt, trace sand, trace gravel with stone fragments, some organic staining, dark brown to brown, moist	131.40	0	10			
				1	23			22.8
		SILT TILL - trace sand, trace gravel, clayey in upper level, becoming sandy with depth, trace oxidized zones, brown to grey, moist, compact to very dense	~129.9	2	20			22.8
				3	44			
				4	40			22.1
				5	50/100 mm			
		SHALE BEDROCK - highly weathered, grey	~126.4	6	60/50 mm			
		Coring Commenced	~125.9	7				
		See Core Log for Details		8				
		End of Borehole	~121.7	9				

LAGWGL02EXP 607430A_BH_LOGS.GPJ NEW.GDT 12/18/19

Notes:
1. Borehole advanced to completion at ~9.7 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

exp.
Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)

ROCK CORE LOG

BH 2

PROJECT	ORIENTATION	ELEVATION (m)	DATUM	PROJECT NUMBER
Geotechnical and Hydrological Investigations	Vertical	131.4	Geodetic	BRM-00607430-A0
LOCATION	**DATE STARTED**	**COMPLETED**	**LOGGED BY**	**DRAWING NUMBER**
1055 Bloor Street, Mississauga, Ontario	11/28/19	11/28/19	D. Panchal	3A
CLIENT	**DRILLER**	**DRILL TYPE**	**CORE BARREL**	**SHEET**
CAPREIT	Davis	CME 55 - Track	HQ	1 of 1

ELEVATION (m)	DEPTH (m)	SYMBOL	GENERAL DESCRIPTION	JOINT CHARACTERISTICS: NO. OF SETS	JOINT TYPE	ORIENTATION	SPACING	ROUGHNESS	FILLING	APERTURE (mm)	WEATHERING	STRENGTH	FRACTURE FREQUENCY	RUN NUMBER	RECOVERY (%)	RQD	WATER RECOVERY (%)	WATER COLOUR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
126.4	5																	
			See Borehole Log for Details															
125.9			**Core Lost**															
125.8			**GEORGIAN BAY FORMATION**															
125.7																		
125.6																		
125.6	6																	
125.5			Shale with interbedded siltstone, and clay layers.	1	B	F	VC C	RU RP	SO SO SO	20 mm 10 mm 20 mm				1	84	32	90	Grey
125.5																		
125.5			Shale (86%) thinly bedded or laminated, grey, low strength, alternating between highly and slightly weathered to ~7.1 m and between moderately weathered and unweathered below.		F F F	V V V												
125.4																		
125.4																		
125.3																		
125.3	7																	
125.2			Limestone (6%) fine grained, grey, medium strength, unweathered															
125.2				1	B	F	VC C	RP SU						2	90	59	100	Grey
125.2			Siltstone (7%) fine grained, grey, medium strength, unweathered.		F	V												
125.1																		
125.1																		
124.8			Discontinuities: bedding joints are rough planar to smooth undulating and at wide to very close intervals.															
124.7	8																	
124.6																		
124.6			Vertical fractures were noted at ~6.73, 6.75. 6.82, 7.58 and 8.96 m.															
124.5																		
124.5			Clay (1%) layers, highly weathered, very low strength were noted at ~5.93, 6.03 and 6.20 m.															
124.4																		
124.3																		
124.3	9		Rubble layers were noted at ~5.66 (60 mm), 5.83 (70 mm), 6.33 (20 mm), 6.64 (130 mm), 6.89 (30 mm), 7.28 (60 mm) and 7.65 m (100 mm).		F	V	C M							3	100	87	100	Grey
124.2																		
124.1																		
124.1																		
124.0																		
123.8			End of Borehole at 9.7 m															
123.8																		
123.7	10																	
123.3																		
123.2																		
122.8																		
122.5																		
122.4																		
122.2																		
122.1	11																	
121.7																		
	12																	
	13																	

EXP_ROCKCORE 1055 BLOOR ST_ROCK LOG.GPJ CORE_LOG.GDT 12/18/19

exp.

Log of Borehole 3

Project No. BRM-00607430-A0

Drawing No. 4

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

Date Drilled: December 2, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

Groundwater	Soil/Rock Symbol	Soil Description	ELEV. m	Depth (m)	SPT (N Value) / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	Sample	Natural Unit Weight kN/m³
		~150 mm **TOPSOIL** over **FILL** - clayey silt, trace sand, trace gravel, some organic inclusions, dark brown to black, moist	130.87	0	6			
				1	11			21.1
			~128.7	2	5			
		SILT TILL - trace sand, trace gravel, clayey in upper level, becoming sandy with depth, trace oxidized zones, brown to grey, moist, compact to very dense		2	18			22.0
				3	34			22.5
				4				
				5	76			
			~125.4		50/75 mm			
		SHALE BEDROCK - highly weathered, grey	~124.7	6	60/25 mm			
		End of Borehole						

Notes:
1. Borehole advanced to completion at ~6.1 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

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Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	~5.3	~6.1

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Log of Borehole 4

Project No. BRM-00607430-A0

Drawing No. 5

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

Date Drilled: November 29, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

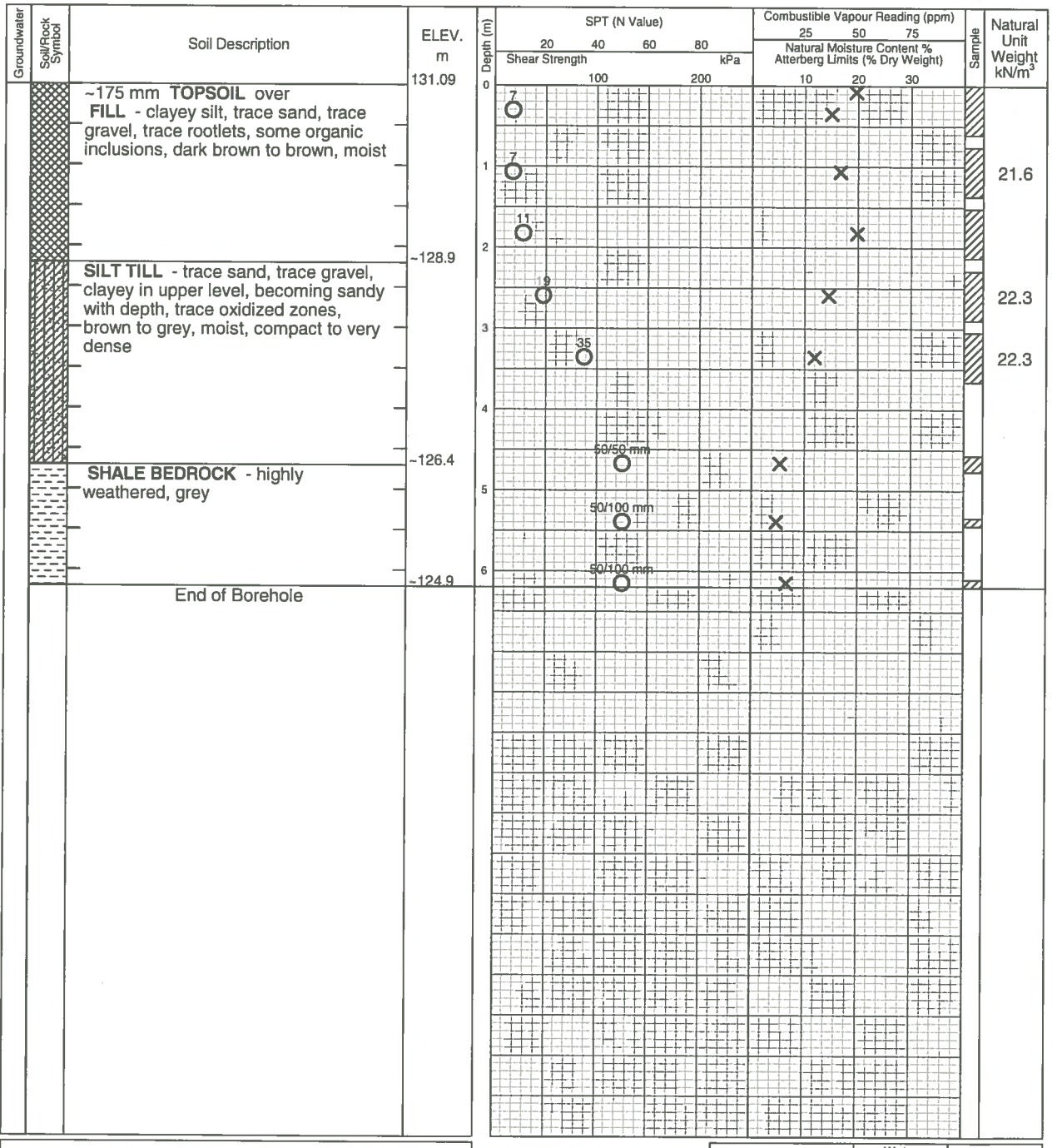
Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

Groundwater	Soil/Rock Symbol	Soil Description	ELEV. m	Depth (m)
		~175 mm **TOPSOIL** over **FILL** - clayey silt, trace sand, trace gravel, trace rootlets, some organic inclusions, dark brown to brown, moist	131.09	0
		SILT TILL - trace sand, trace gravel, clayey in upper level, becoming sandy with depth, trace oxidized zones, brown to grey, moist, compact to very dense	~128.9	2
		SHALE BEDROCK - highly weathered, grey	~126.4	5
		End of Borehole	~124.9	6

SPT (N Value): 20 40 60 80
Shear Strength kPa: 100 200
Combustible Vapour Reading (ppm): 25 50 75
Natural Moisture Content % Atterberg Limits (% Dry Weight): 10 20 30

SPT values: 7, 7, 11, 9, 35, 50/50 mm, 50/100 mm, 50/100 mm

Sample	Natural Unit Weight kN/m³
	21.6
	22.3
	22.3



Notes:
1. Borehole advanced to completion at ~6.2 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

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Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	~6.0	~6.1

LAGWGL02EXP 607430A_BH_LOGS.GPJ NEW.GDT 12/18/19

Log of Borehole 5

Project No. BRM-00607430-A0

Drawing No. 6

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

Date Drilled: November 28, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

Groundwater	Soil/Rock Symbol	Soil Description	ELEV. m	Depth (m)	SPT (N Value) / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	Sample	Natural Unit Weight kN/m³
		~200 mm **TOPSOIL** over **FILL** - clayey silt, trace sand, trace gravel, trace rootlets, some organic inclusions, dark brown to brown, moist	132.11	0	13, 13			
		SILT TILL - trace sand, trace gravel, clayey in upper level, becoming sandy with depth, trace oxidized zones, brown to grey, moist, compact to very dense	~130.6	1	16			21.9
				2	27			21.9
				3	42			23.0
				4	50/150 mm			
		SHALE BEDROCK - highly weathered, grey	~127.0	5	50/75 mm			
		End of Borehole	~126.7					

Notes:
1. Borehole advanced to completion at ~5.4 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

exp. Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	No Free Water	~6.1
December 7, 2019	~4.6	Well
December 12, 2019	~3.6	Well

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Log of Borehole 6

Project No. BRM-00607430-A0

Drawing No. 7

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

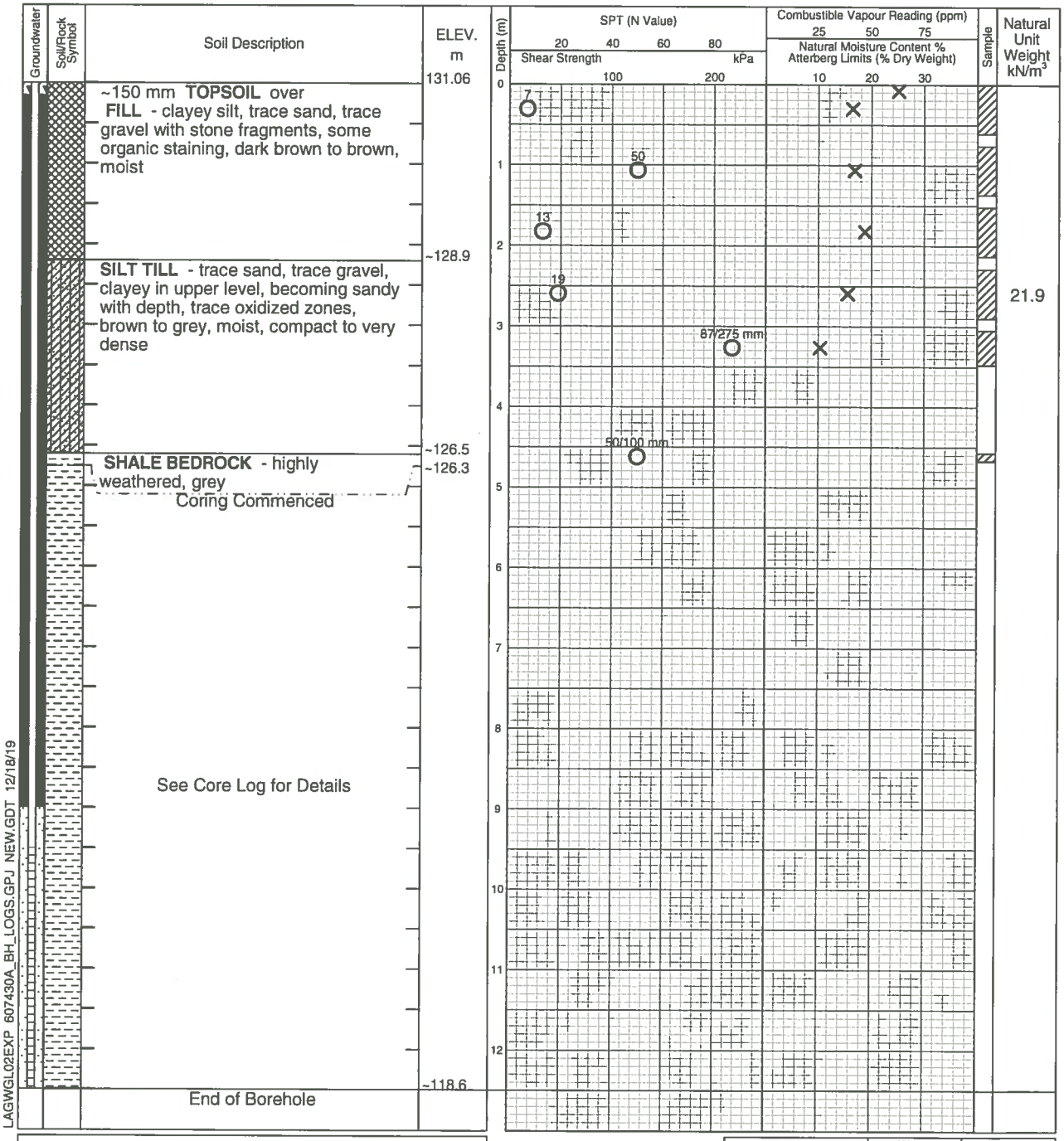
Date Drilled: December 6, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



Notes:
1. Borehole advanced to completion at ~12.5 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

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Elapsed Time	Water Level (m)	Hole Open to (m)
December 7, 2019	~2.6	Well
December 12, 2019	~3.2	Well

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ROCK CORE LOG

BH 6

PROJECT	ORIENTATION	ELEVATION (m)	DATUM	PROJECT NUMBER
Geotechnical and Hydrological Investigations	Vertical	131.1	Geodetic	BRM-00607430-A0
LOCATION	**DATE STARTED**	**COMPLETED**	**LOGGED BY**	**DRAWING NUMBER**
1055 Bloor Street, Mississauga, Ontario	12/06/19	12/06/19	D. Panchal	7A
CLIENT	**DRILLER**	**DRILL TYPE**	**CORE BARREL**	**SHEET**
CAPREIT	Davis	CME 55 - Track	HQ	1 of 2

ELEVATION (m)	DEPTH (m)	SYMBOL	GENERAL DESCRIPTION	JOINT CHARACTERISTICS: NO. OF SETS	JOINT TYPE	ORIENTATION	SPACING	ROUGHNESS	FILLING	APERTURE (mm)	WEATHERING	STRENGTH	FRACTURE FREQUENCY	RUN NUMBER	RECOVERY (%)	RQD	WATER RECOVERY (%)	WATER COLOUR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
126.5																		
126.3			See Borehole Log for Details															
126.3			**GEORGIAN BAY FORMATION**	1	B	F	VC	RU						1	100	25	100	Grey
126.2	-5						VC	RU										
126.2																		
126.1			Shale with interbedded siltstone, and clay layers.		F	V												
126.0					F	V												
125.9			Shale (82%) thinly bedded or laminated, grey, low strength, alternating between highly and slightly weathered to ~7.65 m and between moderately weathered and unweathered below.															
125.9				1	F	V	VC	RU	SO	20 mm				2	81	22	90	Grey
125.9					B	F	VC	RP	NC	50 mm								
125.8	-6				F	V			NC									
125.8					F	V			NC	80 mm								
125.8			Limestone (5%) fine grained, grey, medium strength, unweathered						SO									
125.7									SO	40 mm								
125.6																		
125.6			Siltstone (9%) fine grained, grey, medium strength, unweathered.							50 mm								
125.6																		
125.4	-7		Discontinuities: bedding joints are rough planar to smooth undulating and at wide to very close intervals.															
125.3				1	B	F	C	RP		20 mm				3	100	87	100	Grey
125.3							M	SP										
125.3			Vertical fractures were noted at `5.29, 5.35, 5.82, 5.85, 6.20, 7.63, 9.24 and 10.04 m.															
125.2					F	V												
125.2																		
125.1			Dipping fractures was noted at 10.96 m.															
125.0	-8																	
125.0			clay (4%) layers, highly weathered, very low strength were noted at ~5.76 (20 mm), 6.00 (50 mm), 6.14 (80 mm), 6.23 (40 mm), 6.36 (50 mm) and 6.60 m (20 mm).															
125.0																		
124.9																		
124.9			Rubble layers were noted at ~4.76 (70 mm), 5.09 (90 mm), 5.20 (40 mm), 5.41 (40 mm), 5.71 (90 mm) and 6.04 m (30 mm).															
124.8				1	B	F	C	SP						4	100	73	100	Grey
124.8							C	SP										
124.7	-9																	
124.7			- R0' Zone - Possible shale rubble layer, low recovery possibly due to clay being washed out.															
124.6					F	V												
124.5																		
124.5																		
124.4																		
124.3																		
124.2	-10																	
124.0					F	V												
123.9				1	B	F	M	SP						5	96	92	100	Grey
123.6							M	SP										
123.5																		
123.4																		
123.0																		
122.9	-11																	
122.9					F	D												
122.8																		
122.5																		
122.0																		
121.9																		
121.8				1	B	F	M	SP						6	100	100	100	Grey
121.5	-12						W	SP										
121.4																		
121.3																		
121.3																		
121.1			End of Borehole at 12.5 m															
121.0																		
120.7																		
120.7	-13																	

exp.

ROCK CORE LOG

BH 6

PROJECT Geotechnical and Hydrological Investigations	**ORIENTATION** Vertical	**ELEVATION (m)** 131.1	**DATUM** Geodetic	**PROJECT NUMBER** BRM-00607430-A0	
LOCATION 1055 Bloor Street, Mississauga, Ontario	**DATE STARTED** 12/06/19	**COMPLETED** 12/06/19	**LOGGED BY** D. Panchal	**DRAWING NUMBER** 7A	
CLIENT CAPREIT	**DRILLER** Davis	**DRILL TYPE** CME 55 - Track	**CORE BARREL** HQ	**SHEET** 2 of 2	

ELEVATION (m)	DEPTH (m)	SYMBOL	GENERAL DESCRIPTION	JOINT CHARACTERISTICS: NO. OF SETS	JOINT TYPE	ORIENTATION	SPACING	ROUGHNESS	FILLING	APERTURE (mm)	WEATHERING	STRENGTH	FRACTURE FREQUENCY	RUN NUMBER	RECOVERY (%)	RQD	WATER RECOVERY (%)	WATER COLOUR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
120.6																		
120.5																		
120.2																		
120.0																		
119.9																		
118.9																		
118.6	14																	
	15																	
	16																	
	17																	
	18																	
	19																	
	20																	
	21																	

exp.

Log of Borehole 7

Project No. BRM-00607430-A0

Drawing No. 8

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

Date Drilled: December 6, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

Groundwater	Soil/Rock Symbol	Soil Description	ELEV. m	Depth (m)	SPT (N Value) / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	Sample	Natural Unit Weight kN/m³
		~125 mm **ASPHALT** over **FILL** - sand and gravel, brown, moist	131.38 ~131.0	0				
		FILL - clayey silt, trace sand, trace gravel, trace organic inclusions, brown to grey, moist	~129.6	1	13, 14			21.2
		SILT TILL - trace sand, trace gravel, clayey in upper level, becoming sandy with depth, trace oxidized zones, brown to grey, moist, compact to dense		2	14, 19			21.2
		- auger grinding		3	33			
		SHALE BEDROCK - highly weathered, grey	~127.3	4	50/125 mm			
		End of Borehole	~125.9	5	50/75 mm			

Notes:
1. Borehole advanced to completion at ~5.4 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

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Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	No Free Water	~5.3

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Log of Borehole 8

Project No. BRM-00607430-A0

Drawing No. 9

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

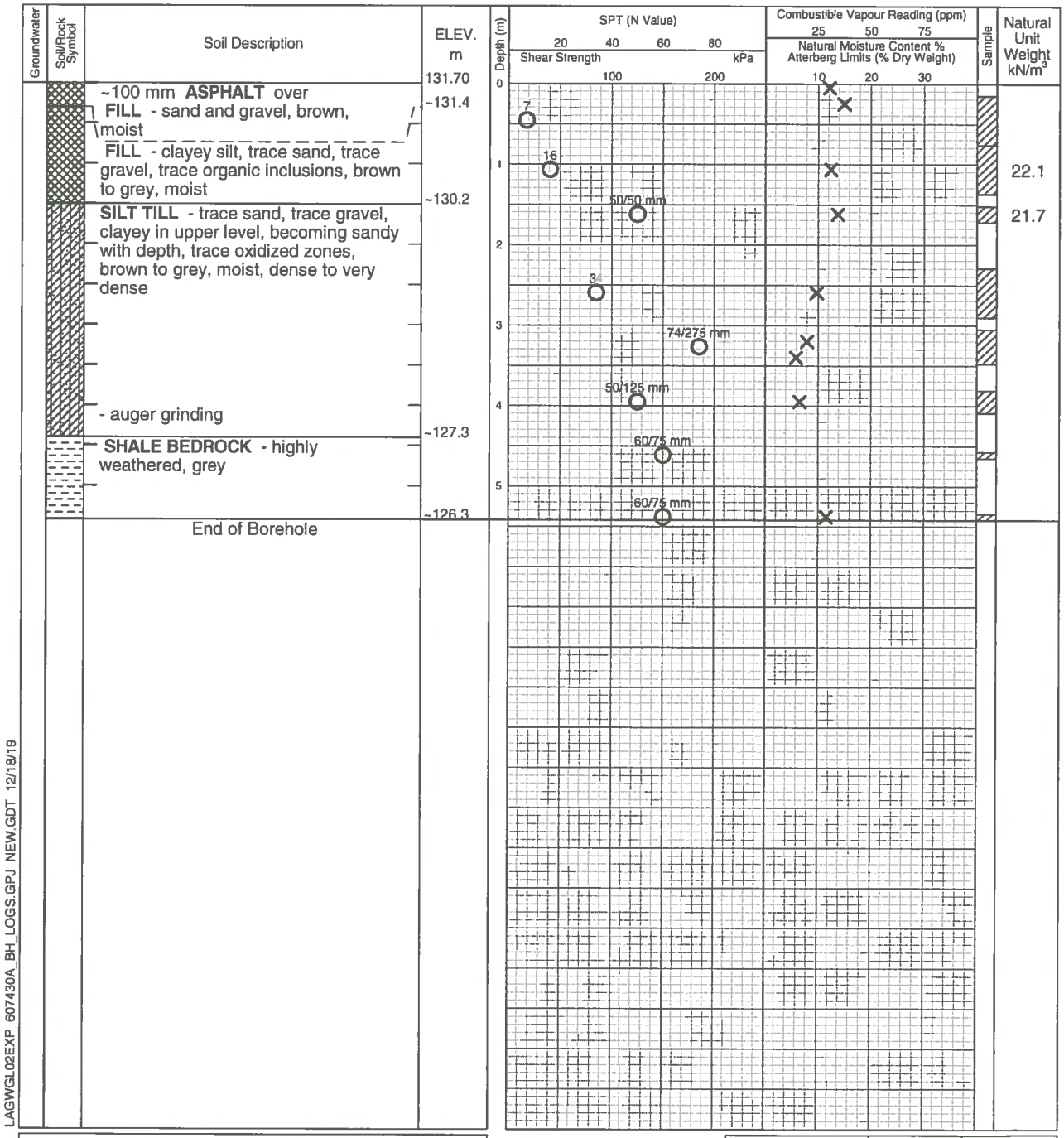
Date Drilled: December 6, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



LAGWGL02EXP 607430A_BH_LOGS.GPJ NEW.GDT 12/18/19

Notes:
1. Borehole advanced to completion at ~5.4 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

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Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	~3.8	~5.3

Log of Borehole 9

Project No. BRM-00607430-A0 | Drawing No. 10

Project: Geotechnical and Hydrogeological Investigation | Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

Date Drilled: November 29, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

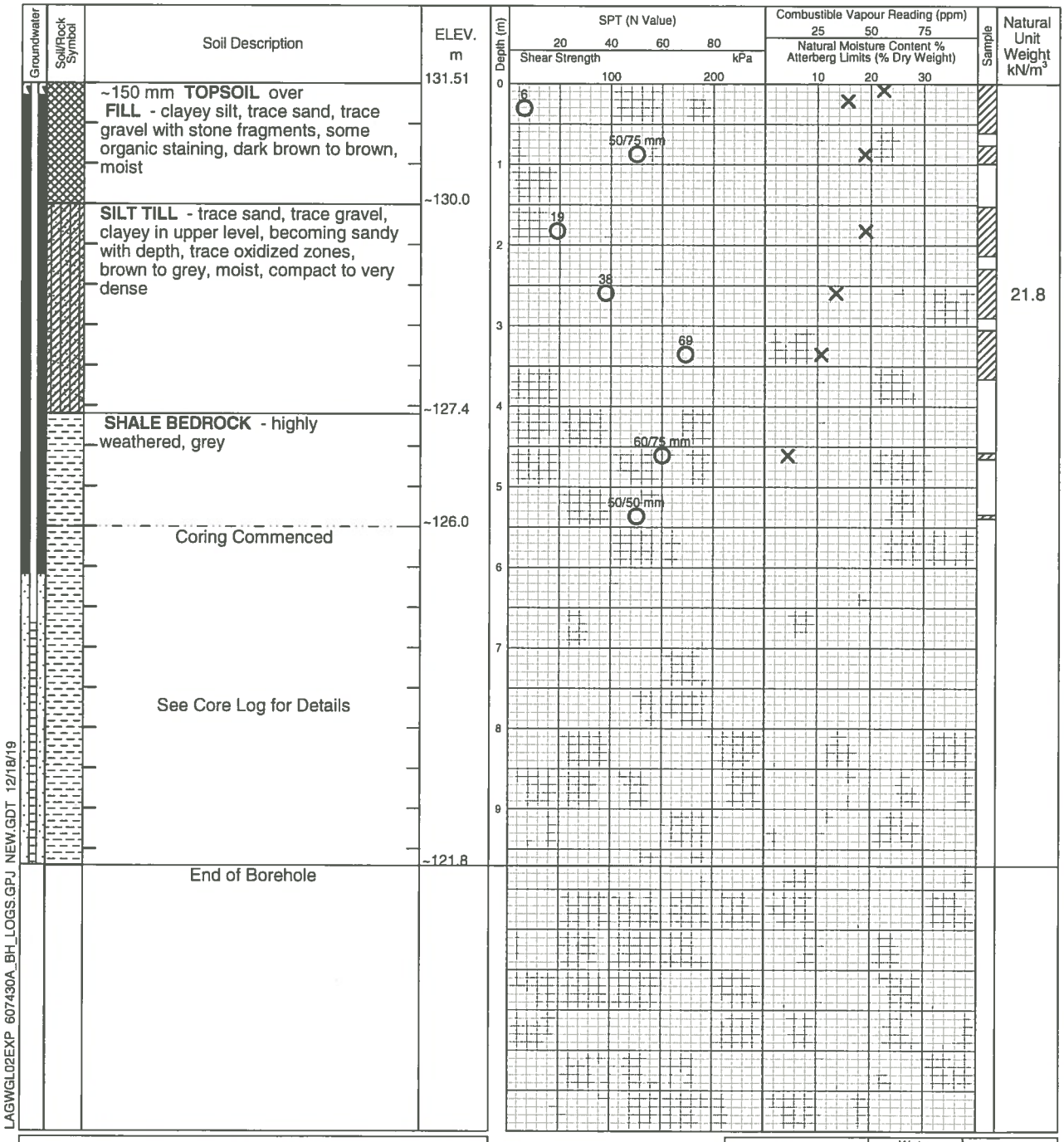
Auger Sample | Combustible Vapour Reading

SPT (N) Value | Natural Moisture

Dynamic Cone Test | Plastic and Liquid Limit

Shelby Tube | Undrained Triaxial at % Strain at Failure

Field Vane Test (S) | Penetrometer



LAGWGL02EXP 607430A_BH_LOGS.GPJ NEW.GDT 12/18/19

Notes:
1. Borehole advanced to completion at ~9.7 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

exp.
Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)
December 7, 2019	~3.1	Well
December 12, 2019	~3.3	Well

ROCK CORE LOG

BH 9

PROJECT	ORIENTATION	ELEVATION (m)	DATUM	PROJECT NUMBER
Geotechnical and Hydrological Investigations	Vertical	131.5	Geodetic	BRM-00607430-A0
LOCATION	**DATE STARTED**	**COMPLETED**	**LOGGED BY**	**DRAWING NUMBER**
1055 Bloor Street, Mississauga, Ontario	11/29/09	11/29/09	D. Panchal	10A
CLIENT	**DRILLER**	**DRILL TYPE**	**CORE BARREL**	**SHEET**
CAPREIT	Davis	CME 55 - Trauck	HQ	1 of 1

ELEVATION (m)	DEPTH (m)	SYMBOL	GENERAL DESCRIPTION	JOINT CHARACTERISTICS: NO. OF SETS	JOINT TYPE	ORIENTATION	SPACING	ROUGHNESS	FILLING	APERTURE (mm)	WEATHERING	STRENGTH	FRACTURE FREQUENCY	RUN NUMBER	RECOVERY (%)	RQD	WATER RECOVERY (%)	WATER COLOUR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
126.5	5		See Borehole Log for Details															
126.0			Core Lost															
125.9			GEORGIAN BAY FORMATION		F	V			SO	20 mm								
125.9									NC									
125.8	6																	
125.8			Shale with interbedded siltstone, and clay layers.	1	B	F	VC	RU		10 mm				1	87	31	95	Grey
125.8							C	RP										
125.7					F	V												
125.6			Shale (78%) thinly bedded or laminated, grey, low strength, alternating between highly and slightly weathered to ~7.62 m and between moderately weathered and unweathered below.		F	V												
125.6																		
125.6									SO	10 mm								
125.6																		
125.5	7		Limestone (5%) fine grained, grey, medium strength, unweathered															
125.4																		
125.2																		
125.1			Siltstone (16%) fine grained, grey, medium strength, unweathered.	1	F	V	C	RP						2	100	63	100	Grey
125.1					B	F	C	SP										
125.1			Discontinuities: bedding joints are rough planar to smooth undulating and at wide to very close intervals.															
125.0	8																	
125.0				1	B	F	W	SP										
125.0							M	SP										
124.9			Vertical fractures were noted at ~5.60, 6.41, 6.54 and 7.34 m.															
124.9																		
124.8			Clay (1%) layers, highly weathered, very low strength were noted at ~5.72 (20 mm), 5.90 (10 mm) and 6.80 m (10 mm).															
124.7																		
124.7	9													3	100	100	100	Grey
124.7			Rubble layers were noted at ~5.63 (50 mm) and 6.53 m (20 mm).															
124.7																		
124.6																		
124.3																		
124.3																		
124.2																		
124.2			End of Borehole at 9.7 m															
124.2	10																	
124.1																		
124.0																		
123.9																		
123.7																		
123.6																		
123.4																		
123.2	11																	
123.1																		
122.8																		
122.6																		
122.4																		
122.3																		
122.3																		
121.8	12																	
	13																	

EXP_ROCKCORE 1055 BLOOR ST_ROCK LOG.GPJ CORE_LOG.GDT 12/18/19

exp.

Log of Borehole 10

Project No. BRM-00607430-A0

Drawing No. 11

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

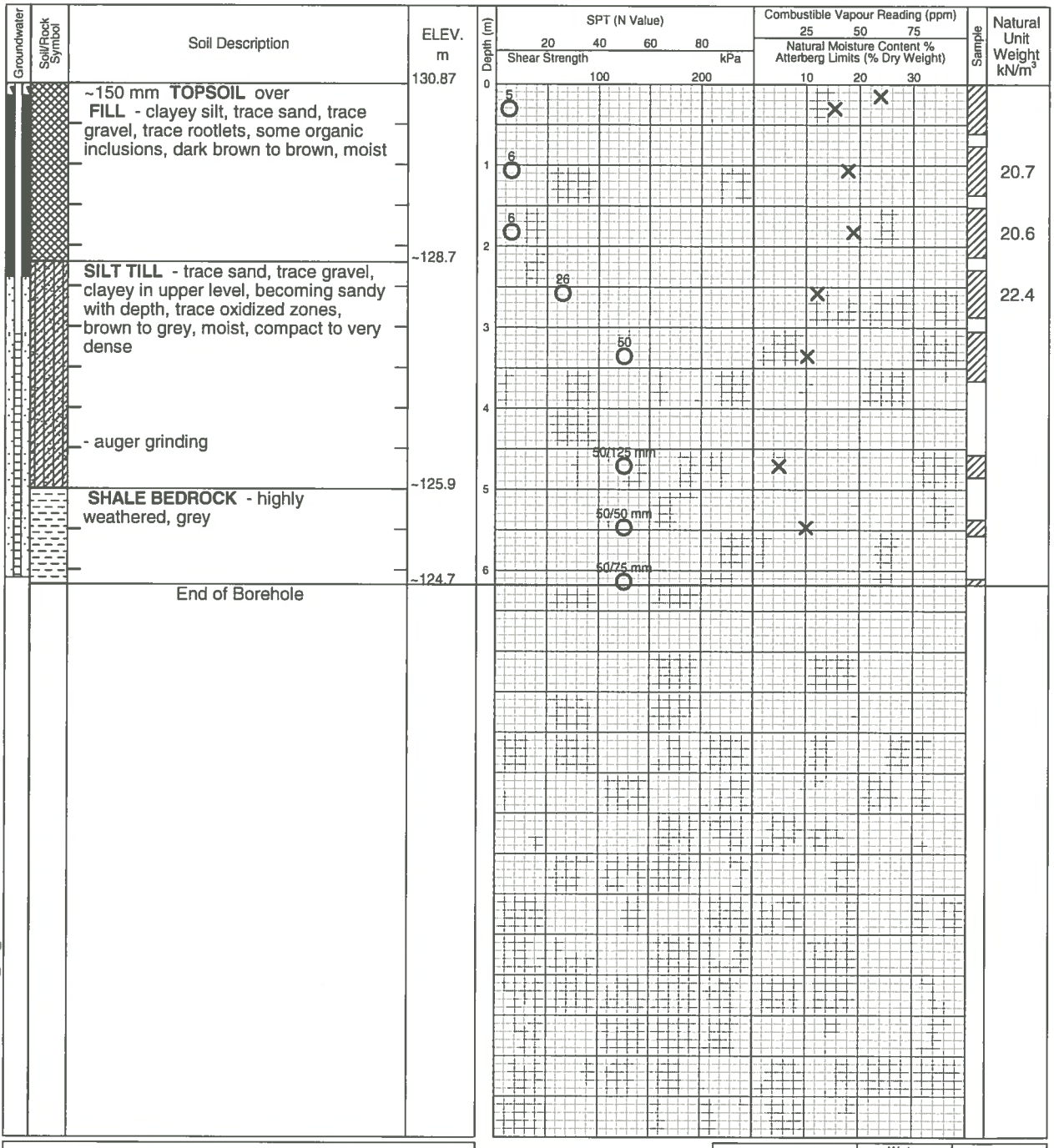
Date Drilled: November 29, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



Notes:
1. Borehole advanced to completion at ~6.2 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

exp.
Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	No Free Water	~6.1
December 7, 2019	~2.9	Well
December 12, 2019	~2.9	Well

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Log of Borehole 11

Project No. BRM-00607430-A0

Drawing No. 12

Project: Geotechnical and Hydrogeological Investigation

Sheet No. 1 of 1

Location: 1055 Bloor Street, Mississauga, Ontario

Date Drilled: December 2, 2019

Drill Type: Solid Stem Augers

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

Groundwater	Soil/Rock Symbol	Soil Description	ELEV. m	Depth (m)
		~175 mm **TOPSOIL** over **FILL** - clayey silt, trace sand, trace gravel, trace rootlets, some organic inclusions, dark brown to brown, moist	130.42	0
		SILT TILL - trace sand, trace gravel, clayey in upper level, becoming sandy with depth, trace oxidized zones, brown to grey, moist, compact to very dense	~128.7	1
		SHALE BEDROCK - highly weathered, grey	~125.6	5
		End of Borehole	~124.2	6

SPT (N Value) 20 40 60 80
Shear Strength kPa 100 200
Combustible Vapour Reading (ppm) 25 50 75
Natural Moisture Content % Atterberg Limits (% Dry Weight) 10 20 30

SPT values: 4, 5, 13, 37, 48, 50/100 mm, 60/100 mm

Sample | Natural Unit Weight kN/m³: 19.7, 21.9, 22.0

Notes:
1. Borehole advanced to completion at ~6.2 m depth by conventional soil sampling methods using a specialist drilling subcontractor. For borehole definitions, see notes prior to logs.
2. This drawing forms part of and must be read in conjunction with the subject report (Ref. No.: BRM-00607430-A0); borehole data requires interpretation assistance by exp professional staff before use by others.

exp. Brampton

Elapsed Time	Water Level (m)	Hole Open to (m)
On Completion	No Free Water	~6.1

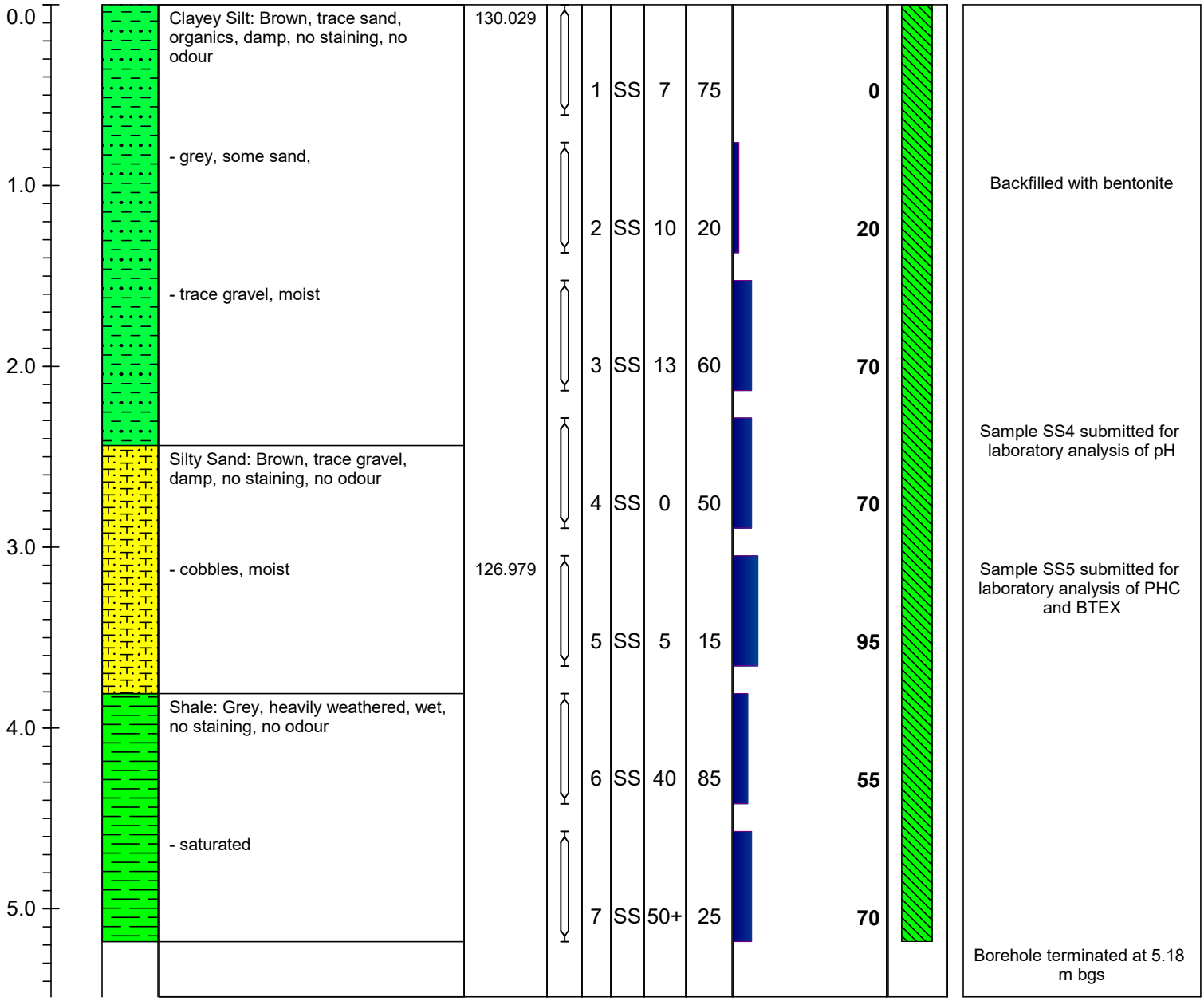
LAGWGL02EXP 607430A_BH_LOGS.GPJ NEW.GDT 12/18/19

Project No: 620017.CE
Project: Phase Two ESA
Client: CAPREIT
Location: 1055 Bloor Street W, Mississauga

Log of Borehole: BH20-01

Checked By: DM/MC
Field Technician: AG

PREMIER ENVIRONMENTAL SERVICES



Drilled By: Geo Environmental Drilling Inc.
Drill Method: Dietrich D120
Hole Size: 152.4 mm
Well Information: N/A
Drill Date: 14/04/20

Premier Environmental Services
244 Montrose Street North
Unit 1 Upper
Cambridge, Ontario
N3H 2H7

Groundsurface Elevation: 130.029 m
Top of Riser Elevation: N/A
Groundwater Elevation: N/A
Datum: Local
Sheet: 1 of 1

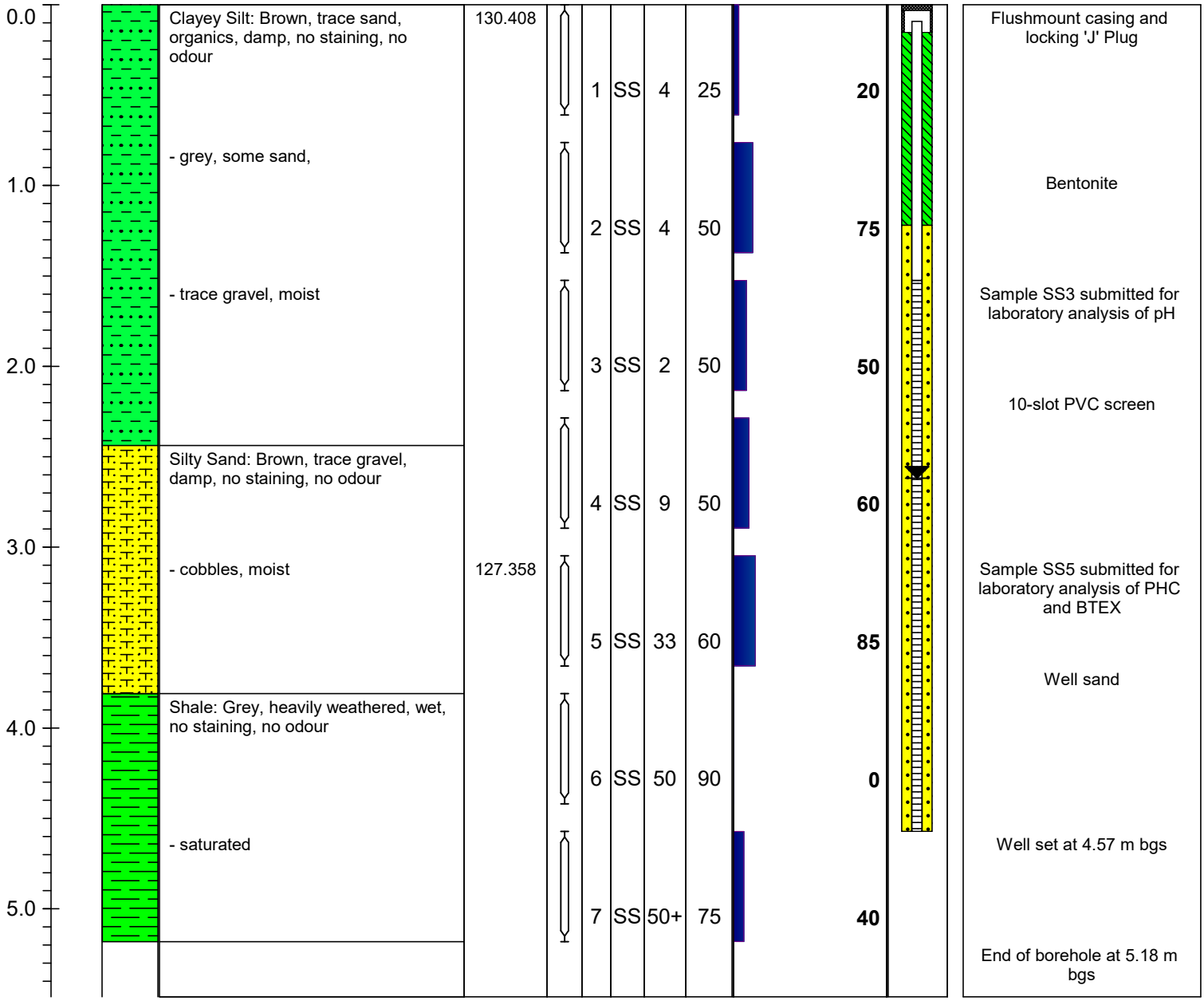
Note: *This borehole log is not suitable for geotechnical purposes*

Project No: 620017.CE
Project: Phase Two ESA
Client: CAPREIT
Location: 1055 Bloor Street W, Mississauga

Log of Borehole: MW20-02

Checked By: DM/MC
Field Technician: AG

PREMIER ENVIRONMENTAL SERVICES



Drilled By: Geo Environmental Drilling Inc.
Drill Method: Dietrich D120
Hole Size: 152.4 mm
Well Information: 50.8 mm
Drill Date: 14/04/20

Premier Environmental Services
244 Montrose Street North
Unit 1 Upper
Cambridge, Ontario
N3H 2H7

Groundsurface Elevation: 130.408 m
Top of Riser Elevation: -
Groundwater Elevation: 127.788 m
Datum: Local
Sheet: 1 of 1

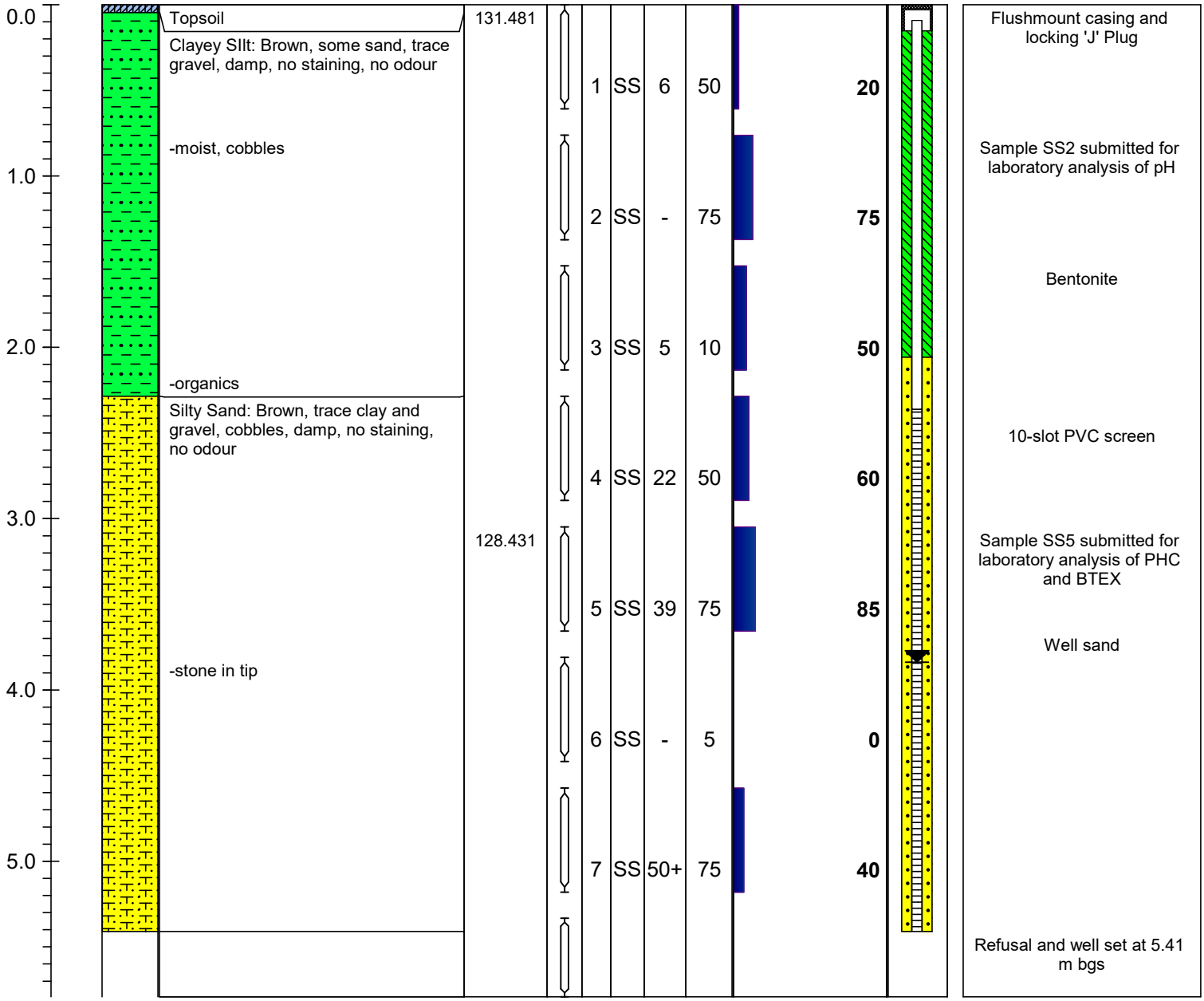
Note: *This borehole log is not suitable for geotechnical purposes*

Project No: 620017.CE
Project: Phase Two ESA
Client: CAPREIT
Location: 1055 Bloor Street W, Mississauga

Log of Borehole: MW20-03

Checked By: DM/MC
Field Technician: AG

PREMIER ENVIRONMENTAL SERVICES



Drilled By: Geo Environmental Drilling Inc.
Drill Method: Dietrich D120
Hole Size: 152.4 mm
Well Information: 50.8 mm
Drill Date: 14/04/20

Premier Environmental Services
244 Montrose Street North
Unit 1 Upper
Cambridge, Ontario
N3H 2H7

Groundsurface Elevation: 131.481 m
Top of Riser Elevation: 127.511 m
Groundwater Elevation: 127.641 m
Datum: Local
Sheet: 1 of 1

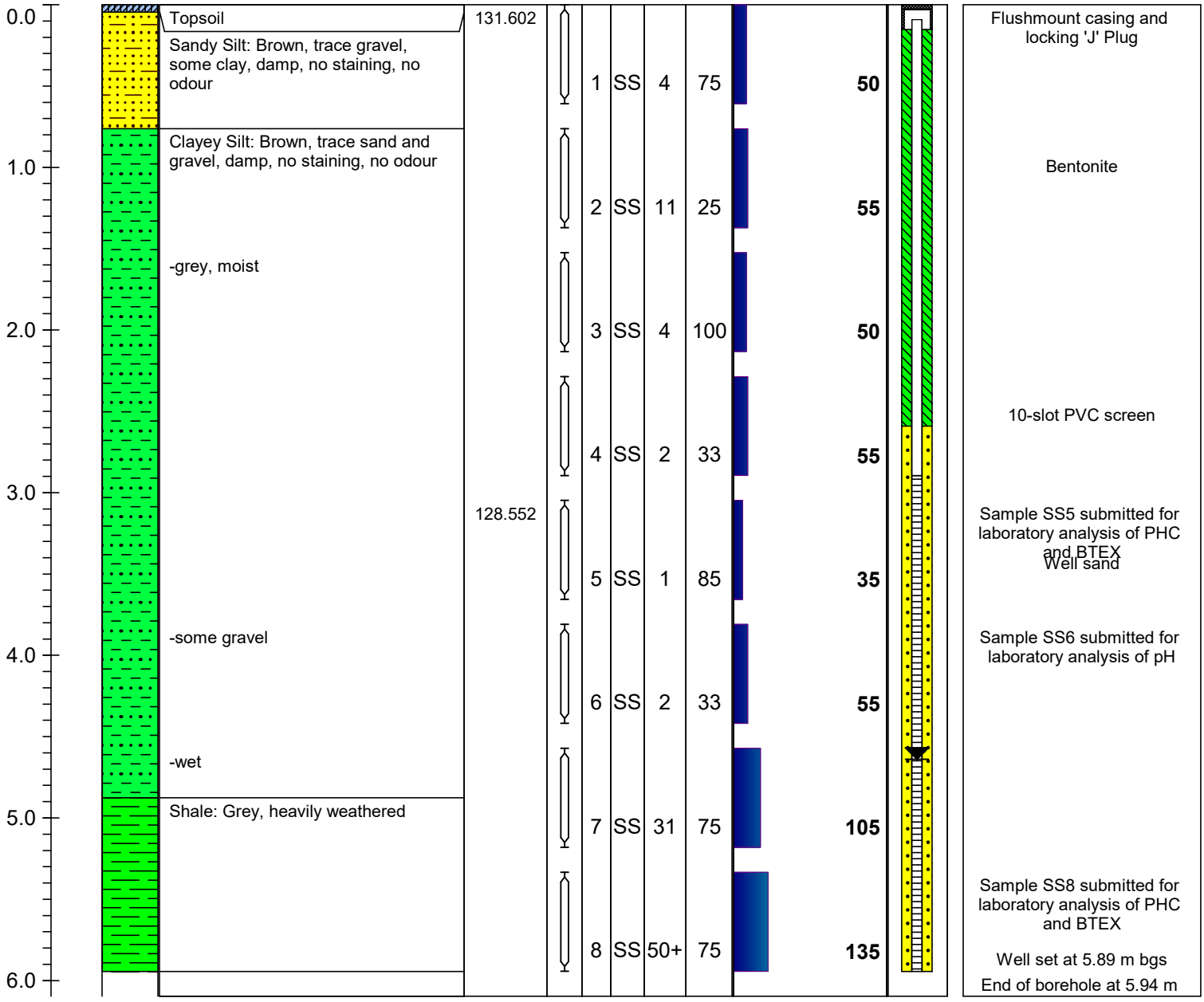
Note: *This borehole log is not suitable for geotechnical purposes*

Log of Borehole: MW20-04

Project No: 620017.CE
Project: Phase Two ESA
Client: CAPREIT
Location: 1055 Bloor Street W, Mississauga

Checked By: DM/MC
Field Technician: AG

PREMIER ENVIRONMENTAL SERVICES



Drilled By: Geo Environmental Drilling Inc.
Drill Method: Dietrich D120
Hole Size: 152.4 mm
Well Information: 50.8 mm
Drill Date: 14/04/20

Premier Environmental Services
244 Montrose Street North
Unit 1 Upper
Cambridge, Ontario
N3H 2H7

Groundsurface Elevation: 131.602 m
Top of Riser Elevation: 131.472 m
Groundwater Elevation: 126.962 m
Datum: Local
Sheet: 1 of 1

Note: *This borehole log is not suitable for geotechnical purposes*

Appendix B

MECP WWR, PTTW and EASR Summary Tables

Table B-1: MECP WWR Summary Table

Count	Well ID	Date Constructed	Total Depth (m bgs)	Reported Water Depth (m bgs)	Status of Well
1.	7132892	8/14/2009	5.2	N/A	Test Hole
2.	7141716	3/8/2010	N/A	N/A	Abandoned
3.	7141729	3/8/2010	N/A	N/A	Abandoned
4.	7145111	4/8/2010	N/A	6.3	Monitoring Well
5.	7223056	11/6/2012	N/A	N/A	Test Hole
6.	7246986	7/15/2015	4.6	N/A	Test Hole
7.	7246987	7/15/2015	4.6	N/A	Test Hole
8.	7246988	7/16/2015	4.3	N/A	Test Hole
9.	7246989	7/14/2015	5.8	N/A	Test Hole
10.	7246990	7/16/2015	5.2	N/A	Test Hole
11.	7248578	7/31/2015	4.6	N/A	Observation
12.	7248595	8/21/2015	2.7	N/A	Test Hole
13.	7248659	8/21/2015	2.9	N/A	Test Hole
14.	7248660	8/15/2015	2.9	N/A	Test Hole
15.	7257845	12/21/2015	4.3	N/A	Test Hole
16.	7257846	12/21/2015	3.7	N/A	Test Hole
17.	7263753	4/12/2016	4.6	N/A	Test Hole
18.	7263754	4/12/2016	4.6	N/A	Test Hole
19.	7268524	2/22/2016	N/A	N/A	Abandoned
20.	7268525	2/22/2016	N/A	N/A	Abandoned
21.	7268528	2/22/2016	N/A	N/A	Abandoned
22.	7277981	11/18/2016	N/A	N/A	Abandoned
23.	7277982	11/18/2016	N/A	N/A	Test Hole
24.	7277983	11/18/2016	N/A	N/A	Test Hole
25.	7277984	11/18/2016	N/A	N/A	Test Hole
26.	7277985	11/18/2016	N/A	N/A	Test Hole
27.	7277986	11/18/2016	N/A	N/A	Test Hole
28.	7277987	11/18/2016	N/A	N/A	Test Hole
29.	7277988	11/18/2016	N/A	N/A	Abandoned
30.	7280777	11/18/2016	N/A	N/A	Abandoned

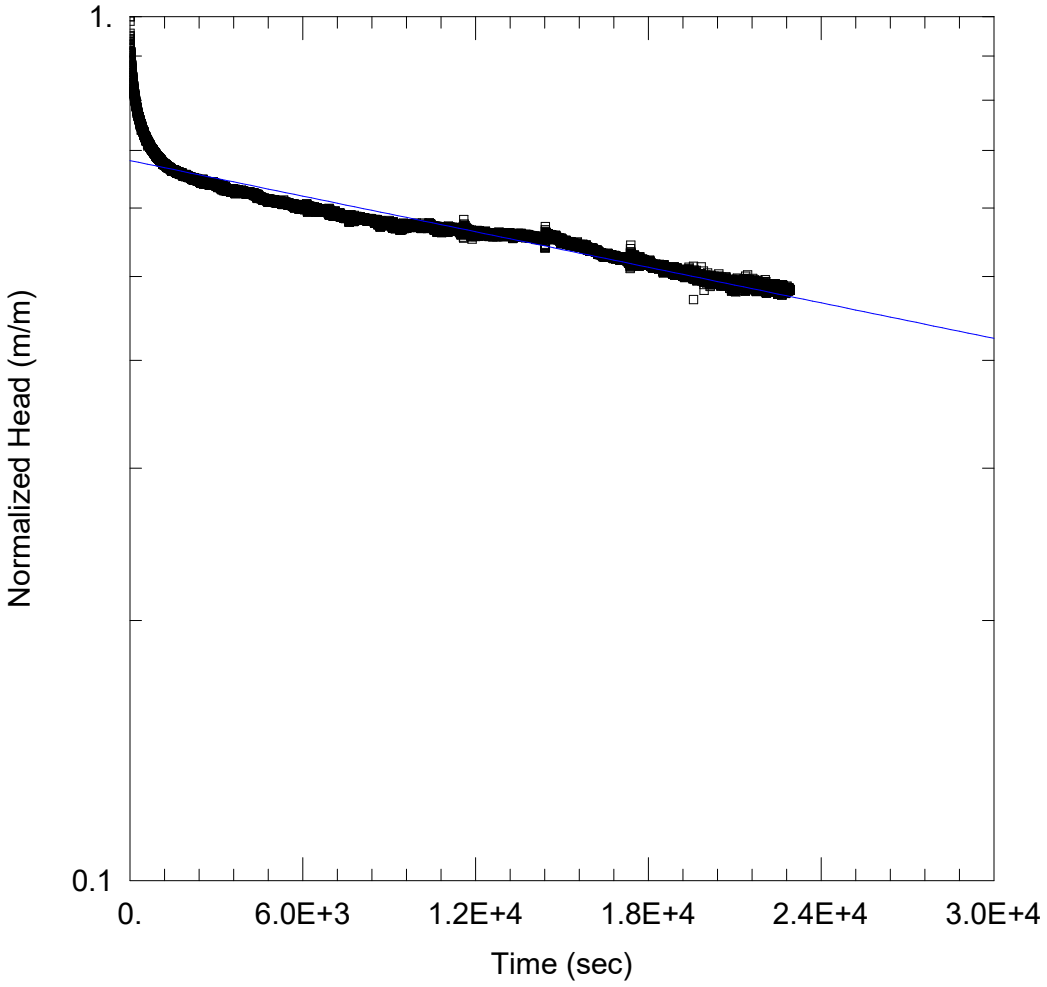
Count	Well ID	Date Constructed	Total Depth (m bgs)	Reported Water Depth (m bgs)	Status of Well
31.	7335384	6/1/2019	6.1	3.7	Observation
32.	7357215	4/14/2020	5.3	N/A	Monitoring Well
33.	7357420	4/14/2020	5.3	N/A	Monitoring Well
34.	7357432	4/14/2020	5.7	N/A	Monitoring Well
35.	7360450	12/6/2019	9.8	N/A	Observation
36.	7360451	12/6/2019	5.3	N/A	Observation
37.	7360452	12/6/2019	9.8	N/A	Observation
38.	7360453	12/6/2019	6.1	N/A	Observation
39.	7360590	12/6/2019	12.2	N/A	Observation
40.	7439640	12/13/2022	4.6	N/A	Observation

Table B-2: MECP PTTW and EASR Summary Table

Permit Number	Purpose	Address	Municipality	Water Source	Max L/Day	Active
P-300-1110346665	Dewatering Construction	Lot Number: 7, Concession Number: 2	Mississauga	Groundwater	1,142,000	Yes
2062-BMTJBE	Dewatering Construction	Lot Number: 7, Concession Number: 2	Mississauga	Groundwater	1,142,000	No
5440-95LRFH	Dewatering Construction	Lakeshore Road Dixie Road Eastgate Parkway and Tomken Rd Lakeview Water Treatment Plant to Hanlan Transfer Pumping Station	Mississauga	Groundwater	10,000 – 1,994,000	No
2608-8V8P4E	Pumping Test	Dixie Rd	Mississauga	Groundwater	316,800	No

Appendix C

SWRT Results



WELL TEST ANALYSIS

Data Set: C:\Users\Will Guo\OneDrive - BIG Consulting\BHMW5 EXP.aqt
Date: 05/13/25 Time: 11:17:55

PROJECT INFORMATION

Company: MTE Consultants
Client: CAPREIT
Project: 62263-001
Location: 1055 Bloor Street, Mississauga
Test Well: BH/MW5 EXP
Test Date: April 29, 2025

AQUIFER DATA

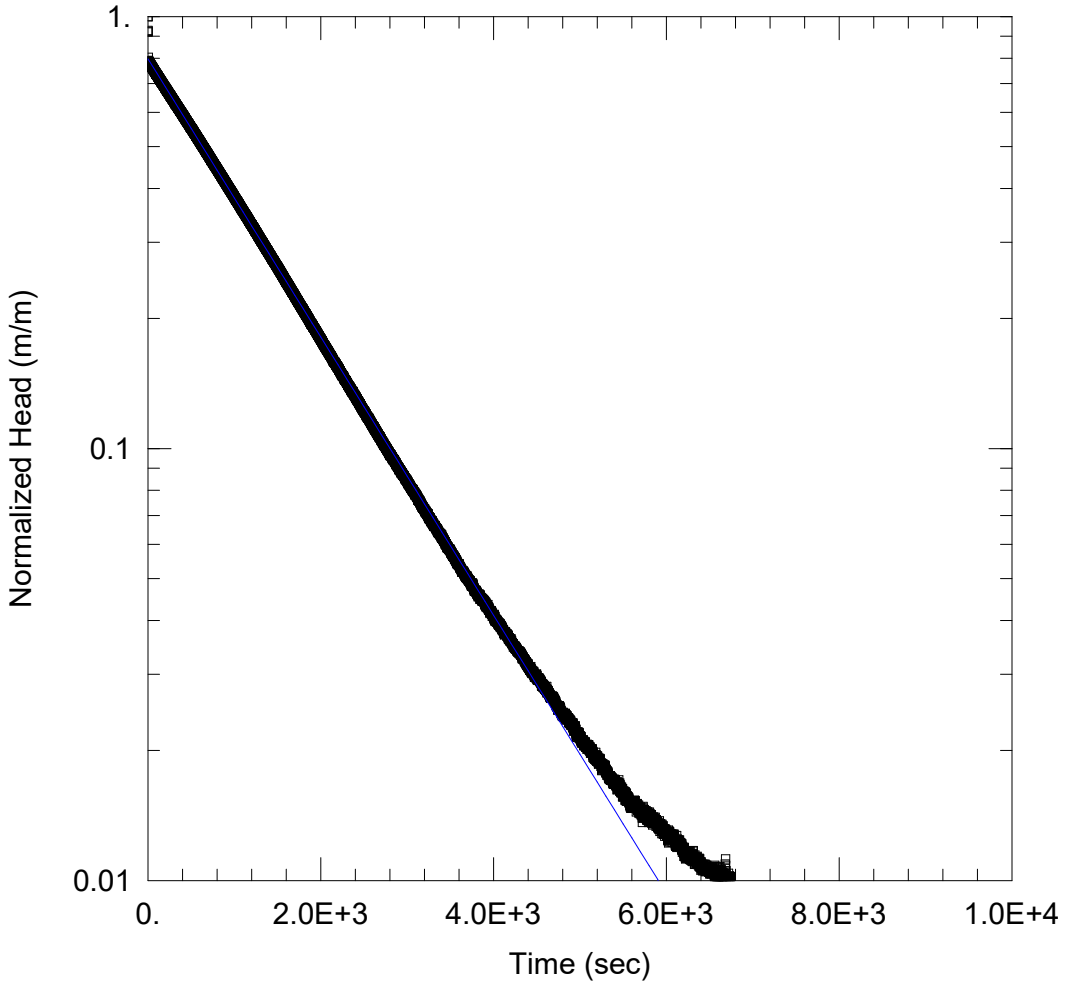
Saturated Thickness: 2.28 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH/MW5 EXP)

Initial Displacement: 0.82 m
Total Well Penetration Depth: 2.28 m
Casing Radius: 0.0254 m
Static Water Column Height: 2.28 m
Screen Length: 2.28 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.185E-8 m/sec
y0 = 0.5586 m



WELL TEST ANALYSIS

Data Set: C:\Users\Will Guo\OneDrive - BIG Consulting\BHMW9 EXP.aqt
Date: 05/13/25 Time: 11:23:00

PROJECT INFORMATION

Company: MTE Consultants
Client: CAPREIT
Project: 62263-001
Location: 1055 Bloor Street, Mississauga
Test Well: BH/MW9 EXP
Test Date: April 29, 2025

AQUIFER DATA

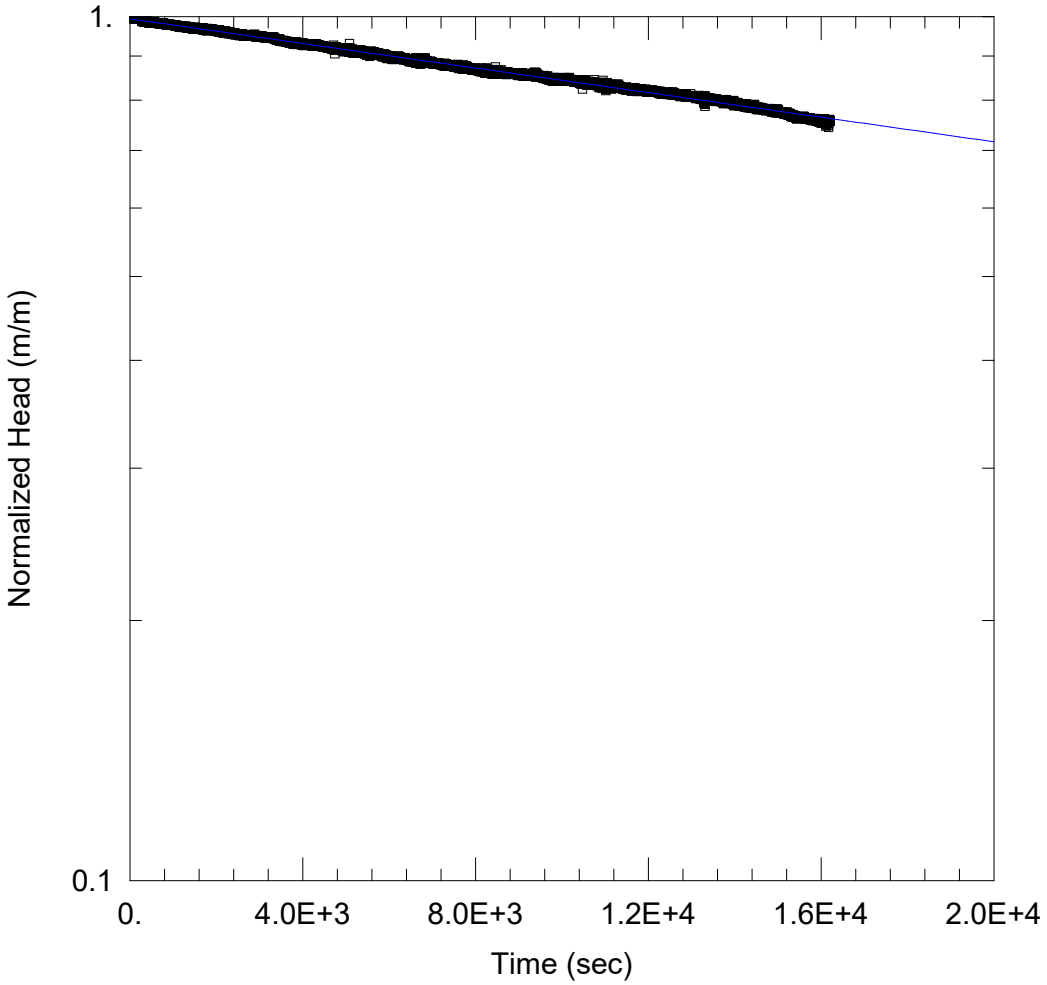
Saturated Thickness: 5.89 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH/MW9 EXP)

Initial Displacement: 3.378 m
Total Well Penetration Depth: 5.89 m
Casing Radius: 0.0254 m
Static Water Column Height: 5.89 m
Screen Length: 3. m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 4.356E-7 m/sec
y0 = 2.695 m



WELL TEST ANALYSIS

Data Set: C:\Users\Will Guo\OneDrive - BIG Consulting\BHMW102.aqt
Date: 05/13/25 Time: 11:12:12

PROJECT INFORMATION

Company: MTE Consultants
Client: CAPREIT
Project: 62263-001
Location: 1055 Bloor Street, Mississauga
Test Well: BH/MW102
Test Date: April 29, 2025

AQUIFER DATA

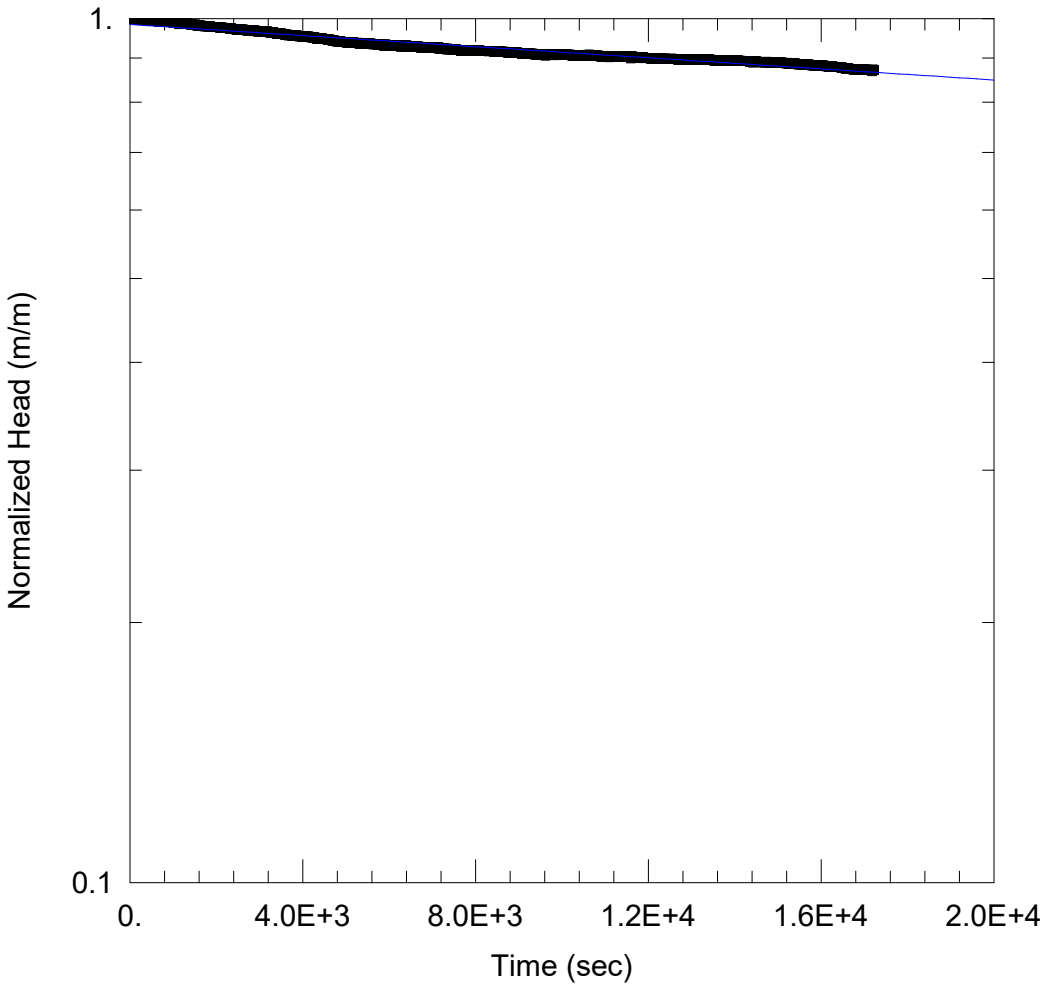
Saturated Thickness: 1.204 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH/MW102)

Initial Displacement: 1.084 m
Total Well Penetration Depth: 1.204 m
Casing Radius: 0.0254 m
Static Water Column Height: 1.204 m
Screen Length: 1.204 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 2.324E-8 m/sec
y0 = 1.077 m



WELL TEST ANALYSIS

Data Set: C:\Users\Will Guo\OneDrive - BIG Consulting\BHMW103.aqt
Date: 05/13/25 Time: 11:11:41

PROJECT INFORMATION

Company: MTE Consultants
Client: CAPREIT
Project: 62263-001
Location: 1055 Bloor Street, Mississauga
Test Well: BH/MW103
Test Date: April 29, 2025

AQUIFER DATA

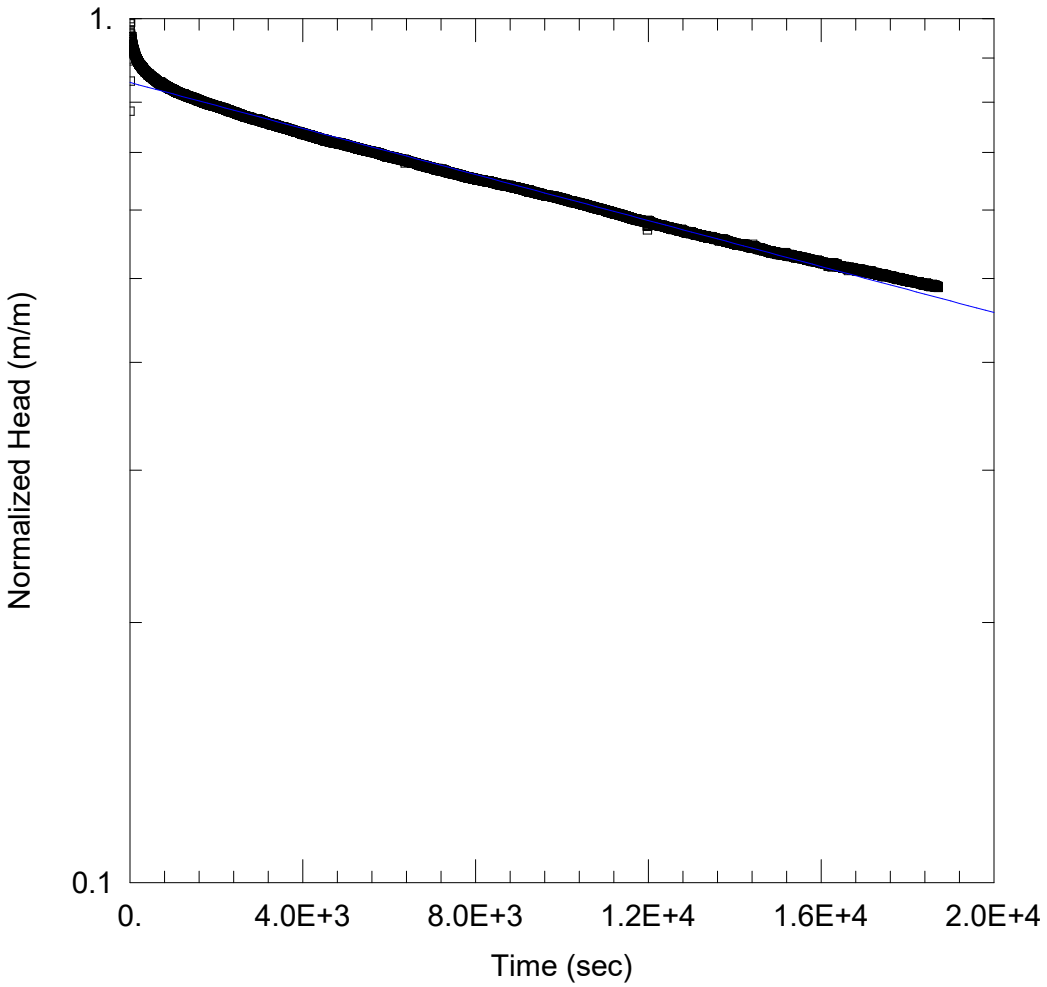
Saturated Thickness: 1.31 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH/MW103)

Initial Displacement: 1.333 m
Total Well Penetration Depth: 1.31 m
Casing Radius: 0.0254 m
Static Water Column Height: 1.31 m
Screen Length: 1.31 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 9.653E-9 m/sec
y0 = 1.313 m



WELL TEST ANALYSIS

Data Set: C:\Users\Will Guo\OneDrive - BIG Consulting\BHMW104.aqt
Date: 05/13/25 Time: 11:15:43

PROJECT INFORMATION

Company: MTE Consultants
Client: CAPREIT
Project: 62263-001
Location: 1055 Bloor Street, Mississauga
Test Well: BH/MW104
Test Date: April 29, 2025

AQUIFER DATA

Saturated Thickness: 1.82 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BH/MW104)

Initial Displacement: 1.887 m
Total Well Penetration Depth: 1.82 m
Casing Radius: 0.0254 m
Static Water Column Height: 1.82 m
Screen Length: 1.82 m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 2.879E-8 m/sec
y0 = 1.591 m

Appendix D

Water Quality Laboratory Certificates of Analysis and Chain of Custody

Your Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Your C.O.C. #: N/A

Attention: Will Guo

MTE Consultants Inc.
970 Lawrence Ave W, Suite 600
Toronto, ON
CANADA M6A 3B6

Report Date: 2025/05/07
Report #: R8533904
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C548962
Received: 2025/05/01, 12:38

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
ABN Compounds in Water by GC/MS	1	2025/05/02	2025/05/02	CAM SOP-00301	EPA 8270E m
Biochemical Oxygen Demand (BOD)	1	2025/05/02	2025/05/07	CAM SOP-00427	SM 24 5210B m
Carbonaceous BOD	1	2025/05/02	2025/05/07	CAM SOP-00427	SM 24 5210B m
Total Residual Chlorine	1	2025/05/02	2025/05/02	CAM SOP 00425	SM 24 4500-CL G m
Chromium (VI) in Water	1	N/A	2025/05/03	CAM SOP-00436	EPA 7199 m
Total Cyanide	1	2025/05/02	2025/05/02	CAM SOP-00457	OMOE E3015 5 m
Fluoride	1	2025/05/06	2025/05/07	CAM SOP-00449	SM 24 4500-F C m
Mercury in Water by CVAA	1	2025/05/05	2025/05/05	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by ICPMS	1	2025/05/05	2025/05/05	CAM SOP-00447	EPA 6020B m
E.coli, (CFU/100mL)	1	N/A	2025/05/01	CAM SOP-00552	SM9222B, MECP E3371
Total Nonylphenol in Liquids by HPLC	1	2025/05/03	2025/05/05	CAM SOP-00313	In-house Method
Nonylphenol Ethoxylates in Liquids: HPLC	1	2025/05/03	2025/05/05	CAM SOP-00313	Bureau Veritas
Animal and Vegetable Oil and Grease	1	N/A	2025/05/07	CAM SOP-00326	EPA1664B m,SM5520B m
Total Oil and Grease	1	2025/05/07	2025/05/07	CAM SOP-00326	EPA1664B m,SM5520B m
PAH Compounds in Water by GC/MS (SIM)	1	2025/05/05	2025/05/06	CAM SOP-00318	EPA 8270E
Polychlorinated Biphenyl in Water	1	2025/05/05	2025/05/06	CAM SOP-00309	EPA 8082A m
Phenols (4AAP)	1	N/A	2025/05/05	CAM SOP-00444	OMOE E3179 m
pH	1	2025/05/05	2025/05/05	CAM SOP-00413	SM 24th-4500H+ B
Sulphate by Automated Turbidimetry	1	N/A	2025/05/06	CAM SOP-00464	SM 24 4500-SO42- E m
Total Kjeldahl Nitrogen in Water	1	2025/05/05	2025/05/05	CAM SOP-00938	SM 4500-N B m
Total PAHs: Barrie/Mississauga Sewer Use (1)	1	N/A	2025/05/07	CAM SOP - 00301	
Mineral/Synthetic O & G (TPH Heavy Oil) (2)	1	2025/05/07	2025/05/07	CAM SOP-00326	EPA1664B m,SM5520F m
Total Suspended Solids	1	2025/05/02	2025/05/06	CAM SOP-00428	SM 24 2540D m
Volatile Organic Compounds in Water	1	N/A	2025/05/05	CAM SOP-00228	EPA 8260D

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in

Your Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Your C.O.C. #: N/A

Attention: Will Guo

MTE Consultants Inc.
970 Lawrence Ave W, Suite 600
Toronto, ON
CANADA M6A 3B6

Report Date: 2025/05/07
Report #: R8533904
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C548962
Received: 2025/05/01, 12:38

writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Total PAHs include only those PAHs specified in the sewer use by-by-law.
(2) Note: TPH (Heavy Oil) is equivalent to Mineral / Synthetic Oil & Grease

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
07 May 2025 16:47:52

Please direct all questions regarding this Certificate of Analysis to:
Keshani Vijh, Sr. Project Manager
Email: keshani.vijh@bureauveritas.com
Phone# (905) 817-5700

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

MISSISSAUGA STORM SEWER BYLAW (46-2022)

Bureau Veritas ID				AQLL51		
Sampling Date				2025/05/01 08:00		
COC Number				N/A		
	UNITS	Criteria	Criteria-2	BH/MW104	RDL	QC Batch
Inorganics						
Total BOD	mg/L	15	-	ND	2	9920987
Total Chlorine	mg/L	1.0	-	0.3	0.1	9921425
Metals						
Chromium (VI)	ug/L	40	-	ND	0.50	9921631
Total Aluminum (Al)	ug/L	1000	50000	**1700**	4.9	9922391
Total Antimony (Sb)	ug/L	-	5000	1.4	0.50	9922391
Total Arsenic (As)	ug/L	20	1000	3.2	1.0	9922391
Total Cadmium (Cd)	ug/L	8	700	ND	0.090	9922391
Total Chromium (Cr)	ug/L	80	5000	ND	5.0	9922391
Total Cobalt (Co)	ug/L	-	5000	2.0	0.50	9922391
Total Copper (Cu)	ug/L	40	3000	2.8	0.90	9922391
Total Lead (Pb)	ug/L	120	3000	0.80	0.50	9922391
Total Manganese (Mn)	ug/L	2000	5000	120	2.0	9922391
Total Molybdenum (Mo)	ug/L	-	5000	5.7	0.50	9922391
Total Nickel (Ni)	ug/L	80	3000	4.1	1.0	9922391
Total Phosphorus (P)	ug/L	400	10000	ND	100	9922391
Total Selenium (Se)	ug/L	20	1000	ND	2.0	9922391
Total Silver (Ag)	ug/L	120	5000	ND	0.090	9922391
Total Tin (Sn)	ug/L	-	5000	ND	1.0	9922391
Total Titanium (Ti)	ug/L	-	5000	19	5.0	9922391
Total Zinc (Zn)	ug/L	200	3000	15	5.0	9922391
Calculated Parameters						
Total PAHs	ug/L	2	-	ND	0.28	9920707
Polyaromatic Hydrocarbons						
Acenaphthene	ug/L	-	-	ND	0.050	9922334
Acenaphthylene	ug/L	-	-	ND	0.050	9922334

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022
Criteria-2: The Regional Municipality of Peel Sanitary Sewer Discharge. By-Law Number 53-2010.
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C548962
Report Date: 2025/05/07

MTE Consultants Inc.
Client Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Sampler Initials: JB

MISSISSAUGA STORM SEWER BYLAW (46-2022)

Bureau Veritas ID				AQLL51		
Sampling Date				2025/05/01 08:00		
COC Number				N/A		
	UNITS	Criteria	Criteria-2	BH/MW104	RDL	QC Batch
Anthracene	ug/L	-	-	ND	0.050	9922334
Benzo(a)anthracene	ug/L	-	-	ND	0.050	9922334
Benzo(a)pyrene	ug/L	-	-	ND	0.0090	9922334
Benzo(g,h,i)perylene	ug/L	-	-	ND	0.050	9922334
Benzo(k)fluoranthene	ug/L	-	-	ND	0.050	9922334
Chrysene	ug/L	-	-	ND	0.050	9922334
Dibenzo(a,h)anthracene	ug/L	-	-	ND	0.050	9922334
Fluoranthene	ug/L	-	-	ND	0.050	9922334
Fluorene	ug/L	-	-	ND	0.050	9922334
Indeno(1,2,3-cd)pyrene	ug/L	-	-	ND	0.050	9922334
1-Methylnaphthalene	ug/L	-	-	ND	0.050	9922334
2-Methylnaphthalene	ug/L	-	-	ND	0.050	9922334
Naphthalene	ug/L	-	-	ND	0.050	9922334
Phenanthrene	ug/L	-	-	0.039	0.030	9922334
Pyrene	ug/L	-	-	ND	0.050	9922334
Benzo(b)fluoranthene	ug/L	-	-	ND	0.030	9922334
Microbiological						
Escherichia coli	CFU/100mL	200	-	<10	10	9920715
Surrogate Recovery (%)						
D10-Anthracene	%	-	-	101		9922334
D14-Terphenyl (FS)	%	-	-	89		9922334
D8-Acenaphthylene	%	-	-	102		9922334

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022
Criteria-2: The Regional Municipality of Peel Sanitary Sewer Discharge.
By-Law Number 53-2010.
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C548962
Report Date: 2025/05/07

MTE Consultants Inc.
Client Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Sampler Initials: JB

PEEL SANITARY SEWER BYLAW (53-2010)

Bureau Veritas ID				AQLL51			AQLL51		
Sampling Date				2025/05/01 08:00			2025/05/01 08:00		
COC Number				N/A			N/A		
	UNITS	Criteria	Criteria-2	BH/MW104	RDL	QC Batch	BH/MW104 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Total Animal/Vegetable Oil and Grease	mg/L	-	150	1.9	0.50	9919907			
Inorganics									
Total Carbonaceous BOD	mg/L	-	300	ND	2	9920990			
Fluoride (F-)	mg/L	-	10	0.79	0.10	9923456			
Total Kjeldahl Nitrogen (TKN)	mg/L	-	100	1.1	0.10	9922177			
pH	pH	6:9	5.5:10.0	7.87		9922234			
Phenols-4AAP	mg/L	0.008	1	ND	0.0010	9922357			
Total Suspended Solids	mg/L	15	350	14	10	9921265	14	10	9921265
Dissolved Sulphate (SO4)	mg/L	-	1500	34	1.0	9922602			
Total Cyanide (CN)	mg/L	0.02	2	ND	0.0050	9921369	ND	0.0050	9921369
Petroleum Hydrocarbons									
Total Oil & Grease	mg/L	-	-	1.9	0.50	9923678			
Total Oil & Grease Mineral/Synthetic	mg/L	-	15	ND	0.50	9923680			
Miscellaneous Parameters									
Nonylphenol Ethoxylate (Total)	mg/L	-	0.2	ND	0.025	9921566			
Nonylphenol (Total)	mg/L	-	0.02	ND	0.001	9921564			
Metals									
Mercury (Hg)	mg/L	0.0004	0.01	ND	0.00010	9922208			
Semivolatile Organics									
Bis(2-ethylhexyl)phthalate	ug/L	-	12	ND	2.0	9920791			
Di-N-butyl phthalate	ug/L	-	80	ND	2.0	9920791			
Volatile Organics									
Benzene	ug/L	2	10	ND	0.20	9921077			
Chloroform	ug/L	-	40	ND	0.20	9921077			
1,2-Dichlorobenzene	ug/L	5.6	50	ND	0.40	9921077			
1,4-Dichlorobenzene	ug/L	6.8	80	ND	0.40	9921077			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022
Criteria-2: The Regional Municipality of Peel Sanitary Sewer Discharge.
By-Law Number 53-2010.
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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PEEL SANITARY SEWER BYLAW (53-2010)

Bureau Veritas ID				AQLL51			AQLL51		
Sampling Date				2025/05/01 08:00			2025/05/01 08:00		
COC Number				N/A			N/A		
	UNITS	Criteria	Criteria-2	BH/MW104	RDL	QC Batch	BH/MW104 Lab-Dup	RDL	QC Batch
cis-1,2-Dichloroethylene	ug/L	-	4000	ND	0.50	9921077			
trans-1,3-Dichloropropene	ug/L	-	140	ND	0.40	9921077			
Ethylbenzene	ug/L	2	160	ND	0.20	9921077			
Methylene Chloride(Dichloromethane)	ug/L	5.2	2000	ND	2.0	9921077			
Methyl Ethyl Ketone (2-Butanone)	ug/L	-	8000	ND	10	9921077			
Styrene	ug/L	-	200	ND	0.40	9921077			
1,1,1,2-Tetrachloroethane	ug/L	-	-	ND	0.50	9921077			
1,1,2,2-Tetrachloroethane	ug/L	17	1400	ND	0.40	9921077			
Tetrachloroethylene	ug/L	4.4	1000	ND	0.20	9921077			
Toluene	ug/L	2	270	ND	0.20	9921077			
Trichloroethylene	ug/L	7.6	400	ND	0.20	9921077			
p+m-Xylene	ug/L	-	-	ND	0.20	9921077			
o-Xylene	ug/L	-	-	ND	0.20	9921077			
Total Xylenes	ug/L	4.4	1400	ND	0.20	9921077			
PCBs									
Total PCB	ug/L	0.4	1	ND	0.05	9922150			
Surrogate Recovery (%)									
2,4,6-Tribromophenol	%	-	-	91		9920791			
2-Fluorobiphenyl	%	-	-	78		9920791			
2-Fluorophenol	%	-	-	42		9920791			
D14-Terphenyl	%	-	-	95		9920791			
D5-Nitrobenzene	%	-	-	77		9920791			
D5-Phenol	%	-	-	31		9920791			
Decachlorobiphenyl	%	-	-	78		9922150			
4-Bromofluorobenzene	%	-	-	92		9921077			
D4-1,2-Dichloroethane	%	-	-	115		9921077			
D8-Toluene	%	-	-	104		9921077			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022
Criteria-2: The Regional Municipality of Peel Sanitary Sewer Discharge.
By-Law Number 53-2010.
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	9.7°C

Results relate only to the items tested.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C548962
Report Date: 2025/05/07

QUALITY ASSURANCE REPORT

MTE Consultants Inc.
Client Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Sampler Initials: JB

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9920791	2,4,6-Tribromophenol	2025/05/02	96	10 - 130	96	10 - 130	81	%				
9920791	2-Fluorobiphenyl	2025/05/02	89	30 - 130	76	30 - 130	77	%				
9920791	2-Fluorophenol	2025/05/02	45	10 - 130	46	10 - 130	42	%				
9920791	D14-Terphenyl	2025/05/02	97	30 - 130	98	30 - 130	99	%				
9920791	D5-Nitrobenzene	2025/05/02	85	30 - 130	83	30 - 130	81	%				
9920791	D5-Phenol	2025/05/02	30	10 - 130	31	10 - 130	27	%				
9921077	4-Bromofluorobenzene	2025/05/04	94	70 - 130	94	70 - 130	94	%				
9921077	D4-1,2-Dichloroethane	2025/05/04	116	70 - 130	112	70 - 130	112	%				
9921077	D8-Toluene	2025/05/04	103	70 - 130	105	70 - 130	104	%				
9922150	Decachlorobiphenyl	2025/05/06	93	60 - 130	98	60 - 130	87	%				
9922334	D10-Anthracene	2025/05/06	102	50 - 130	105	50 - 130	100	%				
9922334	D14-Terphenyl (FS)	2025/05/06	106	50 - 130	107	50 - 130	102	%				
9922334	D8-Acenaphthylene	2025/05/06	107	50 - 130	109	50 - 130	102	%				
9920791	Bis(2-ethylhexyl)phthalate	2025/05/02	98	30 - 130	95	30 - 130	ND, RDL=2.0	ug/L	NC	40		
9920791	Di-N-butyl phthalate	2025/05/02	100	30 - 130	94	30 - 130	ND, RDL=2.0	ug/L	NC	40		
9920987	Total BOD	2025/05/07					ND,RDL=2	mg/L	NC	30	92	80 - 120
9920990	Total Carbonaceous BOD	2025/05/07					ND,RDL=2	mg/L	NC	30	92	80 - 120
9921077	1,1,1,2-Tetrachloroethane	2025/05/04	108	70 - 130	107	70 - 130	ND, RDL=0.50	ug/L	NC	30		
9921077	1,1,2,2-Tetrachloroethane	2025/05/04	109	70 - 130	103	70 - 130	ND, RDL=0.40	ug/L	NC	30		
9921077	1,2-Dichlorobenzene	2025/05/04	106	70 - 130	104	70 - 130	ND, RDL=0.40	ug/L	NC	30		
9921077	1,4-Dichlorobenzene	2025/05/04	105	70 - 130	103	70 - 130	ND, RDL=0.40	ug/L	NC	30		
9921077	Benzene	2025/05/04	100	70 - 130	98	70 - 130	ND, RDL=0.20	ug/L	NC	30		
9921077	Chloroform	2025/05/04	107	70 - 130	103	70 - 130	ND, RDL=0.20	ug/L	NC	30		
9921077	cis-1,2-Dichloroethylene	2025/05/04	NC	70 - 130	104	70 - 130	ND, RDL=0.50	ug/L	0.33	30		
9921077	Ethylbenzene	2025/05/04	103	70 - 130	103	70 - 130	ND, RDL=0.20	ug/L	2.0	30		
9921077	Methyl Ethyl Ketone (2-Butanone)	2025/05/04	130	60 - 140	121	60 - 140	ND, RDL=10	ug/L	NC	30		
9921077	Methylene Chloride(Dichloromethane)	2025/05/04	104	70 - 130	99	70 - 130	ND, RDL=2.0	ug/L	NC	30		
9921077	o-Xylene	2025/05/04	105	70 - 130	105	70 - 130	ND, RDL=0.20	ug/L	NC	30		
9921077	p+m-Xylene	2025/05/04	103	70 - 130	102	70 - 130	ND, RDL=0.20	ug/L	NC	30		
9921077	Styrene	2025/05/04	NC	70 - 130	98	70 - 130	ND, RDL=0.40	ug/L	3.5	30		
9921077	Tetrachloroethylene	2025/05/04	89	70 - 130	89	70 - 130	ND, RDL=0.20	ug/L	NC	30		

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9921077	Toluene	2025/05/04	104	70 - 130	103	70 - 130	ND, RDL=0.20	ug/L	NC	30		
9921077	Total Xylenes	2025/05/04					ND, RDL=0.20	ug/L	NC	30		
9921077	trans-1,3-Dichloropropene	2025/05/04	115	70 - 130	95	70 - 130	ND, RDL=0.40	ug/L	NC	30		
9921077	Trichloroethylene	2025/05/04	NC	70 - 130	95	70 - 130	ND, RDL=0.20	ug/L	2.1	30		
9921265	Total Suspended Solids	2025/05/06			97	80 - 120	ND, RDL=10	mg/L	0	20		
9921369	Total Cyanide (CN)	2025/05/02	94	80 - 120	102	80 - 120	ND, RDL=0.0050	mg/L	NC	20		
9921425	Total Chlorine	2025/05/02	93	85 - 115	101	85 - 115	ND, RDL=0.1	mg/L	NC	25		
9921564	Nonylphenol (Total)	2025/05/05	95	50 - 130	102	50 - 130	ND, RDL=0.001	mg/L	NC	40		
9921566	Nonylphenol Ethoxylate (Total)	2025/05/05	103	50 - 130	104	50 - 130	ND, RDL=0.025	mg/L	NC	40		
9921631	Chromium (VI)	2025/05/03	96	80 - 120	97	80 - 120	ND, RDL=0.50	ug/L	NC	20		
9922150	Total PCB	2025/05/06	98	60 - 130	99	60 - 130	ND, RDL=0.05	ug/L	NC	40		
9922177	Total Kjeldahl Nitrogen (TKN)	2025/05/05	119	80 - 120	107	80 - 120	ND, RDL=0.10	mg/L	13	20	112	80 - 120
9922208	Mercury (Hg)	2025/05/05	97	75 - 125	96	80 - 120	ND, RDL=0.00010	mg/L	NC	20		
9922234	pH	2025/05/05			102	98 - 103			0	N/A		
9922334	1-Methylnaphthalene	2025/05/06	103	50 - 130	103	50 - 130	ND, RDL=0.050	ug/L				
9922334	2-Methylnaphthalene	2025/05/06	101	50 - 130	101	50 - 130	ND, RDL=0.050	ug/L				
9922334	Acenaphthene	2025/05/06	104	50 - 130	102	50 - 130	ND, RDL=0.050	ug/L				
9922334	Acenaphthylene	2025/05/06	104	50 - 130	103	50 - 130	ND, RDL=0.050	ug/L				
9922334	Anthracene	2025/05/06	103	50 - 130	102	50 - 130	ND, RDL=0.050	ug/L				
9922334	Benzo(a)anthracene	2025/05/06	103	50 - 130	104	50 - 130	ND, RDL=0.050	ug/L				
9922334	Benzo(a)pyrene	2025/05/06	100	50 - 130	101	50 - 130	ND, RDL=0.0090	ug/L				

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9922334	Benzo(b)fluoranthene	2025/05/06	101	50 - 130	104	50 - 130	ND, RDL=0.030	ug/L				
9922334	Benzo(g,h,i)perylene	2025/05/06	97	50 - 130	102	50 - 130	ND, RDL=0.050	ug/L				
9922334	Benzo(k)fluoranthene	2025/05/06	95	50 - 130	101	50 - 130	ND, RDL=0.050	ug/L				
9922334	Chrysene	2025/05/06	102	50 - 130	104	50 - 130	ND, RDL=0.050	ug/L				
9922334	Dibenzo(a,h)anthracene	2025/05/06	98	50 - 130	104	50 - 130	ND, RDL=0.050	ug/L				
9922334	Fluoranthene	2025/05/06	104	50 - 130	103	50 - 130	ND, RDL=0.050	ug/L				
9922334	Fluorene	2025/05/06	104	50 - 130	102	50 - 130	ND, RDL=0.050	ug/L				
9922334	Indeno(1,2,3-cd)pyrene	2025/05/06	98	50 - 130	102	50 - 130	ND, RDL=0.050	ug/L				
9922334	Naphthalene	2025/05/06	103	50 - 130	103	50 - 130	ND, RDL=0.050	ug/L	NC	30		
9922334	Phenanthrene	2025/05/06	103	50 - 130	103	50 - 130	ND, RDL=0.030	ug/L				
9922334	Pyrene	2025/05/06	103	50 - 130	102	50 - 130	ND, RDL=0.050	ug/L				
9922357	Phenols-4AAP	2025/05/05	98	80 - 120	104	80 - 120	ND, RDL=0.0010	mg/L	NC	20		
9922391	Total Aluminum (Al)	2025/05/05	95	80 - 120	98	80 - 120	ND, RDL=4.9	ug/L	17	20		
9922391	Total Antimony (Sb)	2025/05/05	102	80 - 120	103	80 - 120	ND, RDL=0.50	ug/L	5.6	20		
9922391	Total Arsenic (As)	2025/05/05	95	80 - 120	97	80 - 120	ND, RDL=1.0	ug/L	2.5	20		
9922391	Total Cadmium (Cd)	2025/05/05	98	80 - 120	100	80 - 120	ND, RDL=0.090	ug/L	NC	20		
9922391	Total Chromium (Cr)	2025/05/05	96	80 - 120	96	80 - 120	ND, RDL=5.0	ug/L	NC	20		
9922391	Total Cobalt (Co)	2025/05/05	96	80 - 120	95	80 - 120	ND, RDL=0.50	ug/L	2.6	20		
9922391	Total Copper (Cu)	2025/05/05	97	80 - 120	98	80 - 120	ND, RDL=0.90	ug/L	1.2	20		
9922391	Total Lead (Pb)	2025/05/05	92	80 - 120	95	80 - 120	ND, RDL=0.50	ug/L	3.2	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9922391	Total Manganese (Mn)	2025/05/05	96	80 - 120	97	80 - 120	ND, RDL=2.0	ug/L	1.4	20		
9922391	Total Molybdenum (Mo)	2025/05/05	97	80 - 120	97	80 - 120	ND, RDL=0.50	ug/L	5.4	20		
9922391	Total Nickel (Ni)	2025/05/05	93	80 - 120	92	80 - 120	ND, RDL=1.0	ug/L	0.46	20		
9922391	Total Phosphorus (P)	2025/05/05	100	80 - 120	94	80 - 120	ND, RDL=100	ug/L	NC	20		
9922391	Total Selenium (Se)	2025/05/05	96	80 - 120	96	80 - 120	ND, RDL=2.0	ug/L	NC	20		
9922391	Total Silver (Ag)	2025/05/05	92	80 - 120	95	80 - 120	ND, RDL=0.090	ug/L	0.77	20		
9922391	Total Tin (Sn)	2025/05/05	98	80 - 120	99	80 - 120	ND, RDL=1.0	ug/L	NC	20		
9922391	Total Titanium (Ti)	2025/05/05	96	80 - 120	97	80 - 120	ND, RDL=5.0	ug/L	3.6	20		
9922391	Total Zinc (Zn)	2025/05/05	99	80 - 120	99	80 - 120	ND, RDL=5.0	ug/L	NC	20		
9922602	Dissolved Sulphate (SO4)	2025/05/06	85	75 - 125	100	80 - 120	ND, RDL=1.0	mg/L	1.9	20		
9923456	Fluoride (F-)	2025/05/07	102	80 - 120	104	80 - 120	ND, RDL=0.10	mg/L	NC	20		
9923678	Total Oil & Grease	2025/05/07			99	80 - 110	ND, RDL=0.50	mg/L	0.51	25		
9923680	Total Oil & Grease Mineral/Synthetic	2025/05/07			97	65 - 130	ND, RDL=0.50	mg/L	0.52	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C548962
Report Date: 2025/05/07

MTE Consultants Inc.
Client Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Sampler Initials: JB

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Louise Harding, Scientific Specialist

Yizhou Han, Analyst 1

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Client Project #: BIG-ENV-719A
Site Location: 1055 BLOOR ST, MISSISSAUGA
Sampler Initials: JB

Exceedance Summary Table – Mississauga Storm Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH/MW104	AQLL51-13	Total Aluminum (Al)	1000	1700	4.9	ug/L

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

Exceedance Summary Table – Peel Region Sanitary 2010

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

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C548962
2025/05/01 12:38

MICRO

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6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v6

Page 1 of 1

NONT-2025-04-6920

Invoice Information	Invoice to (requires report) ☐	Report Information (if differs from invoice)		Project Information	
Company:	# 31796 B.I.G Consulting Inc	Company:	B.I.G. Consulting Inc.	Quotation #:	C35246
Contact Name:	Accounts Payable	Contact Name:	Will Guo	P.O. #/ AFE#:	
Street Address:	12-3500 Tomken Road	Street Address:	12-3500 Tomken Road	Project #:	BIGC-ENV-719A
City:	Mississauga Prov: ON Postal Code: L4W 2Z4	City:	Mississauga Prov: Postal Code: L4W 2Z4	Site #:	1055 Bloor St, Mississauga
Phone:	416 214 4850	Phone:		Site Location:	
Email:	AP-BIGC@brownfieldigi.com	Email:	wguo@mte85.com	Site Location Province:	
Copies:		Copies:		Sampled By:	JB

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table ____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Coarse ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* ☐ MISA ☐ PWQO ☐ Reg 406, Table: ____ ☑ Sanitary Sewer Bylaw ☑ Storm Sewer Bylaw *min 3 day TAT Municipality Peel/Mississauga ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☑

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

	Sample Identification (Please print or Type)	Date Sampled YYYY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEX/ F1	5 F2 - F4	6 VOCs	7 Reg 153 metals and inorganics	8 Reg 153 ICPMS metals	9 Reg 153 metals (Hg, Cr VI, ICPMS metals, HWS - B)	10 Peel Sanitary Sewer Bylaw	11 Mississauga Storm Sewer Bylaw 416-2022	12	13	14	15	16	17	18	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE
1	BH1MW104	2025	05	01	08	00	GW	N									X	X										3	
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Regular Turnaround Time (TAT)

☐ 5 to 7 Day ☒ 10 Day

Rush Turnaround Time (TAT) Surcharges apply

☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YYYY MM DD

Comments

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present		✓				
Seal intact		✓				
Cooling media present	✓			09	10	10

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3	Temperature reading by:
Seal present							
Seal intact							
Cooling media present							

	Relinquished by: (Signature/ Print)	Date YYYY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YYYY	MM	DD	Time HH	MM	Special instructions
1	Jasmine Bateman	2025	05	01	12	35	SA SUGHRA SAEWALI	2025	05	01	12	38	
2													

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OFFICIAL CERTIFICATE OF ANALYSIS : 4626481

WORK REQUEST : 100419345

Report Date : 2026-03-12

Premier Environmental Services Inc.
210 Sheldon Drive, Unit 201
Cambridge, Ontario
N1T 1A8
Attention : Phillip Snable

Reception Date : 2026-03-04
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187)
Sampler : NA
PO Number : 625004.OT
Temperature : 9 °C

Analysis	Quantity	External Method
Base Neutrals (Water, GC/MS)	1	Modified from EPA 8270
BOD5 (Water, DO)	1	Modified from SM 5210 B
Chlorine, Total (Water, Colorimetry)	1	Modified from SM 4500-CL G
Cyanide, Total (Water, Colorimetry)	1	Modified from MECP E3015
Escherichia coli (mFC-BCIG)	1	Modified from SM 9222 D
Fluoride (Water, Auto/ISE)	1	Modified from SM 4500-F A and 4500-F C
Hexavalent Chromium (Water, IC)	2	Modified from SM 3500-CR C
Metals Scan (Water, Dissolved, ICP/MS)	1	Modified from EPA 200.8
Metals Scan (Water, ICP/MS)	1	Modified from EPA 200.8
Nonylphenols (Water, LC/MS/MS)	1	Modified from ASTM D7485
Oil & Grease (TMN) (Water, Gravimetric)	1	Modified from SM 5520 B/F
PAH (Water, GC/MS)	1	Modified from EPA 8270
PCBs (Water, GC/ECD)	1	Modified from EPA 8081/8082
pH (25°C) (Water, Automated)	1	Modified from SM 4500-H+ B
Phenols (Water, Colorimetry)	1	Modified from EPA 420.2
Sulphate (Water, IC)	1	Modified from SM 4110 B and C
Total Kjeldahl Nitrogen (Water, Colorimetry)	1	Modified from EPA 351.2
TSS (Water, Gravimetric)	1	Modified from SM 2540 D
VOCs (Water, GC/MS)	1	Modified from EPA 8260

Criteria :

A : Sanitary Sewer - Peel (Bylaw 53-2010)
B : Storm Sewer - Mississauga (Bylaw 0046-2022)

Sample status upon receipt :

9465654 9465656
Compliant

Certificate Comments :

9465654
Headspace was observed for chlorine(total) analysis. The BN method blank is positive for bis(2-ethylhexyl)phthalate. Blank subtraction was not done.
9465656
Hg Dissolved spike recovery not available due to matrix interference in the spiked sample.

Notes :

- All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated.
- Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at https://directory.cala.ca/
- Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Legend :

RL : Reporting limit
QC : Reference material (QC)
N/A : Not applicable
1 : Results in annex
* : Analysis conducted by external subcontracting
^ : Analysis not accredited

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OFFICIAL CERTIFICATE OF ANALYSIS - EXCEEDENCE SUMMARY

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date : 2026-03-04

Eurofins Sample No	Client Sample Identification	Analyte	Result	Units	Exceeded Criteria		
					A	B	C
Metals Scan (Water, ICP/MS)							
9465654	BH5	Aluminum	2.84	mg/L		1	
TSS (Water, Gravimetric)							
9465654	BH5	Total Suspended Solids	46	mg/L		15	

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OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

Eurofins Sample No :					**9465654**				
Matrix :					Groundwater				
Sampling Date :					2026-03-04				
Client Sample Identification :					BH5				
Anions	**RL**	**Unit**	**Criteria A**	**Criteria B**	**Criteria C**				
Sulphate	1	mg/L	1500			122			

Eurofins Sample No :			**9465654**						
Matrix :			Groundwater						
Sampling Date :			2026-03-04						
Client Sample Identification :			BH5						
Chlorine	**RL**	**Unit**							
Chlorine (Total)	0.04	mg/L	<0.04						

Eurofins Sample No :					**9465654**				
Matrix :					Groundwater				
Sampling Date :					2026-03-04				
Client Sample Identification :					BH5				
General Chemistry	**RL**	**Unit**	**Criteria A**	**Criteria B**	**Criteria C**				
BOD5	1	mg/L	300	15		1			
Cyanide (Total)	0.005	mg/L	2	0.02		<0.005			
Fluoride	0.1	mg/L	10			0.25			
pH @ 25°C	1		5.5-10	6-9		7.83			
Phenols-4AAP	0.001	mg/L	1	0.008		<0.001			
Total Suspended Solids	2	mg/L	350	15		46			

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OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

					Eurofins Sample No :	**9465654**				
					Matrix :	Groundwater				
					Sampling Date :	2026-03-04				
					Client Sample Identification :	BH5				
Metals			**Criteria**							
	RL	**Unit**	**A**	**B**	**C**					
Hexavalent Chromium	0.001	mg/L		0.04		<0.001				
Metals Scan (Water, ICP/MS)										
Aluminum	0.01	mg/L	50	1		2.84				
Antimony	0.0005	mg/L	5			<0.0005				
Arsenic	0.001	mg/L	1	0.02		0.001				
Cadmium	0.0001	mg/L	0.7	0.008		<0.0001				
Chromium	0.001	mg/L	5	0.08		0.003				
Cobalt	0.0002	mg/L	5			0.0017				
Copper	0.001	mg/L	3	0.04		0.003				
Lead	0.001	mg/L	3	0.12		0.001				
Manganese	0.01	mg/L	5	2		0.24				
Mercury	0.0001	mg/L	0.01	0.0004		<0.0001				
Molybdenum	0.005	mg/L	5			<0.005				
Nickel	0.005	mg/L	3	0.08		<0.005				
Phosphorus	0.002	mg/L	10	0.4		0.170				
Selenium	0.001	mg/L	1	0.02		<0.001				
Silver	0.0001	mg/L	5	0.12		<0.0001				
Tin	0.001	mg/L	5			<0.001				
Titanium	0.01	mg/L	5			0.20				
Zinc	0.01	mg/L	3	0.2		<0.01				

Approved by : R. Koshy
Rebecca Koshy,
Senior Project Manager

Approved by : E Ferguson
Emma-Dawn Ferguson, M.Sc.
Environmental Chemist

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OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services inc. - Sewer Peel Metals (193187) Reception Date: 2026-03-04

Eurofins Sample No :			**9465656**						
Matrix :			Groundwater						
Sampling Date :			2026-03-04						
Client Sample Identification :			BH5 - F						
Metals	**RL**	**Unit**							
Hexavalent Chromium	0.001	mg/L	<0.001						
Metals Scan (Water, Dissolved, ICP/MS)									
Aluminum (Dissolved)	0.01	mg/L	<0.01						
Antimony (Dissolved)	0.0005	mg/L	<0.0005						
Arsenic (Dissolved)	0.001	mg/L	<0.001						
Cadmium (Dissolved)	0.0001	mg/L	<0.0001						
Chromium (Dissolved)	0.001	mg/L	<0.001						
Cobalt (Dissolved)	0.0002	mg/L	0.0004						
Copper (Dissolved)	0.001	mg/L	<0.001						
Lead (Dissolved)	0.001	mg/L	<0.001						
Manganese (Dissolved)	0.01	mg/L	0.17						
Mercury (Dissolved)	0.0001	mg/L	<0.0001						
Molybdenum (Dissolved)	0.005	mg/L	<0.005						
Nickel (Dissolved)	0.005	mg/L	<0.005						
Selenium (Dissolved)	0.001	mg/L	<0.001						
Silver (Dissolved)	0.0001	mg/L	<0.0001						
Tin (Dissolved)	0.001	mg/L	<0.001						
Titanium (Dissolved)	0.01	mg/L	<0.01						
Zinc (Dissolved)	0.01	mg/L	<0.01						

Approved by : R. Koshy
Rebecca Koshy,
Senior Project Manager

Approved by : E Ferguson
Emma-Dawn Ferguson, M.Sc.
Environmental Chemist

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OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

Eurofins Sample No :			**9465654**							
Matrix :			Groundwater							
Sampling Date :			2026-03-04							
Client Sample Identification :			BH5							
Microbiology	**RL**	**Unit**								
Escherichia coli (mFC-BCIG)	0	CFU/100mL	0							

Eurofins Sample No :						**9465654**				
Matrix :						Groundwater				
Sampling Date :						2026-03-04				
Client Sample Identification :						BH5				
Nonylphenols			**Criteria**							
	RL	**Unit**	**A**	**B**	**C**					
Nonylphenols (Water, LC/MS/MS)										
Nonylphenol (4-NP)	0.2	ug/L	20			<0.2				
Nonylphenol Ethoxylates (Total)	0.1	ug/L	200			<0.1				

Eurofins Sample No :						**9465654**				
Matrix :						Groundwater				
Sampling Date :						2026-03-04				
Client Sample Identification :						BH5				
Nutrients			**Criteria**							
	RL	**Unit**	**A**	**B**	**C**					
Total Kjeldahl Nitrogen	0.1	mg/L	100			0.968				

Eurofins Sample No :						**9465654**				
Matrix :						Groundwater				
Sampling Date :						2026-03-04				
Client Sample Identification :						BH5				
Oil and Grease			**Criteria**							
	RL	**Unit**	**A**	**B**	**C**					
Oil & Grease (TMN) (Water, Gravimetric)										
Oil and Grease (Animal and Vegetable)	1	mg/L	150			<1				
Oil and Grease (Mineral)	1	mg/L	15			<1				
Oil and Grease (Total)	1	mg/L				<1				

Eurofins Sample No :						**9465654**				
Matrix :						Groundwater				
Sampling Date :						2026-03-04				
Client Sample Identification :						BH5				
Polychlorinated Biphenyls			**Criteria**							
	RL	**Unit**	**A**	**B**	**C**					
PCBs (Water, GC/ECD)										
Polychlorinated Biphenyls	0.1	ug/L	1	0.4		<0.1				
Aroclor 1242	0.1	ug/L				<0.1				
Aroclor 1248	0.1	ug/L				<0.1				
Aroclor 1254	0.1	ug/L				<0.1				
Aroclor 1260	0.1	ug/L				<0.1				
Decachlorobiphenyl (surrogate)	0	%				55				

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OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

					Eurofins Sample No :	**9465654**				
					Matrix :	Groundwater				
					Sampling Date :	2026-03-04				
					Client Sample Identification :	BH5				
Semivolatile Organic Compounds	**RL**	**Unit**	**Criteria**							
			A	**B**	**C**					
Base Neutrals (Water, GC/MS)										
Bis(2-ethylhexyl)phthalate	0.4	ug/L	12			<0.4				
Di-n-butyl phthalate	1.3	ug/L	80			<1.3				
p-Terphenyl-d14 (surrogate)	0	%				64				
PAH (Water, GC/MS)										
1 + 2-Methylnaphthalene	0.1	ug/L				<0.1				
1-Methylnaphthalene	0.1	ug/L				<0.1				
2-Methylnaphthalene	0.1	ug/L				<0.1				
Acenaphthene	0.1	ug/L				<0.1				
Acenaphthylene	0.1	ug/L				<0.1				
Anthracene	0.1	ug/L				<0.1				
Benzo(a)anthracene	0.1	ug/L				<0.1				
Benzo(a)pyrene	0.01	ug/L				<0.01				
Benzo(b)fluoranthene	0.05	ug/L				<0.05				
Benzo(g,h,i)perylene	0.1	ug/L				<0.1				
Benzo(k)fluoranthene	0.05	ug/L				<0.05				
Chrysene	0.05	ug/L				<0.05				
Dibenzo(a,h)anthracene	0.1	ug/L				<0.1				
Fluoranthene	0.1	ug/L				<0.1				
Fluorene	0.1	ug/L				<0.1				
Indeno(1,2,3-c,d)pyrene	0.1	ug/L				<0.1				
Naphthalene	0.1	ug/L				<0.1				
Phenanthrene	0.1	ug/L				<0.1				
Pyrene	0.1	ug/L				<0.1				
p-Terphenyl-d14 (surrogate)	0	%				63				
PAH (Total)^	2	ug/L		2		<2				

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OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

					Eurofins Sample No :	**9465654**				
					Matrix :	Groundwater				
					Sampling Date :	2026-03-04				
					Client Sample Identification :	BH5				
Volatile Organic Compounds	**RL**	**Unit**	**Criteria**							
			A	**B**	**C**					
VOCs (Water, GC/MS)										
1,1,2,2-Tetrachloroethane	0.5	ug/L	1400	17		<0.5				
1,2-Dichlorobenzene	0.4	ug/L	50	5.6		<0.4				
1,4-Dichlorobenzene	0.4	ug/L	80	6.8		<0.4				
Benzene	0.5	ug/L	10	2		<0.5				
Chloroform	0.5	ug/L	40			<0.5				
cis-1,2-Dichloroethene	0.4	ug/L	4000			<0.4				
Dichloromethane	4	ug/L	2000	5.2		<4.0				
Ethylbenzene	0.5	ug/L	1600	2		<0.5				
m/p-Xylene	0.4	ug/L				<0.4				
Methyl ethyl ketone (MEK)	2	ug/L	8000			<2.0				
o-Xylene	0.4	ug/L				<0.4				
Styrene	0.5	ug/L	200			<0.5				
Tetrachloroethylene (PCE)	0.3	ug/L	1000	4.4		<0.3				
Toluene	0.4	ug/L	270	2		<0.4				
trans-1,3-dichloropropene	0.5	ug/L	1400			<0.5				
Trichloroethylene (TCE)	0.3	ug/L	400	7.6		<0.3				
Xylene (Total)	0.5	ug/L	1400	4.4		<0.5				
1,2-dichloroethane-d4 (surrogate)	0	%				111				
4-bromofluorobenzene (surrogate)	0	%				77				
Toluene-d8 (surrogate)	0	%				87				

Approved by : R. Koshy
Rebecca Koshy,
Senior Project Manager

Approved by : E Ferguson
Emma-Dawn Ferguson, M.Sc.
Environmental Chemist

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OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Base Neutrals (Water, GC/MS)									
Method : Semi-volatile organic compounds (Water, GC/MS). Internal method: OTT-O-SEMI-WI45239.									
Bis(2-ethylhexyl)phthalate	ug/L	0.4	0.5	110	50-140				
Di-n-butyl phthalate	ug/L	1.3	<1.3	100	50-140				
Associated Samples : 9465654								Prep Date: 2026-03-08 Analysis Date: 2026-03-10	
BOD5 (Water, DO)									
Method : Biochemical Oxygen Demand (Water, DO Meter). Internal method: OTT-I-DEM-WI46068.									
BOD5	mg/L	1	<1	91	75-125			-	0-33
Associated Samples : 9465654								Prep Date: 2026-03-06 Analysis Date: 2026-03-11	
Chlorine, Total (Water, Colorimetry)									
Method : Chlorine (Water, Colorimetry). Internal method: OTT-I-SPEC-WI45444.									
Chlorine (Total)	mg/L	0.04	<0.04	98	74-116			-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-05 Analysis Date: 2026-03-06	
Cyanide, Total (Water, Colorimetry)									
Method : Cyanide (water, colorimetry). Internal method: OTT-I-CN-WI46209.									
Cyanide (Total)	mg/L	0.005	<0.005	79	76-122	83	80-120	-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-10 Analysis Date: 2026-03-11	
Fluoride (Water, Auto/ISE)									
Method : Fluoride by autotitrator, ion selective electrode. Internal method: OTT-I-AT-WI45398.									
Fluoride	mg/L	0.1	<0.10	98	90-110			-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-09 Analysis Date: 2026-03-10	
Hexavalent Chromium (Water, IC)									
Method : Modified from SM 3500-CR C. Internal method: OTT-I-IC-WI69883.									
Hexavalent Chromium	mg/L	0.001	<0.001	78	70-130	117	70-130	-	0-20
Associated Samples : 9465654, 9465656								Prep Date: 2026-03-09 Analysis Date: 2026-03-09	

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OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Metals Scan (Water, Dissolved, ICP/MS)									
Method : Metals (Water, ICP/MS). Internal method: AMMTFQE1.									
Aluminum (Dissolved)	mg/L	0.01	<0.01	100	80-130	119	70-130	-	0-20
Antimony (Dissolved)	mg/L	0.0005	<0.0005	92	80-130	92	70-130	-	0-20
Arsenic (Dissolved)	mg/L	0.001	<0.001	100	80-130	100	70-130	-	0-20
Cadmium (Dissolved)	mg/L	0.0001	<0.0001	105	80-130	90	70-130	-	0-20
Chromium (Dissolved)	mg/L	0.001	<0.001	110	80-130	109	70-130	-	0-20
Cobalt (Dissolved)	mg/L	0.0002	<0.0002	109	80-130	103	70-130	0	0-20
Copper (Dissolved)	mg/L	0.001	<0.001	110	80-130	96	70-130	0	0-20
Lead (Dissolved)	mg/L	0.001	<0.001	110	80-130	80	70-130	-	0-20
Manganese (Dissolved)	mg/L	0.01	<0.01	100	80-130	104	70-130	0	0-20
Mercury (Dissolved)	mg/L	0.0001	<0.0001	103	80-120			-	0-20
Molybdenum (Dissolved)	mg/L	0.005	<0.005	100	80-130	109	70-130	-	0-20
Nickel (Dissolved)	mg/L	0.005	<0.005	110	80-130	98	70-130	0	0-20
Selenium (Dissolved)	mg/L	0.001	<0.001	100	80-130	89	70-130	-	0-20
Silver (Dissolved)	mg/L	0.0001	<0.0001	99	80-130	78	70-130	-	0-20
Tin (Dissolved)	mg/L	0.001	<0.001	100	80-130	98	70-130	-	0-20
Titanium (Dissolved)	mg/L	0.01	<0.01	102	80-120	120	70-130	-	0-20
Zinc (Dissolved)	mg/L	0.01	<0.01	110	80-130	80	70-130	-	0-20
Associated Samples : 9465656								Prep Date: 2026-03-06 Analysis Date: 2026-03-06	
Metals Scan (Water, ICP/MS)									
Method : Metals (Water, ICP/MS). Internal method: AMMTFQE1.									
Aluminum	mg/L	0.01	<0.01	100	80-120	109	70-130	-	0-20
Antimony	mg/L	0.0005	<0.0005	92	80-120	94	70-130	-	0-20
Arsenic	mg/L	0.001	<0.001	100	80-120	101	70-130	-	0-20
Cadmium	mg/L	0.0001	<0.0001	105	80-120	94	70-130	-	0-20
Chromium	mg/L	0.001	<0.001	110	80-120	105	70-130	-	0-20
Cobalt	mg/L	0.0002	<0.0002	109	80-120	104	70-130	-	0-20
Copper	mg/L	0.001	<0.001	110	80-120	99	70-130	0	0-20
Lead	mg/L	0.001	<0.001	110	80-120	91	70-130	-	0-20
Manganese	mg/L	0.01	<0.01	100	80-120	100	70-130	-	0-20
Mercury	mg/L	0.0001	<0.0001	103	80-120	90	70-130	-	0-20
Molybdenum	mg/L	0.005	<0.005	100	80-120	107	70-130	-	0-20
Nickel	mg/L	0.005	<0.005	110	80-120	101	70-130	-	0-20
Phosphorus	mg/L	0.002	<0.002	104	80-120	113	70-130	-	0-20
Selenium	mg/L	0.001	<0.001	100	80-120	90	70-130	-	0-20
Silver	mg/L	0.0001	<0.0001	99	80-120	80	70-130	-	0-20
Tin	mg/L	0.001	<0.001	100	80-120	100	70-130	-	0-20
Titanium	mg/L	0.01	<0.01	102	80-120	100	70-130	-	0-20
Zinc	mg/L	0.01	<0.01	110	80-120	90	70-130	-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-06 Analysis Date: 2026-03-06	
Nonylphenols (Water, LC/MS/MS)									
Method : Nonylphenols (Water, GC/MS). Internal method: OTT-O-NP-WI48452.									
Nonylphenol (4-NP)	ug/L	0.2	<0.2	80	50-150				
Nonylphenol Ethoxylates (Total)	ug/L	0.1	<0.1						
Associated Samples : 9465654								Prep Date: 2026-03-11 Analysis Date: 2026-03-11	

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OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Oil & Grease (TMN) (Water, Gravimetric)									
Method : Oil and Grease (Water, Gravimetric). Internal method OTT-O-OG-WI45291.									
Oil and Grease (Animal and Vegetable)	mg/L	1	<1	120	70-130				
Oil and Grease (Mineral)	mg/L	1	<1	80	70-130				
Oil and Grease (Total)	mg/L	1	<1	100	70-130				
Associated Samples : 9465654								Prep Date: 2026-03-10 Analysis Date: 2026-03-10	
PAH (Water, GC/MS)									
Method : Semi-volatile organic compounds (Water, GC/MS). Internal method: OTT-O-SEMI-WI45239.									
1 + 2-Methylnaphthalene	ug/L	0.1	<0.1						
1-Methylnaphthalene	ug/L	0.1	<0.1	88	50-140				
2-Methylnaphthalene	ug/L	0.1	<0.1	86	50-140				
Acenaphthene	ug/L	0.1	<0.1	86	50-140				
Acenaphthylene	ug/L	0.1	<0.1	88	50-140				
Anthracene	ug/L	0.1	<0.1	86	50-140				
Benzo(a)anthracene	ug/L	0.1	<0.1	96	50-140				
Benzo(a)pyrene	ug/L	0.01	<0.01	94	50-140				
Benzo(b)fluoranthene	ug/L	0.05	<0.05	69	50-140				
Benzo(g,h,i)perylene	ug/L	0.1	<0.1	90	50-140				
Benzo(k)fluoranthene	ug/L	0.05	<0.05	109	50-140				
Chrysene	ug/L	0.05	<0.05	94	50-140				
Dibenzo(a,h)anthracene	ug/L	0.1	<0.1	88	50-140				
Fluoranthene	ug/L	0.1	<0.1	86	50-140				
Fluorene	ug/L	0.1	<0.1	88	50-140				
Indeno(1,2,3-c,d)pyrene	ug/L	0.1	<0.1	64	50-140				
Naphthalene	ug/L	0.1	<0.1	84	50-140				
Phenanthrene	ug/L	0.1	<0.1	90	50-140				
Pyrene	ug/L	0.1	<0.1	84	50-140				
PAH (Total)^	ug/L	2	<2						
PAH (Total)^	ug/L	2	<2						
PAH (Total)^	ug/L	2	<2						
Associated Samples : 9465654								Prep Date: 2026-03-08 Analysis Date: 2026-03-10	
PCBs (Water, GC/ECD)									
Method : Organochlorine Pesticides/PCBs (Water, GC/ECD). Internal method: AMOCPCE1.									
Polychlorinated Biphenyls	ug/L	0.1	<0.1	89	50-140				
Aroclor 1242	ug/L	0.1	<0.1	89	50-140				
Aroclor 1248	ug/L	0.1	<0.1	89	50-140				
Aroclor 1254	ug/L	0.1	<0.1	89	50-140				
Aroclor 1260	ug/L	0.1	<0.1	89	50-140				
Associated Samples : 9465654								Prep Date: 2026-03-08 Analysis Date: 2026-03-10	
pH (25°C) (Water, Automated)									
Method : pH (Water, Automated Meter). Internal method: OTT-I-AT-WI45398.									
pH @ 25°C		1	6.98	100	97-103			0	0-20
Associated Samples : 9465654								Prep Date: 2026-03-09 Analysis Date: 2026-03-10	

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OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Premier Environmental Services Inc.
Project : Premier Environmental Services Inc. - Storm + San Peel 2026 (193187) Reception Date: 2026-03-04

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Phenols (Water, Colorimetry)									
Method : Phenols (Water, Colorimetry). Internal method: OTT-I-4AAP-WI46150.									
Phenols-4AAP	mg/L	0.001	<0.001	102	75-125	79	70-130	-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-10 Analysis Date: 2026-03-10	
Sulphate (Water, IC)									
Method : Anions (Water, Ion Chromatography). Internal method: OTT-I-IC-WI45985.									
Sulphate	mg/L	1	<1	100	90-110	98	80-120	1	0-20
Associated Samples : 9465654								Prep Date: 2026-03-09 Analysis Date: 2026-03-10	
Total Kjeldahl Nitrogen (Water, Colorimetry)									
Method : TKN (Water, colorimetry). Internal method: OTT-I-NUT-WI46201.									
Total Kjeldahl Nitrogen	mg/L	0.1	<0.100	100	70-130	93	70-130	-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-06 Analysis Date: 2026-03-09	
TSS (Water, Gravimetric)									
Method : Solids, Total Suspended (Water, Gravimetric). Internal method: OTT-I-SOL-WI46259.									
Total Suspended Solids	mg/L	2	<2	95	90-110			-	0-20
Associated Samples : 9465654								Prep Date: 2026-03-08 Analysis Date: 2026-03-09	
VOCs (Water, GC/MS)									
Method : Volatile Organic Compounds (Water, GC/MS). Internal method: AMVOMSE8.									
1,1,2,2-Tetrachloroethane	ug/L	0.5	<0.5	77	70-130	125	70-130	-	0-30
1,2-Dichlorobenzene	ug/L	0.4	<0.4	124	70-130	121	70-130	-	0-30
1,4-Dichlorobenzene	ug/L	0.4	<0.4	113	70-130	112	70-130	-	0-30
Benzene	ug/L	0.5	<0.5	122	70-130	128	70-130	-	0-30
Chloroform	ug/L	0.5	<0.5	127	70-130	125	70-130	-	0-30
cis-1,2-Dichloroethene	ug/L	0.4	<0.4	123	70-130	129	70-130	-	0-30
Dichloromethane	ug/L	4	<4.0	114	70-130	82	70-130	-	0-30
Ethylbenzene	ug/L	0.5	<0.5	116	70-130	114	70-130	-	0-30
m/p-Xylene	ug/L	0.4	<0.4	120	70-130	122	70-130	-	0-30
Methyl ethyl ketone (MEK)	ug/L	2	<2.0	125	70-130	125	70-130	-	0-30
o-Xylene	ug/L	0.4	<0.4	121	70-130	121	70-130	-	0-30
Styrene	ug/L	0.5	<0.5	125	70-130	122	70-130	-	0-30
Tetrachloroethylene (PCE)	ug/L	0.3	<0.3	129	70-130	128	70-130	-	0-30
Toluene	ug/L	0.4	<0.4	121	70-130	126	70-130	-	0-30
trans-1,3-dichloropropene	ug/L	0.5	<0.5	126	70-130	124	70-130	-	0-30
Trichloroethylene (TCE)	ug/L	0.3	<0.3	130	70-130	121	70-130	-	0-30
Xylene (Total)	ug/L	0.5	<0.5				-		-
Associated Samples : 9465654								Prep Date: 2026-03-06 Analysis Date: 2026-03-09	
Method : E.Coli by MF (mFC-BCIG Media). Internal method: OTT-M-BAC-WI45296.									
Escherichia coli (mFC-BCIG)	CFU/100mL	0	0					-	0-30
Associated Samples : 9465654								Prep Date: 2026-03-05 Analysis Date: 2026-03-06	

Where RPD % is reported as "-" the calculation is not available because one or both of the duplicates is within 5 times the RL.

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STANDARD CHAIN-OF-CUSTODY

146 Colonnade Road, Unit #8, Ottawa, ON, K2E 7Y1 - Phone: 613-727-5692, Fax: 613-727-5222

CLIENT INFORMATION

Company: Premier Environmental
Contact: Phillip Snable
Address: 1505 Laperriere Avenue, Suite 113, Ottawa, ON, K1Z 7T1
Telephone: 613-328-0529 Cell:
Email: #1: psnable@premiercorp.ca
Email: #2:
Project: 1055 Bloor Street, Mississauga - 625004.OT Quote #:

INVOICE INFORMATION (SAME AS CLIENT INFORMATION: YES ☐ NO ☒)

Company: Premier Environmental
Contact: Anna Davies Email: #1: adavies@premiercorp.ca
Address: 210 Sheldon Drive, Unit 201, Cambridge, ON Email: #2: ~~[illegible]~~
Telephone: 519-404-3512 PO #: 625004.OT

TURN-AROUND TIME (Business Days)

☐ 1 Day* (100%) ☐ 2 Day** (50%) ☐ 3-5 Days (25%) ☒ 5-7 Days (Standard)

Please contact Lab in advance to determine rush availability. *For results reported after rush due date, surcharges will apply: before 12:00 - 100%, after 12:00 - 50%. **For results reported after rush due date, surcharges will apply: before 12:00 - 50%, after 12:00 - 25%.

TCLP, SPLP, PFAS, and NP/NPE the rush surcharges are 100% (3 day) and 50% (4 day). For farm soils the rush surcharge is 100% (3-5 days). Regular TAT is 10 days.

REGULATION/GUIDELINE REQUIRED

☒ Sanitary Sewer, City: ~~Mississauga~~ Peel
☒ Storm Sewer, City: Mississauga
☐ ODWSOG (Use DW COC if samples are for human consumption)
☐ PWQO
☐ O.Reg. 347 (TCLP)
☐ Other: _____

☒ O. Reg. 153/04
Table # 8 (Coarse / Fine, Surface / subsurface)
The sample results from this submission will form part of a formal Record of Site Condition (RSC) under O.Reg. 153/04. Analysis of full parameter list only Yes ☐ No ☒
Type: Com-Ind / Res-Park / Agri / GW / All Other / Sediment

☐ O. Reg 406 Excess Soils
Table # _____ Full depth/Strat/Ceiling/mSPLP Leachate
Type: Com-Ind /Res-Park /Agri/All Other
Category: Surface /Subsurface

The optimal temperature conditions during transport is 4 - 10°C. Sample(s) cannot be frozen, unless otherwise indicated or agreed upon with the Laboratory. This COC must not be used for drinking water samples. The COC must be complete upon submission of the samples, there will be a $25 surcharge if required information is missing (required fields are shaded in grey).

Occasionally, situations arise in which Eurofins Environment Testing Canada (Ottawa) is unable to process a sample after receipt. By signing this chain-of-custody form, the client agrees that Eurofins Environment Testing Canada (Ottawa) may subcontract samples to a laboratory that is similarly accredited. This subcontracted laboratory will perform the same analysis using the same or similar methodology. Agreements made in advance to subcontract to a specific laboratory will be honored.

Sample Details

Sample ID	Date/Time Collected	Sample Matrix	# of Containers	O.Reg.153/04 parameters: PHC F1 - F4	BTEX	VOCs	PAHs	PCBs	Metals + Inorganics	Metals only	CrVI								RN# (Lab Use Only)
MW104-25	MAR 4-26 3PM	GW	2							X	X			946560					Additional bottle provided
MW104-25-F	" "	↓	2							X	X					52			Field Filtered
BH5	MAR 4-26 2PM		14													54	946459		Storm + Sanitary
BH5-F	" "	↓	2							X	X					56			field filtered

	PRINT NAME	LOCATION	SIGN	DATE/TIME	TEMP (°C)
Sampled By:	Brandon Green		BGreen	MAR 4-26 5PM	
Relinquished By:	Brandon Green		BGreen	MAR 4-26 5PM	
Received By:	Christine Sukkina	NY		04/Mar/26 5pm	5.6
Received By:	Deepa	OTT		05/Mar/26 12:15am	9.1

COMMENTS:

100418340

Printed On : 2026-03-05 17:05:39

CUSTODY SEAL: ☐ YES ☐ NO Ice packs submit ☐ Yes ☐ No

Appendix E

Construction Dewatering Estimate Rate Calculations

Construction Dewatering Rate Estimate

1 level of basement, Unconfined Aquifer, Groundwater seepage to rectangle excavation (line source)

Table E-1: Construction Dewatering Rate Estimates

Description	Symbol	Block A	Block B	Block C	Block D	Unit	Explanation
Input							
Proposed Level 1 Elevation		133.08	133.60	133.48	132.47	m asl	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Highest Groundwater Elevation		129.73	129.73	130.01	130.01	m asl	Highest groundwater elevation for each development area (May 14, 2025)
Footing Elevation		128.45	128.97	128.85	127.84	m asl	Based on drawing A412 and A413 Overall Building Sections, prepared by Kohn, dated January 23, 2026, basement elevation is 3.13 m below level 1 elevation, and footing is approximately 1.5 m below basement elevation.
Aquifer Bottom		125.45	125.97	125.85	124.84	m asl	Assumed 3 m below footing level
Hydraulic Conductivity	K	2.88E-08	2.88E-08	1.19E-08	1.19E-08	m/s	Highest K for each development area
Length of Excavation	x	39.84	39.64	53.04	53.04	m	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Width of Excavation	a	18.07	18.07	18.07	18.07	m	
Output							
Top of Aquifer		129.73	129.73	130.01	130.01	m asl	Water table for unconfined aquifer
Target Water Level		127.45	127.97	127.85	126.84	m asl	Assumed 1.0 m below footing elevation
Water Level above aquifer bottom before dewatering	H	4.3	3.8	4.2	5.2	m	
target water level above aquifer bottom	h	2.0	2.0	2.0	2.0	m	
Radius of Influence	L (R_0)	0.68	0.52	0.41	0.60	m	Sichardt's Formula C=1750
Construction Dewatering Flow Rate - Steady State	Q	3.05	2.78	2.35	2.74	m^3/day	Construction Dewatering flow – Dupuit Equation
Maximum Construction Flow Rate (safety factor of 3)	3Q	9.1	8.4	7.1	8.2	m^3/day	During the initial period and after rains
Construction Dewatering Flow Rate - Steady State	Q	**3,000**	**2,800**	**2,400**	**2,700**	L/day	
Maximum Construction Flow Rate (safety factor of 3)	3Q	**9,000**	**8,400**	**7,200**	**8,100**	L/day	

Appendix F

Long Term Drainage Flow Rate Estimate Calculations

Foundation Sub-Drain Flow Rate Estimate

1 level of basement, Unconfined Aquifer, Groundwater seepage to rectangle excavation (line source)

Table F-1: Foundation Sub-Drain Flow Rate Estimate

Description	Symbol	Block A	Block C	Block D	Unit	Explanation
Input						
Proposed Level 1 Elevation		133.08	133.48	132.47	m asl	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Highest Groundwater Elevation		129.73	130.01	130.01	m asl	Highest groundwater elevation for each development area (May 14, 2025)
Basement Elevation		129.95	130.35	129.34	m asl	Based on drawing A412 and A413 Overall Building Sections, prepared by Kohn, dated January 23, 2026, basement elevation is 3.13 m below level 1 elevation
Aquifer Bottom		126.95	127.35	126.34	m asl	Assumed 3 m below basement level
Hydraulic Conductivity		2.88E-08	1.19E-08	1.19E-08	m/s	Highest K for each development area
Length of Excavation	x	39.84	53.04	53.04	m	Based on drawing A100 Site Plan and Site Statistics, prepared by Kohn, dated January 23, 2026
Width of Excavation	a	18.07	18.07	18.07	m	
Output						
Top of Aquifer		129.7	130.0	130.0	m asl	Water table for unconfined aquifer
Target Water Level		129.45	129.85	128.84	m asl	Assumed 0.5 m below basement elevation
Water Level above aquifer bottom before dewatering	H	2.8	2.7	3.7	m	
Target water level above aquifer bottom	h	2.5	2.5	2.5	m	
Radius of Influence	L (R_0)	2.50	1.57	1.84	m	Weber's Equation - R0 after 30 days
Long-Term Flow Rate - Steady State	Q	0.09	0.04	0.29	m^3/day	Long-term flow rate – Dupuit Equation
Maximum Foundation Drain Flow Rate (safety factor of 3)	3Q	0.26	0.12	0.86	m^3/day	During the initial period and after rains
Estimated Long-term Foundation Drain Flow Rate	Q	**90**	**40**	**290**	L/day	
Estimated Maximum Foundation Drain Flow Rate	3Q	**270**	**120**	**870**	L/day	

Appendix G

Pre and Post Development Water Balance

Summary of Pre-Development Water Balance

1055 Bloor Street, Mississauga, Ontario
Project Number: 62263_001

Pre-Developed Site Condition

Landscape	6,399	sq.m.
Paved Surfaces	1,195	sq.m.
TOTAL	**7,594**	**sq.m.**

Pre-Development Infiltration Factor

Category	Infiltration Factor
Topography/Slope	0.20
Soil Type (Silt Till)	0.20
Cover (Cultivated Lands)	0.10
Total Infiltration factor	**0.50**

Climate Data (Climate Normals 1983-2012 at Pearson International Airport Climate ID 6158733)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Ave. Tempreature (^{0}C)	-5.11	-4.42	0.34	7.13	13.27	18.84	21.69	20.78	16.37	9.65	3.82	-2.06	
Total Precipitation (P) (mm)	52.77	46.97	50.69	70.05	77.06	70.19	76.89	73.91	73.63	63.35	73.62	57.73	786.9

Thornthwaite and Mather (1955) method	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Potential Evapotranspiration (PET) (mm)	9.16	10.88	21.00	39.61	72.46	108.22	127.91	102.63	59.75	31.19	16.15	10.16	609.13
Actual Evapotranspiration (AET) (mm)	9.16	10.88	21.00	39.61	72.38	105.74	112.13	84.58	55.67	30.48	16.15	10.16	567.95
Water Surplus (mm)	15.78	24.71	46.09	46.15	16.71	4.75	2.16	2.66	8.82	5.33	22.07	22.07	217.31

Annual Pre-Development Water Balance

Land Use	Area (sq.m.)	P (cu.m.)	AET (cu.m.)	Infiltration (cu.m.)	Run-off (cu.m.)
Paved Surface	1,195	940	0	0	940
Landscape	6,399	5,035	3,634	695	705
Total	7,594	5,975	3,634	695	1,646
		Pre-development Infiltration Rate		**92**	**mm/a**

Summary of Post-Development Water Balance

1055 Bloor Street, Mississauga, Ontario
Project Number: 62263_001

Post-Developed Site Condition

Building Roofs	3,412	sq.m.
Paved Surface	2,175	sq.m.
Landscape	2,007	sq.m.
TOTAL	**7,594**	**sq.m.**

Post-Development Infiltration Factor

Category	Infiltration Factor
Topography/Slope	0.20
Soil Type (Silt Till)	0.20
Cover (Cultivated Lands)	0.10
Total Infiltration factor	**0.50**

Climate Data (Climate Normals 1983-2012 at Pearson International Airport Climate ID 6158733)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Ave. Tempreature (^{0}C)	-5.11	-4.42	0.34	7.13	13.27	18.84	21.69	20.78	16.37	9.65	3.82	-2.06	
Total Precipitation (P) (mm)	52.77	46.97	50.69	70.05	77.06	70.19	76.89	73.91	73.63	63.35	73.62	57.73	786.9

Thornthwaite and Mather (1955) method	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Potential Evapotranspiration (PET) (mm)	9.16	10.88	21.00	39.61	72.46	108.22	127.91	102.63	59.75	31.19	16.15	10.16	609.13
Actual Evapotranspiration (AET) (mm)	9.16	10.88	21.00	39.61	72.38	105.74	112.13	84.58	55.67	30.48	16.15	10.16	567.95
Water Surplus (mm)	15.78	24.71	46.09	46.15	16.71	4.75	2.16	2.66	8.82	5.33	22.07	22.07	217.31

Annual Post-Development Water Balance

Land Use	Area (sq.m.)	P (cu.m.)	AET (cu.m.)	Infiltration (cu.m.)	Run-off (cu.m.)
Building Roofs	3,412	2,685	0	0	2,685
Paved Surface	2,175	1,711	0	0	1,711
Landscape	2,007	1,579	1,140	218	221
TOTAL	7,594	5,975	1,140	218	4,617
		Post-development Infiltration Rate		**29**	**mm/a**