GEMS®

Groundwater Environmental Management Services

Hydrogeological Report

2343 Eglinton Avenue West, Toronto, Ontario

Project: 24-0022

4 February 2025

Prepared For:

1764174 Ontario Inc.
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1.0 Introduction

Groundwater Environmental Management Services Inc. (GEMS) has been retained by 1764174 Ontario Inc. (the client) to prepare a Hydrogeological Report for a proposed mixed-use residential and commercial building located at 2343 Eglinton Avenue West in Toronto, Ontario. The location of the Site is illustrated in **Figure 1**.

The coordination drawing set provided by RAW dated on 7 August 2024, included as **Appendix A**, indicate the gross site area is not to exceed 4,631 squared metres (m^2). The proposed development is to include the construction of a single mixed-use residential and commercial building with 2 levels of underground parking. The excavation for underground levels is assumed to extend approximately 8.2 m below ground surface to 149.20 metres above sea level (masl).

The highest water table elevation recorded at the Site during this investigation was 151.46 masl. This suggests that excavation for the two below grade parking levels will require short-term construction dewatering to maintain a dry excavation during construction.

GEMS has reviewed the available relevant geological, environmental, and geotechnical information and has prepared this Hydrogeological Report in support of the proposed development in accordance with the Ontario Water Resources Act, Ontario Regulation 387/04, and Toronto Municipal Code Chapter 681-Sewers.

GEMS' scope of work included:

- Review of hydrogeological conditions and environmental information based on previous reports prepared for the Site
- Review of Borehole Logs created by GEMS (2023)
- Groundwater level monitoring
- Hydraulic Conductivity Testing
- Water quality analysis
- Calculation of short-term construction dewatering and long-term groundwater seepage
- Assessment of potential adverse environmental effects
- Assessment of MECP well records within 500 m of the Site

2.0 Site Conditions

2.1 Location and Land Usage

The Site is a rectangular shaped lot located at the address 2343 Eglinton Avenue West. It is on the southwest corner of Eglinton Avenue West and Caledonia Road and is approximately 2.2 kilometers west of Allen Road and 3.5 kilometres south of Highway 401 [1]. The nearest surface water body is the Humber River, located 3.6 km west of the site. The site is currently zoned as commercial residential [2].

Lands within 500 m of the Site generally consist of commercial residential, residential, open space, and residential apartment [2].

North: Commercial Residential, Residential, and Open Space.

East: Commercial Residential, Residential, and Open Space.

South: Residential, Commercial Residential, and Open Space.

West: Commercial Residential, Residential, Open Space, and Residential Apartment.

2.2 Proposed Development

1764174 Ontario Inc.'s proposed development consists of the construction of 2 residential towers at 6 and 42 storeys overtop 1 6-storey commercial podium with 2 levels of underground parking. The development will occupy an approximate total area of 4,631 m^2 as shown in the architectural drawings. The excavation is not expected to exceed more than 4,482 m^2.

The Architectural Drawings for the proposed development are provided in **Appendix A.**

3.0 Methodology

3.1 Drilling Program

On 2 October 2023 to 10 October 2023, GEMS carried out a field investigation including the advancement of 5 boreholes denoted as MW1 through MW5 in support of their geotechnical investigation. All boreholes were equipped with schedule-40, Polyvinyl chloride (PVC) monitoring wells, with screened intervals of 3.0 m length at their base.

The monitoring wells were installed to evaluate static groundwater elevations, conduct hydraulic testing, and obtain water quality samples. All monitoring wells were purged prior to sampling using a Waterra inertial lift pump by purging at least three well volumes or until the monitoring well was purged dry. Borehole logs are provided in **Appendix B**, and a detailed Site Plan showing the borehole and monitoring well locations is presented in **Figure 2**.

3.2 Hydraulic Testing

On 10 September 2024, GEMS personnel visited the Site to complete Single Well Response Tests (SWRTs) on the monitoring wells installed in MW2 and MW4 to evaluate the hydraulic properties of the subsurface materials at the Site.

The SWRTs consisted of rising head testing performed by 'instantaneously' removing a pre-determined volume of water (a slug). Water level recovery back to static conditions was monitored using an automated water level logging device with 1 second measurement intervals and validated with manual measurements. A dedicated baro-logger was set above the water table to allow the data to be compensated for changes in atmospheric pressure.

3.3 Water Quality Sampling

On 26 October 2023, a groundwater sample was collected by GEMS personnel for an initial water quality characterization to inform decisions on means and methods related to groundwater management during construction. The sample was taken from monitoring well MW4 in accordance with GEMS' standard operating procedure for Groundwater Sampling. Using a new dedicated bailer and sterile nitrile gloves preserves sample integrity and prior to sampling activities using a Waterra inertial lift pump by purging at least three well volumes or until the monitoring well was purged dry ensures that the results are

representative of in-situ groundwater conditions. The sample collection was not filtered.

The collected groundwater sample was packed with ice in a cooler to maintain sample temperature, and the cooler was sealed and transported for analysis to Bureau Veritas, a Canadian laboratory accredited and licensed by the Standards Council of Canada and/or the Canadian Association for Laboratory Accreditation.

The sample was tested for all parameters denoted in the City of Toronto Storm Sewer and Sanitary Combined Sewer Use By-law criteria to assess the potential for discharge to the local sewer system.

4.0 Geology and Hydrogeological Setting

The Site is situated in the physiographic region detailed as the South Slope, characterized as shallow shale and till plains that slope southward towards Lake Ontario [3]. Surficial geology at the site primarily consists of deposits of Stone-poor, sandy silt to silty sand-textured till [4]. The surficial geology of the Site is displayed in **Figure 3**.

The bedrock underlaying the Site is part of the Georgian Bay Formation composed primarily of shale and limestone [5].

4.1 Subsurface Investigation

All boreholes were evaluated for this report. Boreholes MW1 through MW5 were advanced to depths between 20.0 and 40.1 metres below grade (mbg) with elevations ranging from 138.0 to 116.9 masl.

Boreholes MW1, MW2, MW3, MW4, and MW5 were installed with monitoring wells, to depths of approximately 7.9 to 19.8 mbg with elevations ranging from 150.1 to 136.2 masl. Borehole logs of the monitoring wells are provided in **Appendix B**.

The ground surface elevations at the locations of the boreholes were established utilizing a TopCon HiPer V GNSS positioning device.

The details of borehole advancement and the approximate well elevations are summarized below in **Table 4.1**.

Table 4.1 Borehole Details

Borehole ID/Well ID	Date Installed (YYYY-MM-DD)	Ground Elevation (masl)	Borehole Depth (mbg)	Borehole Depth (masl)	Well Screen Top (masl)	Well Screen Bottom (masl)
MW1	2023-09-27	159.04	40.1	118.94	154.1	151.1
MW2	2023-10-10	158.12	20.0	138.12	153.2	150.2
MW3	2023-10-02	158.69	20.0	138.69	153.8	150.8
MW4	2023-09-26	159.14	20.0	139.14	142.4	139.4
MW5	2023-10-04	158.21	40.1	118.11	153.3	150.3

4.2 Stratigraphy and Hydrogeological Conditions

Details of the subsurface and groundwater conditions at the site are given on the Borehole Log Sheets attached in **Appendix B** of this report.

The following paragraphs present a commentary on the various soil materials contacted in the boreholes. Commentary on the engineering properties of the contacted soil materials is reviewed in the Geotechnical Report, submitted under separate cover.

It should be noted that the boundaries of soil types indicated on the borehole logs are inferred from non-continuous soil sampling and observations made during drilling. These boundaries are intended to reflect transition zones for the purpose of geotechnical design, and therefore, should not be construed as exact planes of geological change.

4.2.1 Surface Cover

A 70-75 mm thick layer of asphaltic concrete is present at the ground surface of all Boreholes.

4.2.2 Fill

A fill material consisting of a gravelly sand or silty sand with varying clay concentrations can be found in all boreholes below the Asphaltic concrete layer.

4.2.1 Native Soil

The native soils present below the fill material consist predominantly of sandy clayey silt till, sand and silt, sand, silt and clayey silt, clayey silt, and sandy silt.

4.2.2 Sandy Clayey Silt (Till)

Sandy clayey silt till is present in all boreholes underlaying the fill. It extends to depths ranging from 5.6 mbg to 9.2 mbg. The sandy silt till is a glacial deposit consisting of a random mixture of soil particles ranging from clay to gravel, with silt being the predominant fraction.

The sandy clayey silt till is brown in colour and moist in appearance.

4.2.3 Sand / Sandy Silt / Sand and Silt

Sand / sandy silt / sand and silt are present below the sandy clayey silt till layer in all boreholes. It extends to depths of 25.6 mbg in MW1, 24.6 mbg in MW5, and the explored depths of MW2, MW3, and MW4.

The sand / sandy silt / sand and silt are brown in colour to the explored depths of MW3 and MW4, becoming grey at depths ranging from 13.2 mbg to 19 mbg in MW1, MW2, and MW5, and is moist to very wet in appearance.

4.2.4 Silt and Clayey Silt / Clayey Silt

Silt and clayey silt / clayey silt are present beneath the sand / sandy silt / sand and silt layers in MW1 and MW5. It extends to the explored depths of both Boreholes.

The silt and clayey silt / clayey silt are grey in colour and moist in appearance.

4.3 Groundwater Level/Elevation Monitoring

GEMS completed six site visits from 29 August 2024 to 4 November 2024 to obtain water level

measurements from the five monitoring wells (MW1, MW2, MW3, MW4, and MW5). The groundwater monitoring results collected to date are summarized below in **Table 4.3**.

Table 4.3: Monitoring Well Summary and Groundwater Elevations

Well ID	Screened Unit and Screen Depth (masl)	Ground Elevation (masl)	Static Water Levels			
			Date (YYYY-MM-DD)	Water Level (mbg)	Water Elevation (masl)	Average (masl)
MW1	Sandy Clayey Silt Till 154.1 – 151.1	159.04	2024-08-29	7.83	151.21	151.21
			2024-09-10	DRY	DRY	
			2024-09-27	7.82	151.22	
			2024-10-09	7.83	151.21	
			2024-10-23	7.84	151.21	
			2024-11-04	7.83	151.21	
MW2	Sandy Clayey Silt Till 153.2 – 150.2	158.12	2024-08-29	6.54	152.50	152.17
			2024-09-10	6.71	152.33	
			2024-09-27	6.79	152.25	
			2024-10-09	6.80	152.24	
			2024-10-23	6.86	152.18	
			2024-11-04	6.87	152.17	
MW3	Sand / Sandy Clayey Silt Till 153.8 – 150.8	158.69	2024-08-29	6.59	152.45	152.43
			2024-09-10	DRY	DRY	
			2024-09-27	6.59	152.45	
			2024-10-09	6.60	152.44	
			2024-10-23	6.61	152.43	
			2024-11-04	6.61	152.43	
MW4	Sand and Silt 142.4 – 139.4	159.14	2024-08-29	13.38	145.66	145.71
			2024-09-10	13.35	145.69	
			2024-09-27	-	-	
			2024-10-09	13.20	145.84	
			2024-10-23	13.31	145.73	
			2024-11-04	13.33	145.71	
MW5	Sandy Clayey Silt Till 153.3 – 150.3	158.21	2024-08-29	6.97	152.07	151.31
			2024-09-10	7.33	151.71	
			2024-09-27	7.72	151.32	
			2024-10-09	7.74	151.30	

Table 4.3: Monitoring Well Summary and Groundwater Elevations

Well ID	Screened Unit and Screen Depth (masl)	Ground Elevation (masl)	Static Water Levels			
			Date (YYYY-MM-DD)	Water Level (mbg)	Water Elevation (masl)	Average (masl)
			2024-10-23	7.73	151.31	
			2024-11-04	7.73	151.31	

Groundwater elevations at the Site during the monitoring period ranged from 145.66 to 152.50 masl, and the highest level was observed in MW2 on 29 August 2024. The water table is interpreted as being approximately 150.63 masl based on an average of the water levels observed in MW1, MW2, MW3, MW4, and MW5 for the purpose of this report.

Water levels may vary due to seasonal fluctuations and precipitation.

4.4 Single Well Response Tests

Hydraulic conductivity values were calculated based on single well response tests (SWRTs) completed on 2 of the monitoring wells installed on site. On 10 September 2024, GEMS was on-Site to carry out the SWRTs, 4 total SWRTs were conducted. 3 SWRTs were completed in MW4 and 1 SWRT was completed in MW2.

For each SWRT, a 'slug' of water was removed from the well, and the water level recovery was monitored for 30 minutes thereafter, or until the well returned to its static level. Estimations of hydraulic conductivity were made in AQTESOLV Aquifer Test Analysis Software using the Hvorslev Method based on the rate of recovery [6]. Hydraulic Conductivity analysis graphs for each SWRT are provided in **Appendix C**.

The Hvorslev was chosen for its versatility and is based on the following assumptions:

- Water-bearing unit has infinite areal extent;
- Water-bearing unit is homogeneous and of uniform thickness;
- Water bearing unit is confined or unconfined;
- Water table is initially horizontal prior to testing;
- The well is fully or partially penetrating the water-bearing unit;
- The slug is instantaneously removed from the well; and,
- Groundwater flow is steady.

The estimated hydraulic conductivity results for all SWHTs are presented in **Table 4.4**.

Table 4.4: Hydraulic Conductivity Results from Single Well Response Tests

Well ID	Screened Unit	Screen Interval (masl)	SWRT	Hydraulic Conductivity (m/s)	Geometric Mean
MW2	Sandy Clayey Silt Till	153.1 – 150.1	1	5.36×10^{-8}	5.4×10^{-8}
MW4	Sand and Silt	139.2 – 136.2	1	1.48×10^{-6}	1.6×10^{-6}

			2	1.98×10^{-6}	
			3	1.52×10^{-6}	
Geometric Mean Hydraulic Conductivity (m/s) for all SWRTs					3.0×10^{-7}
Highest Hydraulic Conductivity (m/s) for all SWRTs					1.98×10^{-6}

The hydraulic conductivity results for tests in MW2 and MW4 ranged from 1.98×10^{-6} m/s to 5.36×10^{-8} m/s, with an overall geometric mean of 3.0×10^{-7} m/s.

The geometric mean of the hydraulic conductivity estimates for the silt and sand is 1.6×10^{-6} m/s, and for the sandy clayey silt till is 5.4×10^{-8} m/s. These fall within the textbook ranges for the screened materials [7].

4.5 Groundwater Quality

On 26 October 2023, a groundwater sample was collected from monitoring well MW4 to characterize the in-situ groundwater quality at the Site. The water quality analysis results are included in **Appendix D**.

Water quality results were compared to the following criteria:

- City of Toronto Sanitary and Combined By-Law
- City of Toronto Storm Sewer By-Law

The water quality exceeded the City of Toronto Storm Sewer Discharge Guidelines criteria for Phenols-4AAP, Total Suspended Solids (TSS), Total Manganese (Mn), Total PAHs, Benzene, Chloroform, Ethylbenzene, Toluene, and Total Xylenes. It also exceeded the City of Toronto Sanitary and Combined Sewer Discharge Guidelines for Benzene and Toluene.

Exceedances to these criteria is identified and are summarized in **Table 4.5**, with the criteria exceeded in bold.

Table 4.5: Water Quality Results Exceeding Discharge Criteria

Water Quality Parameters	Units	MW4 Results	Storm Criteria	Sanitary Criteria
Phenols-4AAP	mg/L	0.033	**0.008**	1.0
Total Suspended Solids (TSS)	mg/L	104	**15**	350
Total Manganese (Mn)	ug/L	170	**50**	5000
Total PAHs	ug/L	ND (1)	**2**	5
Benzene	ug/L	510	**2**	**10**
Chloroform	ug/L	5.7	**2**	40
Ethylbenzene	ug/L	130	**2**	160
Toluene	ug/L	560	**2**	**16**
Total Xylenes	ug/L	320	**4.4**	1400

ND (1): Reportable detection limit exceeds Storm Criteria

Groundwater quality is expected to change over time during active construction dewatering. The

dewatering contractor should assess the groundwater quality before any water-taking and discharging activities.

5.0 Short and Long-Term Discharge Rates

5.1 Short-Term Construction Dewatering

A construction dewatering system design may include well points, several sump pumps, and/or a network of gravity drains. Implementing a dewatering system is the responsibility of the property owner. A qualified dewatering contractor with experience in construction dewatering should be retained to design and outline the methodology of the dewatering system.

Excavation for installation of the foundations at the project will require that the groundwater level be lowered to a depth at least 1 m below the excavation invert.

A summary of the dewatering estimate assumptions is outlined in **Table 5.1**.

Table 5.1: Dewatering Estimate Assumptions

Input Parameters	Assumption	Notes
Ground Surface Elevation	158.64 masl	Average surface elevation at the borehole locations.
Finished Floor Elevation (FFE)	150.2 masl	FFE of parking level 2
Excavation Invert	149.2 masl	Assumed 1.0 metre below FFE
Dewatering Target Elevation	148.2 masl	Assumed to be 1.0 metre below the excavation invert
Excavation Area	87 m x 52 m	Area of excavation based on coordination drawing set provided by RAW in August 2024.
Max Anticipated Groundwater Elevation	154.0 masl	Maximum groundwater elevation at the Site recorded during 29 August 2024 water level measurements + 1.5 metres for peak season fluctuation allowance.
Base of Aquifer	112.03 masl	Assumed at bedrock surface (based on approximate bedrock elevations from the ORMGP database)
Hydraulic Conductivity (K)	1.98×10^{-6} m/s	Highest K value estimated from SWRT tests (MW2 and MW4)

Dewatering estimates have been calculated assuming an excavation invert of 148.2 masl. On-site water level measurements show the water table ranges between approximately 145.66 to 152.50 masl. The maximum anticipated groundwater level is assumed to be at 154.0 masl to account for natural fluctuation of groundwater elevations. The maximum anticipated groundwater elevation is 5.8 m above the assumed dewatering target elevation (148.2 masl). Therefore, short-term construction dewatering is anticipated.

Construction dewatering rates were calculated using the methods outlined by Powers [8] for radial flow, water table aquifer based on the above dewatering estimate input parameters used, and a safety factor of 1.5 for construction dewatering rates and a safety factor of 1.2 for long-term seepage rates.

The Radius of Influence (ROI) due to construction dewatering is estimated to be 64.3 m from the site boundary once steady-state dewatering is reached after 40 days. The dewatering area and ROI can be seen in **Figure 2**.

5.2 Construction Dewatering Rates

Based on the above dewatering estimate assumptions, the calculated dewatering rate for initial drawdown (7 days) is 185,668 L/day (128.9 L/min). Including a safety factor of 1.5, the calculated dewatering rate for initial drawdown (7 days) is 278,502 L/day (193.4 L/min).

Once steady-state conditions have been reached (40 days), the calculated dewatering rate is 129,331 L/day (89.8 L/min).

It is also necessary to account for contributions from significant precipitation events. Assuming an excavation with dimensions of approximately 87 m x 52 m for the proposed building, the total surface area of the excavation will be 4,524 m^2. Anticipating a 15 mm daily rainfall event, the volume of rainwater contributed to this area would be 67,860 L.

The estimated maximum dewatering rate including the rainfall contribution is 346,362 L/day (240.5 L/min). Calculations are presented in **Appendix E**.

A dewatering contractor should be retained to evaluate the dewatering methods.

Based on the above estimate, a Permit to take Water would not be required for water taking during the dewatering and construction of the proposed development, as the forecasted groundwater dewatering rate is less than 400,000 L/day.

Based on the above estimate, an Environmental Activity and Sector Registry (EASR) would be required for water taking during the dewatering and construction of the proposed project, as the forecasted groundwater dewatering rate is greater than 50,000 L/day.

5.3 Long-Term Seepage Rates

It is assumed that the proposed development will be designed and constructed as water-tight without need for long-term foundation drainage.

However, if a drained foundation is used, the post-construction maximum permanent seepage has been estimated using an assumed pumping time of 365 days. Similar to the short-term dewatering rates, the long-term seepage rate assumes all of the same conditions described in Section 5.1.

The long-term seepage rate forecast at 365 days of continuous pumping with a safety factor of 1.2 is 27,878 L/day (19.4 L/min).

Since long-term dewatering is forecast to be less than 50,000 L/day, a Permit to Take Water (PTTW) will not be required from the MECP for the long-term water taking of ground water if the building is not constructed with a water-tight foundation.

6.0 Potential for Adverse Effects

The following section identifies potential adverse environmental effects of the proposed construction dewatering program.

6.1 Regulated and Sensitive Areas

According to the MECP Source Protection Information Atlas the Site is located within the Toronto Source Protection Area (TSPA) [9].

The Site is not located in an area of development control, as defined by the Niagara Escarpment Planning & Development Act or on the Oak Ridges Moraine Conservation Area, as defined by the Oak Moraine Conservation Plan.

6.2 MECP Well Records and Groundwater Resources

The area within 500 m of the Site is serviced by the City of Toronto municipal water. The City of Toronto obtains its water supply from Lake Ontario. Therefore, there is no potential for groundwater interference complaints during construction dewatering activities.

A copy of the Ministry of Environment, Conservation and Parks (MECP) well listings within 500 metres of the Site are provided in **Appendix F**. The wells within 500 metres of the Site are displayed in **Figure 3**.

There are 144 wells identified within the 500 m area surrounding the Site:

- 33 of the wells identified are documented to be monitoring wells;
- 29 of the wells are documented to be dewatering wells;
- 8 of the wells are documented to be test holes;
- 29 well are documented as monitoring and test holes;
- 4 wells not in use; and
- 1 well labeled as “other”.
- There is no information for the remaining 40 wells identified.

There are 15 wells identified in the MECP water wells database located within the ROI that are not anticipated to be decommissioned during construction of the proposed building.

Prior to construction, any inactive monitoring wells at the Site should be properly decommissioned by a drilling contractor licensed by the MECP, following Ontario Regulation 903.

6.3 Settlement

While given the very stiff to hard consistency of the clayey soils, and dense to very dense compactness condition of the sandy soils underlying the site, the anticipated dewatering of the site to lower the groundwater table below the base of the proposed excavation is not anticipated to result in significant settlement of structures adjacent to the subject Site, it is recommended that once the development plans have been finalized and the base of the proposed excavation established, a settlement analysis be carried out by the geotechnical engineer to determine the magnitude of the settlement, if any.

6.4 Recommended Additional Fieldwork and Monitoring

Monitoring and additional fieldwork are recommended during temporary construction dewatering:

- A EASR will need to be registered with the MECP to allow for water taking during construction. As

a requirement of the EASR, daily water taking volumes must be reported to the MECP on or before March 31st of each year for the previous calendar year of water taking.

- Monitoring of the discharge water quantity is required to ensure compliance with the discharge agreement and/or EASR conditions. GEMS recommends the following program for monitoring the groundwater taking and discharge volumes:

Location:	A flow meter attached to the discharge pipe of the dewatering system.
Parameter:	Total volume of discharge, date, and time of measurement.
Schedule:	Minimum of daily recording by on-Site personnel, with values reported to the Project supervisor weekly for submission to the city, Region and/or MECP.
Trigger:	Discharge volume exceeds the maximum rate of dewatering specified in the discharge agreement and/or the EASR.
Mitigation:	Immediately reduce the pumping rate so that discharge is within the permitted limit.
Reporting:	Values reported to the Project supervisor weekly for submission to the city, Region and/or MECP.

7.0 Qualified Professional (QP) Information

This Water Taking and Discharge Report was prepared by Logan McNabb, who holds a Bachelor of Environmental Engineering, and reviewed and approved by Dan Menard, a Professional Geoscientist Licensee in Ontario. His expertise relates to geology, hydrogeology, and dewatering.

8.0 Conclusion

Based on the above analysis, the following conclusions and recommendations are offered for the proposed development at the 2343 Eglinton Avenue West, Toronto, Ontario:

- The geology within the Site is characterized as the South Slope, including shallow shale and till plains that slope southward towards Lake Ontario.,
- The bedrock underlaying the Site is part of the Georgian Bay Formation composed primarily of shale and limestone.
    - The silt and sand and sandy clayey silt till at the Site are interpreted to all belong to the same unconfined water-bearing zone or aquifer.
- Hydraulic conductivity for the water-bearing zone (MW2 and MW4) ranged from 1.48×10^{-6} m/s to 5.36×10^{-8} m/s, with an overall geometric mean of 3.0×10^{-7} m/s.
- Groundwater table at the Site ranges from 145.66 to 152.50 masl.
    - The maximum anticipated groundwater level is estimated at 154.00 masl, incorporating a 1.5 m fluctuation allowance to account for seasonal variations.
- Groundwater quality at the Site currently exceeds both the City of Toronto Sanitary and Combined By-Law guidelines Storm Sewer By-Law guidelines for multiple parameters.
- The maximum anticipated groundwater (154.00 masl) is above the anticipated excavation invert (149.20 masl) and the assumed dewatering target elevation (148.20 masl).
- The maximum estimated rate of construction dewatering including a factor of safety of 1.5 and the contribution of rainfall is 346,362 L/day (240.5 L/min).
- The ROI for construction dewatering is expected to extend to 64.3 m beyond the excavation area.
- If the foundation is not constructed as a water-tight structure, the maximum anticipated long-term groundwater seepage rate including a factor of safety of 1.2 is 27,878 L/day (19.4 L/min).
- Well decommissioning will be required prior to construction. Any inactive wells within the Site should be decommissioned by a licensed well contractor under Ontario Regulation 903.

9.0 Limitations

Groundwater Environmental Management Services Inc. (GEMS) has prepared this report for our client and its agents exclusively. GEMS accepts no responsibility for any damages that may be suffered by third parties as a result of decisions or actions based on this report.

The findings and conclusions are site-specific and were developed in a manner consistent with that level of care and skill normally exercised by environmental professionals currently practicing under similar conditions in the area. Changing assessment techniques, regulations, and site conditions mean that environmental investigations and their conclusions can quickly become dated, so this report is current up to two years from the published date. The report should not be used after that without GEMS review/approval.

The project has been conducted according to our instructions and work program. Additional conditions, and limitations on our liability are set forth in our work program/contract. No warranty, expressed or implied, is made.

10.0 References

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11.0 Closing

We trust this information will meet your current requirements. Please do not hesitate to contact the undersigned should you have any questions or require additional information.

Yours truly,

Groundwater Environmental Management Services Inc.

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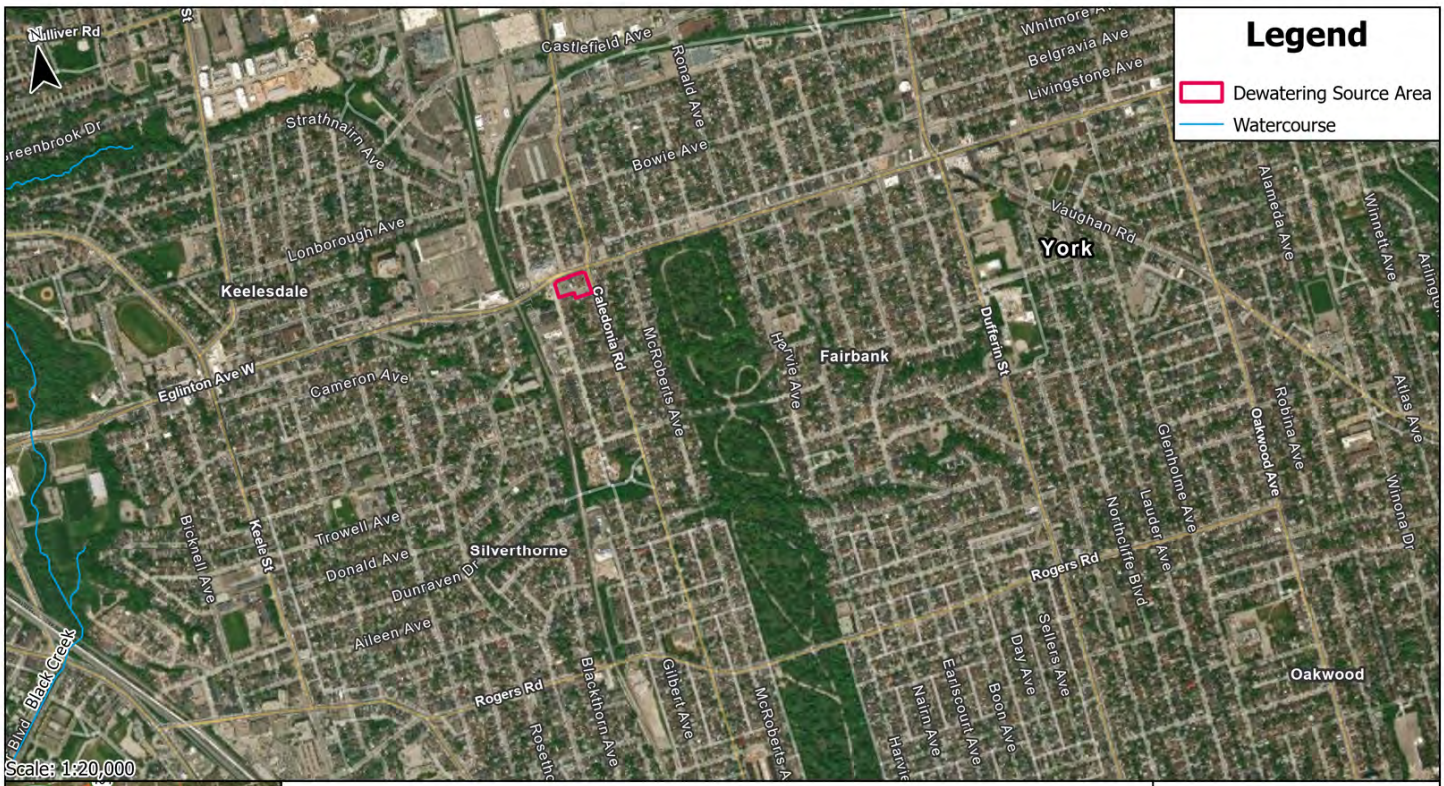
President

Figure 1

Regional Location Plan



Earthstar Geographics, City of Toronto, ON, Maxar, Esri Canada

Figure 2

Detailed Site Plan

Detailed Site Plan
2343 Eglinton Avenue West, Toronto

Client: 1764174 Ontario Inc.	Project # 24-0022	Created by: G.Hogan

Date Saved: 2025-01-31

Figure 2 of 3

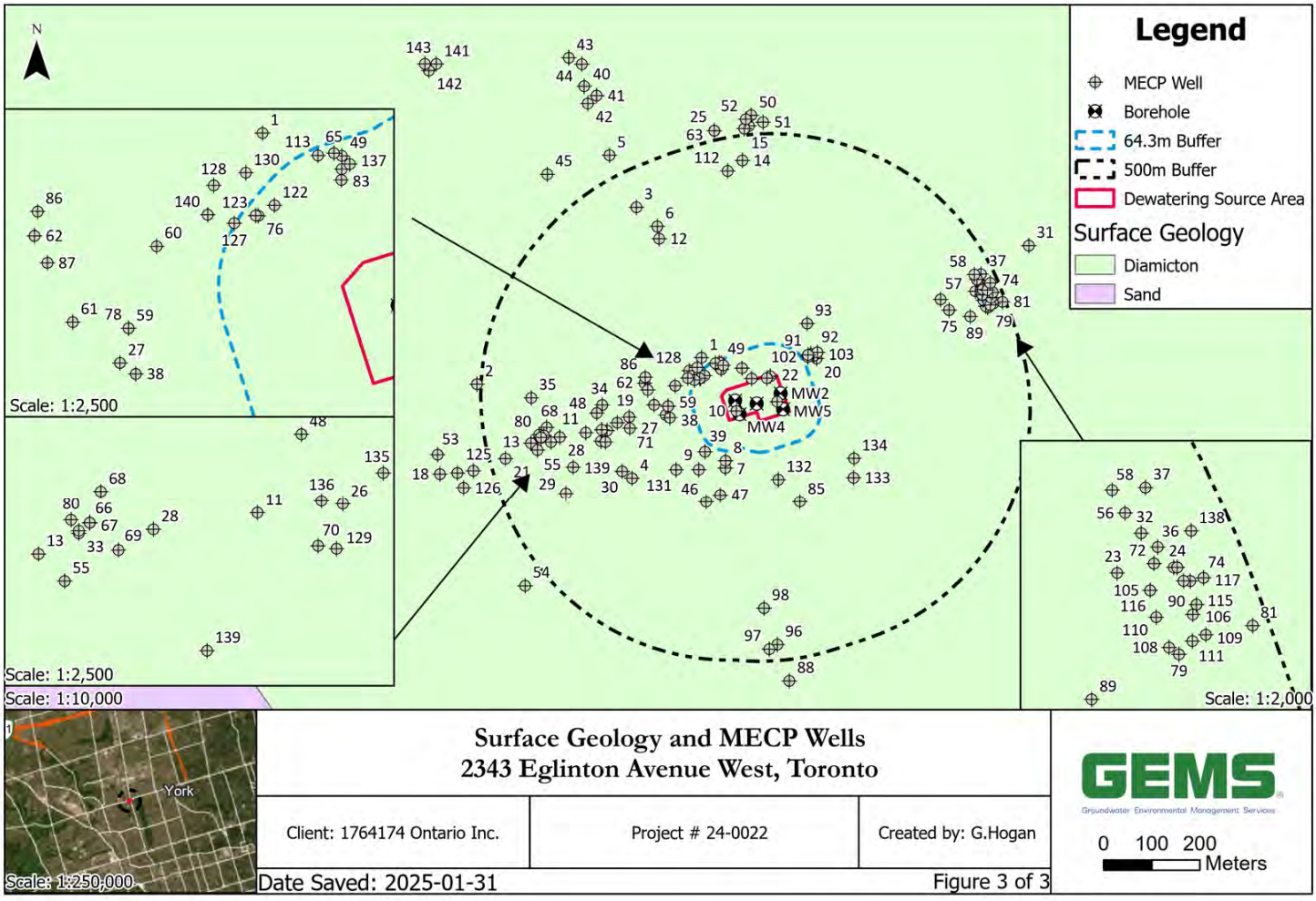
GEMS
Groundwater Environmental Management Services

0 50 100
Meters

Earthstar Geographics, City of Toronto, ON, Maxar, Esri Canada

Figure 3

Surface Geology and MECP Wells


N
Legend
MECP Well
Borehole
64.3m Buffer
500m Buffer
Dewatering Source Area
Surface Geology
Diamicton
Sand
MW2
MW5
MW4
Scale: 1:2,500
Scale: 1:2,500
Scale: 1:10,000
Scale: 1:2,000
York
Scale: 1:250,000
Surface Geology and MECP Wells
2343 Eglinton Avenue West, Toronto
Client: 1764174 Ontario Inc.
Project # 24-0022
Created by: G.Hogan
Date Saved: 2025-01-31
Figure 3 of 3
GEMS
Groundwater Environmental Management Services
0 100 200
Meters
Earthstar Geographics, City of Toronto, ON, Maxar, Esri Canada, Maxar

Appendix A

Architectural Drawings

PROPOSED DEVELOPMENT

2343 Eglinton Ave. W, Toronto, ON

Project: 22029
Date: 2024-08-07
Issued for: Coordination

ARCHITECTURAL DRAWING LIST	
SHEET NUMBER	SHEET NAME
A000	COVER / DRAWING LIST
A001	CONTEXT PLAN & PROJECT STATS
A003	MASSING VIEWS
A100	SITE PLAN
A101	P2 PARKING PLAN
A102	P1 PARKING PLAN
A201	1ST FLOOR PLAN
A202	2ND FLOOR PLAN
A203	3RD-6TH FLOOR PLAN
A207	7TH FLOOR PLAN
A208	8TH-12TH FLOOR PLAN
A213	13TH FLOOR PLAN
A243	14TH-43RD FLOOR PLAN
A244	MECH PH FLOOR PLAN
A401	BUILDING ELEVATION - NORTH & SOUTH
A402	BUILDING ELEVATION - EAST & WEST
A501	BUILDING SECTION
A502	BUILDING SECTION

PROJECT CONSULTANTS

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RAW DESIGN INC.
317 ADELAIDE STREET WEST, SUITE 405
TORONTO, ON, M5V 1P9

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BOUSFIELDS INC.
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TORONTO ON, M5E 1M2

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TBD

CIVIL ENGINEER
COUNTERPOINT ENGINEERING
8395 JANE STREET, SUITE 100,
VAUGHAN ON, L4K 5Y2

ACOUSTICS
TBD

LANDSCAPE ARCHITECT
STUDIO TLA
20 CHAMPLAIN BLVD,
NORTH YORK, ON M3H 2Z1

HERITAGE
TBD

SURVEY
KRCMAR SURVEYORS LTD.
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GEOTECHNICAL ENGINEER
TBD

STRUCTURAL ENGINEER
TBD

WIND
TBD

TRAFFIC CONSULTANT
BA CONSULTING GROUP LTD.

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ISSUED RECORD

REVISION RECORD

405-317 ADELAIDE STREET WEST
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2343 Eglinton Ave. W, Toronto, ON

PROPOSED DEVELOPMENT

COVER / DRAWING LIST

SCALE:

A000

RAW 405-317 ADELAIDE ST. W. TORONTO CANADA M5V 1P9 +1 416 599 9729 WWW.RAWDESIGN.CA

SITE STATISTICS
7 August 2024

22029
2343 Eglinton Avenue West
Toronto, ON

Official Plan	Mixed Use				
Avenue Width	26	streetwall	20.8 m		
Current Zoning					
Gross Site Area	4,631.0	sq.m.	49,848	sq.ft.	
Street Widening	147.2	sq.m.	1,585	sq.ft.	
Net Lot Area	4,483.8	sq.m.	48,263	sq.ft.	

AREA CALCULATIONS

FLOOR	UNITS					INDOOR AMENITY		RETAIL GCA		RES GCA		GFA EXC.		GFA	
	STUDIO	1B/1B+	2B/2B+	3B/3B+	TOTAL	sq.m.	sq.ft.	sq.m.	sq.ft.	sq.m.	sq.ft.	sq.m.	sq.ft.	sq.m.	sq.ft.
P2															
P1															
1		7	3		10		0	988	10,635	1698.0	18,277	284.0	3,057	1414.0	15,220
2		12	20	2	34					2627.0	28,277	227.0	2,443	2400.0	25,833
3		13	20	3	36					2627.0	28,277	134.0	1,442	2493.0	26,834
4		13	20	3	36					2627.0	28,277	134.0	1,442	2493.0	26,834
5		13	20	3	36					2627.0	28,277	134.0	1,442	2493.0	26,834
6		13	20	3	36					2627.0	28,277	134.0	1,442	2493.0	26,834
7		0	0	0	0	1331	14,327			2053.0	22,098	1500.0	16,146	553.0	5,952
8		14	6	3	23					2053.0	22,098	131.0	1,410	1922.0	20,688
9		14	6	3	23					2053.0	22,098	131.0	1,410	1922.0	20,688
10		14	6	3	23					2053.0	22,098	131.0	1,410	1922.0	20,688
11		14	6	3	23					2053.0	22,098	131.0	1,410	1922.0	20,688
12		14	6	3	23					1500.0	16,146	77.0	829	1423.0	15,317
13		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
14		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
15		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
16		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
17		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
18		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
19		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
20		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
21		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
22		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
23		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
24		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
25		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
26		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
27		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
28		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
29		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
30		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
31		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
32		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
33		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
34		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
35		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
36		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
37		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
38		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
39		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
40		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
41		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
42		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
43		7	3	1	11					800.0	8,611	77.0	829	723.0	7,782
ROOF					0					235.0	2,530	235.0	2,530	0.0	0
	0	218	166	40	424	1,331	14,327	988	10,635	51,633	555,791	5,770	62,110	45,863	493,663
	0%	51%	39%	9%											

FSI Retail	0.22
FSI Residential	10.23
FSI Total	10.45

AMENITY	Required	Provided
INDOOR	848	1,331
OUTDOOR	848	1,359
Total	1,696	2,690

PARKING

VEHICLE	Required	G	P1	P2	Provided	RATE	
Residential	N/A		80	98	178	0.42	Including 12 Accessible spaces
Non-Residential			11		11	0.03	
Pick-Up Drop-Off (PUDO)		5			5		
TOTAL					194	0.46	
BIKE	Required				Provided		
(Short-Term) Required Ratio (0.2)	85	85			85		
(Long-Term) Required Ratio (0.9)	382	80	144	144	368		
TOTAL	467				453		

2 SITE STATISTICS
A001 1 : 1

TORONTO City Planning Division

Green Roof Statistics

The Green Roof Statistics Template is required to be submitted for Site Plan Control Applications where a green roof is required under the Toronto Municipal Code Chapter 492, Green Roofs. Complete the table below and **copy it directly onto the Roof Plan** submitted as part of any Site Plan Control Application requiring a green roof in accordance with the Bylaw. Refer to Section § 492-1 of the Municipal Code for a complete list of defined terms, and greater clarity and certainty regarding the intent and application of the terms included in the template. The Toronto Municipal Code Chapter 492, Green Roofs can be found online at: http://www.toronto.ca/legdocs/municode/1184_492.pdf

Green Roof Statistics

		Proposed
Gross Floor Area, *as defined in Green Roof Bylaw* (m^2)		
Total Roof Area (m^2)		
Area of Residential Private Terraces (m^2)		
Rooftop Outdoor Amenity Space, *if in a Residential Building* (m^2)		
Area of Renewable Energy Devices (m^2)		
Tower (s)Roof Area with floor plate less than 750 m^2		
Total Available Roof Space (m^2)		
Green Roof Coverage	Required	Proposed
Coverage of Available Roof Space (m^2)		
Coverage of Available Roof Space (%)		

3 GREEN ROOF STATISTICS
A001 1 : 1

Bird-Friendly Design Statistics

TORONTO

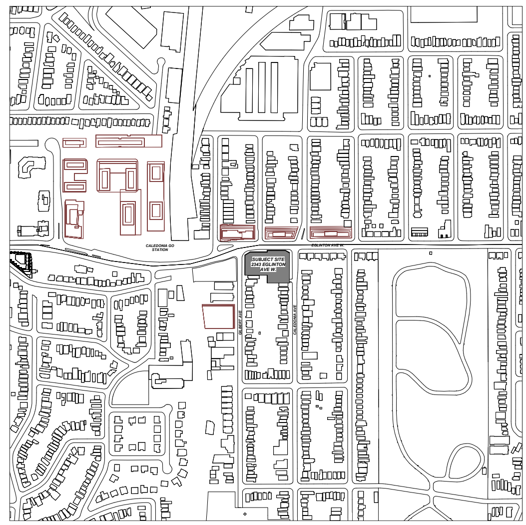
	Elevation First 16m Above Grade					
	North	South	East	West	Total (m2)	Total (%)
Glazing Area (m^2)					0	100%
Glazing Area (m^2) facing High Hazard Area						
Untreated Area (m^2)					0	
Treated Area (m^2)					0	
Visual Markers (m^2)					0	
Non-reflective glass (m^2)						
Shaded (m^2)					0	

	Elevation First 4m Above Rooftop Vegetation*					
	North (Floor #s)	South (Floor #s)	East (Floor #s)	West (Floor #s)	Total (m2)	Total (%)
Glazing Area (m^2)					0	
Untreated Area (m^2)					0	
Treated Area (m^2)					0	
Non-reflective glass (m^2)					0	
Visual Markers (m^2)					0	
Shaded (m^2)					0	
* Include this section only when applicable and provide relevant floor numbers for reference						

Building Window : Wall Ratio	

Refer to the Toronto Green Standard Version 4 Ecology section for details on bird collision dete

4 BIRD FRIENDLY DESIGN STATISTICS
A001 1 : 1



1 CONTEXT PLAN
A001 1 : 2000

TORONTO

Statistics Template – Toronto Green Standard Version 4.0

Mid to High Rise Residential and all New Non-Residential Development

The Toronto Green Standard Version 4.0 Statistics Template is submitted with Site Plan Control Applications and stand-alone Zoning Bylaw Amendment applications. Complete the table and copy it directly onto the Site Plan submitted as part of the application.

For Zoning Bylaw Amendment applications: complete General Project Description and Section 1.
For Site Plan Control applications: complete General Project Description, Section 1 and Section 2.
For further information, please visit www.toronto.ca/greendevelopment

General Project Description	Proposed
Total Gross Floor Area	
Breakdown of project components (m^2):	
Residential	
Retail	
Commercial	
Industrial	
Institutional/Other	
Total number of residential units	

Section 1: For Stand Alone Zoning Bylaw Amendment Applications and Site Plan Control Applications

Low Emissions Transportation	Required	Proposed	Proposed %
Number of Parking Spaces			
Number of EV Parking Spaces (Residential)			
Number of EV Parking Spaces (non-residential)			

Cycling Infrastructure	Required	Proposed	Proposed %
Number of long-term bicycle parking spaces (all-uses)			
Number of long-term bicycle parking located on:			
a) first storey of building			
b) second storey of building			
c) first level below-ground			
d) second level below-ground			
e) other levels below-ground			

3-1-1 toronto at your service

TORONTO

Statistics Template – Toronto Green Standard Version 4.0

Mid to High Rise Residential and all New Non-Residential Development

Cycling Infrastructure	Required	Proposed	Proposed %
Number of short-term bicycle parking spaces			
Number of shower and change facilities (non-residential)			

Tree Canopy	Required	Proposed	Proposed %
Total Soil Volume (40% of the site area ÷ 66 m2 x 30 m^3)			
Soil volume provided within the site area (m^3)			
Soil Volume provided within the public boulevard (m^3)			

Section 2: For Site Plan Control Applications

Cycling Infrastructure	Required	Proposed	Proposed %
Number of short-term bicycle parking spaces (all uses) at-grade or on first level below grade			
Number of publicly accessible bicycle parking spaces			
Number of energized outlets for electric bicycles			

Tree Canopy	Required	Proposed	Proposed %
Total site area (m^2)			
Total Soil Volume (40% of the site area ÷ 66 m^2 x 30 m^3)			
Total number of trees planted			
Number of surface parking spaces (if applicable)			
Number of shade trees located in surface parking area			

Landscaping & Biodiversity	Required	Proposed	Proposed %
Total non-roof hardscape area (m^2)			
Total non-roof hardscape area treated for Urban Heat Island (minimum residential 75% or non-residential 50%) (m^2)			
Area of non-roof hardscape treated with: (indicate m^2)			
a) high-albedo surface material			
b) open-grid pavement			
c) shade from tree canopy			

TORONTO

Statistics Template – Toronto Green Standard Version 4.0

Mid to High Rise Residential and all New Non-Residential Development

Landscaping & Biodiversity	Required	Proposed	Proposed %
d) shade from high-albedo structures			
e) shade from energy generation structures			
Percentage of Lot Area as Soft Landscaping (non-residential only)			
Total number of plants			
Total number of native plants and % of total plants			
Available Roof Space (m^2)			
Available Roof Space provided as Green Roof (m^2)			
Available Roof Space provided as Cool Roof (m^2)			
Available Roof Space provided as Solar Panels (m^2)			

Bird Collision Deterrence	Required	Proposed	Proposed %
Total area of glazing of all elevations within 16m above grade			
Total area of treated glazing (minimum 85% of total area of glazing within 16m above grade) (m^2)			
Percentage of glazing within 16m above grade treated with:			
a) Visual markers			
b) non-reflective glass			
c) Building integrated structures			

5 TORONTO GREEN STANDARDS STATTISTICS TEMPLATE
A001 1 : 1

ISSUED RECORD
—

REVISION RECORD
—

NORTH

RAW
405-317 ADELAIDE STREET WEST
TORONTO CANADA M5V 1P9
+1 416 599 9729
WWW.RAWDESIGN.CA

22029

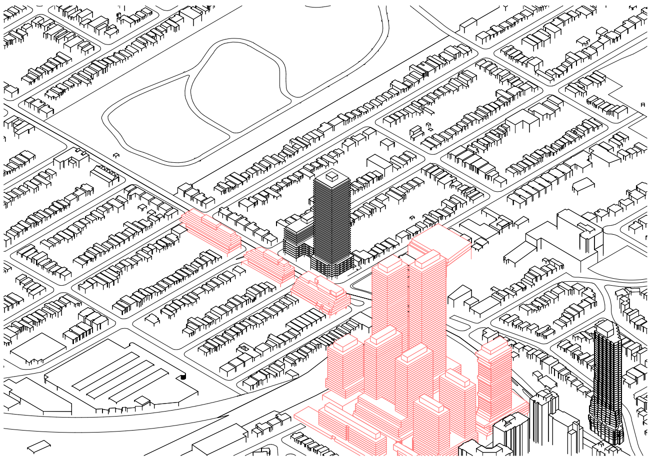
2343 Eglinton Ave. W, Toronto, ON

PROPOSED DEVELOPMENT

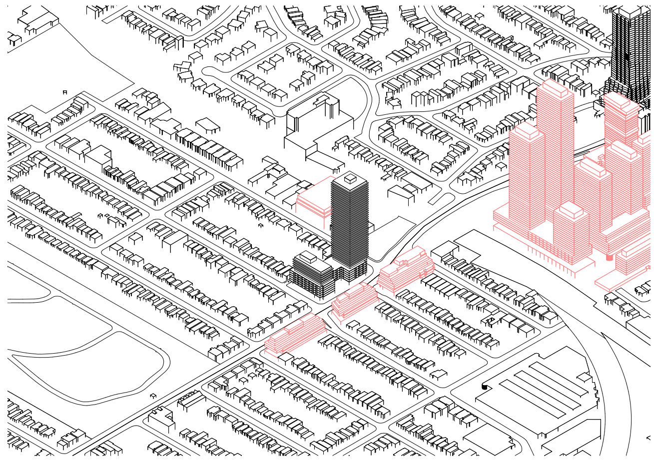
CONTEXT PLAN & PROJECT STATS

SCALE: As indicated

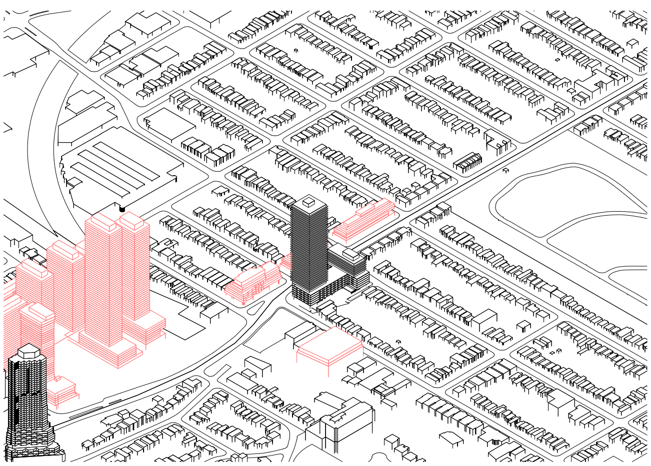
A001



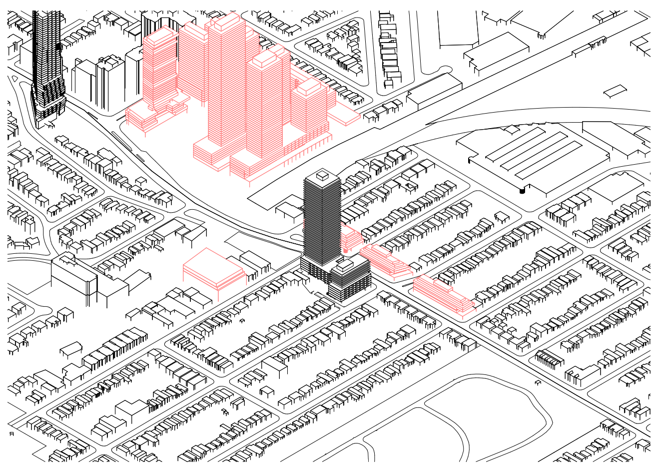
4 A003 NW AERIAL



3 A003 NE AERIAL



2 A003 SW AERIAL



1 A003 SE AERIAL

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REVISION RECORD

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2343 Eglinton Ave. W,
Toronto, ON

PROPOSED DEVELOPMENT

MASSING VIEWS

SCALE:

A003

SITE PLAN LEGEND

Symbol	Description	Symbol	Description
000.000	EXISTING ELEVATION		SIAMESE CONNECTION
000.000 TOS	TOP OF SLAB		FIRE HYDRANT
000.000 TOR	TOP OF ROOF		MANHOLE
			CATCH BASIN
	OUTLINE OF BUILDING AT GRADE		
	OUTLINE OF BELOW GRADE STRUCTURE		
	PRINCIPAL RES ENTRANCE		
	PEDESTRIAN EXIT/ENTRANCE		
	VEHICULAR EXIT/ENTRANCE		

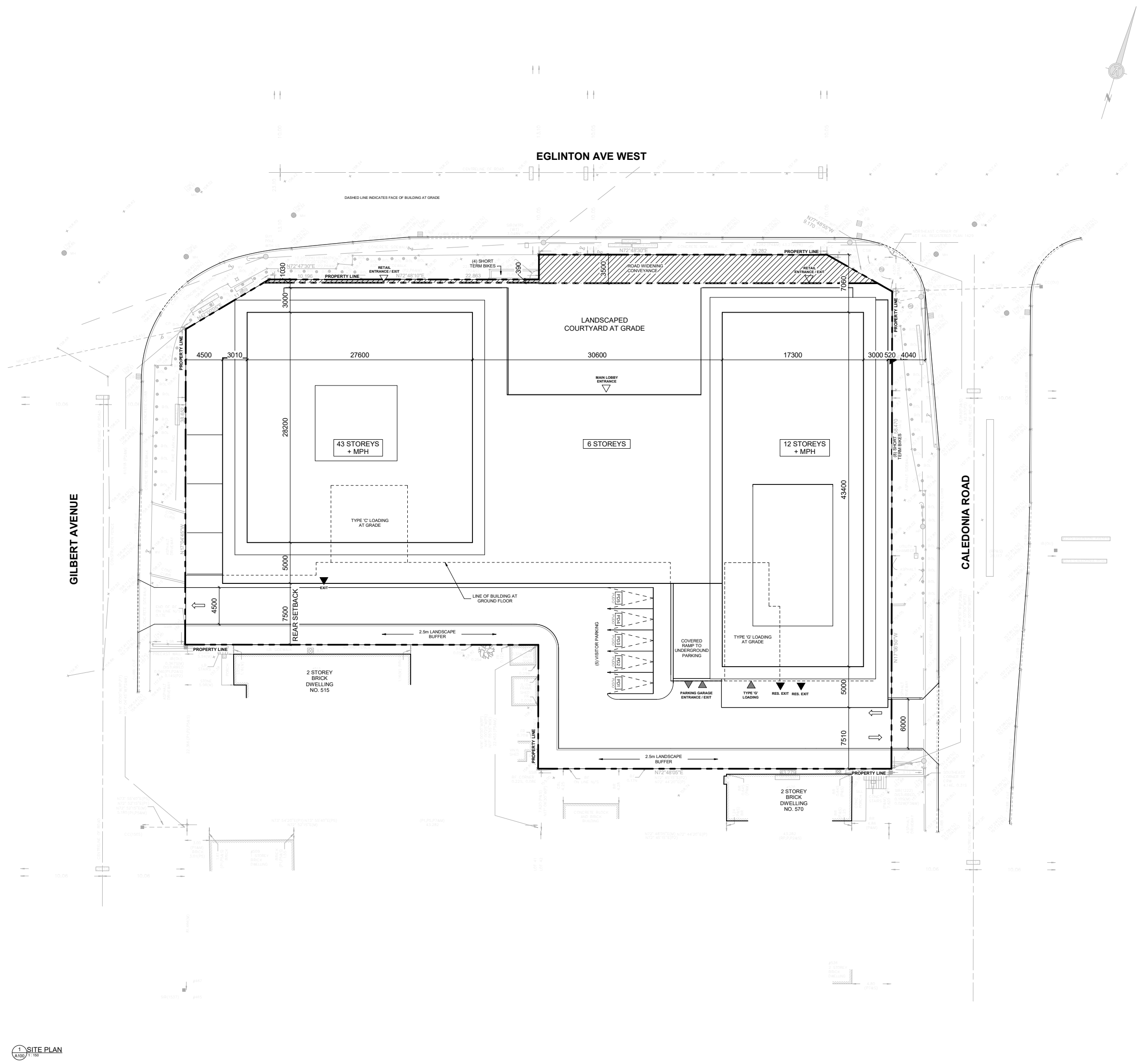
SITE PLAN INFORMATION TAKEN FROM:

TOPOGRAPHIC PLAN SURVEY OF PART OF LOTs 41, 42, 43 AND 44 REGISTERED PLAN 1429
CITY OF TORONTO
PREPARED BY KRCMAR LAND SURVEYORS
AUGUST 8, 2023

158.700m = ESTABLISHED GRADE
158.700m = TOS GROUND FLOOR AVERAGE

SITE PLAN NOTES

1. THE BUILDING IS TO BE SPRINKLERED.
2. TORONTO HYDRO STREET LIGHTING AND TYPE TO BE COORDINATED WITH AND APPROVED BY TORONTO HYDRO.
3. ALL WASTE GENERATED BY THE SITE TO BE STORED ON PRIVATE PROPERTY.
4. SIDEWALKS AND BOULEVARDS WITHIN THE RIGHT OF WAY TO HAVE A MINIMUM 2% AND MAXIMUM 4% SLOPE TOWARDS THE ROADWAY.
5. REFER TO SITE SERVICING PLAN, PREPARED BY XXX, FOR SEWER AND WATER SERVICE INFORMATION.
6. ALL EXISTING ACCESSES, CURB CUTS, TRAFFIC CONTROL SIGNS, ETC. ALONG THE DEVELOPMENT SITE FRONTAGES THAT ARE NO LONGER REQUIRED ARE TO BE REMOVED. THE BOULEVARD WITHIN THE PUBLIC RIGHT OF WAY, IN ACCORDANCE WITH CITY STANDARDS AND TO THE SATISFACTION OF THE EXECUTIVE DIRECTOR OF TECHNICAL SERVICES ARE TO BE REINSTATED.
7. TYPICAL PARKING SPACES ARE 2.6m X 5.6m. SPACES WITH ADJACENT OBSTRUCTIONS OF A DEPTH GREATER THAN 1m TO HAVE A TYPICAL ALLOWANCE OF 0.3m FROM PARKING SPACE.
8. ALL SMALL CAR PARKING SPACES TO BE CLEARLY SIGNED AT THE FRONT OF EACH SPACE AS "SMALL CAR ONLY"
9. EXTERIOR LIGHTING WILL BE FULL CUT-OFF FIXTURES (OR DARK SKY COMPLIANT) SO THAT NO UP-LIGHTING WILL BE PRODUCED FROM THESE LIGHTS AND EXTERIOR LIGHT FIXTURES ARE SHIELDED TO PREVENT GLARE AND LIGHT TRESPASS ONTO ANY NEIGHBORING PROPERTIES
10. SHORT-TERM BIKE PARKING: MIN. LENGTH 1.8m, MIN. WIDTH 0.6m,MIN. VERTICAL CLEARANCE 1.9m



1 A100 SITE PLAN
1 : 150

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REVISION RECORD

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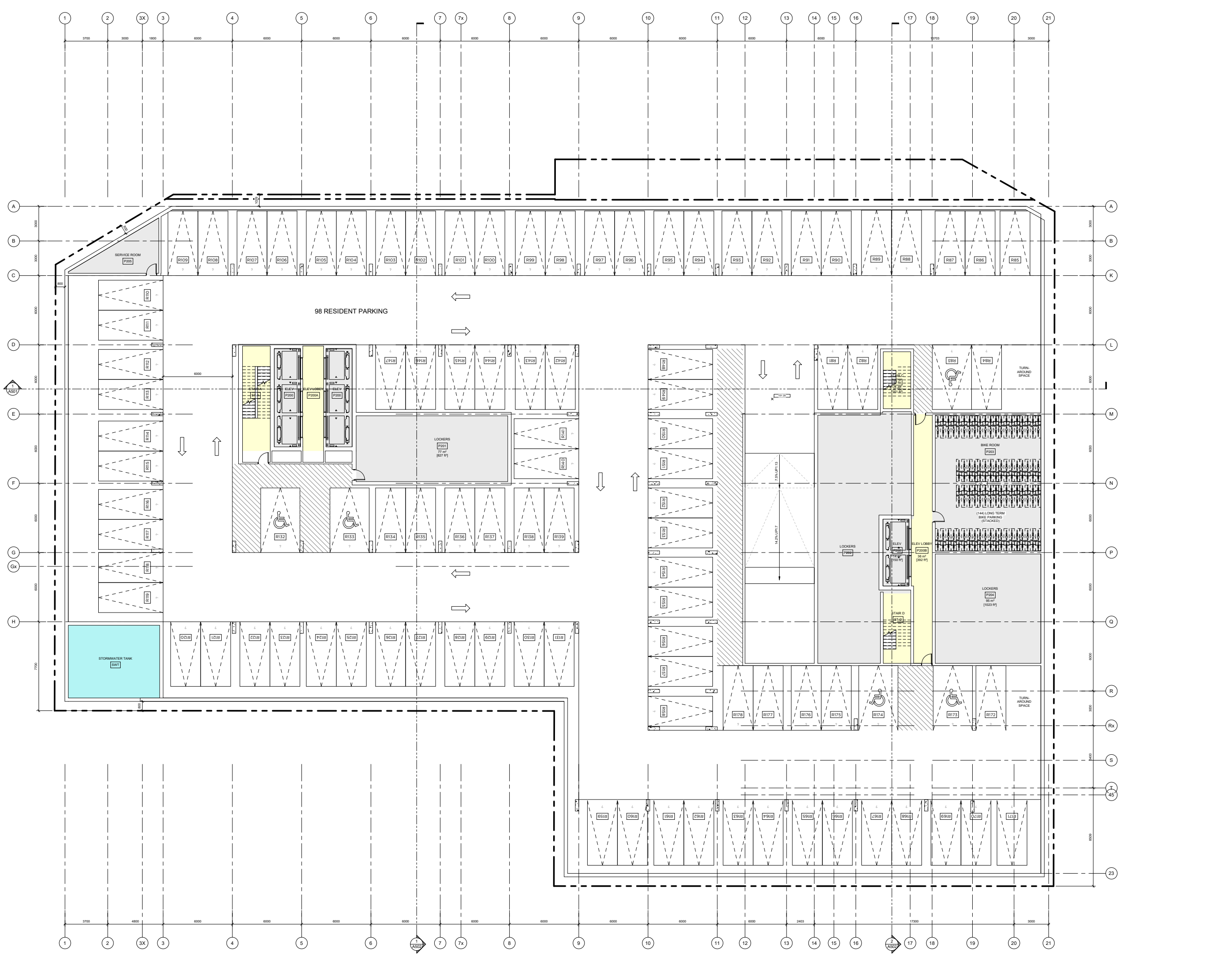
2343 Eglinton Ave. W,
Toronto, ON

PROPOSED DEVELOPMENT

SITE PLAN

SCALE:

A100



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2343 Eglinton Ave. W,
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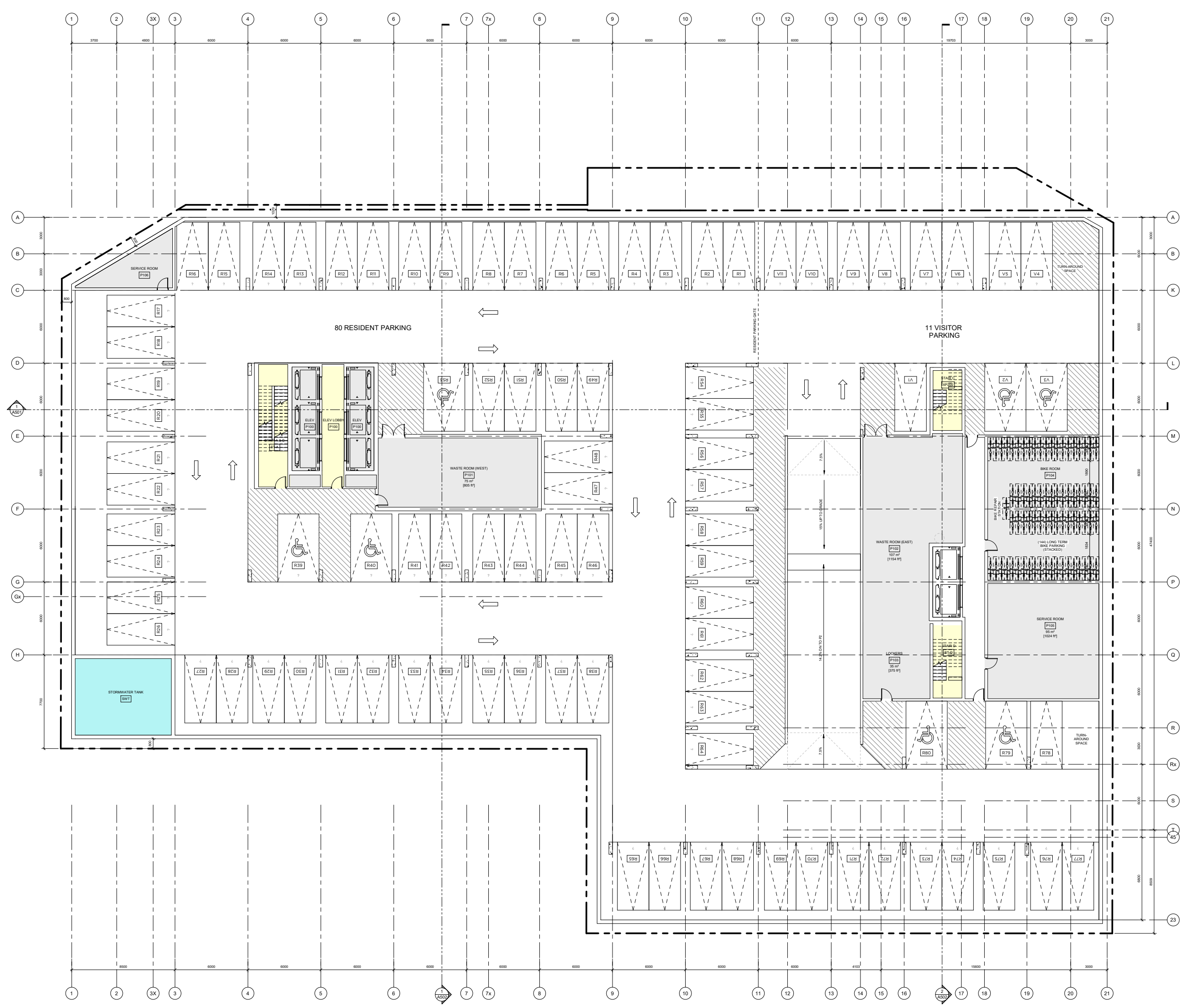
PROPOSED DEVELOPMENT

P2 PARKING PLAN

SCALE: 1 : 100

A101



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REVISION RECORD

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2343 Eglinton Ave. W,
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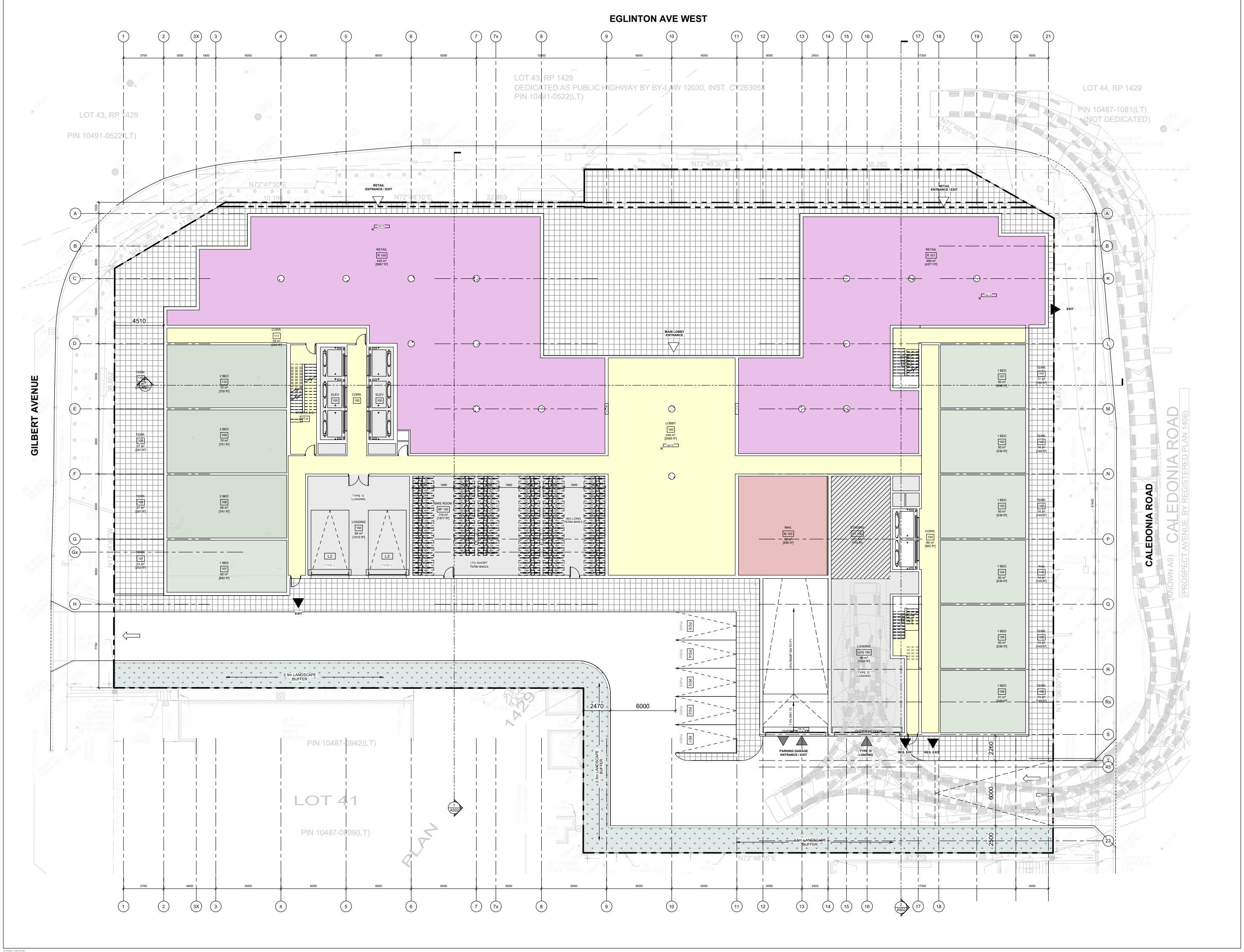
PROPOSED
DEVELOPMENT

P1 PARKING PLAN

SCALE: 1 : 100

A102



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REVISION RECORD

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RAW

405-317 ADELAIDE STREET WEST
TORONTO CANADA M5V 1P9
+1 416 599 9729
WWW.RAWDESIGN.CA

22029

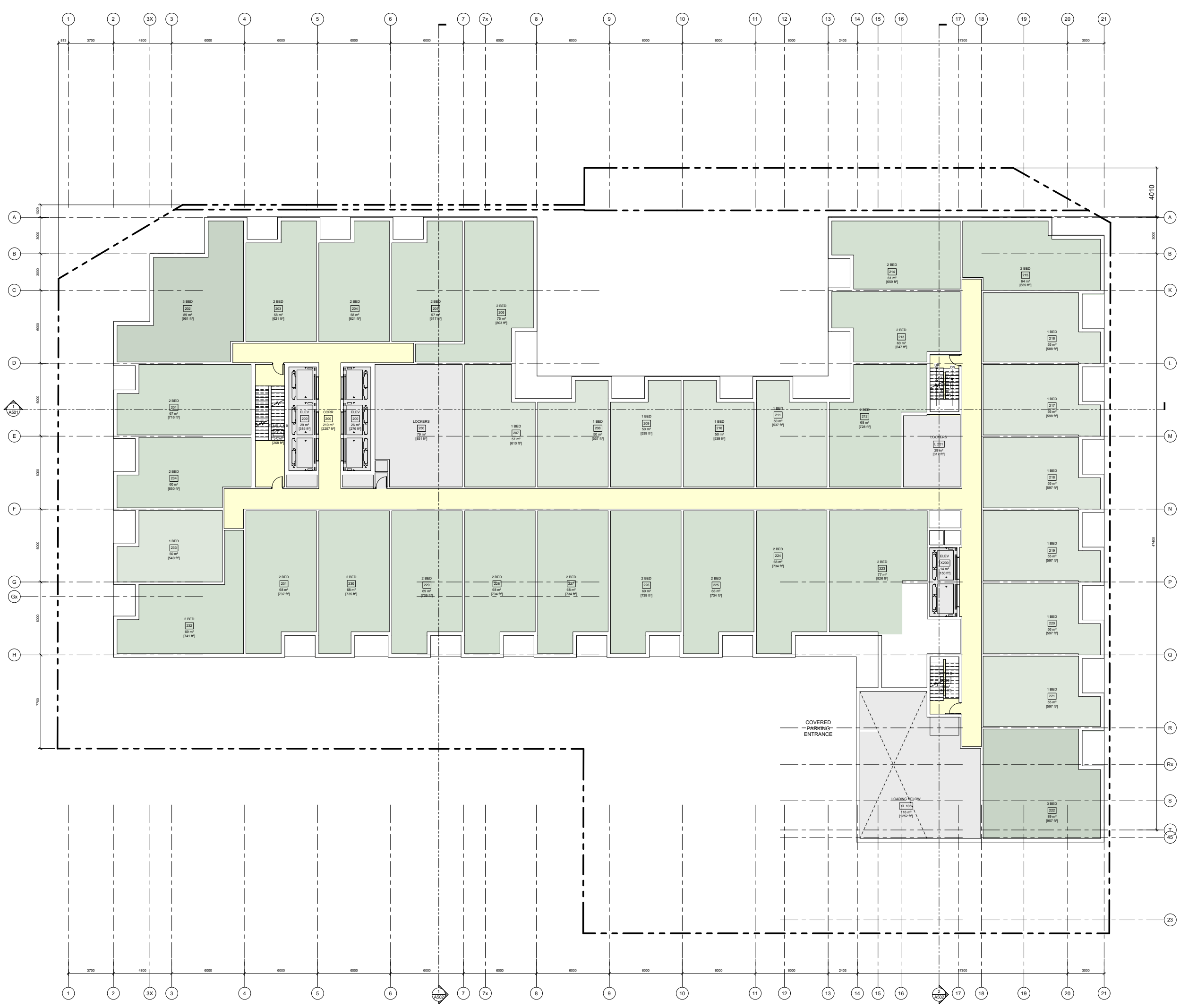
2343 Eglinton Ave. W, Toronto, ON

PROPOSED DEVELOPMENT

1ST FLOOR PLAN

SCALE:

A201



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REVISION RECORD

NORTH

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2343 Eglinton Ave. W,
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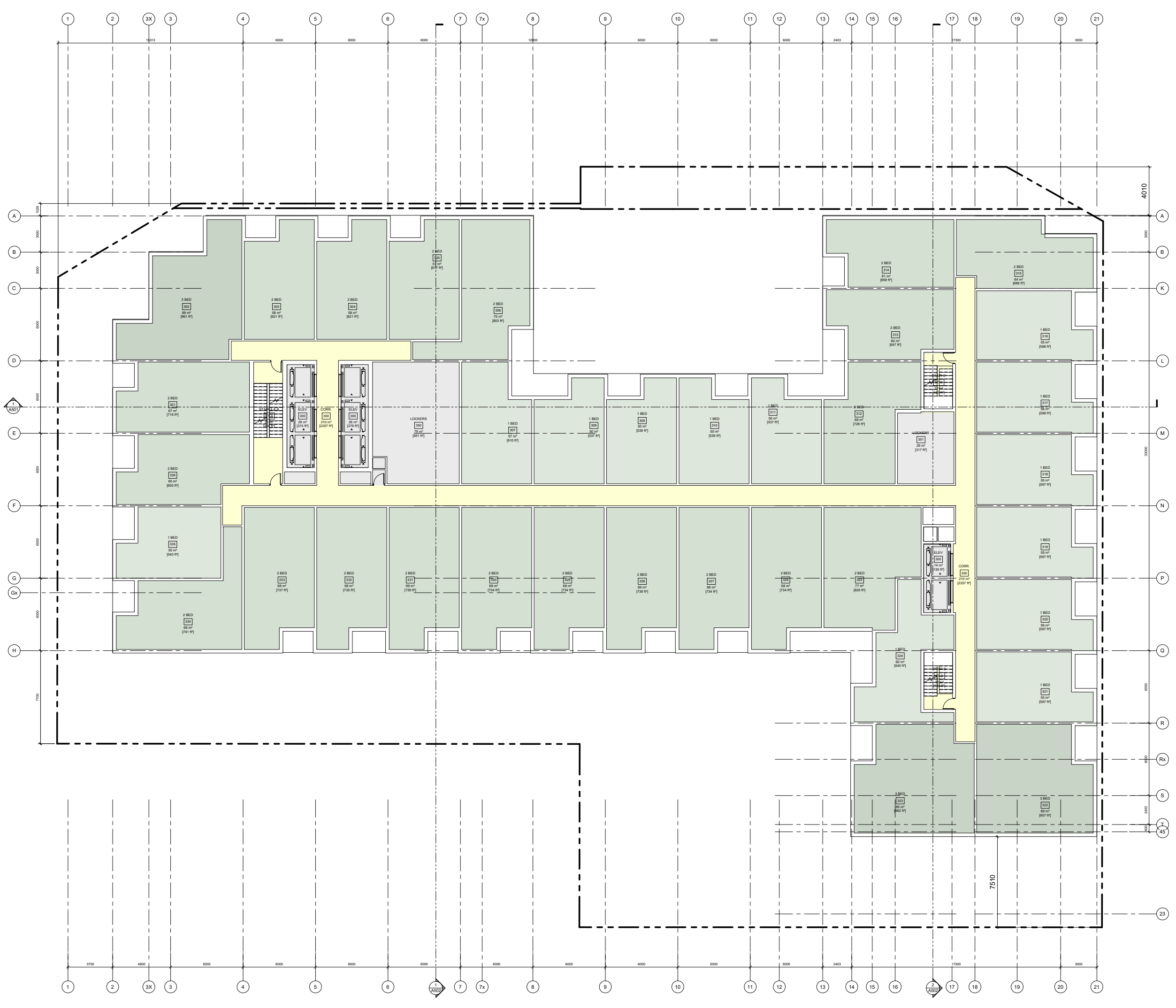
PROPOSED
DEVELOPMENT

2ND FLOOR PLAN

SCALE: 1 : 100

A202



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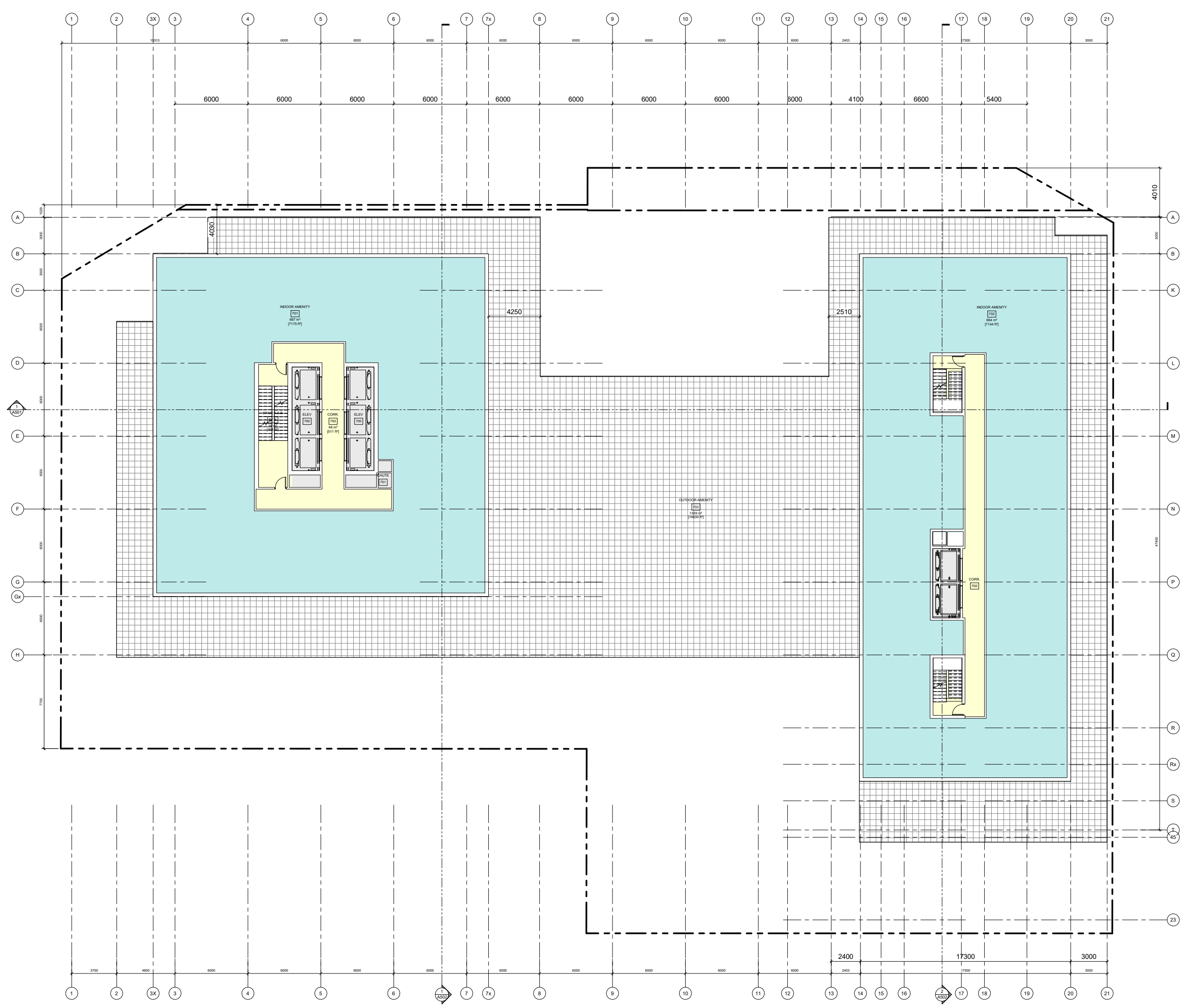
PROPOSED
DEVELOPMENT

3RD-6TH FLOOR
PLAN

SCALE: 1 : 100

A203



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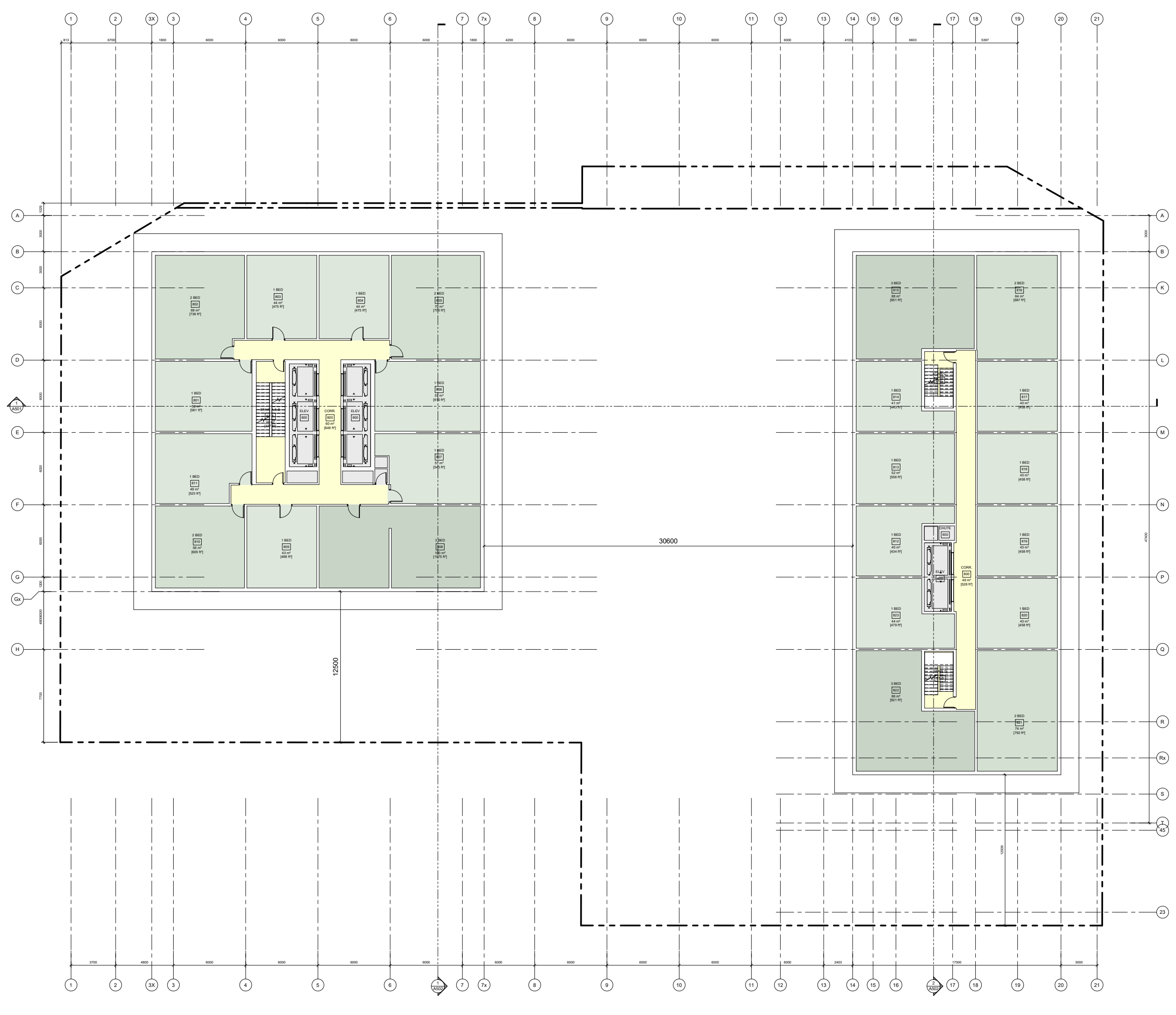
PROPOSED DEVELOPMENT

7TH FLOOR PLAN

SCALE: 1 : 100

A207



ISSUED RECORD

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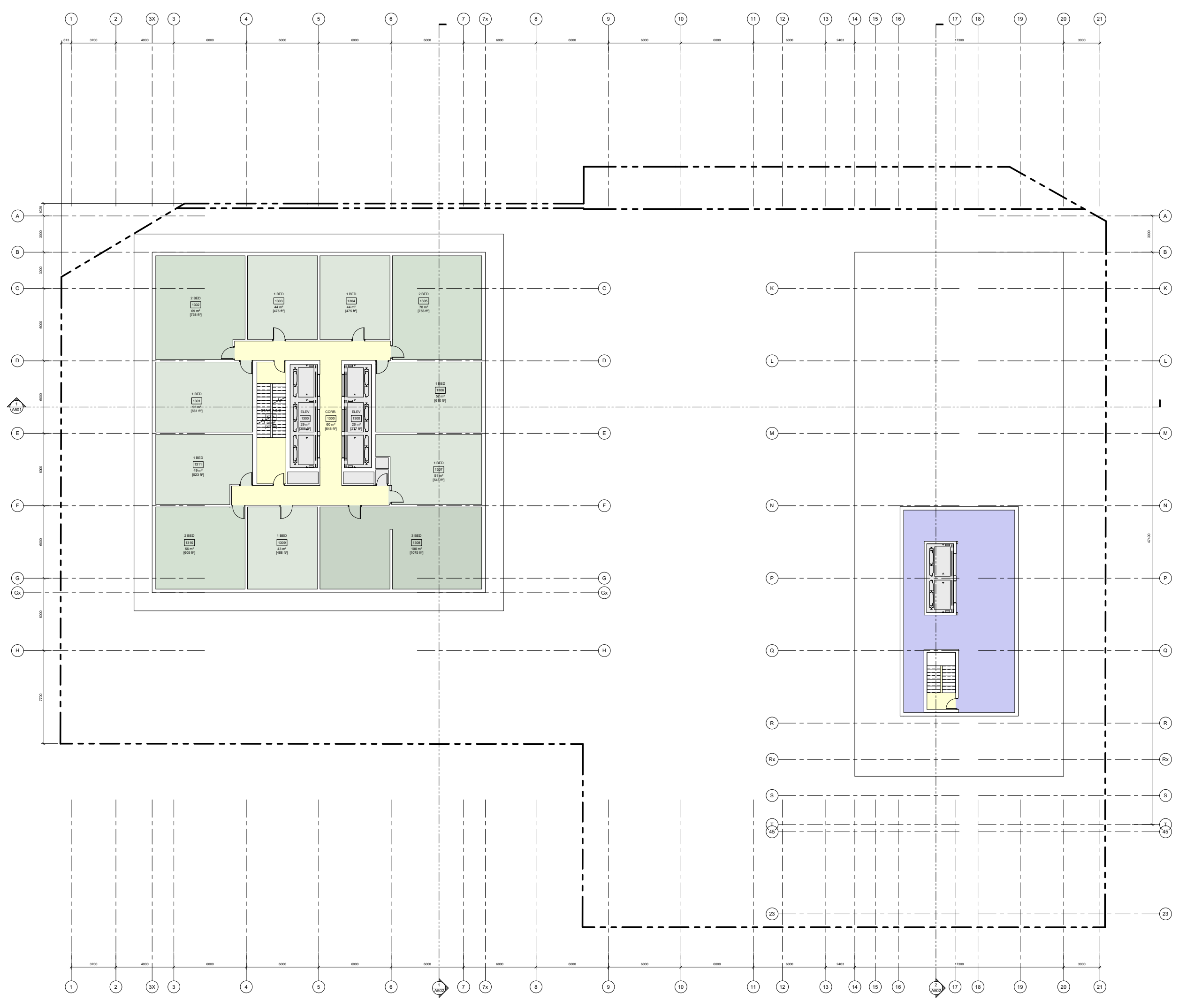
PROPOSED DEVELOPMENT

8TH-12TH FLOOR PLAN

SCALE: 1 : 100

A208



NOT FOR CONSTRUCTION

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Toronto, ON

—

PROPOSED DEVELOPMENT

—

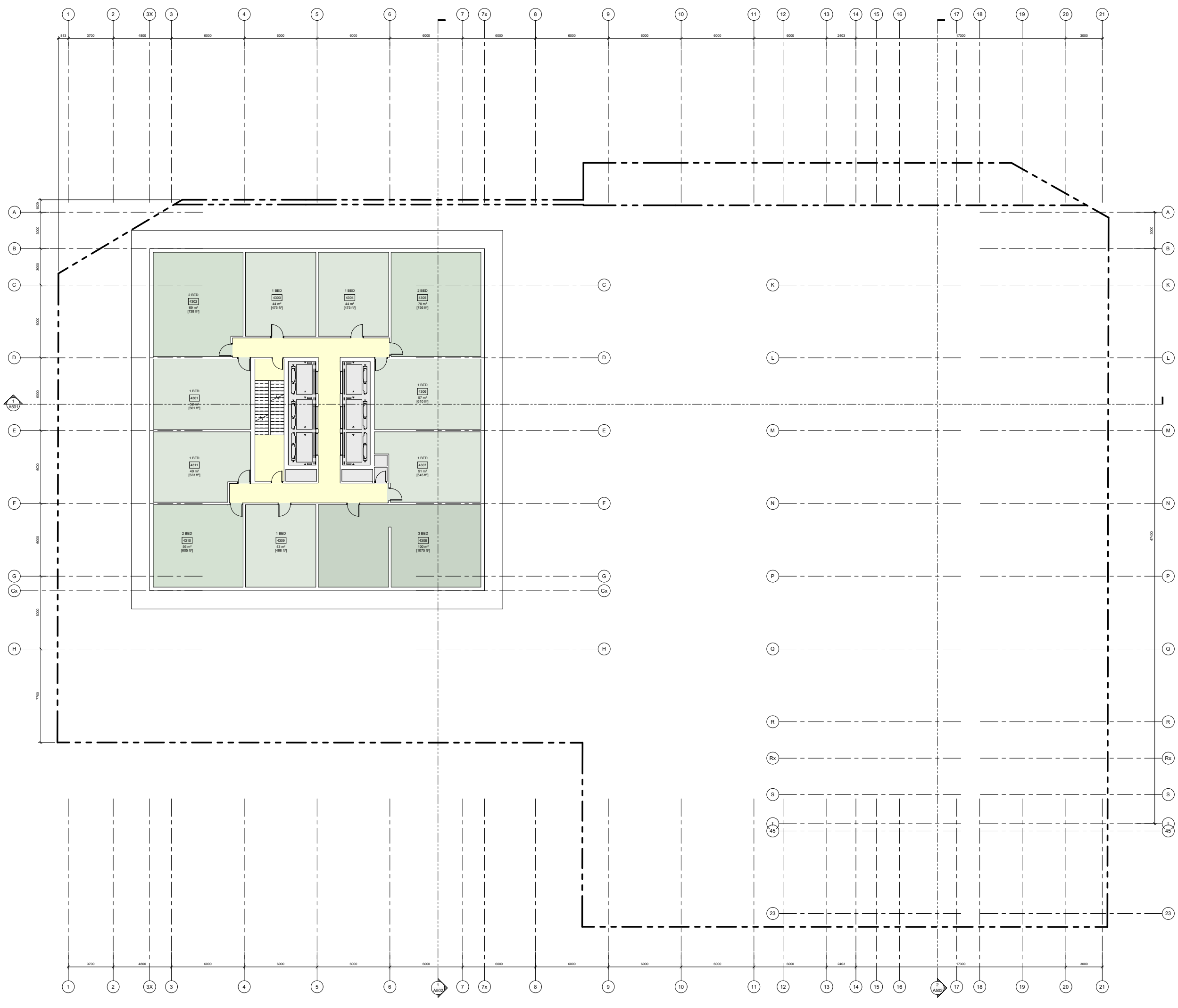
13TH FLOOR PLAN

—

SCALE: 1 : 100

—

A213



ISSUED RECORD

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PROPOSED
DEVELOPMENT

14TH-43RD FLOOR
PLAN

SCALE: 1 : 100

A243

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REVISION RECORD

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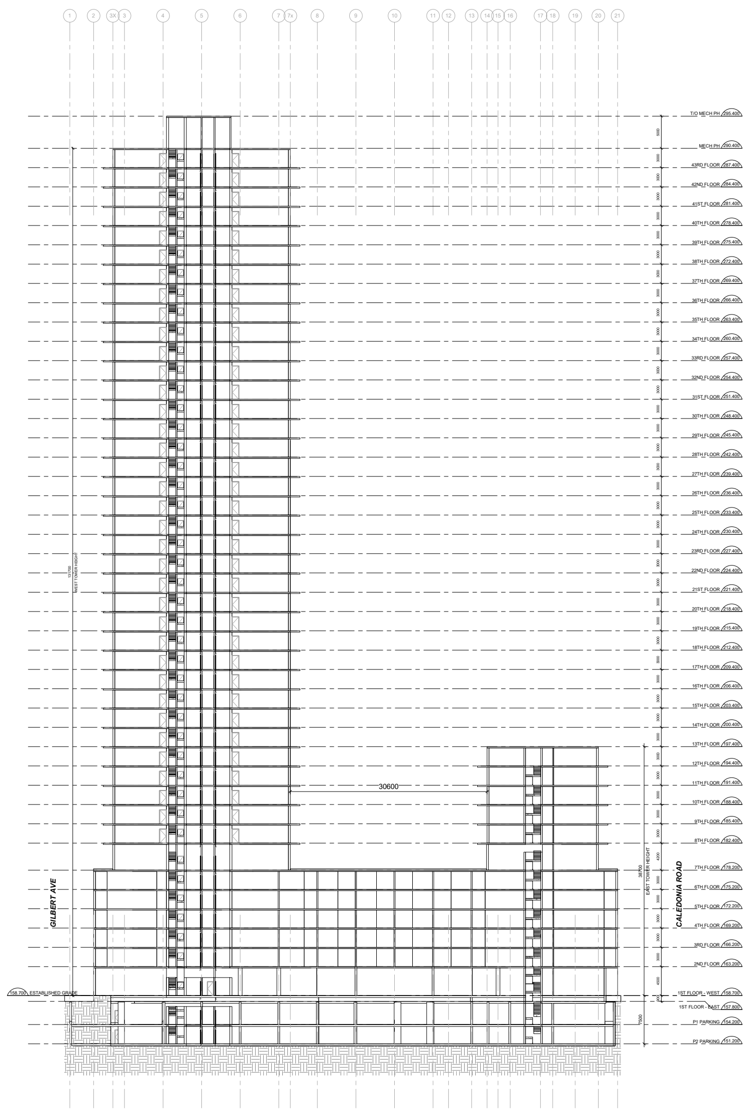
PROPOSED
DEVELOPMENT

MECH PH FLOOR
PLAN

SCALE: 1 : 100

A244



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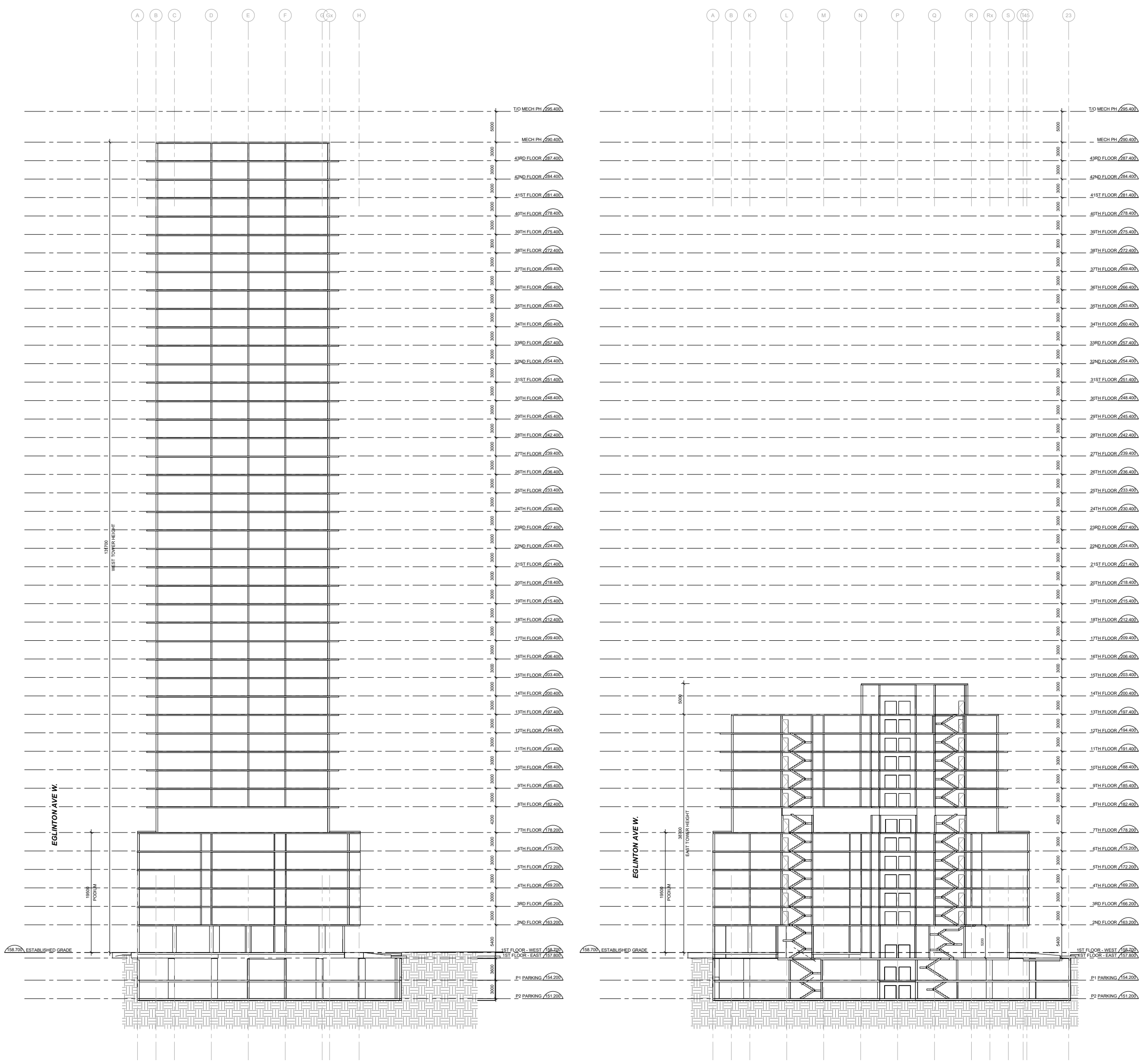
PROPOSED
DEVELOPMENT

BUILDING SECTION

SCALE: 1 : 200

A501



ISSUED RECORD

REVISION RECORD

RAW

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PROPOSED DEVELOPMENT

BUILDING SECTION

SCALE: 1 : 200

A502

Appendix B

Borehole Logs

CLIENT: 1764174 Ontario Inc. | PROJECT NO.: 24-0022 | **BOREHOLE NO. : MW1**

PROJECT: Proposed High-Rise Development

LOCATION: 2343 Eglinton Avenue West, Toronto | NORTHING (m): 4838871.57 | EASTING (m): 623858.028 | ELEV. (m) 159.04

DRILLING CONTRACTOR: Drilltech Drilling Ltd. | BOREHOLE DIAMETER (cm): 10 | WELL DIAMETER (cm): 5

DRILLING METHOD: Augering, Mud Rotary | TOTAL DEPTH OF BOREHOLE (m): 40.1

DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)
0	ASPHALTIC CONCRETE 75 mm	159
	FILL loose, moist, brown gravelly sand	
0.5	FILL loose, moist, brown silty sand, some clay pockets	158.5
1	FILL stiff, moist, brown clayey silt, some sand trace gravel	158
1.5		157.5
2		157
2.5		156.5
3		156
3.5		155.5
4		155
4.5	very stiff to hard moist, brown CLAYEY SANDY SILT trace gravel (TILL) some oxidization	154.5
5		154
5.5		153.5
6		153
6.5		152.5
7		152
7.5		151.5
8		151
8.5	very dense, moist, brown fine SAND and SILT	150.5
9		150
9.5		149.5
10		149

SHEAR STRENGTH ● (kPa) 40 80 120 160; ▲ N-VALUE (Blows/300mm) 20 40 60 80

WATER CONTENT (%) PL W.C. LL 10 20 30 40

SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)
1		9	100
2		10	100
3		42	30
4		24	100
5		78	100
6		100+	75
7		43	100
8		53	100
9		36	100
10		82	100

WELL INSTALLATION NOTES: bentonite and riser; sand and riser; sand and screen

WELL SCHEMATIC

REMARKS: 50 mm diameter monitoring well installed.

Water level on August 29, 2023 at 7.83 mbg.
Monitoring well dry on September 10, 2023.
Water level on September 27, 2023 at 7.82 mbg.
Water level on October 9, 2023 at 7.83 mbg.
Water level on October 23, 2023 at 7.84 mbg.
Water level on November 4, 2023 at 7.83 mbg.

GEMS

LOGGED BY: AD | DRILLING DATE: September 27 and 28, 2023

REVIEWED BY: KC | PAGE 1 OF 4

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW1**
PROJECT: Proposed High-Rise Development		
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838871.57	EASTING (m): 623858.028 ELEV. (m) 159.04
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION		ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	10.5	very dense, moist, brown fine SAND and SILT	moist	148.5									
	11			148		100+ 14	11		100	100			
	11.5			147.5									
	12			147									
	12.5			146.5		100+ 13	12		100	100			
	13		wet	146									
	13.5			145.5									
	14			145	76	16	13		76	50			
	14.5			144.5									
	15			144									
	15.5			143.5		100+ 15	14		100	60			
	16	very dense, wet, brown SAND trace to some silt		143									
	16.5			142.5									
	17			142		100+ 14	15		100	100			
	17.5			141.5									
	18			141									
	18.5			140.5		100+ 16	16		100	85			
	19			140									
	19.5	very dense, wet, grey SILT some sand, trace clay		139.5									
	20			139		100+ 12	17		100	75			

GEMS

LOGGED BY: AD	DRILLING DATE: September 27 and 28, 2023
REVIEWED BY: KC	PAGE 2 OF 4

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW1**	
PROJECT: Proposed High-Rise Development			
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838871.57	EASTING (m): 623858.028	ELEV. (m) 159.04
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5	
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1	

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	20.5		138.5									
	21		138									
	21.5		137.5	100+	18	18		100	70			
	22		137									
	22.5		136.5									
	23	very dense, wet, grey SILT some sand clay	136	100+	12	19		100	75			
	23.5		135.5									
	24		135									
	24.5		134.5	100+	18	20		100	55			
	25		134									
	25.5		133.5									
	26		133	31	20	21		31	100			
	26.5		132.5									
	27		132									
	27.5	dense to very dense and hard wet, grey frequent layers of SILT and CLAYEY SILT	131.5	100+	22	22		100	100			
	28		131									
	28.5		130.5									
	29		130	100+	25 22	23A 23B		100	75			
	29.5		129.5									
	30	hard, moist, grey CLAYEY SILT	129									
	30.5		128.5									

GEMS

LOGGED BY: AD	DRILLING DATE: September 27 and 28, 2023
REVIEWED BY: KC	PAGE 3 OF 4

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW1**	
PROJECT: Proposed High-Rise Development			
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838871.57	EASTING (m): 623858.028	ELEV. (m) 159.04
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5	
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1	

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	31		128	62	20	24		62	100			
	31.5		127.5									
	32		127	100+	15 20	25A 25B		00	100			
	32.5		126.5									
	33		126									
	33.5		125.5	44	19	26		44	70			
	34		125									
	34.5		124.5									
	35	hard and very stiff, moist grey CLAYEY SILT	124	36	18	27		36	100			
	35.5		123.5									
	36		123									
	36.5		122.5	38	20	28		38	100			
	37		122									
	37.5		121.5									
	38		121	24	21	29		24	100			
	38.5		120.5									
	39		120									
	39.5		119.5	30	20	30		30	100			
	40	END OF BOREHOLE	119									

GEMS

LOGGED BY: AD	DRILLING DATE: September 27 and 28, 2023
REVIEWED BY: KC	PAGE 4 OF 4

CLIENT: 1764174 Ontario Inc.

PROJECT NO.: 24-0022

BOREHOLE NO. : MW2

PROJECT: Proposed High-Rise Development

LOCATION: 2343 Eglinton Avenue West, Toronto

NORTHING (m): 4838883.58

EASTING (m): 623925.98

ELEV. (m) 158.12

DRILLING CONTRACTOR: Drilltech Drilling Ltd.

BOREHOLE DIAMETER (cm): 10

WELL DIAMETER (cm): 5

DRILLING METHOD: Augering, Mud Rotary

TOTAL DEPTH OF BOREHOLE (m): 20.0

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	0	ASPHALTIC CONCRETE 70 mm FILL loose, moist, brown gravelly sand	158	5						bentonite and riser		50 mm diameter monitoring well installed.
	0.5		157.5			1		5	30			
	1		157	16		2		16	100			Water level on August 29, 2023 at 6.54 mbg. Water level on September 10, 2023 at 6.71 mbg. Water level on September 27, 2023 at 6.79 mbg. Water level on October 9, 2023 at 6.80 mbg. Water level on October 23, 2023 at 6.86 mbg. Water level on November 4, 2023 at 6.87 mbg.
	1.5		156.5	27		3		27	100			
	2		156									
	2.5		155.5	43		4		43	65			
	3		155									
	3.5		154.5	77		5		77	100			
	4	very stiff to hard moist, brown CLAYEY SANDY SILT trace gravel (TILL)	154									
	4.5		153.5	100+		6		100+	100	sand and riser		
	5		153							sand and screen		
	5.5		152.5									
	6		152	100+		7		100+	100			
	6.5		151.5									
	7		151									
	7.5		150.5	100+		8		100+	75			
	8		150									
	8.5		149.5									
	9	very dense, moist, brown SAND and SILT some clay, trace gravel	149	100+		9		100+	75			
	9.5		148.5									
	10		148									

GEMS

LOGGED BY: AD

REVIEWED BY: KC

DRILLING DATE: October 10-11, 2023

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW2**	
PROJECT: Proposed High-Rise Development			
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838883.58	EASTING (m): 623925.98	ELEV. (m) 158.12
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5	
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 20.0	

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 / ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	10.5	very dense, wet, brown SAND and SILT some clay, trace gravel	147.5		100+	10		100+	100			
	11		147									
	11.5		146.5									
	12		146	43		11		43	75			
	12.5		145.5									
	13		145									
	13.5	very dense, wet, grey SILT and fine SAND	144.5		100+	12		100+	75			
	14		144									
	14.5		143.5									
	15		143		100+	13		100+	60			
	15.5		142.5									
	16		142									
	16.5		141.5		100+	14		100+	75			
	17		141									
	17.5		140.5									
	18		140		100+	15		100+	100			
	18.5		139.5									
	19		139									
	19.5		138.5		100+	16		100+	100			
		END OF BOREHOLE										

GEMS

LOGGED BY: AD

REVIEWED BY: KC

DRILLING DATE: October 10-11, 2023

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW3**
PROJECT: Proposed High-Rise Development		
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838867.58	EASTING (m): 623890.25 ELEV. (m) 158.69
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 20.0

DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)
0	ASPHALTIC CONCRETE 70 mm	158.5
	FILL very loose, moist, brown gravelly sand	
0.5	FILL very loost, moist dark brown and brown sandy silt, some gravel	158
1		
	firm	157.5
1.5	----- hard	157
2		
2.5		156.5
		156
3	moist, brown CLAYEY SANDY SILT trace gravel (TILL)	
		155.5
3.5		155
4		
4.5		154.5
		154
5		
5.5		153.5
		153
6		
6.5		152.5
		152
7		
7.5	very dense, moist, brown SAND some silt to silty	151.5
		151
8		
8.5		150.5
		150
9		
9.5		149.5
		149
10		148.5

SHEAR STRENGTH ● (kPa) 40 80 120 160; ▲ N-VALUE (Blows/300mm) 20 40 60 80

WATER CONTENT (%) PL W.C. LL 10 20 30 40

SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)
1		4	30
2		8	100
3		38	100
4		44	65
5		100+	100
6		100+	100
7		100+	100
8		38	75
9		100+	75

WELL INSTALLATION NOTES: bentonite and riser; sand and riser; sand and screen

WELL SCHEMATIC

REMARKS: 50 mm diameter monitoring well installed.

Water level on August 29, 2023 at 6.59 mbg.
Monitoring well dry on September 10, 2023
Water level on September 27, 2023 at 6.59 mbg.
Water level on October 9, 2023 at 6.60 mbg.
Water level on October 23, 2023 at 6.61 mbg.
Water level on November 4, 2023 at 6.61 mbg.

GEMS	LOGGED BY: AD	DRILLING DATE: October 2, 2023
	REVIEWED BY: KC	PAGE 1 OF 2

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW3**	
PROJECT: Proposed High-Rise Development			
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838867.58	EASTING (m): 623890.25	ELEV. (m) 158.69
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5	
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 20.0	

DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
10.5		148		100+ 11	10		100+	100			
11		147.5									
11.5	very moist --------- wet	147									
12		146.5									
12.5		146	43	12	11		43	75			
13		145.5									
13.5		145									
14		144.5	90	18	12		90	75			
14.5		144									
15	dense to very dense, brown SAND some silt to silty	143.5		100+ 12	13		100+	60			
15.5		143									
16		142.5									
16.5		142		100+ 14	14		100+	75			
17		141.5									
17.5		141									
18		140.5		100+ 14	15		100+	100			
18.5		140									
19		139.5									
19.5		139		100+ 12	16		100+	100			
	END OF BOREHOLE										

GEMS

LOGGED BY: AD	DRILLING DATE: October 2, 2023
REVIEWED BY: KC	PAGE 2 OF 2

CLIENT: 1764174 Ontario Inc.

PROJECT NO.: 24-0022

BOREHOLE NO. : MW4

PROJECT: Proposed High-Rise Development

LOCATION: 2343 Eglinton Avenue West, Toronto

NORTHING (m): 4838851.17

EASTING (m): 623864.82

ELEV. (m) 159.14

DRILLING CONTRACTOR: Drilltech Drilling Ltd.

BOREHOLE DIAMETER (cm): 10

WELL DIAMETER (cm): 5

DRILLING METHOD: Augering, Mud Rotary

TOTAL DEPTH OF BOREHOLE (m): 20.0

DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)
0	ASPHALTIC CONCRETE 70 mm	159
	FILL loose, moist, brown gravelly sand	
0.5	FILL, loose, moist, dark brown and black silty sand, some clay	158.5
	FILL, loose, moist, brown silty sand	
1	stiff, moist, brown CLAYEY SANDY SILT trace gravel (TILL) some oxidization	158
1.5		157.5
2	dense, moist, brown fine SAND, trace silt	157
2.5		156.5
3		156
3.5		155.5
4	hard, moist, brown SANDY CLAYEY SILT trace gravel (TILL) some oxidization	155
4.5		154.5
5		154
5.5		153.5
6		153
6.5		152.5
7	very dense, moist, brown fine SAND and SILT	152
7.5		151.5
8		151
8.5		150.5
9		150
9.5		149.5
10		149

SHEAR STRENGTH ● (kPa) 40 80 120 160
▲ N-VALUE (Blows/300mm) 20 40 60 80

WATER CONTENT (%) PL W.C. LL 10 20 30 40

SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	N-VALUE
1A				7
1B		7	30	
2		14	100	14
3A				41
3B		41	100	
4		36	65	36
5		43	100	43
6		74	100	74
7		70	100	70
8		55	100	55
9		86	75	86
10		100+	75	100+

WELL INSTALLATION NOTES: bentonite and riser

WELL SCHEMATIC

REMARKS:

50 mm diameter monitoring well installed.

Water level on August 29, 2023 at 13.38 mbg.
Water level on September 10, 2023 at 13.35 mbg.
Monitoring well inaccessible on September
Water level on October 9, 2023 at 13.20 mbg.
Water level on October 23, 2023 at 13.31 mbg.
Water level on November 4, 2023 at 13.33 mbg.

GEMS

LOGGED BY: AD

DRILLING DATE: September 26, 2023

REVIEWED BY: KC

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW4**	
PROJECT: Proposed High-Rise Development			
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838851.17	EASTING (m): 623864.82	ELEV. (m) 159.14
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5	
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 20.0	

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	10.5		148.5	100+								
	11		148			11		100+	100			
	11.5		147.5									
	12		147	100+								
	12.5		146.5			12		100+	75			
	13		146									
	13.5		145.5	100+								
	14		145			13		100+	75			
	14.5	moist --- wet	144.5									
	15	very dense, brown fine SAND and SILT	144	100+		14		100+	60			
	15.5		143.5									
	16		143									
	16.5		142.5							sand and riser		
	17		142	100+		15		100+	75	sand and screen		
	17.5		141.5									
	18		141									
	18.5		140.5	100+		16		100+	100			
	19		140									
	19.5		139.5									
		END OF BOREHOLE		100+		17		100+	100			

GEMS

LOGGED BY: AD	DRILLING DATE: September 26, 2023
REVIEWED BY: KC	PAGE 2 OF 2

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW5**
PROJECT: Proposed High-Rise Development		
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838860.03	EASTING (m): 623930.09 ELEV. (m) 158.21
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	0	ASPHALTIC CONCRETE 75 mm FILL loose, moist, brown gravelly sand	158	9	17	1		9	100	bentonite and riser		50 mm diameter monitoring well installed.
	0.5		157.5	10	23	2		10	100			Water level on August 29, 2023 at 6.97 mbg. Water level on September 10, 2023 at 7.33 mbg. Water level on September 27, 2023 at 7.72 mbg. Water level on October 9, 2023 at 7.74 mbg. Water level on October 23, 2023 at 7.73 mbg. Water level on November 4, 2023 at 7.73 mbg.
	1		157									
	1.5		156.5	42	11	3		42	100			
	2		156									
	2.5		155.5	24	5	4		24	100			
	3		155	78	7	5		78	100			
	3.5		154.5									
	4		154			P1						
	4.5	moist, brown CLAYEY SANDY SILT trace gravel (TILL)	153.5		100+8	6		100+	100	sand and riser sand and screen		
	5		153									
	5.5		152.5									
	6		152	43	9	7		43	100			
	6.5		151.5									
	7		151			P2						
	7.5		150.5	53	7	8		53	100			
	8		150									
	8.5		149.5									
	9		149									
	9.5	very dense, moist, brown SILT and fine SAND	148.5			P3						
	10											

GEMS

LOGGED BY: AD	DRILLING DATE: October 4-6, 2023
REVIEWED BY: KC	PAGE 1 OF 4

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW5**
PROJECT: Proposed High-Rise Development		
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838860.03	EASTING (m): 623930.09 ELEV. (m) 158.21
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	10.5	very dense, moist, brown SILT and fine SAND	148									
	11		147.5	36	13	9		36	100			
	11.5		147									
	12		146.5									
	12.5		146	82	11	10		82	100			
	13		145.5									
	13.5		145									
	14		144.5									
	14.5		144			P4						
	15		143.5									
	15.5		143	100+	14	11		100+	100			
	16		142.5									
	16.5		142									
	17	very dense, wet, grey fine SANDY SILT trace clay, trace gravel occasional thin layers of clayey silt	141.5									
	17.5		141			P5						
	18		140.5									
	18.5		140	100+	21	12		100+	100			
	19		139.5									
	19.5		139									
	20		138.5	76	13	13		76	100			
			138									

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW5**
PROJECT: Proposed High-Rise Development		
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838860.03	EASTING (m): 623930.09 ELEV. (m) 158.21
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1

SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	20.5	very dense, wet, grey fine SANDY SILT trace clay, trace gravel occasional thin layers of clayey silt	137.5									
	21		137									
	21.5		136.5									
	22		136			P6						
	22.5		135.5									
	23		135	100+	14	14		100	100			
	23.5		134.5									
	24		134									
	24.5		133.5									
	25	hard, moist, grey CLAYEY SILT frequent thin layers of silt	133									
	25.5		132.5									
	26		132	100+	21	15		100	100			
	26.5		131.5									
	27		131									
	27.5		130.5									
	28		130			P7						
	28.5		129.5									
	29		129	100+	23	16		100	100			
	29.5		128.5									
	30	hard, moist, grey CLAYEY SILT	128									
	30.5											

CLIENT: 1764174 Ontario Inc.	PROJECT NO.: 24-0022	**BOREHOLE NO. : MW5**	
PROJECT: Proposed High-Rise Development			
LOCATION: 2343 Eglinton Avenue West, Toronto	NORTHING (m): 4838860.03	EASTING (m): 623930.09	ELEV. (m) 158.21
DRILLING CONTRACTOR: Drilltech Drilling Ltd.	BOREHOLE DIAMETER (cm): 10	WELL DIAMETER (cm): 5	
DRILLING METHOD: Augering, Mud Rotary		TOTAL DEPTH OF BOREHOLE (m): 40.1	

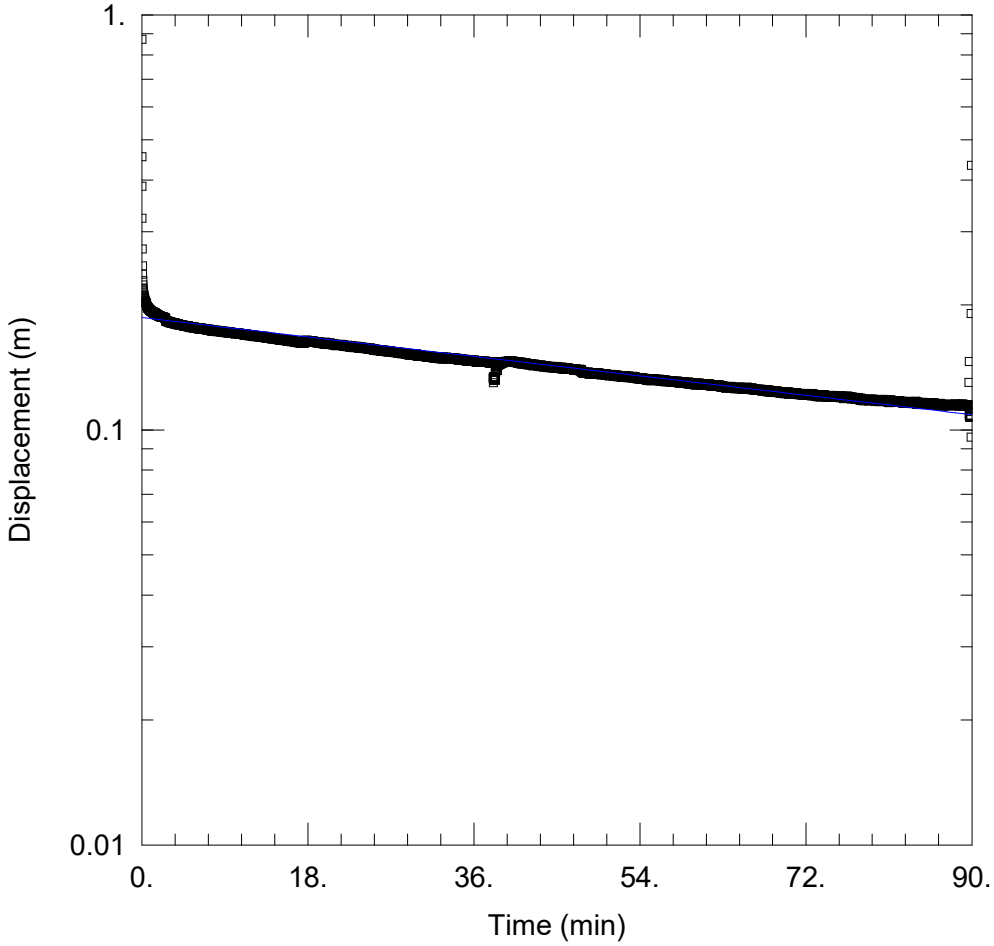
SOIL SYMBOL	DEPTH (m)	SOIL DESCRIPTION	ELEVATION (m)	SHEAR STRENGTH ● (kPa) 40 80 120 160 / ▲ N-VALUE (Blows/300mm) 20 40 60 80	WATER CONTENT (%) PL W.C. LL 10 20 30 40	SAMPLE NO.	SAMPLE TYPE	SPT(N)	RECOVERY (%)	WELL INSTALLATION NOTES	WELL SCHEMATIC	REMARKS
	31		127.5			17		100+	100			
	31.5		127									
	32		126.5									
	32.5		126									
	33		125.5			P8						
	33.5		125									
	34		124.5			18		100+	100			
	34.5		124									
	35	hard, moist, grey CLAYEY SILT	123.5									
	35.5		123									
	36		122.5			P9						
	36.5		122									
	37		121.5			19		100+	100			
	37.5		121									
	38		120.5									
	38.5		120									
	39		119.5			P10						
	39.5		119									
	40		118.5			20		100+	100			
		END OF BOREHOLE										

GEMS

LOGGED BY: AD	DRILLING DATE: October 4-6, 2023
REVIEWED BY: KC	PAGE 4 OF 4

Appendix C

Hydraulic Conductivity



HYDRAUIC CONDUCTIVITY TEST 1 - MW2

PROJECT INFORMATION

Company: GEMS
Client: 1764174 Ontario Inc.
Project: 24-0022
Location: 2343 Eglinton Avenue West
Test Well: MW2
Test Date: 2024-09-10

AQUIFER DATA

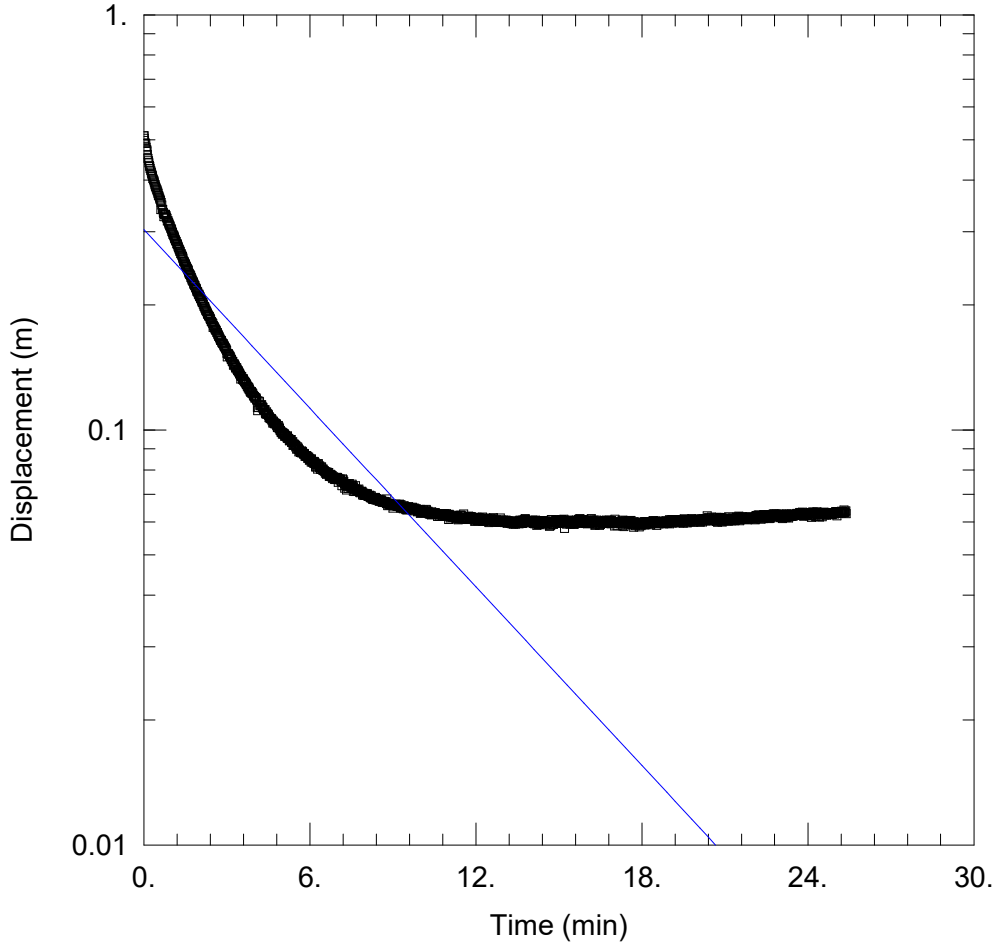
Saturated Thickness: 23.29 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW2)

Initial Displacement: 0.8736 m
Total Well Penetration Depth: 3. m
Casing Radius: 0.026 m
Static Water Column Height: 1.29 m
Screen Length: 3. m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
K = 5.365E-8 m/sec
Solution Method: Hvorslev
y0 = 0.1865 m



HYDRAUIC CONDUCTIVITY TEST 1 - MW4

PROJECT INFORMATION

Company: GEMS
Client: 1764174 Ontario Inc.
Project: 24-0022
Location: 2343 Eglinton Avenue West
Test Well: MW4
Test Date: 2024-09-10

AQUIFER DATA

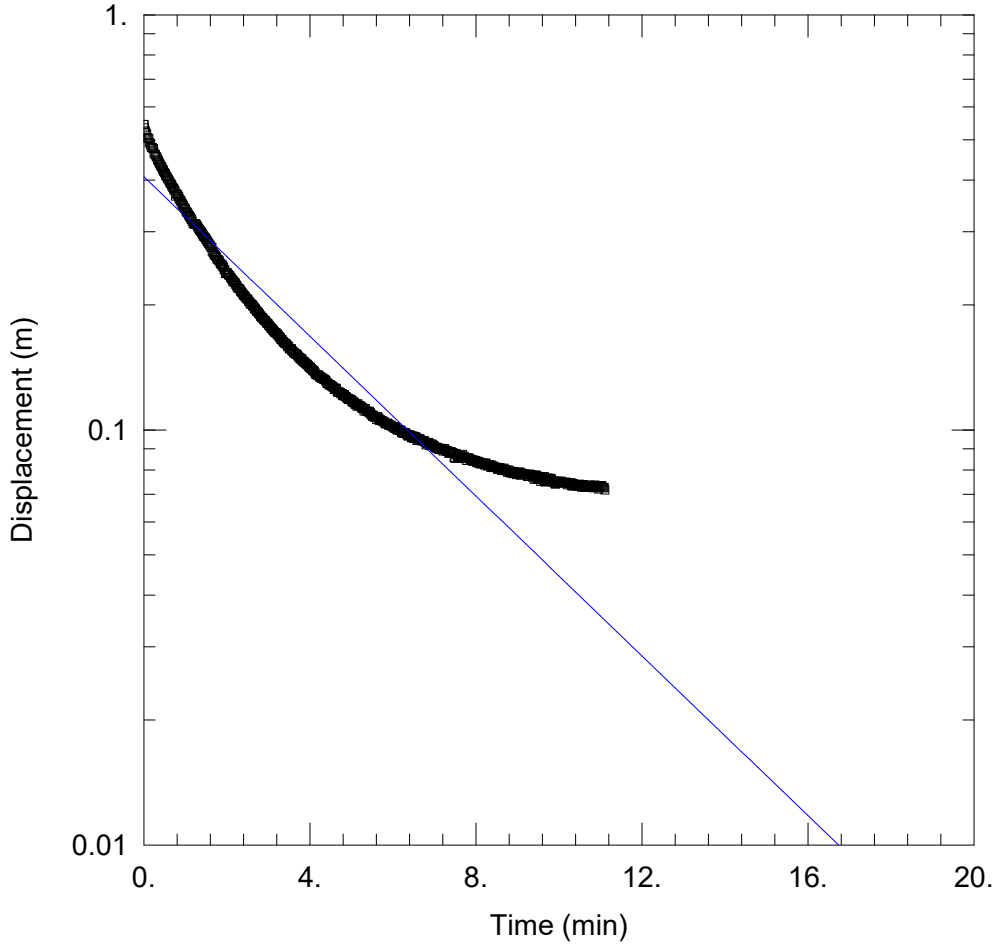
Saturated Thickness: 16.65 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW4)

Initial Displacement: 0.5111 m
Total Well Penetration Depth: 6.15 m
Casing Radius: 0.026 m
Static Water Column Height: 6.15 m
Screen Length: 3. m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.48E-6 m/sec
y0 = 0.3039 m



HYDRAUIC CONDUCTIVITY TEST 2 - MW4

PROJECT INFORMATION

Company: GEMS
Client: 1764174 Ontario Inc.
Project: 24-0022
Location: 2343 Eglinton Avenue West
Test Well: MW4
Test Date: 2024-09-10

AQUIFER DATA

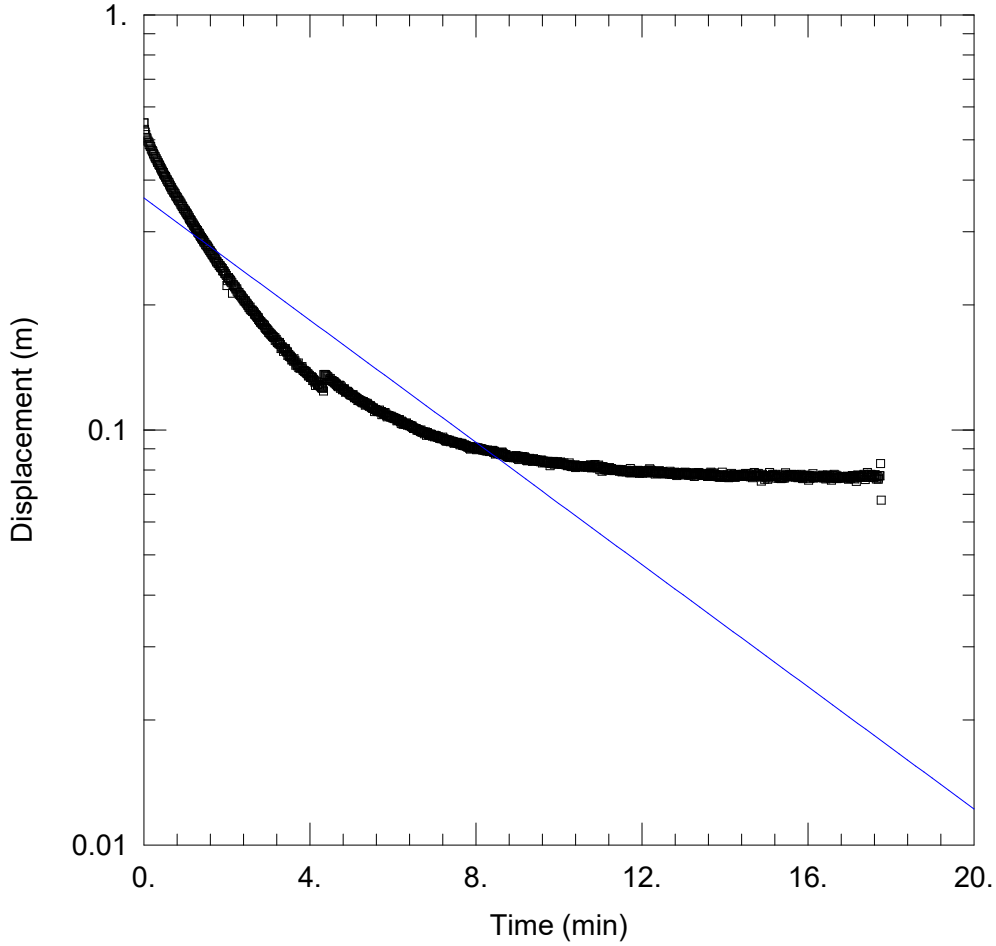
Saturated Thickness: 16.65 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW4)

Initial Displacement: 0.5445 m
Total Well Penetration Depth: 6.15 m
Casing Radius: 0.026 m
Static Water Column Height: 6.15 m
Screen Length: 3. m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.984E-6 m/sec
y0 = 0.4074 m



HYDRAUIC CONDUCTIVITY TEST 3 - MW4

PROJECT INFORMATION

Company: GEMS
Client: 1764174 Ontario Inc.
Project: 24-0022
Location: 2343 Eglinton Avenue West
Test Well: MW4
Test Date: 2024-09-10

AQUIFER DATA

Saturated Thickness: 16.65 m
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW4)

Initial Displacement: 0.5489 m
Total Well Penetration Depth: 6.15 m
Casing Radius: 0.026 m
Static Water Column Height: 6.15 m
Screen Length: 3. m
Well Radius: 0.0254 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.517E-6 m/sec
y0 = 0.3619 m

Appendix D

Water Quality Analysis

Your Project #: 24-0022
Site Location: 2343 EGLINTON AVE W
Your C.O.C. #: 936966-01-01

Attention: Laura Maharaj

Groundwater Environmental Management Services Inc.
150 Rivermede Rd
Unit # 9
Concord, ON
CANADA L4K 3M8

Report Date: 2023/11/03
Report #: R7894277
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3X5217
Received: 2023/10/26, 15:29

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sewer Use By-Law Semivolatile Organics	1	2023/10/31	2023/11/02	CAM SOP 00301	EPA 8270 m
Biochemical Oxygen Demand (BOD)	1	2023/10/28	2023/11/02	CAM SOP-00427	SM 23 5210B m
Chromium (VI) in Water	1	N/A	2023/10/30	CAM SOP-00436	EPA 7199 m
Total Cyanide	1	2023/10/29	2023/10/29	CAM SOP-00457	OMOE E3015 5 m
Fluoride	1	2023/10/28	2023/10/30	CAM SOP-00449	SM 23 4500-F C m
Mercury in Water by CVAA	1	2023/11/01	2023/11/01	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by ICPMS	1	2023/10/31	2023/11/01	CAM SOP-00447	EPA 6020B m
E.coli, (CFU/100mL)	1	N/A	2023/10/26	CAM SOP-00552	MECP E3371
Total Nonylphenol in Liquids by HPLC	1	2023/10/31	2023/11/01	CAM SOP-00313	In-house Method
Nonylphenol Ethoxylates in Liquids: HPLC	1	2023/10/31	2023/11/01	CAM SOP-00313	In-house Method
Animal and Vegetable Oil and Grease	1	N/A	2023/11/03	CAM SOP-00326	EPA1664B m,SM5520B m
Total Oil and Grease	1	2023/11/03	2023/11/03	CAM SOP-00326	EPA1664B m,SM5520B m
Polychlorinated Biphenyl in Water	1	2023/10/27	2023/10/30	CAM SOP-00309	EPA 8082A m
pH	1	2023/10/28	2023/10/30	CAM SOP-00413	SM 4500H+ B m
Phenols (4AAP)	1	N/A	2023/10/30	CAM SOP-00444	OMOE E3179 m
Total Kjeldahl Nitrogen in Water	1	2023/10/30	2023/10/31	CAM SOP-00938	OMOE E3516 m
Total PAHs (1)	1	N/A	2023/11/02	CAM SOP - 00301	
Mineral/Synthetic O & G (TPH Heavy Oil) (2)	1	2023/11/03	2023/11/03	CAM SOP-00326	EPA1664B m,SM5520F m
Total Suspended Solids	1	2023/11/01	2023/11/03	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds in Water	1	N/A	2023/11/02	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, MELCCFP, EPA, APHA.

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 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.

Your Project #: 24-0022
Site Location: 2343 EGLINTON AVE W
Your C.O.C. #: 936966-01-01

Attention: Laura Maharaj

Groundwater Environmental Management Services Inc.
150 Rivermede Rd
Unit # 9
Concord, ON
CANADA L4K 3M8

Report Date: 2023/11/03
Report #: R7894277
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3X5217
Received: 2023/10/26, 15:29

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.

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

Please direct all questions regarding this Certificate of Analysis to:
Jolanta Goralczyk, Project Manager
Email: Jolanta.Goralczyk@bureauveritas.com
Phone# (905)817-5751
==========
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.

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

Bureau Veritas Job #: C3X5217
Report Date: 2023/11/03

Groundwater Environmental Management Services Inc.
Client Project #: 24-0022
Site Location: 2343 EGLINTON AVE W
Sampler Initials: KIM

TORONTO SANITARY&STORM SEWER (100-2016)

Bureau Veritas ID				XKM715		
Sampling Date				2023/10/26 08:00		
COC Number				936966-01-01		
	UNITS	Criteria	Criteria-2	EAW MW4 2343 EGLINTON AVE W	RDL	QC Batch
Calculated Parameters						
Total Animal/Vegetable Oil and Grease	mg/L	-	150	ND	5.0	9007752
Inorganics						
Total BOD	mg/L	15	300	3	2	9013350
Fluoride (F-)	mg/L	-	10	0.55	0.10	9013690
Total Kjeldahl Nitrogen (TKN)	mg/L	-	100	3.0	0.10	9015966
pH	pH	6.0:9.5	6.0:11.5	7.81		9013706
Phenols-4AAP	mg/L	0.008	1.0	**0.033**	0.0010	9015629
Total Suspended Solids	mg/L	15	350	**31**	10	9020513
Total Cyanide (CN)	mg/L	0.02	2	ND	0.0050	9014435
Petroleum Hydrocarbons						
Total Oil & Grease	mg/L	-	-	ND	5.0	9026221
Total Oil & Grease Mineral/Synthetic	mg/L	-	15	ND	5.0	9026222
Miscellaneous Parameters						
Nonylphenol Ethoxylate (Total)	mg/L	0.01	0.2	ND	0.005	9018223
Nonylphenol (Total)	mg/L	0.001	0.02	ND	0.001	9018206
Metals						
Chromium (VI)	ug/L	40	2000	ND	0.50	9014971
Mercury (Hg)	mg/L	0.0004	0.01	ND	0.00010	9020961
Total Aluminum (Al)	ug/L	-	50000	390	4.9	9017374
Total Antimony (Sb)	ug/L	-	5000	ND	0.50	9017374
Total Arsenic (As)	ug/L	20	1000	ND	1.0	9017374
Total Cadmium (Cd)	ug/L	8	700	ND	0.090	9017374
Total Chromium (Cr)	ug/L	80	4000	ND	5.0	9017374
Total Cobalt (Co)	ug/L	-	5000	0.74	0.50	9017374
Total Copper (Cu)	ug/L	40	2000	11	0.90	9017374
Total Lead (Pb)	ug/L	120	1000	0.88	0.50	9017374

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: Toronto Storm Sewer Discharge Use By-Law
Criteria-2: Toronto Sanitary and Combined Sewers Discharge Guidelines. Referenced to the Chapter 681.

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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TORONTO SANITARY&STORM SEWER (100-2016)

Bureau Veritas ID				XKM715		
Sampling Date				2023/10/26 08:00		
COC Number				936966-01-01		
	UNITS	Criteria	Criteria-2	EAW MW4 2343 EGLINTON AVE W	RDL	QC Batch
Total Manganese (Mn)	ug/L	50	5000	**170**	2.0	9017374
Total Molybdenum (Mo)	ug/L	-	5000	4.0	0.50	9017374
Total Nickel (Ni)	ug/L	80	2000	2.5	1.0	9017374
Total Phosphorus (P)	ug/L	400	10000	ND	100	9017374
Total Selenium (Se)	ug/L	20	1000	ND	2.0	9017374
Total Silver (Ag)	ug/L	120	5000	ND	0.090	9017374
Total Tin (Sn)	ug/L	-	5000	11	1.0	9017374
Total Titanium (Ti)	ug/L	-	5000	18	5.0	9017374
Total Zinc (Zn)	ug/L	40	2000	15	5.0	9017374
Semivolatile Organics						
Di-N-butyl phthalate	ug/L	15	80	ND	8	9017420
Bis(2-ethylhexyl)phthalate	ug/L	8.8	12	ND	8	9017420
3,3'-Dichlorobenzidine	ug/L	0.8	2	ND	0.8	9017420
Pentachlorophenol	ug/L	2	5	ND	2	9017420
Phenanthrene	ug/L	-	-	ND	0.8	9017420
Anthracene	ug/L	-	-	ND	0.8	9017420
Fluoranthene	ug/L	-	-	ND	0.8	9017420
Pyrene	ug/L	-	-	ND	0.8	9017420
Benzo(a)anthracene	ug/L	-	-	ND	0.8	9017420
Chrysene	ug/L	-	-	ND	0.8	9017420
Benzo(b/j)fluoranthene	ug/L	-	-	ND	0.8	9017420
Benzo(k)fluoranthene	ug/L	-	-	ND	0.8	9017420
Benzo(a)pyrene	ug/L	-	-	ND	0.8	9017420
Indeno(1,2,3-cd)pyrene	ug/L	-	-	ND	0.8	9017420
Dibenzo(a,h)anthracene	ug/L	-	-	ND	0.8	9017420
Benzo(g,h,i)perylene	ug/L	-	-	ND	0.8	9017420
Dibenzo(a,i)pyrene	ug/L	-	-	ND	0.8	9017420

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: Toronto Storm Sewer Discharge Use By-Law
Criteria-2: Toronto Sanitary and Combined Sewers Discharge Guidelines. Referenced to the Chapter 681.

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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TORONTO SANITARY&STORM SEWER (100-2016)

Bureau Veritas ID				XKM715		
Sampling Date				2023/10/26 08:00		
COC Number				936966-01-01		
	UNITS	Criteria	Criteria-2	EAW MW4 2343 EGLINTON AVE W	RDL	QC Batch
Benzo(e)pyrene	ug/L	-	-	ND	0.8	9017420
Perylene	ug/L	-	-	ND	0.8	9017420
Dibenzo(a,j) acridine	ug/L	-	-	ND	2	9017420
7H-Dibenzo(c,g) Carbazole	ug/L	-	-	ND	2	9017420
1,6-Dinitropyrene	ug/L	-	-	ND	2	9017420
1,3-Dinitropyrene	ug/L	-	-	ND	2	9017420
1,8-Dinitropyrene	ug/L	-	-	ND	2	9017420
Calculated Parameters						
Total PAHs (18 PAHs)	ug/L	2	5	**ND (1)**	5	9008003
Volatile Organics						
Benzene	ug/L	2	10	**510**	1.0	9014579
Chloroform	ug/L	2	40	**5.7**	0.20	9014579
1,2-Dichlorobenzene	ug/L	5.6	50	ND	0.40	9014579
1,4-Dichlorobenzene	ug/L	6.8	80	ND	0.40	9014579
cis-1,2-Dichloroethylene	ug/L	5.6	4000	ND	0.50	9014579
trans-1,3-Dichloropropene	ug/L	5.6	140	ND	0.40	9014579
Ethylbenzene	ug/L	2	160	**130**	0.20	9014579
Methylene Chloride(Dichloromethane)	ug/L	5.2	2000	ND	2.0	9014579
1,1,2,2-Tetrachloroethane	ug/L	17	1400	ND	0.40	9014579
Tetrachloroethylene	ug/L	4.4	1000	ND	0.20	9014579
Toluene	ug/L	2	16	**560**	1.0	9014579
Trichloroethylene	ug/L	7.6	400	ND	0.20	9014579
p+m-Xylene	ug/L	-	-	280	1.0	9014579
o-Xylene	ug/L	-	-	39	0.20	9014579
Total Xylenes	ug/L	4.4	1400	**320**	1.0	9014579

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: Toronto Storm Sewer Discharge Use By-Law
Criteria-2: Toronto Sanitary and Combined Sewers Discharge Guidelines. Referenced to the Chapter 681.

ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.
(1) RDL exceeds criteria

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TORONTO SANITARY&STORM SEWER (100-2016)

Bureau Veritas ID				XKM715		
Sampling Date				2023/10/26 08:00		
COC Number				936966-01-01		
	UNITS	Criteria	Criteria-2	EAW MW4 2343 EGLINTON AVE W	RDL	QC Batch
PCBs						
Total PCB	ug/L	0.4	1	ND	0.05	9013125
Microbiological						
Escherichia coli	CFU/100mL	200	-	<10	10	9009961
Surrogate Recovery (%)						
2,4,6-Tribromophenol	%	-	-	91		9017420
2-Fluorobiphenyl	%	-	-	62		9017420
D14-Terphenyl (FS)	%	-	-	100		9017420
D5-Nitrobenzene	%	-	-	83		9017420
D8-Acenaphthylene	%	-	-	74		9017420
Decachlorobiphenyl	%	-	-	76		9013125
4-Bromofluorobenzene	%	-	-	102		9014579
D4-1,2-Dichloroethane	%	-	-	91		9014579
D8-Toluene	%	-	-	104		9014579

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: Toronto Storm Sewer Discharge Use By-Law
Criteria-2: Toronto Sanitary and Combined Sewers Discharge Guidelines. Referenced to the Chapter 681.
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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Bureau Veritas Job #: C3X5217
Report Date: 2023/11/03

Groundwater Environmental Management Services Inc.
Client Project #: 24-0022
Site Location: 2343 EGLINTON AVE W
Sampler Initials: KIM

TEST SUMMARY

Bureau Veritas ID: XKM715
Sample ID: EAW MW4 2343 EGLINTON AVE W
Matrix: Water

Collected: 2023/10/26
Shipped:
Received: 2023/10/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sewer Use By-Law Semivolatile Organics	GC/MS	9017420	2023/10/31	2023/11/02	Kathy Horvat
Biochemical Oxygen Demand (BOD)	DO	9013350	2023/10/28	2023/11/02	Gurjot Kaur
Chromium (VI) in Water	IC	9014971	N/A	2023/10/30	Theodora Luck
Total Cyanide	SKAL/CN	9014435	2023/10/29	2023/10/29	Prgya Panchal
Fluoride	ISE	9013690	2023/10/28	2023/10/30	Surinder Rai
Mercury in Water by CVAA	CV/AA	9020961	2023/11/01	2023/11/01	Gagandeep Rai
Total Metals Analysis by ICPMS	ICP/MS	9017374	2023/10/31	2023/11/01	Arefa Dabhad
E.coli, (CFU/100mL)	PL	9009961	N/A	2023/10/26	Soham Patel
Total Nonylphenol in Liquids by HPLC	LC/FLU	9018206	2023/10/31	2023/11/01	Furneesh Kumar
Nonylphenol Ethoxylates in Liquids: HPLC	LC/FLU	9018223	2023/10/31	2023/11/01	Furneesh Kumar
Animal and Vegetable Oil and Grease	BAL	9007752	N/A	2023/11/03	Automated Statchk
Total Oil and Grease	BAL	9026221	2023/11/03	2023/11/03	Navneet Singh
Polychlorinated Biphenyl in Water	GC/ECD	9013125	2023/10/27	2023/10/30	Akruti Patel
pH	AT	9013706	2023/10/28	2023/10/30	Surinder Rai
Phenols (4AAP)	TECH/PHEN	9015629	N/A	2023/10/30	Chloe Pollock
Total Kjeldahl Nitrogen in Water	SKAL	9015966	2023/10/30	2023/10/31	Rajni Tyagi
Total PAHs	CALC	9008003	N/A	2023/11/02	Automated Statchk
Mineral/Synthetic O & G (TPH Heavy Oil)	BAL	9026222	2023/11/03	2023/11/03	Navneet Singh
Total Suspended Solids	BAL	9020513	2023/11/01	2023/11/03	Shaneil Hall
Volatile Organic Compounds in Water	GC/MS	9014579	N/A	2023/11/02	Narayan Ghimire

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GENERAL COMMENTS

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

Package 1	5.7°C

Sample XKM715 [EAW MW4 2343 EGLINTON AVE W] : VOC Analysis: Due to high concentrations of target analytes, sample required dilution. Detection limits were adjusted accordingly. In order to meet required regulatory criteria or to achieve lower reporting limits, results for selected compounds (obtained by a separate analysis using an appropriate low dilution) are included in the report.

ABN Analysis: Due to the sample matrix, a smaller than usual portion of the sample was used for extraction. Detection limits were adjusted accordingly.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9013125	AP1	Matrix Spike	Decachlorobiphenyl	2023/10/30		79	%	60 - 130
			Total PCB	2023/10/30		89	%	60 - 130
9013125	AP1	Spiked Blank	Decachlorobiphenyl	2023/10/30		80	%	60 - 130
			Total PCB	2023/10/30		95	%	60 - 130
9013125	AP1	Method Blank	Decachlorobiphenyl	2023/10/30		81	%	60 - 130
			Total PCB	2023/10/30	ND, RDL=0.05		ug/L	
9013125	AP1	RPD	Total PCB	2023/10/30	NC		%	40
9013350	GUJ	QC Standard	Total BOD	2023/11/02		94	%	80 - 120
9013350	GUJ	Method Blank	Total BOD	2023/11/02	ND,RDL=2		mg/L	
9013350	GUJ	RPD	Total BOD	2023/11/02	NC		%	30
9013690	SAU	Matrix Spike	Fluoride (F-)	2023/10/30		103	%	80 - 120
9013690	SAU	Spiked Blank	Fluoride (F-)	2023/10/30		101	%	80 - 120
9013690	SAU	Method Blank	Fluoride (F-)	2023/10/30	ND, RDL=0.10		mg/L	
9013690	SAU	RPD	Fluoride (F-)	2023/10/30	0.46		%	20
9013706	SAU	Spiked Blank	pH	2023/10/30		102	%	98 - 103
9013706	SAU	RPD	pH	2023/10/30	1.7		%	N/A
9014435	GYA	Matrix Spike	Total Cyanide (CN)	2023/10/29		112	%	80 - 120
9014435	GYA	Spiked Blank	Total Cyanide (CN)	2023/10/29		100	%	80 - 120
9014435	GYA	Method Blank	Total Cyanide (CN)	2023/10/29	ND, RDL=0.0050		mg/L	
9014435	GYA	RPD	Total Cyanide (CN)	2023/10/29	NC		%	20
9014579	NGH	Matrix Spike	4-Bromofluorobenzene	2023/10/31		104	%	70 - 130
			D4-1,2-Dichloroethane	2023/10/31		91	%	70 - 130
			D8-Toluene	2023/10/31		98	%	70 - 130
			Benzene	2023/10/31		86	%	70 - 130
			Chloroform	2023/10/31		91	%	70 - 130
			1,2-Dichlorobenzene	2023/10/31		99	%	70 - 130
			1,4-Dichlorobenzene	2023/10/31		106	%	70 - 130
			cis-1,2-Dichloroethylene	2023/10/31		94	%	70 - 130
			trans-1,3-Dichloropropene	2023/10/31		83	%	70 - 130
			Ethylbenzene	2023/10/31		84	%	70 - 130
			Methylene Chloride(Dichloromethane)	2023/10/31		94	%	70 - 130
			1,1,2,2-Tetrachloroethane	2023/10/31		101	%	70 - 130
			Tetrachloroethylene	2023/10/31		95	%	70 - 130
			Toluene	2023/10/31		87	%	70 - 130
			Trichloroethylene	2023/10/31		97	%	70 - 130
			p+m-Xylene	2023/10/31		87	%	70 - 130
			o-Xylene	2023/10/31		78	%	70 - 130
9014579	NGH	Spiked Blank	4-Bromofluorobenzene	2023/10/31		103	%	70 - 130
			D4-1,2-Dichloroethane	2023/10/31		88	%	70 - 130
			D8-Toluene	2023/10/31		99	%	70 - 130
			Benzene	2023/10/31		83	%	70 - 130
			Chloroform	2023/10/31		87	%	70 - 130
			1,2-Dichlorobenzene	2023/10/31		89	%	70 - 130
			1,4-Dichlorobenzene	2023/10/31		96	%	70 - 130
			cis-1,2-Dichloroethylene	2023/10/31		91	%	70 - 130
			trans-1,3-Dichloropropene	2023/10/31		88	%	70 - 130
			Ethylbenzene	2023/10/31		78	%	70 - 130
			Methylene Chloride(Dichloromethane)	2023/10/31		92	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,2,2-Tetrachloroethane	2023/10/31		90	%	70 - 130
			Tetrachloroethylene	2023/10/31		90	%	70 - 130
			Toluene	2023/10/31		83	%	70 - 130
			Trichloroethylene	2023/10/31		93	%	70 - 130
			p+m-Xylene	2023/10/31		81	%	70 - 130
			o-Xylene	2023/10/31		73	%	70 - 130
9014579	NGH	Method Blank	4-Bromofluorobenzene	2023/10/31		102	%	70 - 130
			D4-1,2-Dichloroethane	2023/10/31		86	%	70 - 130
			D8-Toluene	2023/10/31		98	%	70 - 130
			Benzene	2023/10/31	ND, RDL=0.20		ug/L	
			Chloroform	2023/10/31	ND, RDL=0.20		ug/L	
			1,2-Dichlorobenzene	2023/10/31	ND, RDL=0.40		ug/L	
			1,4-Dichlorobenzene	2023/10/31	ND, RDL=0.40		ug/L	
			cis-1,2-Dichloroethylene	2023/10/31	ND, RDL=0.50		ug/L	
			trans-1,3-Dichloropropene	2023/10/31	ND, RDL=0.40		ug/L	
			Ethylbenzene	2023/10/31	ND, RDL=0.20		ug/L	
			Methylene Chloride(Dichloromethane)	2023/10/31	ND, RDL=2.0		ug/L	
			1,1,2,2-Tetrachloroethane	2023/10/31	ND, RDL=0.40		ug/L	
			Tetrachloroethylene	2023/10/31	ND, RDL=0.20		ug/L	
			Toluene	2023/10/31	ND, RDL=0.20		ug/L	
			Trichloroethylene	2023/10/31	ND, RDL=0.20		ug/L	
			p+m-Xylene	2023/10/31	ND, RDL=0.20		ug/L	
			o-Xylene	2023/10/31	ND, RDL=0.20		ug/L	
			Total Xylenes	2023/10/31	ND, RDL=0.20		ug/L	
9014579	NGH	RPD	Benzene	2023/10/31	NC		%	30
			Chloroform	2023/10/31	NC		%	30
			1,2-Dichlorobenzene	2023/10/31	NC		%	30
			1,4-Dichlorobenzene	2023/10/31	NC		%	30
			cis-1,2-Dichloroethylene	2023/10/31	NC		%	30
			trans-1,3-Dichloropropene	2023/10/31	NC		%	30
			Ethylbenzene	2023/10/31	NC		%	30
			Methylene Chloride(Dichloromethane)	2023/10/31	NC		%	30
			1,1,2,2-Tetrachloroethane	2023/10/31	NC		%	30
			Tetrachloroethylene	2023/10/31	NC		%	30
			Toluene	2023/10/31	NC		%	30
			Trichloroethylene	2023/10/31	NC		%	30
			p+m-Xylene	2023/10/31	NC		%	30

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			o-Xylene	2023/10/31	NC		%	30
			Total Xylenes	2023/10/31	NC		%	30
9014971	TL2	Matrix Spike	Chromium (VI)	2023/10/30		103	%	80 - 120
9014971	TL2	Spiked Blank	Chromium (VI)	2023/10/30		97	%	80 - 120
9014971	TL2	Method Blank	Chromium (VI)	2023/10/30	ND, RDL=0.50		ug/L	
9014971	TL2	RPD	Chromium (VI)	2023/10/30	NC		%	20
9015629	CPO	Matrix Spike	Phenols-4AAP	2023/10/30		104	%	80 - 120
9015629	CPO	Spiked Blank	Phenols-4AAP	2023/10/30		101	%	80 - 120
9015629	CPO	Method Blank	Phenols-4AAP	2023/10/30	ND, RDL=0.0010		mg/L	
9015629	CPO	RPD	Phenols-4AAP	2023/10/30	0		%	20
9015966	RTY	Matrix Spike	Total Kjeldahl Nitrogen (TKN)	2023/10/31		107	%	80 - 120
9015966	RTY	QC Standard	Total Kjeldahl Nitrogen (TKN)	2023/10/31		97	%	80 - 120
9015966	RTY	Spiked Blank	Total Kjeldahl Nitrogen (TKN)	2023/10/31		93	%	80 - 120
9015966	RTY	Method Blank	Total Kjeldahl Nitrogen (TKN)	2023/10/31	ND, RDL=0.10		mg/L	
9015966	RTY	RPD	Total Kjeldahl Nitrogen (TKN)	2023/10/31	11		%	20
9017374	ADA	Matrix Spike	Total Aluminum (Al)	2023/11/01		104	%	80 - 120
			Total Antimony (Sb)	2023/11/01		104	%	80 - 120
			Total Arsenic (As)	2023/11/01		97	%	80 - 120
			Total Cadmium (Cd)	2023/11/01		99	%	80 - 120
			Total Chromium (Cr)	2023/11/01		94	%	80 - 120
			Total Cobalt (Co)	2023/11/01		96	%	80 - 120
			Total Copper (Cu)	2023/11/01		101	%	80 - 120
			Total Lead (Pb)	2023/11/01		96	%	80 - 120
			Total Manganese (Mn)	2023/11/01		96	%	80 - 120
			Total Molybdenum (Mo)	2023/11/01		100	%	80 - 120
			Total Nickel (Ni)	2023/11/01		94	%	80 - 120
			Total Phosphorus (P)	2023/11/01		99	%	80 - 120
			Total Selenium (Se)	2023/11/01		100	%	80 - 120
			Total Silver (Ag)	2023/11/01		96	%	80 - 120
			Total Tin (Sn)	2023/11/01		103	%	80 - 120
			Total Titanium (Ti)	2023/11/01		98	%	80 - 120
			Total Zinc (Zn)	2023/11/01		93	%	80 - 120
9017374	ADA	Spiked Blank	Total Aluminum (Al)	2023/11/01		101	%	80 - 120
			Total Antimony (Sb)	2023/11/01		100	%	80 - 120
			Total Arsenic (As)	2023/11/01		97	%	80 - 120
			Total Cadmium (Cd)	2023/11/01		96	%	80 - 120
			Total Chromium (Cr)	2023/11/01		92	%	80 - 120
			Total Cobalt (Co)	2023/11/01		99	%	80 - 120
			Total Copper (Cu)	2023/11/01		100	%	80 - 120
			Total Lead (Pb)	2023/11/01		95	%	80 - 120
			Total Manganese (Mn)	2023/11/01		95	%	80 - 120
			Total Molybdenum (Mo)	2023/11/01		97	%	80 - 120
			Total Nickel (Ni)	2023/11/01		93	%	80 - 120
			Total Phosphorus (P)	2023/11/01		93	%	80 - 120
			Total Selenium (Se)	2023/11/01		98	%	80 - 120
			Total Silver (Ag)	2023/11/01		94	%	80 - 120
			Total Tin (Sn)	2023/11/01		100	%	80 - 120
			Total Titanium (Ti)	2023/11/01		99	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Zinc (Zn)	2023/11/01		94	%	80 - 120
9017374	ADA	Method Blank	Total Aluminum (Al)	2023/11/01	ND, RDL=4.9		ug/L	
			Total Antimony (Sb)	2023/11/01	ND, RDL=0.50		ug/L	
			Total Arsenic (As)	2023/11/01	ND, RDL=1.0		ug/L	
			Total Cadmium (Cd)	2023/11/01	ND, RDL=0.090		ug/L	
			Total Chromium (Cr)	2023/11/01	ND, RDL=5.0		ug/L	
			Total Cobalt (Co)	2023/11/01	ND, RDL=0.50		ug/L	
			Total Copper (Cu)	2023/11/01	ND, RDL=0.90		ug/L	
			Total Lead (Pb)	2023/11/01	ND, RDL=0.50		ug/L	
			Total Manganese (Mn)	2023/11/01	ND, RDL=2.0		ug/L	
			Total Molybdenum (Mo)	2023/11/01	ND, RDL=0.50		ug/L	
			Total Nickel (Ni)	2023/11/01	ND, RDL=1.0		ug/L	
			Total Phosphorus (P)	2023/11/01	ND, RDL=100		ug/L	
			Total Selenium (Se)	2023/11/01	ND, RDL=2.0		ug/L	
			Total Silver (Ag)	2023/11/01	ND, RDL=0.090		ug/L	
			Total Tin (Sn)	2023/11/01	ND, RDL=1.0		ug/L	
			Total Titanium (Ti)	2023/11/01	ND, RDL=5.0		ug/L	
			Total Zinc (Zn)	2023/11/01	ND, RDL=5.0		ug/L	
9017374	ADA	RPD	Total Aluminum (Al)	2023/11/01	0.31		%	20
			Total Antimony (Sb)	2023/11/01	NC		%	20
			Total Arsenic (As)	2023/11/01	NC		%	20
			Total Cadmium (Cd)	2023/11/01	NC		%	20
			Total Chromium (Cr)	2023/11/01	NC		%	20
			Total Cobalt (Co)	2023/11/01	NC		%	20
			Total Copper (Cu)	2023/11/01	1.5		%	20
			Total Lead (Pb)	2023/11/01	NC		%	20
			Total Manganese (Mn)	2023/11/01	NC		%	20
			Total Molybdenum (Mo)	2023/11/01	12		%	20
			Total Nickel (Ni)	2023/11/01	NC		%	20
			Total Selenium (Se)	2023/11/01	NC		%	20
			Total Silver (Ag)	2023/11/01	NC		%	20
			Total Tin (Sn)	2023/11/01	NC		%	20
			Total Titanium (Ti)	2023/11/01	NC		%	20
			Total Zinc (Zn)	2023/11/01	2.0		%	20
9017420	KHO	Matrix Spike	2,4,6-Tribromophenol	2023/10/31		103	%	10 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			2-Fluorobiphenyl	2023/10/31		116	%	30 - 130
			D14-Terphenyl (FS)	2023/10/31		111	%	30 - 130
			D5-Nitrobenzene	2023/10/31		40	%	30 - 130
			D8-Acenaphthylene	2023/10/31		120	%	30 - 130
			Di-N-butyl phthalate	2023/10/31		103	%	30 - 130
			Bis(2-ethylhexyl)phthalate	2023/10/31		119	%	30 - 130
			3,3'-Dichlorobenzidine	2023/10/31		74	%	30 - 130
			Pentachlorophenol	2023/10/31		69	%	30 - 130
			Phenanthrene	2023/10/31		95	%	30 - 130
			Anthracene	2023/10/31		95	%	30 - 130
			Fluoranthene	2023/10/31		113	%	30 - 130
			Pyrene	2023/10/31		113	%	30 - 130
			Benzo(a)anthracene	2023/10/31		111	%	30 - 130
			Chrysene	2023/10/31		103	%	30 - 130
			Benzo(b/j)fluoranthene	2023/10/31		118	%	30 - 130
			Benzo(k)fluoranthene	2023/10/31		105	%	30 - 130
			Benzo(a)pyrene	2023/10/31		120	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2023/10/31		106	%	30 - 130
			Dibenzo(a,h)anthracene	2023/10/31		91	%	30 - 130
			Benzo(g,h,i)perylene	2023/10/31		104	%	30 - 130
			Dibenzo(a,i)pyrene	2023/10/31		78	%	30 - 130
			Benzo(e)pyrene	2023/10/31		114	%	30 - 130
			Perylene	2023/10/31		88	%	30 - 130
			Dibenzo(a,j) acridine	2023/10/31		90	%	30 - 130
			7H-Dibenzo(c,g) Carbazole	2023/10/31		82	%	30 - 130
			1,6-Dinitropyrene	2023/10/31		61	%	30 - 130
			1,3-Dinitropyrene	2023/10/31		53	%	30 - 130
			1,8-Dinitropyrene	2023/10/31		64	%	30 - 130
9017420	KHO	Spiked Blank	2,4,6-Tribromophenol	2023/10/31		92	%	10 - 130
			2-Fluorobiphenyl	2023/10/31		79	%	30 - 130
			D14-Terphenyl (FS)	2023/10/31		100	%	30 - 130
			D5-Nitrobenzene	2023/10/31		35	%	30 - 130
			D8-Acenaphthylene	2023/10/31		85	%	30 - 130
			Di-N-butyl phthalate	2023/10/31		87	%	30 - 130
			Bis(2-ethylhexyl)phthalate	2023/10/31		105	%	30 - 130
			3,3'-Dichlorobenzidine	2023/10/31		87	%	30 - 130
			Pentachlorophenol	2023/10/31		44	%	30 - 130
			Phenanthrene	2023/10/31		90	%	30 - 130
			Anthracene	2023/10/31		88	%	30 - 130
			Fluoranthene	2023/10/31		103	%	30 - 130
			Pyrene	2023/10/31		102	%	30 - 130
			Benzo(a)anthracene	2023/10/31		103	%	30 - 130
			Chrysene	2023/10/31		96	%	30 - 130
			Benzo(b/j)fluoranthene	2023/10/31		105	%	30 - 130
			Benzo(k)fluoranthene	2023/10/31		113	%	30 - 130
			Benzo(a)pyrene	2023/10/31		116	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2023/10/31		122	%	30 - 130
			Dibenzo(a,h)anthracene	2023/10/31		103	%	30 - 130
			Benzo(g,h,i)perylene	2023/10/31		118	%	30 - 130
			Dibenzo(a,i)pyrene	2023/10/31		92	%	30 - 130
			Benzo(e)pyrene	2023/10/31		108	%	30 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Perylene	2023/10/31		100	%	30 - 130
			Dibenzo(a,j) acridine	2023/10/31		99	%	30 - 130
			7H-Dibenzo(c,g) Carbazole	2023/10/31		101	%	30 - 130
			1,6-Dinitropyrene	2023/10/31		67	%	30 - 130
			1,3-Dinitropyrene	2023/10/31		60	%	30 - 130
			1,8-Dinitropyrene	2023/10/31		72	%	30 - 130
9017420	KHO	Method Blank	2,4,6-Tribromophenol	2023/10/31		64	%	10 - 130
			2-Fluorobiphenyl	2023/10/31		81	%	30 - 130
			D14-Terphenyl (FS)	2023/10/31		105	%	30 - 130
			D5-Nitrobenzene	2023/10/31		35	%	30 - 130
			D8-Acenaphthylene	2023/10/31		93	%	30 - 130
			Di-N-butyl phthalate	2023/10/31	ND,RDL=2		ug/L	
			Bis(2-ethylhexyl)phthalate	2023/10/31	ND,RDL=2		ug/L	
			3,3'-Dichlorobenzidine	2023/10/31	ND, RDL=0.8		ug/L	
			Pentachlorophenol	2023/10/31	ND,RDL=1		ug/L	
			Phenanthrene	2023/10/31	ND, RDL=0.2		ug/L	
			Anthracene	2023/10/31	ND, RDL=0.2		ug/L	
			Fluoranthene	2023/10/31	ND, RDL=0.2		ug/L	
			Pyrene	2023/10/31	ND, RDL=0.2		ug/L	
			Benzo(a)anthracene	2023/10/31	ND, RDL=0.2		ug/L	
			Chrysene	2023/10/31	ND, RDL=0.2		ug/L	
			Benzo(b/j)fluoranthene	2023/10/31	ND, RDL=0.2		ug/L	
			Benzo(k)fluoranthene	2023/10/31	ND, RDL=0.2		ug/L	
			Benzo(a)pyrene	2023/10/31	ND, RDL=0.2		ug/L	
			Indeno(1,2,3-cd)pyrene	2023/10/31	ND, RDL=0.2		ug/L	
			Dibenzo(a,h)anthracene	2023/10/31	ND, RDL=0.2		ug/L	
			Benzo(g,h,i)perylene	2023/10/31	ND, RDL=0.2		ug/L	
			Dibenzo(a,i)pyrene	2023/10/31	ND, RDL=0.2		ug/L	
			Benzo(e)pyrene	2023/10/31	ND, RDL=0.2		ug/L	
			Perylene	2023/10/31	ND, RDL=0.2		ug/L	
			Dibenzo(a,j) acridine	2023/10/31	ND, RDL=0.4		ug/L	
			7H-Dibenzo(c,g) Carbazole	2023/10/31	ND, RDL=0.4		ug/L	
			1,6-Dinitropyrene	2023/10/31	ND, RDL=0.4		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,3-Dinitropyrene	2023/10/31	ND, RDL=0.4		ug/L	
			1,8-Dinitropyrene	2023/10/31	ND, RDL=0.4		ug/L	
9017420	KHO	RPD	Di-N-butyl phthalate	2023/11/01	NC		%	40
			Bis(2-ethylhexyl)phthalate	2023/11/01	NC		%	40
			3,3'-Dichlorobenzidine	2023/11/01	NC		%	40
			Pentachlorophenol	2023/11/01	NC		%	40
			Phenanthrene	2023/11/01	NC		%	40
			Anthracene	2023/11/01	NC		%	40
			Fluoranthene	2023/11/01	NC		%	40
			Pyrene	2023/11/01	NC		%	40
			Benzo(a)anthracene	2023/11/01	NC		%	40
			Chrysene	2023/11/01	NC		%	40
			Benzo(b/j)fluoranthene	2023/11/01	NC		%	40
			Benzo(k)fluoranthene	2023/11/01	NC		%	40
			Benzo(a)pyrene	2023/11/01	NC		%	40
			Indeno(1,2,3-cd)pyrene	2023/11/01	NC		%	40
			Dibenzo(a,h)anthracene	2023/11/01	NC		%	40
			Benzo(g,h,i)perylene	2023/11/01	NC		%	40
			Dibenzo(a,i)pyrene	2023/11/01	NC		%	40
			Benzo(e)pyrene	2023/11/01	NC		%	40
			Perylene	2023/11/01	NC		%	40
			Dibenzo(a,j) acridine	2023/11/01	NC		%	40
			7H-Dibenzo(c,g) Carbazole	2023/11/01	NC		%	40
			1,6-Dinitropyrene	2023/11/01	NC		%	40
			1,3-Dinitropyrene	2023/11/01	NC		%	40
			1,8-Dinitropyrene	2023/11/01	NC		%	40
9018206	FKU	Matrix Spike	Nonylphenol (Total)	2023/11/01		108	%	50 - 130
9018206	FKU	Spiked Blank	Nonylphenol (Total)	2023/11/01		109	%	50 - 130
9018206	FKU	Method Blank	Nonylphenol (Total)	2023/11/01	ND, RDL=0.001		mg/L	
9018206	FKU	RPD	Nonylphenol (Total)	2023/11/01	NC		%	40
9018223	FKU	Matrix Spike	Nonylphenol Ethoxylate (Total)	2023/11/01		86	%	50 - 130
9018223	FKU	Spiked Blank	Nonylphenol Ethoxylate (Total)	2023/11/01		86	%	50 - 130
9018223	FKU	Method Blank	Nonylphenol Ethoxylate (Total)	2023/11/01	ND, RDL=0.005		mg/L	
9018223	FKU	RPD	Nonylphenol Ethoxylate (Total)	2023/11/01	NC		%	40
9020513	SHD	Spiked Blank	Total Suspended Solids	2023/11/03		96	%	85 - 115
9020513	SHD	Method Blank	Total Suspended Solids	2023/11/03	ND, RDL=10		mg/L	
9020513	SHD	RPD	Total Suspended Solids	2023/11/03	12		%	20
9020961	GR1	Matrix Spike	Mercury (Hg)	2023/11/01		100	%	75 - 125
9020961	GR1	Spiked Blank	Mercury (Hg)	2023/11/01		109	%	80 - 120
9020961	GR1	Method Blank	Mercury (Hg)	2023/11/01	ND, RDL=0.00010		mg/L	
9020961	GR1	RPD	Mercury (Hg)	2023/11/01	NC		%	20
9026221	NSG	Spiked Blank	Total Oil & Grease	2023/11/03		98	%	85 - 115
9026221	NSG	RPD	Total Oil & Grease	2023/11/03	0.25		%	25
9026221	NSG	Method Blank	Total Oil & Grease	2023/11/03	ND, RDL=0.50		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9026222	NSG	Spiked Blank	Total Oil & Grease Mineral/Synthetic	2023/11/03		96	%	85 - 115
9026222	NSG	RPD	Total Oil & Grease Mineral/Synthetic	2023/11/03	0		%	25
9026222	NSG	Method Blank	Total Oil & Grease Mineral/Synthetic	2023/11/03	ND, RDL=0.50		mg/L	

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 (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).

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VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

Soham N Patel

Soham Patel, Senior Analyst

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.

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MICRO

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CHAIN OF CUSTODY RECORD

Page 1 of 1

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#24874 Groundwater Environmental Management Ser	Company Name:	GEMS	Quotation #:	C25014	Bureau Veritas Job #:	Bottle Order #:
Attention:	Accounts Payable	Attention:	Laura Maharaj	P.O. #:			936966
Address:	150 Rivermede Rd Unit # 9	Address:		Project:	~~19-191037~~ 24-0022	COC #:	Project Manager:
	Concord ON L4K 3M8			Project Name:		C#936966-01-01	Jolanta Goralczyk
Tel:	(905) 907-3077 Fax: (905) 907-6617	Tel:	Fax:	Site #:	2343 Eglinton Ave W		
Email:	accounts.payable@gemservicesinc.com	Email:	laura.maharaj@gemservicesinc.com	Sampled By:	Kimberly		

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)	Other Regulations	Special Instructions
☐ Table 1 ☐ Res/Park ☐ Medium/Fine	☐ CCME ☑ Sanitary Sewer Bylaw	
☐ Table 2 ☐ Ind/Comm ☐ Coarse	☐ Reg 558 ☑ Storm Sewer Bylaw	
☐ Table 3 ☐ Agri/Other ☐ For RSC	☐ MISA Municipality: TORONTO	
☐ Table ___	☐ PWQO ☐ Reg 406 Table ___	
	☐ Other ___	

Include Criteria on Certificate of Analysis (Y/N)? Y

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	Toronto Sanitary&Storm Sewer (100-2016)	# of Bottles	Comments
1	EAW MW4	2343 Eglinton Ave W	2023/10/26	8:00	GW	N/A	✓	18	
2									
3									
4									
5									
6									
7									
8									
9									
10									

Turnaround Time (TAT) Required:
Please provide advance notice for rush projects

Regular (Standard) TAT: ☑
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: ___ Time Required: ___ ☐
Rush Confirmation Number: ___ *(call lab for #)*

26-Oct-23 15:29
Jolanta Goralczyk
C3X5217
AKO ENV-857

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
[signature] / Kimberly	23/10/26	10:00	[signature] SHIVANGI PATEL	2023/10/26	15:29			5 / 5 / 7	Present	✓	
									Intact	—	

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

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

White: Bureau Veritas Yellow: Client

7/4/12
on ice

Bureau Veritas Canada (2019) Inc.

Exceedance Summary Table – Toronto Storm Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Benzene	2	510	1.0	ug/L
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Chloroform	2	5.7	0.20	ug/L
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Ethylbenzene	2	130	0.20	ug/L
EAW MW4 2343 EGLINTON AVE W	XKM715-11	Total Manganese (Mn)	50	170	2.0	ug/L
EAW MW4 2343 EGLINTON AVE W	XKM715-13	Phenols-4AAP	0.008	0.033	0.0010	mg/L
EAW MW4 2343 EGLINTON AVE W	XKM715-06	Total Suspended Solids	15	31	10	mg/L
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Toluene	2	560	1.0	ug/L
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Total Xylenes	4.4	320	1.0	ug/L

Detection Limit Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
EAW MW4 2343 EGLINTON AVE W	XKM715-01	Total PAHs (18 PAHs)	2	<5	5	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 – Toronto Sanitary Sewer

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Benzene	10	510	1.0	ug/L
EAW MW4 2343 EGLINTON AVE W	XKM715-14	Toluene	16	560	1.0	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.

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Appendix E

Dewatering Calculations

Table 1

Short-Term Dewatering Rate Calculations - 7 & 40 days
Proposed Development: 2343 Eglinton Avenue, Toronto **24-0203**

Symbol	Description	Value 7 Days	Value 40 Days	Unit	Comment
Dewatering target heights and elevations					
$E_{Target} = E_{invert} - 1$	Dewatering target elevation	148.20	148.20	masl	
$E_{wp} = E_{Target} - 1$	Target water level	147.20	147.20	masl	
$H = E_{GW} - E_{wp}$	Initial height of groundwater	7.80	7.80	m	
$h = E_{Target} - E_{wp}$	Target height of groundwater	1.00	1.00	m	
H - h	Drawdown required	6.80	6.80	m	
t	Duration of Dewatering	7	40	days	
K	Hydraulic Conductivity	2.0E-06	2.0E-06	m/s	
T	Transmissivity	1.5E-05	1.5E-05	m^2/sec	$T = K \cdot (H - h)$
Cs	Storage Coefficient	0.30	0.30	no units	
C_4	Constant	4790	4790	no units	
a	Dewatered Area Length	87.0	87.0	m	
b	Dewatered Area Width	52.0	52.0	m	
r_w	Effective Well Radius of Open Excavation	44.2	44.2	m	$r_w = \frac{a+b}{\pi}$
R_o	**Radius of influence**	**52.6**	**64.2**	**m**	$R_o = r_w + \sqrt{\frac{T \cdot t}{C_4 \cdot C_s}}$
					Unconfined Conditions
Q	**Predicted Pumping Rate**	**128.9**	**59.9**	L/min	$Q = \frac{\pi \cdot K \left(H^2 - h^2\right)}{\ln\left(\frac{R_o}{r_w}\right)}$
		185,668	**86,221**	L/day	

(Powers et al., 2008)

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Table 2

Long-Term Seepage Rate Calculations - 150 & 365 days

Proposed Development: 2343 Eglinton Avenue, Toronto **Project No. 24-0203**

Symbol	Description	Value	Unit	Comment
		365 Days		
Dewatering target heights and elevations				
$E_{Target} = E_{invert}$	Dewatering target elevation	149.20	masl	
$E_{wp} = E_{Target}$	Target water level	149.20	masl	
$H = E_{GW} - E_{wp}$	Initial height of groundwater	5.80	m	
$h = E_{Target} - E_{wp}$	Target height of groundwater	0.00	m	
H - h	Drawdown required	5.80	m	
t	Duration of Dewatering	365	days	
K	Hydraulic Conductivity	2.0E-06	m/s	
T	Transmissivity	1.1E-05	m^2/sec	$T = K \cdot (H - h)$
Cs	Storage Coefficient	0.30	no units	
C_4	Constant	4790	no units	
a	Dewatered Area Length	87.0	m	
b	Dewatered Area Width	52.0	m	
r_w	Effective Well Radius of Open Excavation	44.2	m	$r_w = \frac{a+b}{\pi}$
R_o	**Radius of influence**	**96.3**	**m**	$R_o = r_w + \sqrt{\frac{T \cdot t}{C_4 \cdot C_s}}$
				Unconfined Conditions
Q	**Predicted Seepage Rate**	**16.1**	L/min	$Q = \frac{\pi \cdot K (H^2 - h^2)}{\ln\left(\frac{R_o}{r_w}\right)}$
		23,231	L/day	

(Powers et al., 2008)

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Appendix F

MECP Wells within 500 m Radius

Table 1: MECP Wells

Location: 2343 Eglinton Avenue West, Toronto, ON

Project No. 24-0022

Well ID	Easting	Northing	FID	Well Usage
6928284	623921	4838871	0	Not Used
6929667	623806	4838935	1	N/A
6930099	623469	4838889	2	Not Used
6930586	623704	4839158	3	N/A
7103238	623705	4838752	4	Not Used
7120232	623662	4839235	5	Monitoring
7135256	623736	4839130	6	Not Used
7150548	623845	4838770	7	Monitoring
7150712	623845	4838781	8	N/A
7150713	623805	4838767	9	N/A
7152560	623860	4838856	10	Test Hole
7154478	623634	4838819	11	Other
7156213	623739	4839112	12	N/A
7156515	623552	4838802	13	Monitoring and Test Hole
7170709	623862	4839231	14	Monitoring and Test Hole
7170710	623864	4839279	15	Monitoring and Test Hole
7170711	623871	4839283	16	Monitoring and Test Hole
7170712	623864	4839279	17	Monitoring and Test Hole
7171141	623416	4838753	18	Monitoring
7171142	623699	4838844	19	Monitoring
7171535	623979	4838937	20	Monitoring
7171541	623514	4838778	21	Monitoring
7173046	623910	4838909	22	N/A
7173078	624216	4839042	23	N/A
7173189	624233	4839044	24	Monitoring
7174716	623819	4839275	25	Monitoring and Test Hole
7175199	623666	4838823	26	N/A
7177911	623754	4838848	27	Monitoring
7177912	623595	4838812	28	Monitoring
7177914	623606	4838727	29	Monitoring
7177915	623690	4838762	30	Monitoring
7177974	624295	4839112	31	Monitoring
7177977	624223	4839054	32	Monitoring
7178585	623567	4838810	33	N/A
7183103	623658	4838861	34	Monitoring
7183107	623551	4838870	35	Monitoring
7184732	624228	4839050	36	Monitoring
7184733	624224	4839068	37	Monitoring
7185116	623760	4838844	38	N/A
7185171	623814	4838794	39	Monitoring
7185263	623622	4839338	40	Monitoring and Test Hole
7185264	623641	4839324	41	Monitoring and Test Hole
7185265	623628	4839312	42	Monitoring and Test Hole

7187768	623598	4839380	43	N/A
7187769	623618	4839371	44	Monitoring and Test Hole
7187770	623569	4839205	45	Monitoring and Test Hole
7190936	623817	4838718	46	Monitoring and Test Hole
7190937	623838	4838729	47	Monitoring and Test Hole
7193054	623650	4838849	48	Test Hole
7196155	623836	4838927	49	Monitoring and Test Hole
7198116	623874	4839299	50	Monitoring and Test Hole
7198117	623892	4839289	51	Monitoring and Test Hole
7198118	623866	4839293	52	Monitoring and Test Hole
7211338	623412	4838782	53	N/A
7211339	623547	4838587	54	N/A
7211402	623562	4838792	55	N/A
7213509	624218	4839060	56	Monitoring and Test Hole
7213510	624164	4839029	57	Monitoring and Test Hole
7213511	624214	4839067	58	Monitoring and Test Hole
7213820	623757	4838861	59	N/A
7214561	623767	4838892	60	Monitoring
7214562	623736	4838863	61	Monitoring
7214563	623721	4838895	62	Monitoring
7215096	623819	4839275	63	Monitoring and Test Hole
7217590	623836	4838922	64	Monitoring and Test Hole
7218623	623833	4838928	65	N/A
7219018	623571	4838814	66	Test Hole
7219019	623571	4838814	67	Test Hole
7220014	623575	4838826	68	Dewatering
7220015	623582	4838804	69	Dewatering
7223744	623657	4838807	70	Dewatering
7223745	623700	4838827	71	Dewatering
7223793	624227	4839045	72	Dewatering
7223803	624234	4839044	73	Dewatering
7223805	624242	4839041	74	Dewatering
7225867	624177	4839013	75	Monitoring
7226179	623805	4838904	76	Monitoring and Test Hole
7226180	623905	4838906	77	Monitoring and Test Hole
7228273	623757	4838861	78	N/A
7230779	624235	4839018	79	Dewatering
7230783	623564	4838815	80	Dewatering
7230785	624257	4839027	81	Dewatering
7230786	623571	4838814	82	Dewatering
7231420	623836	4838918	83	N/A
7231483	623567	4838811	84	N/A
7235124	623958	4838721	85	Dewatering
7236625	623722	4838904	86	Monitoring
7238354	623726	4838885	87	N/A
7241094	623947	4838452	88	N/A
7242615	624209	4839004	89	Dewatering

7242616	624239	4839030	90	Dewatering
7244370	623966	4838942	91	Dewatering
7244371	623980	4838946	92	Dewatering
7244458	623964	4838989	93	Monitoring
7246646	623966	4838939	94	Dewatering
7246647	623975	4838941	95	Dewatering
7248621	623928	4838506	96	Monitoring and Test Hole
7248622	623916	4838499	97	Monitoring and Test Hole
7248623	623907	4838560	98	Monitoring and Test Hole
7253772	623970.3	4838943.5	99	Dewatering
7253773	623970.3	4838943.5	100	Dewatering
7253865	623975	4838941	101	Dewatering
7253866	623966	4838939	102	Dewatering
7253867	623980	4838946	103	Dewatering
7253868	623966	4838942	104	Dewatering
7253869	624226	4839037	105	N/A
7253870	624240	4839033	106	Monitoring
7253871	624238	4839040	107	Dewatering
7253872	624232	4839020	108	Dewatering
7253873	624243	4839024	109	Dewatering
7253874	624228	4839029	110	Dewatering
7253875	624239	4839022	111	Dewatering
7255817	623840	4839215	112	N/A
7255962	623827	4838927	113	Monitoring and Test Hole
7258028	624236	4839040	114	N/A
7258029	624240	4839033	115	N/A
7258030	624226	4839037	116	N/A
7258071	624242	4839041	117	N/A
7258072	624227	4839045	118	N/A
7258073	624234	4839044	119	N/A
7258782	623867.3	4838920.5	120	Monitoring
7258783	623882	4838905	121	Monitoring
7261284	623811	4838908	122	N/A
7261286	623804	4838904	123	N/A
7262445	623442	4838755	124	Monitoring
7262446	623466	4838759	125	Monitoring
7262447	623452	4838733	126	Monitoring
7262451	623796	4838901	127	N/A
7262452	623788	4838915	128	N/A
7263145	623664	4838806	129	Monitoring
7266056	623800	4838920	130	Monitoring and Test Hole
7268822	623771	4838766	131	N/A
7268823	623925	4838754	132	N/A
7268824	624038	4838759	133	N/A
7268825	624038	4838788	134	N/A
7270452	623681	4838835	135	Monitoring
7270453	623658	4838824	136	Monitoring

7281177	623839	4838924	137	N/A
7285804	624238	4839055	138	N/A
7287672	623616	4838767	139	N/A
7287939	623786	4838904	140	Test Hole
7291305	623399	4839367	141	Test Hole
7291307	623388	4839357	142	Test Hole
7291308	623382	4839367	143	Test Hole

Water Well Records

October 25, 2023
9:48:12 AM

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
TORONTO CITY	17 623925 4838754 W	2016-06 7091						7268823 (Z238894) A	
TORONTO CITY	17 623771 4838766 W	2016-06 7091						7268822 (Z238895) A	
TORONTO CITY	17 624038 4838788 W	2016-06 7091						7268825 (Z238892) A	
TORONTO CITY	17 623681 4838835 W	2016-05 6032	2			MO	0032 8	7270452 (Z206941) A202413	BRWN SAND SILT SOFT 0005 GREY SILT GRVL SOFT 0030 BRWN SAND SILT SOFT 0040
TORONTO CITY	17 623658 4838824 W	2016-05 6032	2			MO	0037 10	7270453 (Z206940) A202412	BRWN SAND SILT SOFT 0005 GREY SILT WDFR SOFT 0040 BRWN SAND SILT HARD 0047
TORONTO CITY	17 623616 4838767 W	2017-04 7215						7287672 (C37450) A218557 P	
TORONTO CITY	17 623921 4838871 W	2004-07 7230	1.97			NU	0010 10	6928284 (Z18304) A015017	BRWN FILL LOOS 0003 BRWN SILT SAND CLAY 0009 BRWN SAND SILT DNSE 0022
TORONTO CITY	17 623705 4838752 W	2008-03 7147	1.99	FR 0005	///:	NU		7103238 (Z77700) A056432	GREY GRVL 0001 BRWN FILL SAND CLAY 0002 BRWN FILL CLAY SAND 0008 BRWN FILL 0012 BRWN SAND 0015
YORK BOROUGH	17 623874 4839299 W	2013-02 7241	2			MT	0010 10	7198116 (Z165495) A117568	BRWN SAND SILT 0012 GREY SILT 0020
YORK BOROUGH	17 623836 4838927 W	2013-01 7241	2			MT	0020 10	7196155 (Z165750) A143667	BRWN FILL 0013 BRWN TILL ROCK 0022 BRWN SAND 0030
YORK BOROUGH	17 623650 4838849 W	2012-03 1663	5 5	UT	31/76/13/72:	TH	0070 12	7193054 (Z161036) A116171	BRWN FILL 0032 BRWN SAND GRVL CLAY 0053 GREY FSND 0057 GREY CLAY 0059 GREY FSND 0063 GREY SAND CLAY SLTY 0068 GREY CLAY 0072 GREY SAND SLTY 0076 GREY CLAY SILT 0093
YORK BOROUGH	17 623838 4838729 W	2012-10 7241	2.04			MT	0010 10	7190937 (Z157108) A120904	BRWN FILL SAND LOOS 0002 BRWN SAND SILT DNSE 0010 GREY SAND SILT DNSE 0020
YORK BOROUGH	17 623817 4838718 W	2012-10 7241	2.04			MT	0010 10	7190936 (Z157107) A120906	BRWN FILL SAND LOOS 0002 BRWN SAND SILT DNSE 0010 GREY SAND SILT DNSE 0020

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623569 4839205 W	2012-08 7241	2			MT	0012 10	7187770 (Z157147) A109842	BRWN FILL SAND SOFT 0005 BRWN SILT SAND 0020 GREY SAND SILT WBRG 0022
YORK BOROUGH	17 623618 4839371 W	2012-08 7241	2			MT	0012 10	7187769 (Z156817) A137025	BRWN FILL 0005 BRWN SILT SAND 0017 GREY SAND SILT 0022
YORK BOROUGH	17 623598 4839380 W	2012-08 7241	2				0012 10	7187768 (Z156819) A137024	BRWN FILL 0005 BRWN TILL SILT HARD 0017 GREY SAND SILT 0022
YORK BOROUGH	17 623622 4839338 W	2012-06 7241	1.25			MT	0009 10	7185263 (Z152570) A109718	BLCK ---- 0000 BRWN SAND GRVL LOOS 0001 BRWN SILT CLAY DNSE 0008 BRWN SILT SAND DNSE 0019
YORK BOROUGH	17 623641 4839324 W	2012-06 7241	1.25			MT	0008 10	7185264 (Z150757) A109717	BLCK ---- 0000 BRWN SAND GRVL LOOS 0001 BRWN SILT CLAY DNSE 0008 BRWN SILT SAND DNSE 0018
YORK BOROUGH	17 624218 4839060 W	2013-11 7241	2			MT	0010 10	7213509 (Z181352) A157942	BRWN GRVL SAND FILL 0004 BRWN SAND ROCK 0012 BRWN SILT SAND 0020
YORK BOROUGH	17 623814 4838794 W	2012-04 6032	2 2 2			MO	0030 100035 10	7185171 (Z131710) A106829	BRWN SAND FILL HARD 0030 BRWN SAND FILL HARD 0030 BRWN SAND FILL HARD 0035
YORK BOROUGH	17 624228 4839050 W	2012-06 7075	1.87			MO	0030 10	7184732 (Z144493) A105952	GREY TILL SAND LOOS 0012 BRWN TILL STNS SAND 0020 BRWN SILT SAND DNSE 0035 BRWN SAND FSND DNSE 0040
YORK BOROUGH	17 624224 4839068 W	2012-06 7075	1.12			MO	0030 10	7184733 (Z144492) A105952	BRWN FILL STNS SAND 0008 BRWN TILL STNS SOFT 0020 BRWN SILT SAND DNSE 0035 BRWN SAND FSND DNSE 0040
YORK BOROUGH	17 623760 4838844 W	2012-02 6032						7185116 (M01940) A116448 P	
YORK BOROUGH	17 623628 4839312 W	2012-06 7241	1.20			MT	0010 10	7185265 (Z150756) A109716	BLCK ---- 0000 BRWN SAND GRVL LOOS 0001 BRWN SILT CLAY DNSE 0008 BRWN SILT SAND DNSE 0020
YORK BOROUGH	17 624214 4839067 W	2013-11 7241	2			MT	0010 10	7213511 (Z181347) A155717	BRWN GRVL SAND FILL 0003 BRWN SAND ROCK 0012 BRWN SILT SAND 0020
YORK BOROUGH	17 623571 4838814 W	2014-01 1413	6.25	UT 0056 UT 0062 UT 0077	39/75/5/2:30	TH DE	0051 5 0057 5 0072 5	7219018 (Z180082) A144311	GREY CLAY STNS HARD 0020 GREY CLAY HARD 0034 BRWN SAND SILT 0052 GREY SAND SILT 0069 GREY CLAY SOFT 0071 GREY SAND 0077 GREY CLAY SOFT 0080
YORK BOROUGH	17 623833 4838928 W	2013-08 7230						7218623 (C25583) A151441 P	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623836 4838922 W	2013-11 7247	2	UT 0037	///:	MT	0065 5	7217590 (Z176683) A152953	BRWN SILT CLAY 0010 BRWN SILT CLAY DNSE 0030 GREY SAND SILT DNSE 0070
YORK BOROUGH	17 623819 4839275 W	2013-12 7241	0.75			MT	0009 10	7215096 (Z183008) A159163	BRWN SAND DRY 0003 GREY SAND CLAY 0011 GREY SILT SAND 0019
YORK BOROUGH	17 623721 4838895 W	2013-12 7472	2.04			MO	0030 10	7214563 (Z183805) A159925	BRWN FILL LOAM LOOS 0010 BRWN FSND SILT PCKD 0030 BRWN FSND PCKD 0040
YORK BOROUGH	17 623736 4838863 W	2013-12 7472	2.04			MO	0030 10	7214562 (Z183804) A159926	BRWN FILL LOAM LOOS 0010 BRWN FSND SILT PCKD 0030 BRWN FSND PCKD 0040
YORK BOROUGH	17 623547 4838587 W	2013-08 6964						7211339 (C21852) _MULTI_TAG P	
YORK BOROUGH	17 623757 4838861 W	7341						7213820 (M07455) A101197 P	
YORK BOROUGH	17 623892 4839289 W	2013-02 7241	2			MT		7198117 (Z165496) A117566	BRWN SAND SILT 0015 GREY SILT 0022
YORK BOROUGH	17 624164 4839029 W	2013-11 7241	2			MT	0010 10	7213510 (Z181353) A157828	BLCK 0000 BRWN SAND GRVL FILL 0003 BRWN SAND SILT LOOS 0010 GREY SAND SILT LOOS 0020
YORK BOROUGH	17 623690 4838762 W	2012-02 7075	2			MO	0060 5	7177915 (Z136070) A120180	BRWN FILL SAND GRVL 0010 BRWN SAND GRVL DNSE 0015 BRWN SILT GRVL CLAY 0040 BRWN SAND GRVL CLAY 0050 BRWN SAND SILT CLAY 0055 GREY SILT GRVL SAND 0060 GREY SAND SILT GRVL 0075
YORK BOROUGH	17 623562 4838792 W	2013-05 7215						7211402 (C22774) A145007 P	
YORK BOROUGH	17 623551 4838870 W	2012-03 7075	2			MO	0045 5	7183107 (Z122907) A127579	GREY SILT SAND GRVL 0015 GREY SILT GRVL SAND 0035 GREY SAND GRVL CLAY 0040 GREY SAND GRVL CLAY 0049 0164
YORK BOROUGH	17 623412 4838782 W	2013-08 6964						7211338 (C21853) _MULTI_TAG P	
YORK BOROUGH	17 623866 4839293 W	2013-02 7241	2			MT	0013 12	7198118 (Z165494) A117567	BRWN SAND SILT 0015 GREY SILT 0025
YORK BOROUGH	17 623767 4838892 W	2013-12 7472	2.04			MO	0040 10	7214561 (Z183803) A159927	BRWN FILL SAND LOOS 0010 BRWN FSND SILT PCKD 0040 BRWN FSND SILT PCKD 0050

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623845 4838781 W	2010-01 7147	1.25					7150712 (Z112266) A092955	GREY 0001 BLUE SAND 0012 BRWN SILT SAND 0019
YORK BOROUGH	17 624223 4839054 W	2011-10 7075	2			MO	0075 10	7177977 (Z136065) A120189	BRWN SAND GRVL SILT 0048 GREY SAND 0085
YORK BOROUGH	17 623864 4839279 W	2011-10 7241	2.04			MT	0020 5	7170710 (Z131024) A116619	BRWN FILL GRVL LOOS 0002 BRWN SILT CLAY DNSE 0015 GREY SILT CLAY DNSE 0020 GREY SILT CLAY WBRG 0025
YORK BOROUGH	17 623862 4839231 W	2011-10 7241	2			MT	0020 5	7170709 (Z134963) A118761	BLCK 0000 BRWN SAND GRVL LOOS 0002 GREY 0002 BRWN SILT SAND LOOS 0013 GREY SILT SAND LOOS 0025
YORK BOROUGH	17 623552 4838802 W	2010-10 7075	1.37			MT	0080 10	7156515 (Z110976) A045978	BLCK LOAM LOOS 0001 BRWN TILL SAND STNS 0020 BRWN SAND DNSE 0090
YORK BOROUGH	17 623739 4839112 W	2010-11 7215						7156213 (Z122216) A093039 A	
YORK BOROUGH	17 623634 4838819 W	2010-10 7075	2			OT		7154478 (Z110977) A105952	BLCK LOAM SOFT 0001 BRWN FILL STNS SOFT 0009 BRWN FILL SAND GRVL 0035 BRWN SAND DNSE 0135 GREY SAND SILT DNSE 0150
YORK BOROUGH	17 623864 4839279 W	2011-10 7241				MT		7170712 (Z131023) A120995	
YORK BOROUGH	17 623805 4838767 W	2010-08 7147	1.97	FR 0018				7150713 (Z112264) A092955	GREY 0001 BRWN SAND 0012 BRWN SILT SAND 0024
YORK BOROUGH	17 623416 4838753 W	2011-09 7472	2.13	UK 0039		MO	0079 10	7171141 (Z125953) A121872	BRWN SAND GRVL 0010 BRWN SILT CLAY 0020 GREY SAND CLAY 0046 GREY SILT SAND 0089
YORK BOROUGH	17 623845 4838770 W	2010-08 7147	1.97	FR 0010		MO		7150548 (M08105) A092955	BLCK ---- 0001 BRWN SAND FILL 0008 BRWN SILT SAND 0020
YORK BOROUGH	17 623736 4839130 W	2009-11 7147	1.97	FR 0005		NU MO		7135256 (M08654) A093039	BLCK ---- 0001 BRWN FILL 0001 BRWN SAND 0010 BRWN CLAY TILL 0018
YORK BOROUGH	17 623662 4839235 W	2008-11 7215	2			MO		7120232 (Z68013) A058910	BRWN SAND SAND 0035
YORK BOROUGH	17 623704 4839158 W	2006-07 6607	2.00	FR 0020			0015 10	6930586 (Z52289) A046445	BLUE SILT 0025

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623469 4838889 W	2006-04 7147	1.25	0009		NU	0003 10	6930099 (Z46131) A025122	BLCK 0001 BRWN FILL 0001 BRWN SAND SLTY FILL 0013
YORK BOROUGH	17 623806 4838935 W	2005-11 6607	2.00				0010 15	6929667 (Z40306) A034583	BRWN SAND GRVL 0004 BRWN SILT SAND 0012 GREY SAND SILT 0018 GREY SAND 0025
YORK BOROUGH	17 623860 4838856 W	2010-08 7215	2 6			TH	0003 34	7152560 (Z121718) A103161	FILL GRVL CLAY 0002 BRWN SAND DRY 0020 BRWN SAND CLAY WBRG 0037
YORK BOROUGH	17 623819 4839275 W	2011-11 7241	1.25			MT	0001 4	7174716 (Z142599) A123815	BRWN SILT CLAY DNSE 0007
YORK BOROUGH	17 623567 4838810 W	2011-09 7230						7178585 (M10809) A119556 P	
YORK BOROUGH	17 623571 4838814 W	2014-01 1413	6.25	UT 0050 UT 0065 UT 0083	39/75/10/3:	TH DE	0045 5 0060 5 0078 5	7219019 (Z180081) A144311	GREY CLAY STNS HARD 0033 BRWN SAND SILT 0050 GREY SAND SILT 0065 GREY CLAY SOFT 0070 GREY SAND CLAY LYRD 0084 GREY CLAY SAND LYRD 0097 GREY CLAY DNSE 0100
YORK BOROUGH	17 624295 4839112 W	2011-11 7075	2			MO	0067 10	7177974 (Z136040) A120236	BRWN CLAY SAND DNSE 0010 BRWN SAND SILT DNSE 0020 BRWN SAND GRVL PORS 0035 BRWN SAND GRVL DNSE 0045 BRWN SAND SILT DNSE 0075 GREY SILT SAND HARD 0080
YORK BOROUGH	17 624227 4839045 W	2014-05 1413	5	UT 0078		DE	0038 40	7223793 (Z180123) _NO_TAG	BRWN CLAY PCKD 0036 BRWN SAND FSND 0069 GREY CLAY SAND LYRD 0078
YORK BOROUGH	17 623606 4838727 W	2012-01 7075	2			MO	0071 5	7177914 (Z136067) A120183	BRWN FILL SAND GRVL 0010 BRWN GRVL SILT HARD 0011 BRWN SILT GRVL DNSE 0020 BRWN SILT GRVL DNSE 0045 GREY SAND GRVL DNSE 0082
YORK BOROUGH	17 623595 4838812 W	2012-02 7075	2			MO	0095 5	7177912 (Z136068) A127573	BRWN SAND GRVL CLAY 0010 GREY FILL SILT GRVL 0030 GREY SILT GRVL CLAY 0040 GREY SILT GRVL CLAY 0100 GREY CLAY SILT SAND 0115
YORK BOROUGH	17 623871 4839283 W	2011-10 7241	2.04			MT	0020 5	7170711 (Z131025) A116620	BRWN FILL GRVL LOOS 0002 BRWN SILT CLAY DNSE 0015 GREY SILT CLAY DNSE 0020 GREY SILT CLAY WBRG 0025
YORK BOROUGH	17 623666 4838823 W	2011-09 1507						7175199 (M02704) A093535 P	
YORK BOROUGH	17 623658 4838861 W	2012-03 7075	2			MO	0110 5	7183103 (Z122898) A127576	GREY SAND GRVL CLAY 0010 GREY SILT GRVL SAND 0035 BRWN SAND GRVL CLAY 0050 GREY SAND GRVL CLAY 0095 GREY SILT GRVL SAND 0115 0377
YORK BOROUGH	17 624233 4839044 W	2011-10 7075	2			MO	0065 10	7173189 (Z125650) A108851	BRWN SAND GRVL SLTY 0050 BRWN SAND CLAY SLTY 0055 GREY SAND CLAY SLTY 0110

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 624216 4839042 W	2011-11 5459	6				0085 10	7173078 (Z141191) A124616	BRWN SAND FILL SOFT 0020 BRWN SAND DNSE 0027 BRWN SAND SILT SOFT 0045 GREY SILT SAND SOFT 0095
YORK BOROUGH	17 623910 4838909 W	2011-08 6607						7173046 (M10379) A115318 P	
YORK BOROUGH	17 623514 4838778 W	2011-10 7075	2			MO	0105 10	7171541 (Z125648) A120196	BRWN SAND SLTY GRVL 0055 GREY SAND SLTY CLAY 0092 GREY CLAY SLTY SAND 0132
YORK BOROUGH	17 623979 4838937 W	2011-10 7075	2			MO	0070 20	7171535 (Z136020) A120200	BRWN SILT CLAY DRY 0020 BRWN SILT SAND GRVL 0050 GREY SAND SILT 0078 GREY SILT SNDY 0085 GREY SILT SAND 0090
YORK BOROUGH	17 623699 4838844 W	2011-09 7472	2.13	UK 0039		MO	0108 10	7171142 (Z125954) A121873	BRWN SAND LOAM 0005 GREY SAND GRVL 0049 GREY SAND SILT 0118
YORK BOROUGH	17 623754 4838848 W	2012-02 7075	2			MO	0065 5	7177911 (Z136069) A120207	BRWN SAND GRVL SILT 0010 BRWN GRVL SAND LOOS 0015 BRWN SILT GRVL DNSE 0040 BRWN SILT GRVL DNSE 0070 GREY GRVL SILT SAND 0075 GREY SILT GRVL DNSE 0082
YORK BOROUGH	17 624239 4839022 W	2015-10 6875	3.94	UT 0046		DE		7253875 (Z200182) A118562 A	
YORK BOROUGH	17 623657 4838807 W	2013-11 7341	4.30			DE	0022 2	7223744 (Z182234) A101181	BRWN SILT CLAY LOOS 0006 GREY SILT SAND LOOS 0009 GREY CLAY DNSE 0024
YORK BOROUGH	17 624227 4839045 W	2014-05 1413						7258072 (Z227309)	
YORK BOROUGH	17 624242 4839041 W	2014-05 1413						7258071 (Z227310)	
YORK BOROUGH	17 624226 4839037 W	2015-10 6875						7258030 (Z226750)	
YORK BOROUGH	17 624240 4839033 W	2015-11 6875						7258029 (Z226751)	
YORK BOROUGH	17 624236 4839040 W	2015-10 6875						7258028 (Z226749)	
YORK BOROUGH	17 623867 4838920 W	2016-02 7201	2			MO	0050 10	7258782 (Z223291) A	
YORK BOROUGH	17 623840 4839215 W	2014-02 7215						7255817 (C24746) A155208 P	
YORK BOROUGH	17 623882 4838905 W	2016-02 7201	2			MO	0130 10	7258783 (Z223289) A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 624228 4839029 W	2015-09 6875	3.94	UT 0046		DE		7253874 (Z200184) A118625 A	
YORK BOROUGH	17 624243 4839024 W	2015-09 6875	3.94	UT 0046		DE		7253873 (Z200183) A118562 A	
YORK BOROUGH	17 624232 4839020 W	2015-09 6875	4.92	UT 0046		DE		7253872 (Z200161) A118642 A	
YORK BOROUGH	17 624238 4839040 W	2015-10 6875	4.92	UT 0046		DE		7253871 (Z200162) A	
YORK BOROUGH	17 624240 4839033 W	2015-11 6875	3.94	UT 0046		MO		7253870 (Z200068) A	
YORK BOROUGH	17 624226 4839037 W	2015-10 6875	12.5	UT 0014				7253869 (Z200070) A	
YORK BOROUGH	17 623827 4838927 W	2015-07 7247	2	UT 0045		MT	0065 5	7255962 (Z214048) A174020	BRWN SILT SNDY FILL 0005 BRWN SILT SAND CLAY 0025 GREY SAND SLTY CLAY 0070
YORK BOROUGH	17 623788 4838915 W	2015-12 7464						7262452 (Z220912) A164027 A	
YORK BOROUGH	17 623388 4839357 W	2017-06 7241	2			TH MO	0012 10	7291307 (Z261151) A208777	BRWN CLAY SILT 0010 GREY CLAY SILT 0022
YORK BOROUGH	17 623399 4839367 W	2017-06 7241	1.25			TH MO	0013 10	7291305 (Z261154) A208773	GREY CMTD HARD 0000 BRWN FILL LOOS 0002 BRWN CLAY SAND LOOS 0008 GREY CLAY HARD 0015 GREY SILT SAND HARD 0023
YORK BOROUGH	17 623786 4838904 W	2016-11 7247	2	UT 0045		TH MO	0060 10	7287939 (Z254698) A202310	BRWN FILL SAND DNSE 0016 BRWN SAND SILT DNSE 0070
YORK BOROUGH	17 624238 4839055 W	2016-11 7215						7285804 (C36088) A218484 P	
YORK BOROUGH	17 623839 4838924 W	2016-11 7464						7281177 (C35055) A208239 P	
YORK BOROUGH	17 624038 4838759 W	2016-06 7091						7268824 (Z238893) A	
YORK BOROUGH	17 624234 4839044 W	2014-05 1413						7258073 (Z227311)	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623664 4838806 W	2016-03 7238	2			MO	0155 10	7263145 (Z229353) A185394	BRWN SILT SAND FILL 0035 GREY SILT SAND 0080 GREY CLAY SILT 0165
YORK BOROUGH	17 623966 4838939 W	2015-11 6875	5			DE		7253866 (Z226763) A118559 A	
YORK BOROUGH	17 623796 4838901 W	2015-12 7464						7262451 (Z220913) A164026 A	
YORK BOROUGH	17 623452 4838733 W	2016-03 7464	1.97			MO	0013 10	7262447 (Z220986) A192013	SAND 0010 SAND 0023
YORK BOROUGH	17 623466 4838759 W	2016-03 7464	1.97			MO	0013 10	7262446 (Z220988) A203888	SAND 0010 SAND 0023
YORK BOROUGH	17 623442 4838755 W	2016-03 7464	1.97			MO	0013 10	7262445 (Z220987) A203889	SAND 0010 SAND 0023
YORK BOROUGH	17 623804 4838904 W	2016-03 7201						7261286 (Z223261) A	
YORK BOROUGH	17 623811 4838908 W	2016-03 7201						7261284 (Z223262) A	
YORK BOROUGH	17 623800 4838920 W	2016-04 7247	2	UT 0035		MT	0035 10	7266056 (Z226676) A199721	BRWN SAND GRVL SILT 0002 BRWN SAND CLAY GRVL 0015 BRWN SAND SILT GRVL 0020 BRWN SAND SILT CLAY 0033 BRWN SAND GRVL DNSE 0045
YORK BOROUGH	17 623805 4838904 W	2014-06 7320	2	UT 0038		MT	0034 10	7226179 (Z187414) A164026	BRWN SAND FILL 0005 BRWN SAND 0035 BRWN SILT SAND 0045
YORK BOROUGH	17 623567 4838811 W	2012-04 6032						7231483 (C02954) A116448 P	
YORK BOROUGH	17 623836 4838918 W	2012-03 7147						7231420 (C12940) A107239 P	
YORK BOROUGH	17 623571 4838814 W	2014-05 6875				DE		7230786 (Z189463) A144311 A	
YORK BOROUGH	17 624257 4839027 W	2014-06 6875	5	UT 0038	//15/:	DE	0042 36	7230785 (Z189451) A186412	GREY HARD 0002 BRWN CLAY STNS 0033 BRWN SAND PCKD 0065 GREY CLAY LYRD 0128
YORK BOROUGH	17 623564 4838815 W	2014-05 6875				DE		7230783 (Z189454) A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 624235 4839018 W	2014-06 6875	5	UT 0038	//10/:	DE	0042 36	7230779 (Z189450) A118562	GREY HARD 0003 BRWN CLAY STNS 0035 BRWN SAND PCKD 0068 GREY CLAY LYRD HARD 0078
YORK BOROUGH	17 623966 4838942 W	2015-11 6875	5			DE		7253868 (Z226760) A118644 A	
YORK BOROUGH	17 623905 4838906 W	2014-06 7320	2	UT 0038		MT	0034 10	7226180 (Z187413) A164027	BRWN SAND FILL 0005 BRWN SAND 0035 BRWN SILT SAND 0045
YORK BOROUGH	17 623726 4838885 W	2014-12 7215						7238354 (C27949) P	
YORK BOROUGH	17 624177 4839013 W	2014-08 7201	2			MO		7225867 (Z187581) A	
YORK BOROUGH	17 624242 4839041 W	2014-05 1413	4	UT 0078		DE	0038 400038 40	7223805 (Z180122) _NO_TAG	BRWN CLAY PCKD 0035 BRWN SAND MSND 0068 GREY CLAY SAND LYRD 0078
YORK BOROUGH	17 624234 4839044 W	2014-05 1413	5	UT 0068		DE	0037 40	7223803 (Z180107) _NO_TAG	GREY HARD 0003 BRWN CLAY HARD 0035 BRWN SAND PCKD 0068 GREY CLAY LYRD 0078
YORK BOROUGH	17 623382 4839367 W	2017-06 7241	2			TH MO	0012 10	7291308 (Z261152) A208778	BRWN SILT CLAY 0010 GREY SILT CLAY 0020 BRWN SAND 0022
YORK BOROUGH	17 623700 4838827 W	2013-11 7341	4.30		///:	DE	0018 2	7223745 (Z1822334) A101195	BRWN CLAY SILT LOOS 0006 GREY SILT SAND LOOS 0009 GREY CLAY DNSE 0019
YORK BOROUGH	17 623582 4838804 W	2014-03 1663	5 5	UT		DE	0052 41	7220015 (Z185825) A146977	BRWN FILL 0030 GREY SAND CLAY SLTY 0073 GREY SAND SLTY 0078 GREY SAND CLAY LYRD 0093
YORK BOROUGH	17 623757 4838861 W	7341						7228273 (M07476) A101197 P	
YORK BOROUGH	17 623966 4838939 W	2015-07 6875	5	UT 0049		DE	0080 5 0035 45	7246646 (Z200142) A118559	GREY HARD 0005 GREY SILT SAND DNSE 0043 BRWN SAND SILT SOFT 0085
YORK BOROUGH	17 623575 4838826 W	2014-03 1663	5 5 8	UT		DE	0052 38	7220014 (Z185824) A146976	BRWN FILL 0035 GREY SAND CLAY SLTY 0073 GREY SAND SLTY 0078 GREY SAND CLAY LYRD 0093
YORK BOROUGH	17 623975 4838941 W	2015-11 6875	5			DE		7253865 (Z226762) A118560 A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623970 4838943 W	2015-11 6875	12.6			DE		7253773 (Z226769) A118553 A	
YORK BOROUGH	17 623970 4838943 W	2015-11 6875	5			DE		7253772 (Z226767) A118553 A	
YORK BOROUGH	17 623907 4838560 W	2015-08 7241	0.79			MT	0033 33	7248623 (Z216535) A186318	BRWN FILL GRVL LOOS 0007 BRWN SAND SILT DNSE 0033 GREY SAND SILT DNSE 0066
YORK BOROUGH	17 623916 4838499 W	2015-08 7241	0.79			MT	0026 33	7248622 (Z216534) A186319	BRWN FILL GRVL LOOS 0007 BRWN SAND SILT DNSE 0033 GREY SAND SILT DNSE 0059
YORK BOROUGH	17 623958 4838721 W	6875	5			DE	0055 51	7235124 (Z200232) A118553	GREY CLAY FSND HARD 0015 GREY SAND SLTY CLAY 0040 GREY CLAY FSND HARD 0070 BRWN SAND SLTY SOFT 0080 GREY CLAY FSND HARD 0090 BRWN SAND SOFT 0106
YORK BOROUGH	17 623975 4838941 W	2015-07 6875	5	UT 0049		DE	0035 450080 5	7246647 (Z200141) A118560	GREY HARD 0005 GREY SILT SAND DNSE 0043 BRWN SAND SILT SOFT 0085
YORK BOROUGH	17 623722 4838904 W	2014-10 7201	2			MO	0055 5	7236625 (Z196708) A170061	BRWN FILL GRVL 0010 BRWN TILL 0030 SAND SILT WBRG 0055
YORK BOROUGH	17 623964 4838989 W	2015-06 7437	2	0016		MO	0010 10	7244458 (Z202124) A183933	BLCK 0004 BRWN SAND SLTY FILL 0005 BRWN SILT SNDY TILL 0020
YORK BOROUGH	17 623980 4838946 W	2015-06 6875	5	UT 0059		DE	0035 50	7244371 (Z200131) A118645	GREY HARD 0005 GREY SILT SAND DNSE 0043 BRWN SAND SILT SOFT 0085
YORK BOROUGH	17 623966 4838942 W	2015-06 6875	5	UT 0059		DE	0035 50	7244370 (Z200130) A118644	GREY HARD 0005 GREY SILT SAND DNSE 0043 BRWN SAND SILT SOFT 0085
YORK BOROUGH	17 624239 4839030 W	2015-05 6875	3.94	UT 0046		DE	0052 20	7242616 (Z200180) A118562	GREY SILT SAND CLAY 0020 GREY SAND SILT CLAY 0072
YORK BOROUGH	17 624209 4839004 W	2015-05 6875	3.94	UT 0046		DE	0052 20	7242615 (Z200181) A118625	GREY SILT SAND CLAY 0020 GREY SAND SILT CLAY 0072
YORK BOROUGH	17 623947 4838452 W	2015-03 7215						7241094 (C27826) A178693 P	
YORK BOROUGH	17 623980 4838946 W	2015-11 6875	5			DE		7253867 (Z226761) A118645 A	

TOWNSHIP CON LOT	UTM	DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
YORK BOROUGH	17 623928 4838506 W	2015-08 7241	0.79			MT	0033 33	7248621 (Z216533) A188724	BRWN FILL GRVL LOOS 0007 BRWN SAND SILT DNSE 0033 GREY SAND SILT DNSE 0066

Notes:
UTM: UTM in Zone, Easting, Northing and Datum is NAD83; L: UTM estimated from Centroid of Lot; W: UTM not from Lot Centroid
DATE CNTR: Date Work Completedand Well Contractor Licence Number
CASING DIA: .Casing diameter in inches
WATER: Unit of Depth in Fee. See Table 4 for Meaning of Code

PUMP TEST: Static Water Level in Feet / Water Level After Pumping in Feet / Pump Test Rate in GPM / Pump Test Duration in Hour : Minutes
WELL USE: See Table 3 for Meaning of Code
SCREEN: Screen Depth and Length in feet
WELL: WEL (AUDIT #) Well Tag . A: Abandonment; P: Partial Data Entry Only
FORMATION: See Table 1 and 2 for Meaning of Code

1. Core Material and Descriptive terms

Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
BLDR	BOULDERS	FCRD	FRACTURED	IRFM	IRON FORMATION	PORS	POROUS	SOFT	SOFT
BSLT	BASALT	FGRD	FINE-GRAINED	LIMY	LIMY	PRDG	PREVIOUSLY DUG	SPST	SOAPSTONE
CGRD	COARSE-GRAINED	FGVL	FINE GRAVEL	LMSN	LIMESTONE	PRDR	PREV. DRILLED	STKY	STICKY
CGVL	COARSE GRAVEL	FILL	FILL	LOAM	TOPSOIL	QRTZ	QUARTZITE	STNS	STONES
CHRT	CHERT	FLDS	FELDSPAR	LOOS	LOOSE	QSND	QUICKSAND	STNY	STONEY
CLAY	CLAY	FLNT	FLINT	LTCL	LIGHT-COLOURED	QTZ	QUARTZ	THIK	THICK
CLN	CLEAN	FOSS	FOSILIFEROUS	LYRD	LAYERED	ROCK	ROCK	THIN	THIN
CLYY	CLAYEY	FSND	FINE SAND	MARL	MARL	SAND	SAND	TILL	TILL
CMTD	CEMENTED	GNIS	GNEISS	MGRD	MEDIUM-GRAINED	SHLE	SHALE	UNKN	UNKNOWN TYPE
CONG	CONGLOMERATE	GRNT	GRANITE	MGVL	MEDIUM GRAVEL	SHLY	SHALY	VERY	VERY
CRYS	CRYSTALLINE	GRSN	GREENSTONE	MRBL	MARBLE	SHRP	SHARP	WBRG	WATER-BEARING
CSND	COARSE SAND	GRVL	GRAVEL	MSND	MEDIUM SAND	SHST	SCHIST	WDFR	WOOD FRAGMENTS
DKCL	DARK-COLOURED	GRWK	GREYWACKE	MUCK	MUCK	SILT	SILT	WTHD	WEATHERED
DLMT	DOLOMITE	GVLY	GRAVELLY	OBDN	OVERBURDEN	SLTE	SLATE		
DNSE	DENSE	GYPS	GYPSUM	PCKD	PACKED	SLTY	SILTY		
DRTY	DIRTY	HARD	HARD	PEAT	PEAT	SNDS	SANDSTONE		
DRY	DRY	HPAN	HARDPAN	PGVL	PEA GRAVEL	SNDY	SANDYOAPSTONE		

2. Core Color

Code	Description
WHIT	WHITE
GREY	GREY
BLUE	BLUE
GREN	GREEN
YLLW	YELLOW
BRWN	BROWN
RED	RED
BLCK	BLACK
BLGY	BLUE-GREY

3. Well Use

Code	Description	Code	Description
DO	Domestic	OT	Other
ST	Livestock	TH	Test Hole
IR	Irrigation	DE	Dewatering
IN	Industrial	MO	Monitoring
CO	Commercial	MT	Monitoring TestHole
MN	Municipal		
PS	Public		
AC	Cooling And A/C		
NU	Not Used		

4. Water Detail

Code	Description	Code	Description
FR	Fresh	GS	Gas
SA	Salty	IR	Iron
SU	Sulphur		
MN	Mineral		
UK	Unknown		