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A REPORT TO
HALTON HILLS ONE LIMITED PARTNERSHIP

A HYDROGEOLOGICAL ASSESSMENT FOR PROPOSED COMMERCIAL/INDUSTRIAL DEVELOPMENT

9094 REGIONAL ROAD 25
TOWN OF HALTON HILLS

REFERENCE NO. 2507-W174

APRIL 2, 2026
REV 2

DISTRIBUTION

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TABLE OF CONTENTS

TABLES:

DRAWINGS:

APPENDICES:

ISSUES AND REVISIONS REGISTRY

SEL Reference No.	Report Description	Date	Description of Issued and/or Revision
2507-W174	Draft	October 31, 2025	Draft Report
2507-W174	Final	October 31, 2025	Final Report
2507-W174	Final REV 1	November 24, 2025	Final Report including groundwater and surface water quality assessments
2507-W174	Draft REV 2	April 1, 2026	Revised draft report based on the most recent site plan drawing
2507-W174	Final REV 2	April 2, 2026	Final report based on the most recent site plan drawing

1.0 EXECUTIVE SUMMARY

Soil Engineers Ltd. (SEL) was retained by Halton Hills One Limited Partnership to conduct a hydrogeological assessment for proposed commercial/industrial development at 9094 Regional Road 25, in the Town of Halton Hills (the Subject Site).

The Subject Site is located northwest of the intersection of 5th Side Road and Regional Road 25 in the Town of Halton Hills. The Subject Site is bounded by an agricultural land to the north, Regional Road 25 and industrial properties to the east, residential properties, 5th Side Road, and industrial properties to the south, and wooded areas and agricultural land to the west.

The Subject Site is currently occupied by a driving range, a farm field and several structures, sheds and associated paved driveway with access to Regional Road 25 and 5th Side Road. Additionally, a record of a watercourse is mapped within the central and southwestern portions of the Subject Site.

The Site Plan prepared by Turner Fleischer, dated March 31, 2026 indicates that the eastern portion (Phase 1) of the proposed development will include the construction of eight (8) slab-on-grade buildings and will be provided with municipal services and paved roadways meeting urban standards. Details of the proposed development or the western portion of the Subject Site are not available for review at the time of preparation of the current report. Once the development plans for the west portion of the Subject Site (Future Employment Area - Phase 2) are available, the hydrogeological assessment report should be updated.

The current investigation revealed that:

- The subsoil investigation has revealed that beneath the pavement structure, topsoil and/or a layer of earth fill, the Subject Site is mainly underlain by strata of silty clay till, sandy silt, and sand/silty sand to a maximum termination depth of investigation of 9.6 mbgs.
- The finding of the groundwater monitoring program indicates that shallow groundwater level elevation ranged from the EL. 218.0 masl to 225.2 masl at BH/MWs 103 and 3 during the groundwater monitoring program, respectively.
- Groundwater seepage is not anticipated for the construction of the proposed slab-on-grade buildings. The short-term construction dewatering flow rate for the construction of the footing of the proposed slab-on-grade buildings that is expected during storm event could reach up to 15,700.0 L/day, 5,000.0 L/day, 7,000.0 L/day, 7,800.0 L/day, 5,700.0 L/day, 7,200.0 L/day, 2,600.0 L/day, and 2,600.0 L/day for Buildings A to H, respectively.
- Since the range of the anticipated preliminary short-term construction dewatering flow that is expected during the storm event only remains below the MECP EASR threshold limit of 50,000.0 L/day for the construction of the proposed slab-on-grade buildings, an EASR filing with the MECP will not be required.

- The results of analysis for the unfiltered groundwater samples collected from BH/MW 8 indicate the groundwater quality meets the Halton Region Sanitary/Combined and Storm Sewer Use By-Laws.
- The results of analysis for the unfiltered surface water samples collected from the creek located at the west portion of the Subject Site indicate that the concentration of total iron and total phosphorus exceeded the applicable standards when compared against the Provincial Water Quality Objectives (PWQO) standards.
- The proposed excavation and construction will be completed above shallow groundwater table. As such, no ZOI and associated ground settlement are anticipated.
- The proposed development will be constructed above shallow groundwater table. As such, no short-term construction dewatering from the groundwater source is expected, and no significant impacts to the natural features is anticipated. However, there is a wetland located within the footprint of Building A, which is understood to be relocated.
- A review of the MECP well records confirmed that there are fifty-seven (57) records for water supply wells including thirteen (13) records that are registered within 500 m of the Subject Site. As no short-term construction dewatering from the groundwater source is expected, no significant impacts to the potential groundwater users are anticipated if the wells exist and in service.

2.0 INTRODUCTION

2.1 Site Location and Project Description

Soil Engineers Ltd. (SEL) was retained by Halton Hills One Limited Partnership to conduct a hydrogeological assessment for proposed commercial/industrial development at 9094 Regional Road 25, in the Town of Halton Hills (the Subject Site). The Subject Site is located northwest of the intersection of 5th Side Road and Regional Road 25 in the Town of Halton Hills. The Subject Site is bounded by an agricultural land to the north, Regional Road 25 and industrial properties to the east, residential properties, 5th Side Road, and industrial properties to the south, and wooded areas and agricultural land to the west. The location of the Subject Site is shown on **Drawing 1**.

The Subject Site is currently occupied by a driving range, a farm field and several structures, sheds and associated paved driveway with access to Regional Road 25 and 5th Side Road. Additionally, a record of watercourse is mapped within the central and southwestern portions of the Subject Site.

The Site Plan prepared by Turner Fleischer, dated March 31, 2026 indicates that the eastern portion (Phase 1) of the proposed development will include the construction of eight (8) slab-on-grade buildings and will be provided with municipal services and paved roadways meeting urban standards. Details of the proposed development or the western portion of the Subject Site are not available for review at the time of preparation of the current report. Once the development plans for the west portion of the Subject Site (Future Employment Area - Phase 2) are available, the hydrogeological assessment report should be updated.

2.2 Project Objectives

The current hydrogeological assessment report presents the regional and local setting of the Subject Site. The findings of the fieldwork, including subsoil investigation, groundwater level monitoring, groundwater quality assessment, surface water quality assessment, and hydraulic conductivity testing are presented in the report. Potential needs for short-term dewatering and long-term foundation drainage control are assessed, and hydrogeological impacts of the proposed development to the nearby groundwater receptors including water supply wells, natural heritage features, and structures are assessed (if applicable). This report provides comments on potential needs for mitigating the potential impacts of the proposed development to the groundwater receptors, and structures. Comments and recommendations are provided on any needs for applying for a Permit to Take Water (PTTW), or posting Environmental Activity and Sector Registry (EASR) with the Ministry of the Environment, Conservation and Parks (MECP).

2.3 Scope of Work

The scope of work for the hydrogeological assessment is summarized below:

- *Background Review:* Available background geological and hydrogeological information for the Subject Site including topographic mapping, surface geological, natural heritage features databases, Town of Halton Hills official plans, Conservation Halton (CH) regulated area plans, and MECP water well records were reviewed.
- *Fieldwork:* Fieldwork includes inspecting the Subject Site and surrounding properties with respect to the natural features, groundwater receptors, and structures, as well as installing and developing the monitoring wells. Additionally, groundwater levels within the installed monitoring wells were monitored over five (5) monitoring events, in-situ hydraulic conductivity testing was completed within the installed monitoring wells. One (1) set of groundwater samples and one (1) set of surface water samples were collected and submitted to a CALA laboratory to characterize groundwater and surface water quality in comparison with the Halton Region Sanitary/Combined and Storm Sewer Use By-Law (By-Law No. BL_2_03) and Provincial Water Quality Objectives (PWQO) parameters, respectively. Furthermore, piezometers and additional monitoring wells have been installed in the vicinity of the four (4) wetlands located at the Subject Site. The additional monitoring wells and piezometers were monitored over two (2) monitoring events and the monitoring program is ongoing. Additional piezometers will also be installed within the four (4) wetlands located at the Subject Site, as per the information provided by Crozier.
- *Short-Term Dewatering and Long-Term Drainage Flow Rate:* Based on a review of the available design drawings, findings of the current subsurface investigation, and recommendations provided in the geotechnical investigation report (if applicable), short-term dewatering flow rates including groundwater seepage, and anticipated water that should be collected over potential storm events were calculated. Potential need for a mitigation plan was discussed to mitigate potential short-term dewatering impacts to the nearby groundwater receptors (including natural heritage features and water supply wells), and structures, if applicable.
- *Long-term foundation Drainage Control Requirement:* Based on a review of the available design drawings, findings of the current subsurface investigation, and recommendations provided in the geotechnical investigation report (if available), total long-term foundation drainage flow rate including groundwater seepage, and anticipated flow from infiltration source was estimated.
- *Permit Requirements:* Considering the estimated short-term construction dewatering and long-term foundation drainage flow rates, recommendations were provided on any need for applying for a PTTW or posting on the EASR with the MECP, and the Halton Region, if required.

3.0 APPLICABLE REGULATIONS AND OFFICIAL PLANS

The regulations and policies are relevant to this hydrogeological assessment and the location of the Subject Site within the official plans are summarized below.

3.1 Conservation Halton (CH) Policies and Regulation (O. Reg. 41/24)

Under Section 28 of the Conservation Authorities Act, local conservation authorities are mandated to protect the health and integrity of the regional greenspace system, and to maintain or improve the hydrological and ecological functions performed by valley and stream corridors. The CH, through its regulatory mandate, is responsible for issuing permits under O. Reg. 41/24, Development, Interference with Wetlands and Alterations to Shorelines and Watercourses for development proposal or Site alteration work to shorelines and watercourses within the regulated areas.

CH Regulated Area online mapping was reviewed on October 20, 2025. It is our understanding that the Subject Site is partially located within CH Regulated Area (O. Reg. 41/24). As such, it is anticipated that obtaining a permit from the CH under O. Reg. 41/24 will be required for the proposed development.

3.2 Clean Water Act

The MECP mandates the protection of existing and future sources of drinking water under the Clean Water Act, 2006 (CWA). Initiatives under the CWA include the delineation of Wellhead Protection Areas (WHPAs), significant groundwater recharge areas (SGRAs) and Highly Vulnerable Aquifers (HVAs) as well as the assessment of drinking water quality and quantity threats within Source Protection Regions. Source Protection Plans are developed under the CWA and include the restriction and prohibition of certain types of activities and land uses within WHPAs.

Based on a regional-scale source water protection mapping (Source Water Protection Information Atlas) provided by the MECP updated on March 31, 2026, the Subject Site is not located within, a Significant Groundwater Recharge Area, an Issue Contributing Area, Intake Protection Zone, Event Based Area, or Wellhead Protection Areas Q1 and Q2, but is partially located within a Highly Vulnerable Aquifer with a score of 6.

3.3 Town of Halton Hills Official Plan

The Town of Halton Hills Official Plan sets up policies that deal with legislative and administrative concerns, guides physical growth, and addresses social, economic, and environmental concerns. The Official Plan provides land use planning designations and identifies areas of environmental significance where more stringent policies may apply for development applications.

Town of Halton Hills Official Plan maps were reviewed for the current study with the results summarized below:

- Schedule A1 (Land Use Plan) – A review of the map, dated April 30, 2024, indicates that the Subject Site is located within an area designated as an Agricultural Area and within a Special Policy Area.
- Appendix X1A (Environment Natural Areas) – A review of the map, dated April 30, 2024, indicates that there is a Woodland located at the west portion of the Subject Site.
- Appendix X1B (Environment Water Resources Areas) – A review of the map, dated April 30, 2024, indicates that there is a Watercourse/Drainage Feature at the west portion of the Subject Site.

4.0 METHODOLOGY

4.1 Borehole Advancement and Monitoring Well Installation

Drilling boreholes and construction of monitoring wells were conducted for the hydrogeological investigations by SEL between August 25 and 29, 2025 and piezometers and additional monitoring wells were constructed by SEL between January 27and 29, 2026. The first program consisted of the drilling of fifteen (15) boreholes (BH) and the installation of eight (8) monitoring wells (BH/MW) for geotechnical investigation and hydrogeological assessment purposes within the footprint of the proposed development of the Subject Site. The second program consisted of the drilling of four (4) BHs, the installation of four (4) BH/MWs, and the installation of eight (8) piezometers (PZs) for hydrogeological assessment purposes within the footprint of the proposed development of the Subject Site. The locations of the boreholes, monitoring wells, and piezometers are shown on **Drawing 2**, along with the wetland features as per the information provided by Crozier, dated March 30, 2026. Furthermore, additional piezometers will be installed within the four (4) wetlands located at the Subject Site, as per the information provided by Crozier..

Borehole drilling and monitoring well construction were completed by a licensed water well contractor, under the full-time supervision of SEL's geotechnical supervisor who logged the soil strata encountered during borehole advancement and collected representative soil samples for textural classification. The boreholes were drilled using a track-mounted drill rig equipped with continuous flight, solid-stem augers. Detailed descriptions of the encountered subsoil and groundwater conditions as well as a grain size distribution graph are provided by SEL and presented on the borehole and monitoring well logs, in the enclosed **Appendix A**.

The monitoring wells were constructed using 50-mm diameter Trilock pipes and 1.5 or 3.0 m long 10-slot well screens, which were installed in each of the boreholes. Seven (7) of the eight (8) monitoring wells were equipped with monument protective casings and one (1) monitoring well was equipped with a flush mount casing.

The UTM coordinates and ground surface elevations at the monitoring wells' locations, as well as the monitoring well construction details, are presented in **Table 4-1**. The ground surface elevations and horizontal coordinates at the monitoring well locations were determined at the time of the investigation, using a handheld Global Navigation Satellite System survey equipment (Trimble TSC3) which has an accuracy of ±0.05 m.

Table 4-1- Monitoring Well and Piezometer Installation Details

Monitoring Well ID	Installation Date	UTM Coordinates (m)		Ground El. (masl)	Screen Interval (mbgs)	Soil in the Screen Interval	Casing Dia. (mm)	Protective Casing Type
		Easting	Northing					
BH/MW 1	August 29, 2025	586832	4821509	234.5	4.6-6.1	Sand	50	Monument
BH/MW 3	August 26, 2025	586605	4821419	226.0	3.1-6.1	Silt	50	Monument
BH/MW 5	August 25, 2025	586405	4821176	225.1	3.1-6.1	Silty Clay Till	50	Monument
BH/MW 7	August 25, 2025	586616	4821152	221.5	4.6-6.1	Silt/Silty Clay Till	50	Monument
BH/MW 8	August 29, 2025	586677	4821054	223.8	3.1-6.1	Silty Clay Till	50	Monument
BH/MW 11	August 28, 2025	586906	4821181	228.6	4.6-6.1	Silt	50	Flush mount
BH/MW 12	August 29, 2025	586810	4821302	226.0	5.1-6.6	Silt	50	Monument
BH/MW 14	August 26, 2025	586771	4821678	238.7	4.6-6.1	Sand	50	Monument
BH/MW 101*	January 27, 2026	586829	4821591	234.0	3.1-4.6	Silt/Sand	50	Monument
BH/MW 102	January 28, 2026	586739	4821381	224.5	3.1-4.6	Silt	50	Monument
BH/MW 103	January 28, 2026	586530	4821110	221.7	3.1-4.6	Silty Clay Till	50	Monument
BH/MW 104	January 29, 2026	586677	4820965	222.7	3.1-4.6	Silty Clay Till	50	Monument
PZ-1D*	January 27, 2026	586835	4821594	232.8	1.2–1.5	Silt	35	Monument
PZ-1S*	January 27, 2026	586835	4821593	232.9	0.7–1.0	Earth Fill/Silt	35	Monument
PZ-2D	January 28, 2026	586742	4821380	224.6	1.2–1.5	Silty Clay Till	35	Monument
PZ-2S	January 28, 2026	586741	4821379	224.6	0.7–1.0	Silty Clay Till	35	Monument
PZ-3D	January 28, 2026	586527	4821112	221.6	1.2–1.5	Silty Clay Till	35	Monument
PZ-3S	January 28, 2026	586528	4821112	221.6	0.7–1.0	Silty Clay Till	35	Monument
PZ-4D	January 29, 2026	586678	4820958	222.3	1.2–1.5	Silty Clay Till	35	Monument
PZ-4S	January 29, 2026	586678	4820959	222.3	0.7–1.0	Silty Clay Till	35	Monument

Notes:
mbgs metres below ground surface
masl metres above sea level
S: Shallow Piezometer
D: Deep Piezometer
* The elevation difference between BH/MW 101 and PZs-1D/S is due to an approximately 1 m change in topography between the BH/MW and PZ locations at the Subject Site.

4.2 MECP Water Well Records Review

MECP Water Well Records (WWRs) were reviewed for the registered wells located within 500 m radius of the Subject Site (Study Area). The water well records indicate that one-hundred and eleven (111) wells are located within the 500 m zone of influence Study Area relative to the Subject Site. The findings of the MECP well records are summarized in the **Section 5.6** of the current report.

4.3 Groundwater and Surface Water Monitoring

The eight (8) monitoring wells installed in August 2025 and the four (4) monitoring wells installed in January 2026were utilized to measure and monitor groundwater levels. Additionally, the eight (8) piezometers installed in January 2026 were utilized to measure and monitor surface water levels. Monitoring wells were developed, and the groundwater monitoring program confirmed the stabilized groundwater level beneath the Subject Site. The stabilized groundwater levels were manually measured over five (5) monitoring events between September 10 to October 7, 2025 and between February 10 to March 10, 2026. The surface water levels were manually measured over two (2) monitoring events between February 10 to March 10, 2026. The results of the groundwater and surface water levels are presented in **Section 7.1**.

4.4 In-Situ Hydraulic Conductivity Test

SEL has conducted in-situ hydraulic conductivity tests (falling head and rising head) at four (4) BH/MWs.

The in-situ hydraulic conductivity test (falling head and rising head) provides estimated hydraulic conductivity (K) for subsoil strata at the depths of the well screens. The monitoring wells were developed in advance of the tests. Well development involves the purging and removal of groundwater from each monitoring well to remove remnants of clay, silt and other debris introduced into the monitoring well during construction, and to induce the flow of formation groundwater through the well screens, thereby improving the transmissivity of the subsoil strata formation at the well screen depths.

The in-situ falling head hydraulic conductivity test involves the placement of a slug of known volume into the monitoring well, below the water table, to displace the groundwater level upward. The in-situ rising head hydraulic conductivity test involves removing a volume of water from the monitoring well to displace the groundwater level downward. The rate at which the water level recovers to static conditions (rising head/falling head) is tracked manually using a water level tape and a data logger. Slug tests in the monitoring wells with partially submerged screens may exabit double straight-line effect due to the filter pack drainage. Therefore, the data that represent the filter pack around the screen is eliminated during the interpretation of the slug test. The rate at which the water table recovers to static conditions is used to estimate the K value for the water-bearing strata formation at the well screen depth using the Bouwer and

Rice method (1976). The findings for the hydraulic conductivity testing are presented in **Section 7.3** of the current report.

4.5 Groundwater Quality Assessment

Groundwater quality assessment was completed by SEL on October 28, 2025. One (1) set of groundwater samples was collected from one (1) selected monitoring well (BH/MW 8) to characterize its quality for evaluation against the Halton Region Sanitary/Combined and Storm Sewer Use By-Law (By-Law Nos. BL_2_03) parameters. This is performed to assess whether any anticipated dewatering effluent or long-term foundation drainage flow can be disposed of into the Halton Region sanitary/combined and/or storm sewer system during construction. Based on the results, recommendations for any pre-treatment for any dewatering effluent or long-term foundation drainage flow can be developed, if required.

The sample analysis was performed by SGS Canada Inc. and the results of the analysis are discussed in **Section 7.4** of the current report.

4.6 Surface Water Quality Assessment

Surface water quality assessment was completed by SEL on October 28, 2025. One (1) set of surface water samples was collected from the creek located at the west portion of the Subject Site to characterize its quality for evaluation against the PWQO parameters.

The sample analysis was performed by SGS Canada Inc. and the results of the analysis are discussed in **Section 7.5** of the current report.

4.7 Review of Regional Data and Available Reports for the Subject Site

The maps, data, and documents provided by the MECP, Ontario Geological Survey (OGS), Ministry of Natural Resources (MNR), Oak Ridges Moraine Groundwater Program (ORMGP), and CH were reviewed with the findings summarized in **Sections 5** and **6**.

5.0 REGIONAL AND LOCAL SITE SETTING

5.1 Regional Geology

The current understanding of the surface geological setting of the Subject Site is based on scientific work conducted by the OGS (OGS, 2003). The majority of the Subject Site is located within an area mapped as Till (5d), comprising of clay to silt-textured till. The southwest portion of the Subject Site is located within an area mapped as Modern Alluvial Deposits (19), comprising of silt, sand, and gravel. **Drawing 3** illustrates the mapped surficial geology for the Subject Site and the surrounding area.

The Oak Ridges Moraine Groundwater Program (ORMGP) produced a cross-sectional geological map to aid in the characterization of the general area. Considering the regional cross-section, it is understood that the overburden units prevalent in this area are as follows, with the youngest unit at the top:

- *Undifferentiated Sediments:* Undifferentiated sediments present in ground surface, with an approximate thickness ranging from 0.4 m to 2.7 m.
- *Halton Till (Upper Till):* The Halton Till is mainly comprised of sandy silt to clayey silt till interbedded with silt, clay, and a number of discontinuous sand and gravel lenses. It was deposited approximately 12,500 years ago. Based on cross-section, the Halton Till or equivalent can be contacted beneath the undifferentiated sediments with an approximate thickness ranging from 0.5 m to 10.5 m.
- *Oak Ridges Moraine, Channel Silt Aquitard and Channel Sand Aquifer:* The Oak Ridges Moraine Aquifer Complex (ORAC) is a regionally significant aquifer in southern Ontario. It is primarily composed of interbedded fine sand and silt deposits with localized coarse sand and gravel deposits. The ORAC and channel silt aquitard have approximate thicknesses of 3.7 m and 14.7 m, respectively.
- *Lower Newmarket Till:* The Lower Newmarket Till is a regionally extensive till formation that acts as an aquitard separating the Oak Ridges Aquifer Complex (ORAC) from the underlying Thorncliffe Formation. Based on the ORMGP cross-section, Newmarket Till is mapped beneath the ORAC. The Lower Newmarket Till is also expected beneath the Subject Site, and it has an approximate thickness ranging from 4.9 m to 10.6 m.

The underlying bedrock at the Subject Site is the Queenston Formation, which consists of shale, siltstone, minor limestone, and sandstone (OGS, 2007). A review of the ORMGP cross-section indicates that the bedrock could be contacted at an approximate elevation between 199.7 and 204.7 metres above sea level (masl) beneath the Subject Site.

5.2 Regional Physiography

The Subject Site is located within regional physiography's of Southern Ontario known as South Slope. The South Slope within the vicinity of the Subject Site comprises of Drumlinized Till Plains. **Drawing 4** shows the location of the Subject Site within the regional physiography map.

5.3 Regional Topography and Drainage

A review of a regional topography map presented on **Drawing 5** indicates that the topography of the Subject Site exhibits a decline towards the southwest direction.

The ground surface elevation ranges approximately between 221.5 and 238.7 masl, based on ground surface elevations measured at the borehole and monitoring wells' locations at the Subject Site.

5.4 Watershed Setting

The Subject Site is located within the Sixteen Mile Creek watershed that falls in the Conservation Halton (CH) jurisdiction.

5.5 Local Surface Water and Natural Heritage Features

MNR database was reviewed for any natural heritage features including, watercourses, bodies of water, wetland features, Area of Natural and Scientific Interest (ANSI) and wooded areas. Details are presented below. **Drawing 6** shows the location of the Subject Site within the surrounding Natural Heritage Features as well as the wetland features as per the information provided by Crozier, dated March 30, 2026.

Record review indicates there are watercourses located at the central and west portions of the Subject Site flowing south/southeasterly direction. Furthermore, there is a record of a wooded area within the southwest portion of the Subject Site and a record of a not evaluated wetland feature as per Ontario Wetland Evaluation System (OWES) located approximately 1,000 m southwest of the Subject Site. Additionally, CH mapping identified that the southern portion of the Subject Site is located within a Wetland Hazard area.

The information provided by Crozier, dated March 30, 2026 indicates four (4) wetlands located at the west, south, central, and northeast portions of the Subject Site.

5.6 Ground Water Resources (MECP Well Records)

MECP well record database was reviewed for records located within a radius of 500 m from the approximate Subject Site (Study Area). The records indicate that one-hundred and eleven (111) well records

are located within the Study Area relative to the Subject Site boundaries. A summary of the final status of the records, obtained from the records review is presented in **Table 4-1**.

The locations of the well records, based on the UTM coordinates provided by the records, are shown on **Drawing 7**. Details of the MECP water well records that were reviewed are provided in **Appendix B**.

Table 5-1 - MECP Well Record Summary

Water Use- Final Status	Number of Records
Water Supply	57
Observation Wells	27
Unknown	10
Test Hole	7
Abandoned-Supply	7
Abandoned-Other	2
Other Status	1

The above summary indicates that there are fifty-seven (57) records of water supply wells in the Study Area. There are thirteen (13) records of water supply wells across the Subject Site (Record Nos. 5, 6, 7, 13, 19, 20, 22, 23, 35, 44, 59, 67, and 72 on **Drawing 7**).

5.7 Active Permit to Take Water Application Record Review

MECP website was reviewed for any active PTTW application records within 1.0 km radius of the Subject Site on March 30, 2026. Record review indicates there no active PTTW within 1 km radius of the Subject Site.

6.0 SOIL LITHOLOGY AND SUBSURFACE INVESTIGATION

The subsoil investigation has revealed that beneath the pavement structure, topsoil and/or a layer of earth fill, the Subject Site is mainly underlain by strata of silty clay till, sandy silt, and sand/silty sand. The investigation extended up to a maximum termination depth of investigation of 9.6 mbgs. Information regarding borehole logs and grain size distributions are presented in **Appendix A** on **Figures 1** to **24**. The approximate locations of boreholes are shown on **Drawing 2**. Additionally, a key plan and subsoil profile are presented on **Drawing 8-1**, **8-2A** and **8-2B**, respectively. Based on a review of the borehole logs, the stratigraphy beneath the investigated areas of the Subject Site generally consists of the followings:

6.1 Pavement Structure

BH/MW 11 is located on the paved driveway. The pavement structure consists of asphalt concrete with a thickness of 50 mm overlying a layer of 200 mm thick granular fill.

6.2 Topsoil

The investigation revealed that topsoil was contacted at all Boreholes with the exception of BH/MWs 11, 101, and 103. The topsoil thickness ranges from 5 cm to 20 cm.

6.3 Earth Fill

A layer of earth fill was encountered at BH/MWs 1,14, and 101, beneath the pavement structure or topsoil. The fill consists of sandy silt fine sand, and silty clay and extends to depths of 0.8 to 3.1 metres below ground surface (mbgs).

6.4 Silty Clay Till

The silty clay till was encountered at BH/MWs 1,14, 102, 103, and 104 and BH 10 beneath the pavement structure or topsoil layer. The silty clay till layer consists of a mixture of particle sizes ranging from clay to gravel, with silt and clay being the dominant fraction. Sample examination indicates that the till is sandy and contains a trace of gravel with occasional cobbles, boulders and shale fragments. The consistency of the till is firm to hard and the moisture contents for the retrieved subsoil samples indicate generally moist to wet conditions. Grain size analysis was performed on one (1) selected subsoil samples, and the gradation is plotted on **Appendix A** (**Figure 20)**.

6.5 Sandy Silt

The sandy silt was encountered at BH/MWs 3, 7, 11, 12, 14, 101, 102, and 104 and BHs 2, 4, and 10. Sample examination indicates that the silt is sandy and contains a trace of clay. The consistency of the silt is loose to very dense and the moisture contents for the retrieved subsoil samples indicate generally damp to wet conditions. Grain size analysis was performed on two (2) selected subsoil samples, and the gradation is plotted on **Appendix A** (**Figures 21** and **24)**.

6.6 Silty Sand and Sand

The silty sand deposit was encountered at BH/MW 14 and BHs 9, 10, and 13. The silty sand consist of some clay and variable amounts of sand. The silty sand is fine grained and silty, containing traces of clay and medium sand.

The fine to coarse sand was observed at the bottom of BH/MWs 1 5, and 101 and BH 15, and contained some silt and traces of clay and gravel. The consistency of the sand is loose to very dense and the moisture contents for the retrieved subsoil samples indicate generally damp to wet conditions. Grain size analyses were performed on three (3) subsoil samples, and the gradations are plotted in **Appendix A** (**Figures 22** and **23)**.

7.0 LOCAL HYDROGEOLOGICAL STUDY

7.1 Groundwater and Surface Water Monitoring

The groundwater levels in the monitoring wells were measured, manually between September 10 and October 7, 2025 and between February 10 to March 10, 2026 to record the fluctuation of the shallow groundwater table beneath the Subject Site. The surface water tables were manually measured over two (2) monitoring events between February 10 to March 10, 2026 in the installed piezometers.

Monitoring wells were developed and groundwater levels were monitored over five (5) monitoring events. SEL measured the groundwater levels in the monitoring wells and water tables in the piezometers using an interface probe (Heron Water Tape Series #1900). A summary of the groundwater and surface water observations and their corresponding elevations are provided in **Table 7-1**.

Table 7-1- A Summary of Groundwater and Surface Water Monitoring

MW ID	Unit	Groundwater Level				
		September 10, 2025	September 24, 2025	October 7, 2025	February 10, 2026	March 10, 2026
BH/MW 1	mbgs	Dry	Dry	Dry	Dry	Dry
	masl	Dry	Dry	Dry	Dry	Dry
BH/MW 3	mbgs	1.6	0.8	1.4	1.4	0.8
	masl	224.4	225.2	224.6	224.6	225.2
BH/MW 5	mbgs	1.0	0.8	0.9	0.9	0.7
	masl	224.1	224.3	224.2	224.2	224.4
BH/MW 7	mbgs	-0.8*	-0.8*	-0.8*	-0.8*	-0.8*
	masl	222.3	222.3	222.3	222.3	222.3
BH/MW 8	mbgs	0.1	0.0	0.1	0.0	-0.3*
	masl	223.7	223.8	223.7	223.8	224.1
BH/MW 11	mbgs	4.2	4.1	4.2	4.5	3.8
	masl	224.4	224.5	224.4	224.1	224.8
BH/MW 12	mbgs	1.3	1.3	1.3	1.5	1.2
	masl	224.7	224.7	224.7	224.5	224.8
BH/MW 14	mbgs	Dry	Dry	Dry	Dry	Dry
	masl	Dry	Dry	Dry	Dry	Dry
BH/MW 101	mbgs	-	-	-	Dry	Dry
	masl	-	-	-	Dry	Dry
BH/MW 102	mbgs	-	-	-	Frozen	Frozen
	masl	-	-	-	Frozen	Frozen
BH/MW 103	mbgs	-	-	-	3.7	1.8
	masl	-	-	-	218.0	219.9

MW ID	Unit	Groundwater Level				
		September 10, 2025	September 24, 2025	October 7, 2025	February 10, 2026	March 10, 2026
BH/MW 104	mbgs	-	-	-	2.2	1.3
	masl	-	-	-	220.5	221.4
PZ-1D	mbgs	-	-	-	Dry	1.7
	masl	-	-	-	Dry	231.1
PZ-1S	mbgs	-	-	-	Dry	0.5
	masl	-	-	-	Dry	232.4
PZ-2D	mbgs	-	-	-	0.9	0.4
	masl	-	-	-	223.7	224.2
PZ-2S	mbgs	-	-	-	Dry	Dry
	masl	-	-	-	Dry	Dry
PZ-3D	mbgs	-	-	-	Dry	0.9
	masl	-	-	-	Dry	220.7
PZ-3S	mbgs	-	-	-	Dry	Dry
	masl	-	-	-	Dry	Dry
PZ-4D	mbgs	-	-	-	Dry	0.4
	masl	-	-	-	Dry	221.9
PZ-4S	mbgs	-	-	-	Dry	Dry
	masl	-	-	-	Dry	Dry

Notes:
mbgs metres below ground surface
masl metres above sea level
*Groundwater table was recorded above the existing ground surface in the BH/MW
S: Shallow Piezometer
D: Deep Piezometer

The finding of the groundwater monitoring indicates that shallow groundwater level elevation ranged from the EL. 218.0 masl to 225.2 masl at BH/MW 103 and 3, respectively.

Three (3) unknown monitoring wells were also observed at the Subject Site. Since the details of the monitoring wells are not available, groundwater tables measured in theses monitoring wells are not presented in the current report.

A review of shallow groundwater table compared to the recorded water table in the nested piezometers generally indicates a downward vertical hydraulic gradient over the monitoring period.

7.2 Shallow Groundwater Flow Pattern

The shallow groundwater flow pattern at the Subject Site is shown on **Drawing 9**. The recorded groundwater level measured on March 10, 2026 was considered for interpretation of the shallow

groundwater direction beneath the Subject Site. A review of the interpreted shallow groundwater flow pattern indicates that shallow groundwater flows in a southwesterly direction.

7.3 Single Well Response Test

Four (4) BH/MWs underwent a single well response testing (SWRTs), to assess the hydraulic conductivity (K) for saturated shallow aquifer or water bearing unit at the depths of the well screens. BH/MWs 3, 8, 11, and 12 underwent SWRTs on September 24, 2025. There was not sufficient water in BH/MWs 1 and 14 to complete the SWRT. Each monitoring well was equipped with a digital transducer to record the fluctuation made to complete the SWRT. The results of the SWRT tests are presented in **Appendix C**, with a summary of the findings provided in **Table 7-2**.

Table 7-2- A Summary of In-Situ Hydraulic Conductivity Testing

Well ID	Ground El. (masl)	Monitoring Well Depth (mbgs)	Screen Interval (mbgs)	Screened Soil Strata	Hydraulic Conductivity (K) (m/sec)	Test Method
BH/MW 3	226.0	6.1	3.1-6.1	Silt	4.9×10^{-7}	Falling Head Test
BH/MW 8	223.8	6.1	3.1-6.1	Silty Clay Till	2.1×10^{-7}	Rising Head Test
BH/MW 11	228.6	6.1	4.6-6.1	Silt	3.1×10^{-7}	Falling Head Test
BH/MW 12	226.0	6.6	4.6-6.1	Silt	5.4×10^{-7}	Falling Head Test

Notes:
mbgs metres below ground surface
masl metres above sea level

The findings of SWRTs reveal that the hydraulic conductivity (K) for the water bearing units underneath the Subject Site ranges from 2.1×10^{-7} to 5.4×10^{-7} m/sec at BH/MWs 8 and 12, respectively.

7.4 Groundwater Quality

Groundwater quality assessment was completed by SEL on October 28, 2025. One (1) set of groundwater samples was collected from one (1) selected monitoring well (BH/MW 8) to characterize its quality for evaluation against Halton Region Sanitary/Combined and Storm Sewer Use By-Law (By-Law No. BL_2_03) parameters. Upon sampling, all of the bottles were placed in a cooler for shipment to the analytical laboratory. Sample analysis was performed by SGS Canada Inc., which is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA). Results of the analysis are provided in **Appendix D-I**, with a discussion of the findings provided below. The chain of custody number for the submitted samples that underwent analysis is 045853.

As per the protocols for the Halton Region Sewer Use analysis, a complete set of unfiltered groundwater samples were submitted to the laboratory with the results being presented as totals for various analyzed parameters.

The results of analysis for the unfiltered groundwater samples indicate the samples meet the Halton Region Sanitary/Combined and Storm Sewer Use By-Laws.

These results suggest that any short-term construction dewatering, or long-term foundation drainage discharge would be acceptable for disposal to the Halton Region sanitary/combined and storm sewer, without any significant pre-treatment.

The assessment above is provided solely for comparing groundwater quality against the limits set by the Halton Region Sewer Use By-Law Standards. Any discharge should adhere to the respective policies of the jurisdiction. The final design for any temporary or long-term construction dewatering effluent pre-treatment system is the responsibility of contractors responsible for construction, or the water treatment system design specialists, if required.

7.5 Surface Water Quality

Surface water quality assessment was completed by SEL on October 28, 2025. One (1) set of surface water samples was collected from the creek located at the west portion of the Subject Site to characterize its quality for evaluation against the Provincial Water Quality Objectives (PWQO) parameters. Upon sampling, all of the bottles were placed in a cooler for shipment to the analytical laboratory. Sample analysis was performed by SGS Canada Inc., which is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA). Results of the analysis are provided in **Appendix D-II**, with a discussion of the findings provided below. The chain of custody number for the submitted samples that underwent analysis is 045854.

As per the protocols for the PWQO analysis, a complete set of unfiltered surface water samples were submitted to the laboratory with the results being presented as totals for various analyzed parameters.

The results of analysis for the unfiltered surface water samples indicate two (2) exceedances when compared and evaluated against PWQO parameters. The exceedances are presented in **Table 7-3**.

Table 7-3- Surface Water Quality Exceedance Results (Unfiltered Samples)

Monitoring Well	Exceeded Parameter	Surface Water Quality Results (Unfiltered Sample) (mg/L)	PWQO Limits (mg/L)	Detection Limit (mg/L)
Creek at Subject Site	Total Iron	**1.26**	0.3	0.007
	Total Phosphorus	**0.085**	0.01	0.003

As shown above, the results indicate that the concentration for total iron and total phosphorus exceed the PWQO limits for the unfiltered samples.

8.0 DISCHARGE WATER CONTROL

8.1 A review of Proposed Development Plans

The Site Plan prepared by Turner Fleischer, dated March 31, 2026 indicates that Phase 1 of the proposed development will include the construction of eight (8) slab-on-grade buildings and will be provided with municipal services and paved roadways meeting urban standards. Details of the proposed Phase 2 development within the west portion of the Subject Site is not available for review at the time of preparation of the current report. Once the development plans for the west portion of the Subject Site (Future Employment Area - Phase 2) are available, the hydrogeological assessment report should be updated. **Appendix E** presents the reviewed plans.

8.2 Review of Geotechnical Report

A geotechnical investigation report, dated March 2026, (SEL Reference No. 2507-W174), was reviewed for the current assessment, with a summary of findings presented below:

- The existing earth fill, pavement structure and weathered soil are not suitable to support any structures sensitive to movement. In using the granular fill and weathered soil to support the structure, it should be subexcavated, sorted free of topsoil, organic or deleterious material, if any, and uniformly recompacted in layers.
- The native soils are weathered extending to depths of 0.6 to 1.3 m from the ground surface. It is weak and will consolidate under surcharge loads. To upgrade the weathered soils to engineered status suitable for normal footing construction, they must be subexcavated, sorted, aerated and properly compacted.
- The sound native soils and engineered fill are suitable for conventional spread and strip footing construction of the proposed structures, underground services, and road pavement.
- The proposed structures can be supported on conventional spread and strip footing founded on the native soils below the frost penetration depth. The foundation subgrade must be inspected by the geotechnical engineer or a senior geotechnical technician to ensure that the revealed conditions are compatible with the foundation design.
- Footings exposed to weathering or in unheated areas should have at least 1.2 m of earth cover for protection against frost action.
- Excavations should be carried out in accordance with Ontario Regulation 213/91.

8.3 Short-Term Construction Dewatering Needs

The Site Plan prepared by Turner Fleischer, dated March 31, 2026 indicates that Phase 1 of the proposed development will include the construction of eight (8) slab-on-grade buildings and will be provided with municipal services and paved roadways meeting urban standards.

The following sections present short-term dewatering flow rates estimated for the excavation and construction of the proposed slab-on-grade buildings.

8.3.1 Methodology

Short-Term Dewatering Calculation: The pumping rate calculation for the construction for the proposed development was performed based on the assumption with each excavation acting as trench considering the dimensions of the proposed excavation boxes. The calculation was based on the equations provided by Powers et al. (2007). For the purposes of this analysis, steady state flow into an open excavation is assumed. Additionally, the equations of radial flow have the following assumptions:

- Ideal aquifer conditions (homogeneous, isotropic, uniform thickness and has infinite areal extent)
- Fully penetrating pumping well
- Only lateral flow to the pumping well

The following equation was used for open trenches and is based on unconfined aquifer conditions (Powers et. al., 2007):

$$Q = \frac{\pi K(H^2 - h^2)}{\ln(R_0 / r_s)} + 2\left[\frac{xK(H^2 - h^2)}{2L}\right]$$

Where:

Q = Anticipated pumping Rate (m3/day)
K = Hydraulic Conductivity (m/day)
H = Distance from the static water level to the bottom of the saturated aquifer (m)
h = Depth of water in the well while pumping (m)
R_o = Distance from a point of greatest drawdown to a point where there is zero drawdown (radius of influence) (m)
r_s = Distance to the wellpoints from the centre of the trench, assumed to be half of the trench width (m) for Trench base calculation.
X = Trench Length (m)
L = Distance from a line source to the trench, Ro (m)/2

The calculated pumping rate was multiplied by a factor of safety of 2.0 to account for uncertainties and natural variability in the range of hydraulic conductivity.

Zone of Influence for Dewatering: An estimate of the Zone of Influence (ZOI) for dewatering in unconfined aquifers can be calculated using the following equation (Bear, 1979):

$$R_0 = 2.45\sqrt{\frac{HK}{S_y}}t$$

where,

R_o	=	Zone of Influence (m), beyond which there is negligible drawdown
H	=	Distance from initial static water level to bottom of saturated aquifer (m)
Sy	=	Specific yield of the aquifer formation
t	=	Time, in seconds, required to draw the static groundwater level to the desired level (assumed to be equivalent to 14 days)
K	=	Hydraulic Conductivity (m/s)

Stormwater flow Estimate: The amount of runoff that could accumulate in the excavation box was also considered for any construction dewatering needs assessment. Therefore, the dewatering flow rates at the Subject Site should also include removing stormwater from the excavation. Additionally, the anticipated flow through infiltration after storm event for the post-development site should be considered.

A review of intensity duration frequency curve (IDF curve) for the year 2010 for the coordinates 43° 32' 15" N, 79° 55' 45" W, the rainfall depth considering 2-year storm event over a 3-hour period per day is approximately 30.6 mm, and a 100-year storm event over a 12-hour period per day is 100.8 mm. The data was taken from the Ministry of Transportation's (MTO) website.

The accumulated runoff associated with rainfall events within the anticipated excavations for the proposed footings of the slab-on-grade buildings were calculated using the estimated rainfall depth multiplied by the estimated area of the proposed excavation for the construction of the footings of the proposed buildings.

8.3.2 Construction Dewatering Flow Rate Calculation

The proposed Phase 1 development comprises of the construction of eight (8) slab-on-grade buildings.

The geotechnical investigation report suggests that the slab-on-grade buildings are to be supported on conventional strip or spread footings founded on either engineered fill or sound native soils. Based on this recommendation, the dewatering flow calculations are performed assuming conventional footings for the house foundation.

The following short-term dewatering and long-term foundation drainage flow rates, are based on the groundwater tables measured in the installed monitoring wells at the Subject Site.

8.3.3 Short-Term Dewatering – Slab-on-Grade Buildings

Groundwater Seepage (Slab-on-Grade Buildings): The following sections present the estimated dewatering flow rates for the construction of the slab-on-grade buildings.

A review of the provided plans compared to the shallow groundwater table and assuming the proposed elevations of the underside of the footings to be 1.2 mbgs indicates that the proposed footings for the commercial/industrial buildings will be constructed above shallow groundwater table. As such, short-term construction dewatering from groundwater source is not expected. A review of the Site Plan compared to the ground surface elevations measured at BHs and BH/MWs locations indicates that the ground surface will be raised. Groundwater table at BH/MWs 7 and 8 was recorded at the existing ground level or above it during the monitoring program. However, the ground surface was reported dry during the monitoring events, indicating that the recorded high groundwater table in the monitoring wells is due to the lower pressure in the monitoring well. Furthermore, since the ground surface will be raised during the grading program, there is no concern with respect to the groundwater conditions within the footprint of the Future Employment Area.

The following are the assumptions and proposed development details for the short-term construction dewatering estimates:

- The proposed development will include construction of eight (8) slab-on-grade buildings.
- The shallow groundwater flow pattern map prepared based on the stabilized groundwater levels measured on March 10, 2026, was utilized for the assessment.
- The grading elevations were considered based on the Finished Floor Elevations (FFEs) indicated on the Site Plan, prepared by Turner Fleischer, dated March 31, 2026.
- The areas for the buildings were measured based on the Site Plan, prepared by Turner Fleischer, dated March 31, 2026. The measured areas were taken into consideration for the dewatering assessment. Based on the reviewed plan, the dimensions of the slab-on-grade buildings range in length from 21.4 m to 155.9 m and in width from 19.8 m to 99.6 m.
- The elevation of the underside of the footings for the slab-on-grade buildings were not available for review and were assumed to be at a depth of 1.2 mbgs for the slab-on-grade buildings as recommended by the geotechnical engineer.
- The storm event of 2 years -3 hr. was also considered to estimate the anticipated flow during storm event as a part of the short-term construction dewatering flow rate.

The summary of construction dewatering flow rates for the construction of the footings of the proposed commercial/industrial buildings that require dewatering and a summary of the calculations are presented in **Appendix E** (**Page 1**). **Table 8-1** below, indicates the estimated dewatering flow rates for the slab-on-grade buildings.

Table 8-1- Estimated Construction Dewatering Flow Rates – Slab-on-Grade Buildings

Building	Dimensions of Building (m)	Assumed Footing Elevation* (masl)	The Highest Interpreted Groundwater Contour (masl)	ZOI (m)	Groundwater Flow (L/day) without S.F.	Groundwater Flow (L/day) S. F. 2.0	Anticipated Storm Flow L/day (2-year 3 Hr)	Total Estimated Short-term Dewatering Flow Rates (Storm event and S.F. 2.0)
Building A	~ 155.9 x 99.6	229.30	225.0	NE	NE	NE	15,700.0	15,700.0
Building B	~ 46.9 x 34.1	227.80	224.5	NE	NE	NE	5,000.0	5,000.0
Building C	~ 67.3 x 47.1	227.80	225.0	NE	NE	NE	7,000.0	7,000.0
Building D	~ 106.8 x 19.8	226.80	224.0	NE	NE	NE	7,800.0	7,800.0
Building E	~ 73.2 x 19.8	226.80	224.5	NE	NE	NE	5,700.0	5,700.0
Building F	~ 97.6 x 19.8	227.30	224.8	NE	NE	NE	7,200.0	7,200.0
Building G	~ 21.4 x 20.0	226.30	224.0	NE	NE	NE	2,600.0	2,600.0
Building H	~ 21.4 x 19.8	227.30	224.8	NE	NE	NE	2,600.0	2,600.0

S.F.: Safety Factor NE: Not Expected
* Assumed 1.2 m below proposed grade

As no groundwater seepage is expected, the anticipated flow rates considering a 2-year storm event with a duration of 3 hr/day for active excavation area for the proposed slab-on-grade buildings can range from 2,600 L/day to 15,700.0 L/day.

Additionally, a potential 100-year storm event with a duration of 12 hours is expected to range from 8,400.0 L/day to 51,600.0 L/day for the proposed slab-on-grade buildings considering the active excavation area dimensions mentioned in the assumptions above.

Additionally, during the excavation and replacement of fill material in a couple of places within the footprint of the proposed buildings, perched water as well as stormwater from precipitation are expected that can be managed locally.

8.4 Long-Term Foundation Drainage

No long-term foundation drainage is expected as the proposed slab-on-grade buildings will be constructed above the shallow groundwater table.

8.5 Permit Requirements

Short -Term Construction Dewatering: As per the recent amendment to O.Reg. 63/16 that came into effect on July 1, 2025, EASR registration with the MECP will be required for water takings, including groundwater seepage and precipitation, of more than 50,000 L/day.

A review of the total estimated dewatering flow rates presented in **Table 8-1** and **Appendix E** (**Page 1**) indicates that total estimated dewatering flow rates during the construction of the footings of the proposed slab-on-grade buildings could reach up to 15,700.0 L/day, 5,000.0 L/day, 7,000.0 L/day, 7,800.0 L/day,

5,700.0 L/day, 7,200.0 L/day, 2,600.0 L/day, and 2,600.0 L/day (stormwater flow only) for Buildings A to H. As such, filing EASR with MECP is not required for the construction of the slab-on-grade buildings.

However, applying for a discharge permit with the Halton Region is required if the collected water during construction is proposed to be conveyed to the sewer system. Alternatively, the collected water can be hauled off-site hiring a licenced contractor.

Long-Term Foundation Drainage: No long-term foundation drainage is expected for the proposed slab-on-grade buildings. As such, applying for PTTW with the MECP or obtaining discharge permit from Halton Region are not required.

8.6 Potential Dewatering Impacts and Mitigation Plan

8.6.1 Short-Term Discharge Water Quality

The dewatering system must be appropriately filtered in order to prevent the pumping of fines and loss of ground during the dewatering activities.

A review of the groundwater quality test results suggests groundwater quality meets the Halton Region Sanitary/Combined and Storm Sewer Use By-Laws without significant pre-treatment. As such, any short-term construction dewatering discharge would be acceptable for disposal to the Halton Region sanitary/combined and storm sewer, without any significant pre-treatment. Alternatively, short-term dewatering effluent could be hauled and disposed off-site using a licenced contractor if the excavation and construction is completed over phases. These results suggest that

The assessment above is provided solely for comparing groundwater quality against the limits set by the Halton Region Sewer Use By-Law Standards. Any discharge should adhere to the respective policies of the jurisdiction. The final design for any temporary construction dewatering effluent pre-treatment system is the responsibility of contractors responsible for construction, or the water treatment system design specialists, if required.

8.6.2 Ground Settlement

Excavation and construction will be completed above shallow groundwater table. As such, no ZOI for dewatering and ground settlement are anticipated.

8.6.3 Surface Water, Wetlands and Areas of Natural Significance

The proposed development will be constructed above shallow groundwater table. As such, no short-term construction dewatering from the groundwater source is expected, and no significant impacts to the natural

features is anticipated. However, there is a wetland located within the footprint of Building A, which is understood to be relocated.

8.6.4 Water Supply Wells and Zone of Influence

A review of the MECP well records confirmed that there are fifty-seven (57) records for water supply wells including thirteen (13) records that are registered within 500 m of the Subject Site. As no short-term construction dewatering from the groundwater source is expected, no significant impacts to the potential groundwater users are anticipated if the wells exist and in service.

9.0 CONCLUSIONS AND RECOMMENDATIONS

- The Subject Site is located within regional physiography's of Southern Ontario known as South Slope. The South Slope within the vicinity of the Subject Site comprises of Drumlinized Till Plains.
- The majority of the Subject Site is located within an area mapped as Till (5d), comprising of clay to silt-textured till. The southwest portion of the Subject Site is located within an area mapped as Modern Alluvial Deposits (19), comprising of silt, sand, and gravel
- The Subject Site is located within the Sixteen Mile Creek watershed that falls in the Conservation Halton (CH) jurisdiction.
- The subsoil investigation has revealed that beneath the pavement structure, topsoil and/or a layer of earth fill, the Subject Site is mainly underlain by strata of silty clay till, sandy silt, and sand/silty sand to a maximum termination depth of investigation of 9.6 mbgs.
- The finding of the groundwater monitoring program indicates that shallow groundwater level elevation ranged from the EL. 218.0 masl to 225.2 masl at BH/MWs 103 and 3 during the groundwater monitoring program, respectively.
- Groundwater seepage is not anticipated for the construction of the proposed slab-on-grade buildings. The short-term construction dewatering flow rate for the construction of the footing of the proposed slab-on-grade buildings that is expected during storm event could reach up to 15,700.0 L/day, 5,000.0 L/day, 7,000.0 L/day, 7,800.0 L/day, 5,700.0 L/day, 7,200.0 L/day, 2,600.0 L/day, and 2,600.0 L/day for Buildings A to H, respectively.
- Since the range of the anticipated preliminary short-term construction dewatering flow that is expected during the storm event only remains below the MECP EASR threshold limit of 50,000.0 L/day for the construction of the proposed slab-on-grade buildings, an EASR filing with the MECP will not be required.
- The results of analysis for the unfiltered groundwater samples collected from BH/MW 8 indicate the groundwater quality meets the Halton Region Sanitary/Combined and Storm Sewer Use By-Laws.
- The results of analysis for the unfiltered surface water samples collected from the creek located at the west portion of the Subject Site indicate that the concentration of total iron and total phosphorus exceeded the applicable standards when compared against the Provincial Water Quality Objectives (PWQO) standards.
- The proposed excavation and construction will be completed above shallow groundwater table. As such, no ZOI and associated ground settlement are anticipated.

- The proposed development will be constructed above shallow groundwater table. As such, no short-term construction dewatering from the groundwater source is expected, and no significant impacts to the natural features is anticipated. However, there is a wetland located within the footprint of Building A, which is understood to be relocated.
- A review of the MECP well records confirmed that there are fifty-seven (57) records for water supply wells including thirteen (13) records that are registered within 500 m of the Subject Site. As no short-term construction dewatering from the groundwater source is expected, no significant impacts to the potential groundwater users are anticipated if the wells exist and in service.

10.0 CLOSURE

We trust that the above-noted information is suitable for your review. If you have any questions regarding this information, please do not hesitate to contact the undersigned.

Yours truly,
SOIL ENGINEERS LTD.

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DRAWINGS 1 to 9

REFERENCE NO. 2507-W174

585500 586000 586500 587000 587500 588000

4822000 4821500 4821000 4820500

MANSEWOOD COURT
PEDDIE ROAD
REGIONAL ROAD 25
SIDEROAD 5
DUBLIN LINE
ESCARPMENT WAY
HOLGATE CRES. CENT.
JAMES SNOW PARKWAY NORTH
Sixteen Mile Creek

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References: Ontario Ministry of Natural Resources and Forestry
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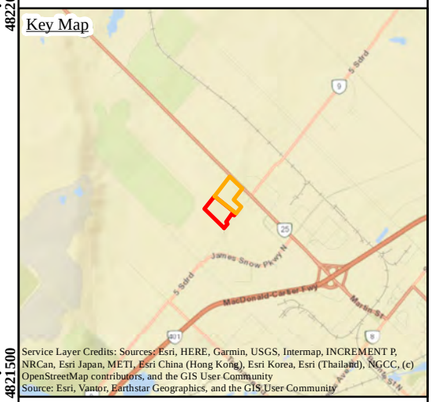
Key Map



Legend

- Phase One Approximate Boundary of Subject Site
- Phase Two Approximate Boundary of Subject Site
- Major Road
- Local Road
- Railway
- Waterbody
- Watercourse

Soil Engineers Ltd.

Site Location Plan

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: March 26, 2026

Scale:
0 45 90 180 270 360 450
Metres

Drawing No. 1

586500

587000

4821500

4821000

BH/MW 14
BH/MW 101
PZ-1D
PZ-1S
BH 15
BH/MW 1
BH 13
BH/MW 3
BH 2
BH/MW 102
PZ-2D
PZ-2S
BH 4
BH/MW 12
BH 6
BH 9
BH/MW 5
BH/MW 11
BH/MW 7
PZ-3S
BH/MW 103
PZ-3D
BH 10
BH/MW 8
BH/MW 104
PZ-4D
PZ-4S

MANSEWOOD COURT
PEDDIE ROAD
REGIONAL ROAD 25
SIDEROAD 5
ESCARPMENT WAY

D:\Projects\2507-W174\Updated\

N

References: Ontario Ministry of Natural Resources and Forestry
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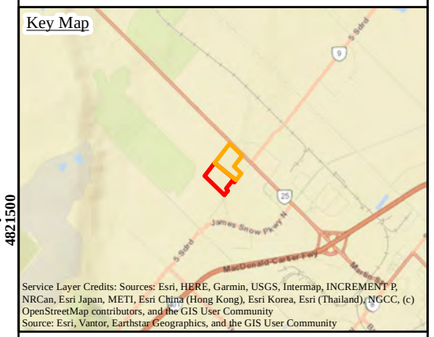
Key Map



Legend

- Phase One Approximate Boundary of Subject
- Phase Two Approximate Boundary of Subject

Natural Features from Crozier (March 30, 2026)

- Floodplain 15 m Buffer
- Floodplain Hazard
- Wetland (Staked with CH_ September 19_ 2025)
- Wetland Buffer 15 m
- Wetland Limit per ELC
- Major Road
- Local Road
- Watercourse
- Borehole 2025 (7)
- Borehole With Monitoring Well 2025 (8)
- Borehole with Monitoring Well 2026 (4)
- Piezometer (8)

Soil Engineers Ltd.

Borehole and Monitoring Well and Piezometer Location Plan

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

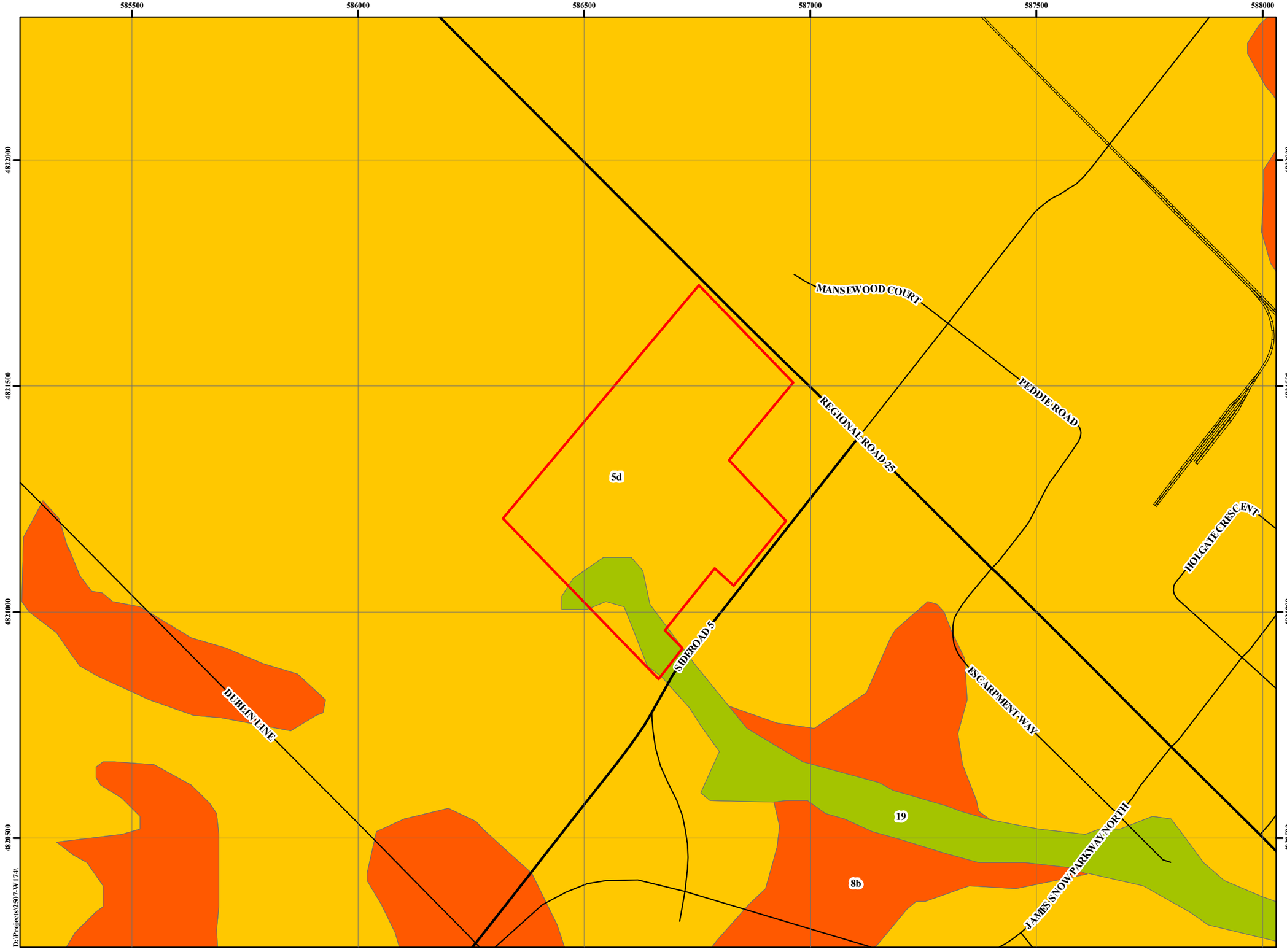
Reference No. 2507-W174

Date: April 01, 2026

Scale:

0 20 40 80 120 160 200
Metres

Drawing No. 2



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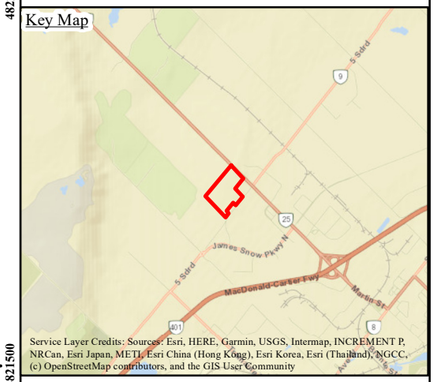
Key Map



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Legend

- Approximate Boundary of Subject Site
- Major Road
- Local Road
- Railway
- 19: Modern Alluvium: Consisting of clay, silt, sand, gravel: modern floodplain
- 5d: Halton Till: Consisting of diamicton:
- 8b: Glaciolacustrine Deposits: Consisting of clay, silt: foreshore/basinal

Soil Engineers Ltd.

Surface Geology Map

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: October, 21, 2025

Scale:

0 90 180 270 360 450

Metres

Drawing No. 3

585500 586000 586500 587000 587500 588000

4822000 4821500 4821000 4820500

MANSEWOOD COURT

PEDDIE ROAD

REGIONAL ROAD 25

SIDEROAD 5

DUBLIN LINE

HOLGATE CRESCENT

ESCARPMENT WAY

JAMES SNOW PARKWAY NORTH

South Slope

Till Plains
(Drumlinized)

Peel Plain

Bevelled
Till Plains

Till Moraines

Niagara
Escarpment

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Source: Chapman, L.J. and Putnam, D.F. 2007. Physiography of Southern Ontario;
Ontario Geological Survey, Miscellaneous Release--Data 228 ISBN 978-1-4249-5158-1

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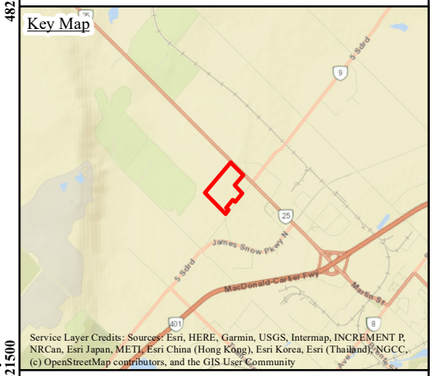
References: © Physiography Map was Produced by Soil Engineers Ltd. under license from the Ministry of North Development and Mines (MNDM). Copyright (c) is hold by the King's Printer for Ontario, 2025. Physiography of Southern Ontario, 2007, Ontario Geological Survey, Miscellaneous Release — Date 228.

Key Map



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Legend

- Approximate Boundary of Subject Site
- Major Road
- Local Road
- Railway
- Region Boundary
- Till Plains (Drumlinized)
- Bevelled Till Plains
- Till Moraines

Soil Engineers Ltd.

Physiographic Map

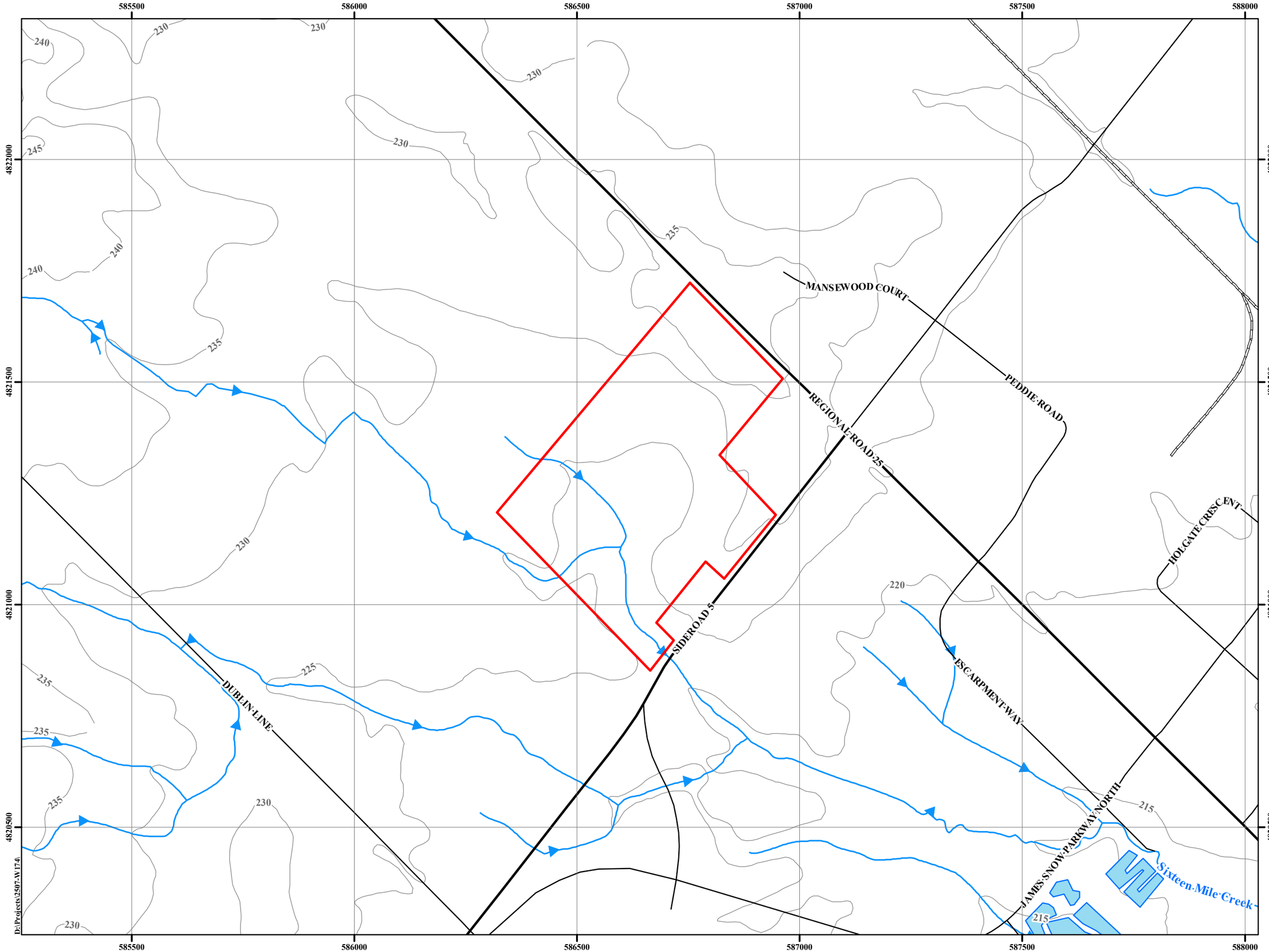
Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: October, 21, 2025

Scale:
0 45 90 180 270 360 450
Metres

Drawing No. 4



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References: Ontario Ministry of Natural Resources and Forestry
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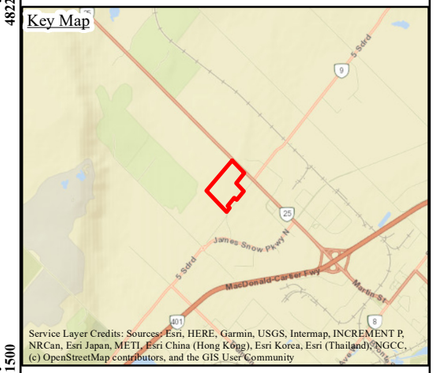
Key Map



Legend

- Approximate Boundary of Subject Site
- Major Road
- Local Road
- Railway
- Waterbody
- Watercourse
- Ontario - 5 m

Soil Engineers Ltd.

Topographic Map

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: October, 21, 2025

Scale:
0 45 90 180 270 360 450
Metres

Drawing No. 5

D:\Projects\2507-W174\

585500 586000 586500 587000 587500 588000

4822000 4821500 4821000 4820500

MANSEWOOD COURT
PEDDIE ROAD
REGIONAL ROAD 25
SIDEROAD 5
DUBLIN LINE
ESCARPMENT WAY
HOLGATE CRESCENT
JAMES SNOW PARKWAY NORTH
Sixteen Mile Creek

D:\Projects\2507-W174\Updated

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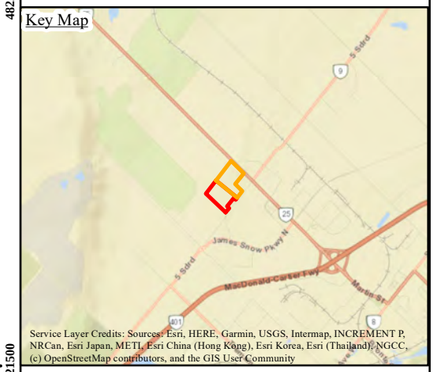
Key Map



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Legend

- Phase One Approximate Boundary of Subject Site
- Phase Two Approximate Boundary of Subject Site
- Major Road
- Local Road
- Railway
- Waterbody
- Watercourse

Natural Features from Crozier (March 30, 2026)

- Floodplain 15 m Buffer
- Floodplain Hazard
- Wetland (Staked with CH_ September 19_ 2025)
- Wetland Buffer 15 m
- Wetland Limit per ELC
- Wooded Area *Wooded Area*
- Wetland (Not evaluated per OWES)
- Niagara Escarpment (Protection Area)
- Niagara Escarpment (Mineral Resource Extraction Area)

Soil Engineers Ltd.

Natural Features and Protection Area Plan

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: March 27, 2026

Scale:
0 90 180 270 360 450
Metres

Drawing No. 6

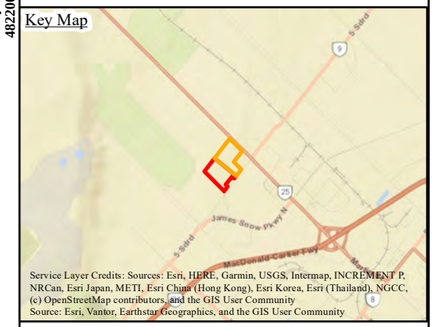
585500 586000 586500 587000 587500 588000

4822000 4821500 4821000 4820500

MANSEWOOD COURT
PEDDIE ROAD
REGIONAL ROAD 25
HOLGATE CRESCENT
ESCARPMENT WAY
CHUDLEIGH WAY
SIDEROAD 5
DUBLIN LINE
JAMES SNOW PARKWAY NORTH
Sixteen Mile Creek

N

Key Map



Legend

- 500 Metres From Subject Site Boundaries
- Phase One Approximate Boundary of Subject Site
- Phase Two Approximate Boundary of Subject Site
- Major Road
- Local Road
- Waterbody
- Watercourse
- Unknown (10)
- Abandoned-Other (2)
- Abandoned-Supply (7)
- Observation Wells (27)
- Other Status (1)
- Test Hole (7)
- Water Supply (57)

Soil Engineers Ltd.

MECP Well Location Plan

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: March 27, 2026

Scale:
0 45 90 180 270 360 450
Metres

Drawing No. 7

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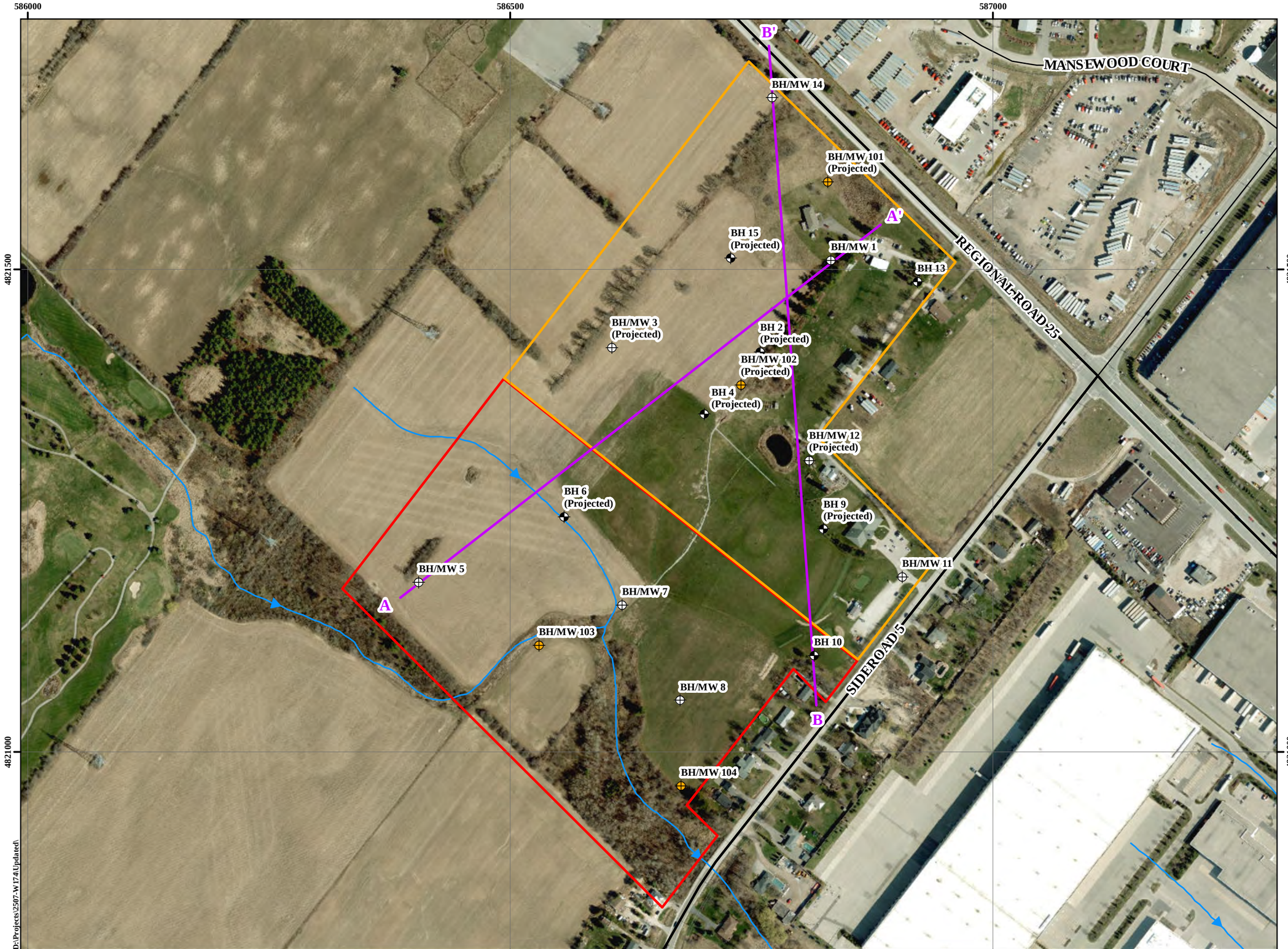

N

References: Ontario Ministry of Natural Resources and Forestry
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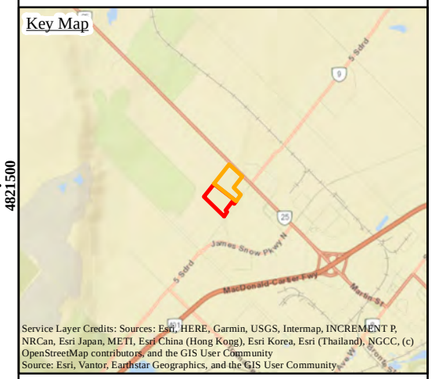
Key Map



Legend

- Phase One Approximate Boundary of Subject Site
- Phase Two Approximate Boundary of Subject Site
- Cross Section
- Major Road
- Local Road
- Watercourse
- Borehole 2025
- Borehole With Monitoring Well 2025
- Borehole with Monitoring Well 2026

Soil Engineers Ltd.

Subsurface Profile Cross-Section Key Plan

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: March 26, 2026

Scale:
0 20 40 80 120 160 200
Metres

Drawing No. 8-1

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GEOTECHNICAL | ENVIRONMENTAL | HYDROGEOLOGICAL | BUILDING SCIENCE

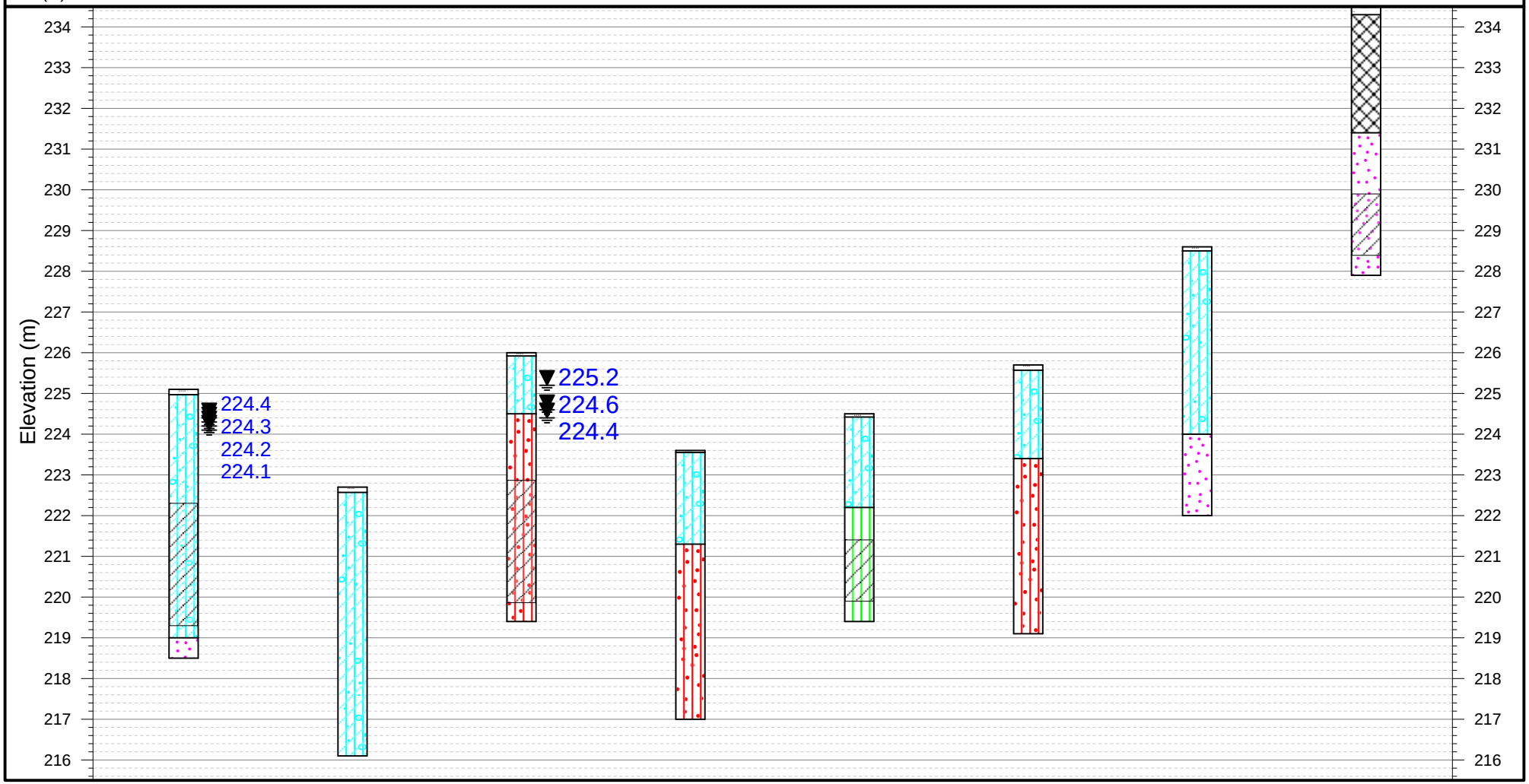
SUBSURFACE PROFILE
CROSS SECTION A-A'
DRAWING NO. 8-2A
SCALE: AS SHOWN

JOB NO.: 2507-W174
REPORT DATE: March 2026
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development
PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

LEGEND

FILL | SANDY SILT | SILTY CLAY TILL | TOPSOIL
SAND | SILT | SCREEN

WATER LEVEL (STABILIZED)



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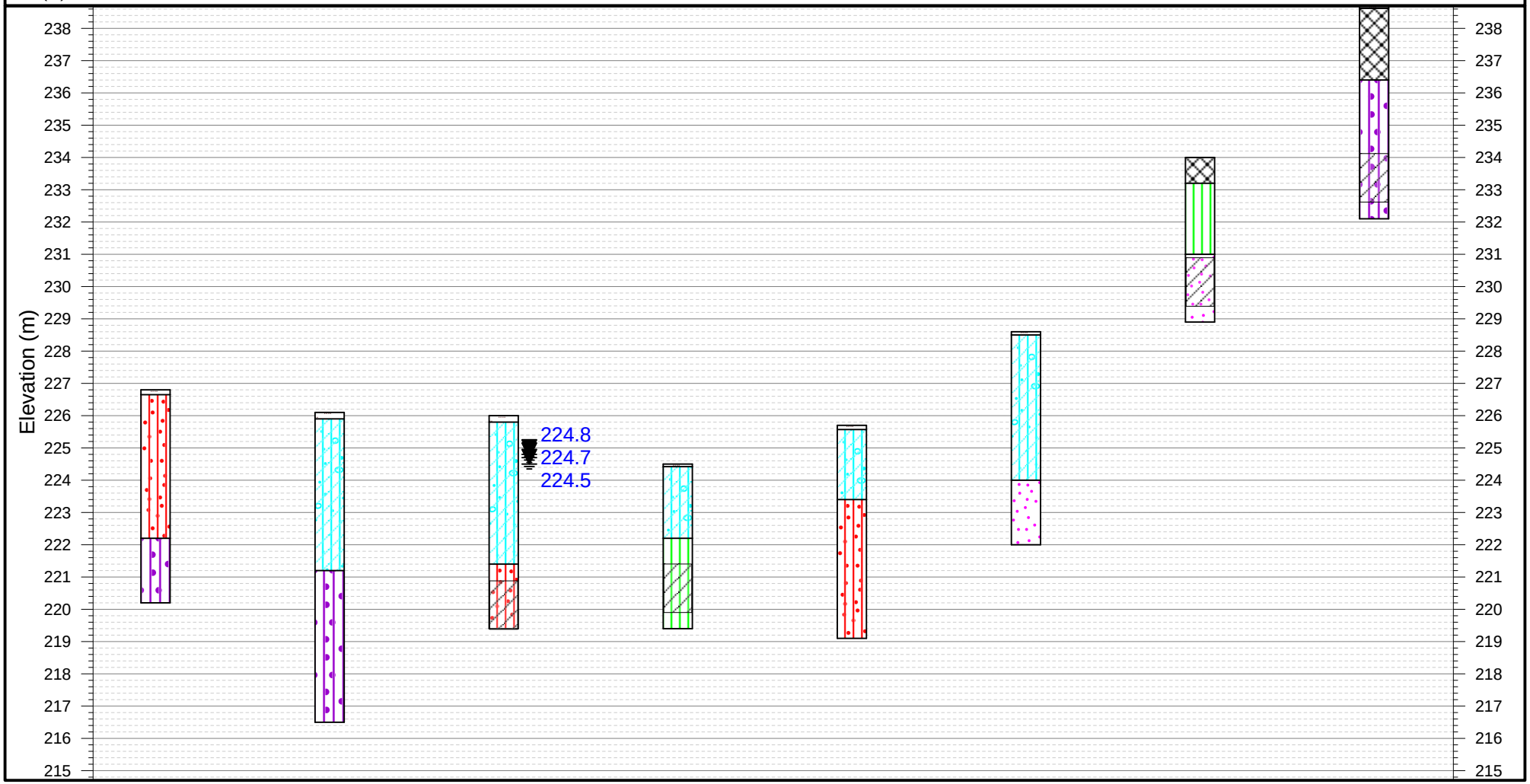
SUBSURFACE PROFILE
CROSS SECTION B-B'
DRAWING NO. 8-2B
SCALE: AS SHOWN

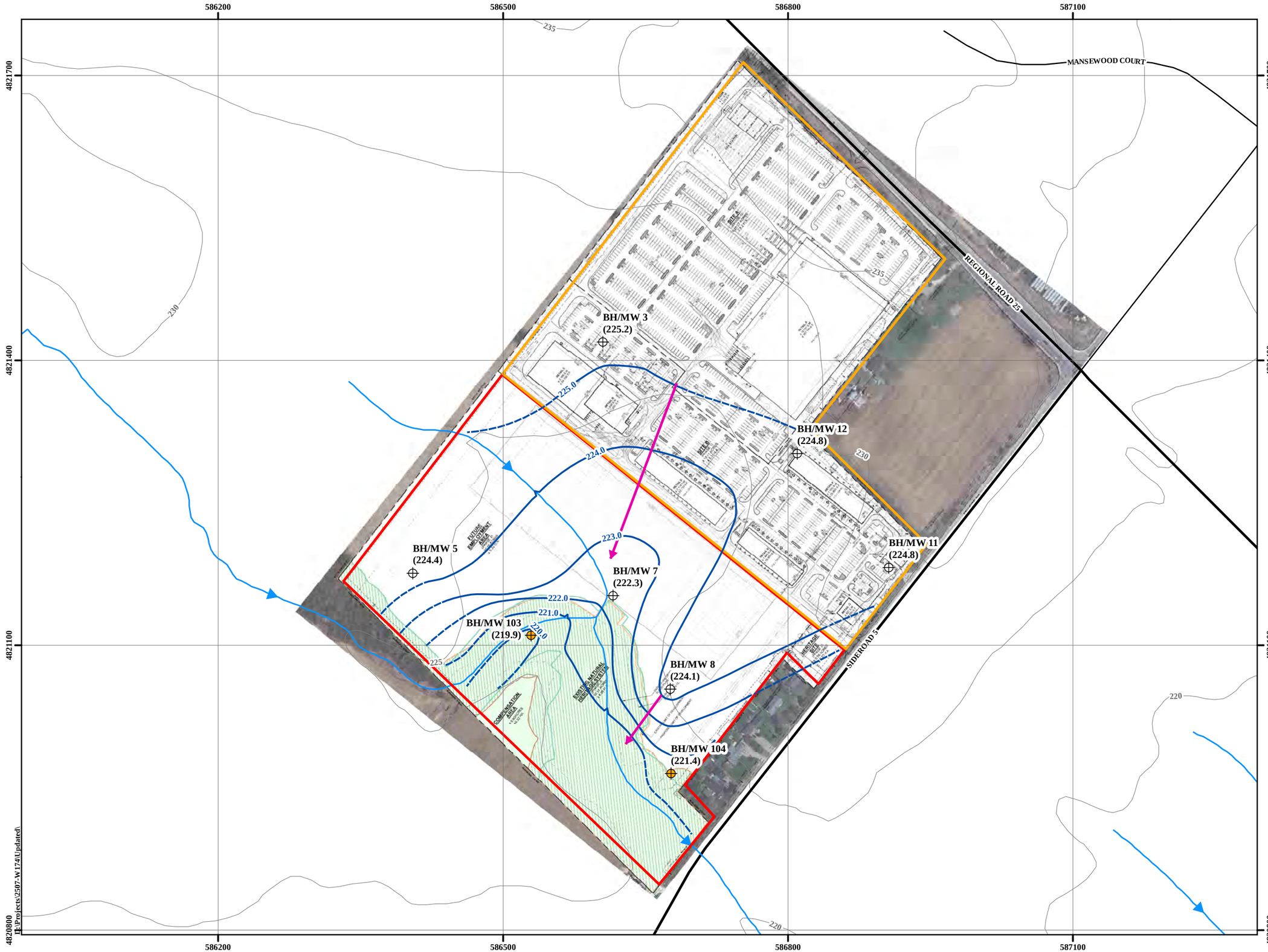
JOB NO.: 2507-W174
REPORT DATE: March 2026
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development
PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

LEGEND

FILL | SANDY SILT | SILTY CLAY TILL | TOPSOIL
SAND | SILT | SILTY SAND | SCREEN

WATER LEVEL (STABILIZED)





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References: Ontario Ministry of Natural Resources and Forestry
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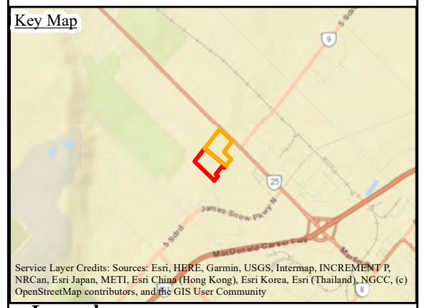
Key Map



Legend

- Phase One Approximate Boundary of Subject
- Phase Two Approximate Boundary of Subject
- Borehole With Monitoring Well 2025
- Borehole with Monitoring Well 2026
- Watercourse
- Major Road
- Local Road
- Ontario - 5 m
- Highest Interpreted Shallow Groundwater Elevation Contour
- Highest Inferred Shallow Groundwater Elevation Contour
- Interpreted Shallow Groundwater Flow Direction
- (225.2) Highest Shallow Groundwater Level Measured on March 10, 2026

Soil Engineers Ltd.

Shallow Groundwater Flow Pattern Plan

Hydrogeological Assessment
Proposed Commercial/Industrial Development
9094 Regional Road 25
Town of Halton Hills

Reference No. 2507-W174

Date: April 01, 2026

Scale:

0 20 40 80 120 160 200
Metres

Drawing No. 9

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90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 684-4242	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

APPENDIX 'A'

BOREHOLE LOGS/MONITORING WELL LOGS
AND
GRAIN SIZE DISTRIBUTION GRAPH

REFERENCE NO. 2507-W174

LIST OF ABBREVIATIONS AND DESCRIPTION OF TERMS

The abbreviations and terms commonly employed on the borehole logs and figures, and in the text of the report, are as follows:

SAMPLE TYPES

AS Auger sample
CS Chunk sample
DO Drive open (split spoon)
DS Denison type sample
FS Foil sample
RC Rock core (with size and percentage recovery)
ST Slotted tube
TO Thin-walled, open
TP Thin-walled, piston
WS Wash sample

PENETRATION RESISTANCE

Dynamic Cone Penetration Resistance:

A continuous profile showing the number of blows for each foot of penetration of a 2-inch diameter, 90° point cone driven by a 140-pound hammer falling 30 inches.

Plotted as '—●—'

Standard Penetration Resistance or 'N' Value:

The number of blows of a 140-pound hammer falling 30 inches required to advance a 2-inch O.D. drive open sampler one foot into undisturbed soil.

Plotted as '○'

WH Sampler advanced by static weight
PH Sampler advanced by hydraulic pressure
PM Sampler advanced by manual pressure
NP No penetration

SOIL DESCRIPTION

Cohesionless Soils:

'N' (blows/ft)	Relative Density
0 to 4	very loose
4 to 10	loose
10 to 30	compact
30 to 50	dense
over 50	very dense

Cohesive Soils:

Undrained Shear Strength (ksf)	'N' (blows/ft)	Consistency
less than 0.25	0 to 2	very soft
0.25 to 0.50	2 to 4	soft
0.50 to 1.0	4 to 8	firm
1.0 to 2.0	8 to 16	stiff
2.0 to 4.0	16 to 32	very stiff
over 4.0	over 32	hard

Method of Determination of Undrained Shear Strength of Cohesive Soils:

x 0.0 Field vane test in borehole; the number denotes the sensitivity to remoulding

△ Laboratory vane test

☐ Compression test in laboratory

For a saturated cohesive soil, the undrained shear strength is taken as one half of the undrained compressive strength

METRIC CONVERSION FACTORS

1 ft = 0.3048 metres
1lb = 0.454 kg
1 inch = 25.4 mm
1ksf = 47.88 kPa

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 1

FIGURE NO.: 1

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 29, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)
234.5 / 0.0	Ground Surface				
	20 cm TOPSOIL				0
	Brown **EARTH FILL** sandy silt and fine sand occ. gravels and cobbles	1	DO	5	
		2	DO	7	1
		3	DO	15	
		4	DO	48	2
231.4 / 3.1	Brown, dense to very dense **SAND** fine to coarse grained some silt, traces of clay and gravel	5	DO	34	3
		6	DO	34	4
227.9 / 6.6		7	DO	74	5
	END OF BOREHOLE				6
	Installed 50 mm Ø monitoring well to 6.1 m completed with 1.5 m screen Sand backfill from 4.0 to 6.1 m Bentonite seal from 0.0 m to 4.0 m Provided with a momument steel casing **Water level reading:** Dry on Sep 10, 2025 Dry on Sep 24, 2025 Dry on Oct 07, 2025 Dry on Feb 10, 2026 Dry on Mar 10, 2026				7
					8
					9
					10

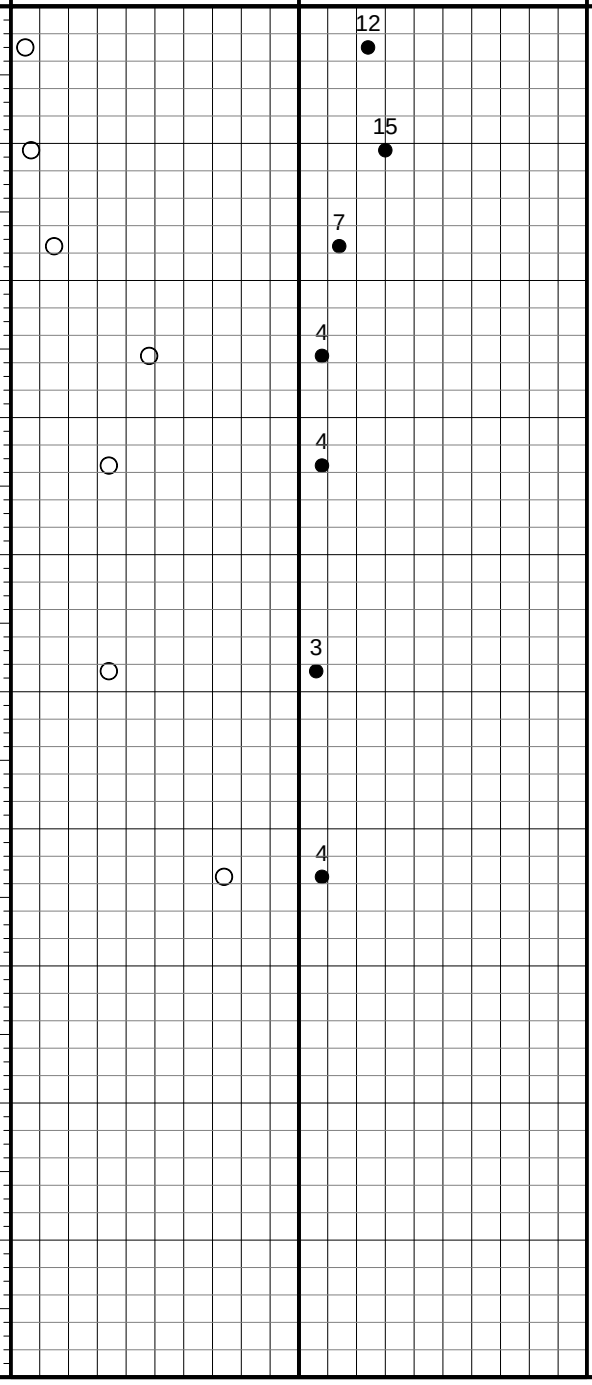
Dynamic Cone (blows/30 cm) 10 30 50 70 90

Shear Strength (kN/m²) 50 100 150 200

Penetration Resistance (blows/30 cm) 10 30 50 70 90

Atterberg Limits PL LL

Moisture Content (%) 10 20 30 40



WATER LEVEL

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 2

FIGURE NO.: 2

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 26, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m^2) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
225.7	Ground Surface							
0.0	**13 cm TOPSOIL**							
	Brown, stiff to very stiff **SILTY CLAY TILL** sandy, a trace of gravel — weathered seepage below 1.5 m	1	DO	8	0		15	
		2	DO	20	1		14	
		3	DO	11	2		19	
223.4								
2.3	Compact to dense, wet **SILT** sandy a trace of clay	4	DO	49	3		17	
		5	DO	33			19	
	— brown reddish-grey	6	DO	25	4		19	
		7	DO	15	5		17	
219.1					6			
6.6	**END OF BOREHOLE**				7			
					8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 3

FIGURE NO.: 3

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 26, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
226.0	Ground Surface							
0.0	**8 cm TOPSOIL**	1	DO	6	0		20	
	Brown, firm to stiff **SILTY CLAY TILL** sandy, a trace of gravel	2	DO	12	1		17	
224.5	weathered							
1.5	Compact to dense, wet **SILT** sandy a trace of clay	3	DO	17	2		19	
		4	DO	27			18	
		5	DO	32	3		20	
	reddish-brown reddish-grey	6	DO	17	4		19	
219.4		7	AS	19	5		20	
6.6	**END OF BOREHOLE**				6			
	Installed 50 mm Ø monitoring well to 6.1 m completed with 3.1 m screen Sand backfill from 2.4 to 6.1 m Bentonite seal from 0.0 m to 2.4 m Provided with a momument steel casing **Water level reading:** W.L. @ El. 224.4 masl on Sep 10, 2025 W.L. @ El. 225.2 masl on Sep 24, 2025 W.L. @ El. 224.6 masl on Oct 07, 2025 W.L. @ El. 224.6 masl on Feb 10, 2026 W.L. @ El. 225.2 masl on Mar 10, 2026				7			
					8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 4

FIGURE NO.: 4

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 25, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m^2) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
223.6	Ground Surface							
0.0	**5 cm TOPSOIL**							
	Stiff to very stiff **SILTY CLAY TILL** — weathered sandy, a trace of gravel	1	DO	8	0		19	
		2	DO	14	1		26	
	— brown grey	3	DO	22	2		16	
221.3								
2.3	Grey, compact **SILT** sandy a trace of clay seepage below 4.6 m	4	DO	29	3		16	
		5	DO	26			17	
		6	DO	26	4		17	
		7	DO	19	5		20	
217.0					6			
6.6	**END OF BOREHOLE**				7			
					8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 5

FIGURE NO.: 5

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 25, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
225.1	Ground Surface							
0.0	**13 cm TOPSOIL**				0			
	Firm to hard **SILTY CLAY TILL** sandy, a trace of gravel occ. shale fragments	1	DO	6			21	
		2	DO	21	1		14	
	weathered							
		3	DO	46	2		14	
		4	DO	36			13	
		5	DO	42	3		12	
	reddish-brown grey	6	DO	17	4		13	
219.0 6.1	Reddish-grey, compact, wet **SAND** fine grained	7	DO	21	5 6		19	
218.5 6.6	**END OF BOREHOLE** Installed 50 mm Ø monitoring well to 5.8 m completed with 3.1 m screen Sand backfill from 2.1 to 5.8 m Bentonite seal from 0.0 m to 2.1 m Provided with a momument steel casing **Water level reading:** W.L. @ El. 224.1 masl on Sep 10, 2025 W.L. @ El. 224.3 masl on Sep 24, 2025 W.L. @ El. 224.2 masl on Oct 07, 2025 W.L. @ El. 224.2 masl on Feb 10, 2026 W.L. @ El. 224.4 masl on Mar 10, 2026				7 8 9 10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 6

FIGURE NO.: 6

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 25, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m^2) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
222.7	Ground Surface							
0.0	**13 cm TOPSOIL**	1	DO	8	0		16	
	Stiff to very stiff **SILTY CLAY TILL** sandy, a trace of gravel occ. cobbles and boulders — weathered	2	DO	9	1		24	
		3	DO	15	2		25	
	— silt layer	4	DO	17			13	
	— brown grey	5	DO	16	3		11	
		6	DO	20	4 5		14	
216.1		7	DO	15	6		21	
6.6	**END OF BOREHOLE**				7 8 9 10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 7

FIGURE NO.: 7

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 25, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
221.5	Ground Surface							
0.0	**13 cm TOPSOIL**				0			
	Firm to hard **SILTY CLAY TILL** sandy, a trace of gravel — weathered	1	DO	7			20	
		2	DO	13	1		23	
		3	DO	37	2		14	
	— brown grey	4	DO	24			15	
	— silt seams	5	DO	9	3		29	
216.9					4			
4.6	Grey, loose, wet **SILT** sandy, some clay	6	DO	9	5		22	
		7	DO	7	6		23	
214.9								
6.6	**END OF BOREHOLE**				7			
	Installed 50 mm Ø monitoring well to 6.1 m completed with 1.5 m screen Sand backfill from 4.0 to 6.1 m Bentonite seal from 0.0 m to 4.0 m Provided with a momument steel casing **Water level reading:** W.L. @ El. 222.3 masl on Sep 10, 2025 W.L. @ El. 222.3 masl on Sep 24, 2025 W.L. @ El. 222.3 masl on Oct 07, 2025 W.L. @ El. 222.3 masl on Feb 10, 2026 W.L. @ El. 222.3 masl on Mar 10, 2026				8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 8

FIGURE NO.: 8

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 29, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
223.8	Ground Surface							
0.0	**20 cm TOPSOIL**				0			
	Stiff to hard **SILTY CLAY TILL** weathered sandy, a trace of gravel occ. shale fragments	1	DO	9			15	
		2	DO	23	1		13	
		3	DO	30	2		13	
		4	DO	30			13	
		5	DO	24	3		13	
	reddish-brown grey	6	DO	11	4 5		16	
217.2		7	DO	18	6		13	
6.6	**END OF BOREHOLE**				7 8 9 10			

Installed 50 mm Ø monitoring well to 6.1 m
completed with 3.1 m screen
Sand backfill from 2.4 to 6.1 m
Bentonite seal from 0.0 m to 2.4 m
Provided with a momument steel casing

Water level reading:
W.L. @ El. 223.7 masl on Sep 10, 2025
W.L. @ El. 223.8 masl on Sep 24, 2025
W.L. @ El. 223.7 masl on Oct 07, 2025
W.L. @ El. 223.8 masl on Feb 10, 2026
W.L. @ El. 224.1 masl on Mar 10, 2026

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 9

FIGURE NO.: 9

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 28, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
226.1	Ground Surface							
0.0	**20 cm TOPSOIL**				0			
	Stiff to hard **SILTY CLAY TILL** sandy, a trace of gravel occ. shale fragments	1	DO	10			12	
	weathered	2	DO	10	1		14	
		3	DO	22			13	
		4	DO	25	2		13	
	reddish-brown grey	5	DO	34	3		12	
221.2		6A	DO	16	4		15	
4.9	Loose to compact, wet **SAND** silty grained traces of clay and medium sand	6B			5		22	
	brown grey	7	DO	9	6		21	
		8	DO	10	7		20	
		9	DO	10	8		21	
216.5					9			
9.6	**END OF BOREHOLE**				10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 10

FIGURE NO.: 10

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 28, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m^2) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
226.8	Ground Surface							
0.0	**15 cm TOPSOIL**				0			
	Brown, loose to compact **SILT** sandy a trace of clay seepage below 1.5 m	1	DO	6			21	
		2	DO	4	1		16	
	weathered	3	DO	12	2		22	
		4	DO	25			24	
		5	DO	23	3		23	
222.2					4			
4.6	Grey, compact, wet **SAND** silty grained traces of clay and medium sand	6	DO	17	5		21	
		7	DO	20	6		21	
220.2								
6.6	**END OF BOREHOLE**				7			
					8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 11

FIGURE NO.: 11

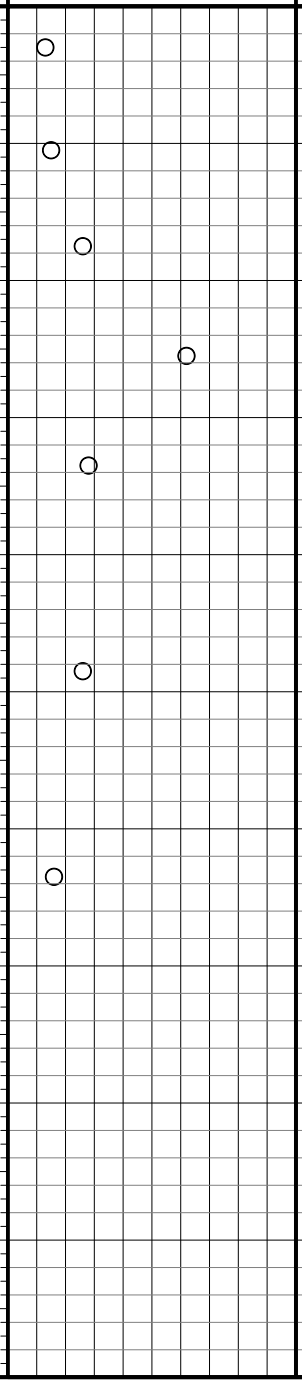
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

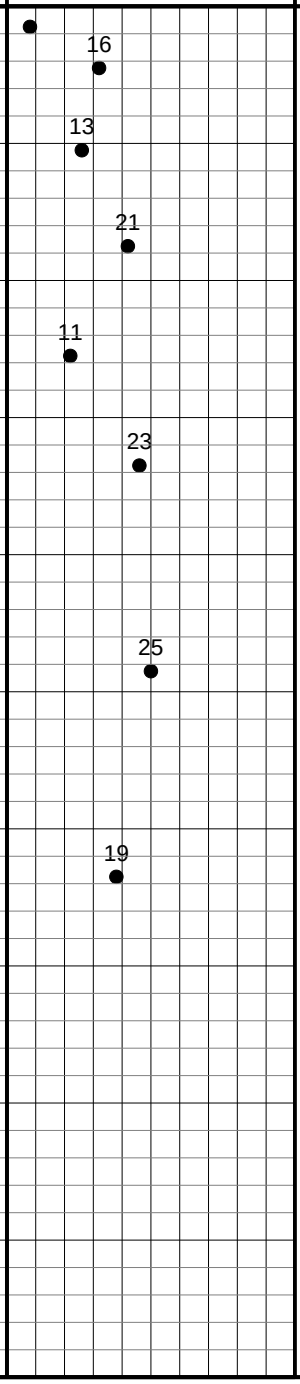
METHOD OF BORING: Solid Stem Augers

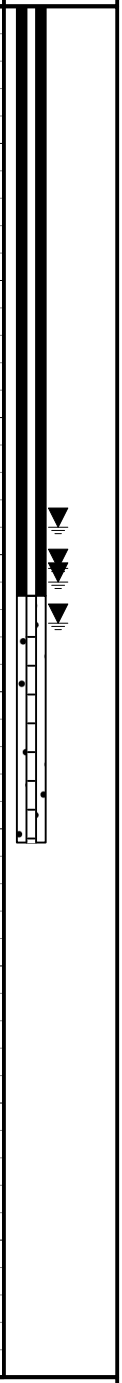
PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 28, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)
228.6 / 0.0	Ground Surface				
	50 mm ASPHALT **200 mm GRANULAR**	1A	DO	13	0
	Reddish-brown, stiff **SILTY CLAY TILL** sandy, a trace of gravel	1B			
		2	DO	15	1
227.1 / 1.5	Compact to very dense **SILT** sandy a trace of clay seepage below 3.1 m	3	DO	26	2
		4	DO	62	
		5	DO	28	3
		6	DO	26	4
	brown / grey	7	DO	16	5
222.0 / 6.6	**END OF BOREHOLE** Installed 50 mm Ø monitoring well to 6.1 m completed with 1.5 m screen Sand backfill from 4.3 to 6.1 m Bentonite seal from 0.0 m to 4.3 m Provided with a momument steel casing **Water level reading:** W.L. @ El. 224.4 masl on Sep 10, 2025 W.L. @ El. 224.5 masl on Sep 24, 2025 W.L. @ El. 224.4 masl on Oct 07, 2025 W.L. @ El. 224.1 masl on Feb 10, 2026 W.L. @ El. 224.8 masl on Mar 10, 2026				6 7 8 9 10







Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 12

FIGURE NO.: 12

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 29, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
226.0	Ground Surface							
0.0	**20 cm TOPSOIL**				0			
	Reddish-brown, stiff to hard **SILTY CLAY TILL** weathered sandy, a trace of gravel occ. shale fragments	1	DO	11			17	
		2	DO	16	1		16	
		3	DO	20	2		14	
		4	DO	38			14	
		5	DO	30	3		12	
221.4					4			
4.6	Grey, compact, wet **SILT** sandy a trace of clay	6	DO	15	5		21	
		7	DO	16	6		17	
219.4								
6.6	**END OF BOREHOLE**				7			
	Installed 50 mm Ø monitoring well to 6.6 m completed with 1.5 m screen Sand backfill from 4.7 to 6.6 m Bentonite seal from 0.0 m to 4.7 m Provided with a momument steel casing **Water level reading:** W.L. @ El. 224.7 masl on Sep 10, 2025 W.L. @ El. 224.7 masl on Sep 24, 2025 W.L. @ El. 224.7 masl on Oct 07, 2025 W.L. @ El. 224.5 masl on Feb 10, 2026 W.L. @ El. 224.8 masl on Mar 10, 2026				8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 13

FIGURE NO.: 13

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 29, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
234.9	Ground Surface							
0.0	**20 cm TOPSOIL**				0			
	Reddish-brown/brown, stiff to hard **SILTY CLAY TILL** sandy, a trace of gravel	1	DO	8			14	
	weathered	2	DO	28	1		12	
		3	DO	42	2		13	
		4	DO	34			12	
		5	DO	37	3		13	
		6	DO	20	4		14	
228.8					5			
6.1	Brown, dense **SAND** silty grained	7	DO	42	6		16	
228.3								
6.6	**END OF BOREHOLE**				7			
					8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 14

FIGURE NO.: 14

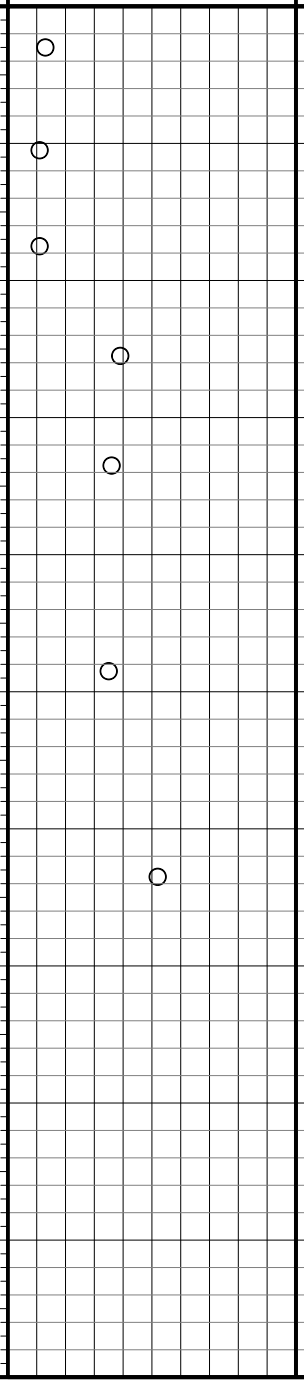
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

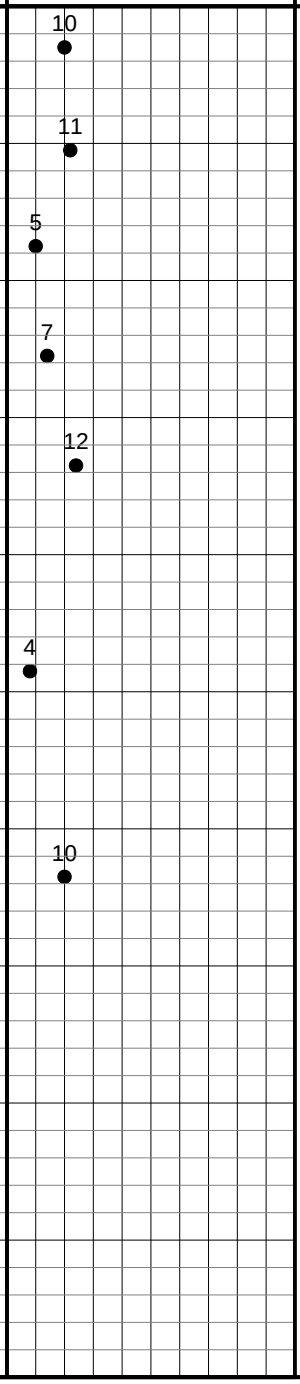
METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 26, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)
238.7	Ground Surface				
0.0	**8 cm TOPSOIL**				0
	Brown **EARTH FILL** sandy silt	1	DO	13	
		2	DO	11	1
		3	DO	11	
236.4					2
2.3	Brown, dense to very dense **SAND** silty grained traces of clay and medium sand	4	DO	39	
		5	DO	36	3
					4
		6	DO	35	5
					6
232.1		7	DO	52	
6.6	**END OF BOREHOLE** Installed 50 mm Ø monitoring well to 6.1 m completed with 1.5 m screen Sand backfill from 4.3 to 6.1 m Bentonite seal from 0.0 m to 4.3 m Provided with a momument steel casing **Water level reading:** Dry on Sep 10, 2025 Dry on Sep 24, 2025 Dry on Oct 07, 2025 Dry on Feb 10, 2026 Dry on Mar 10, 2026				7 8 9 10





Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH 15

FIGURE NO.: 15

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Solid Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: August 26, 2025

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
228.6	Ground Surface							
0.0	**10 cm TOPSOIL**	1	DO	8	0		19	
	Brown, stiff to hard **SILTY CLAY TILL** — weathered sandy, a trace of gravel	2	DO	25	1		14	
		3	DO	30	2		13	
		4	DO	27	3		14	
		5	DO	25	4		15	
224.0								
4.6	Reddish-grey, compact to dense, wet **SAND** fine grained traces of clay and cobbles	6	DO	35	5		20	
		7	DO	21	6		19	
222.0								
6.6	**END OF BOREHOLE**				7			
					8			
					9			
					10			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 101

FIGURE NO.: 16

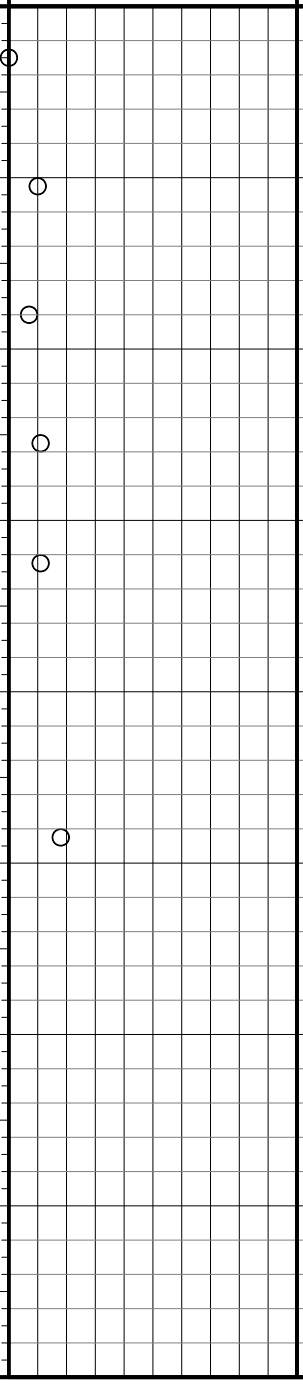
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

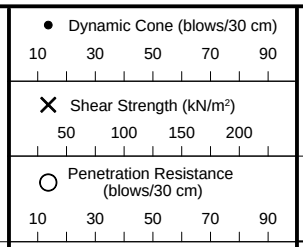
METHOD OF BORING: Hollow Stem Augers

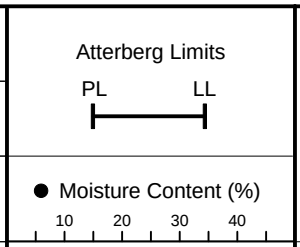
PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

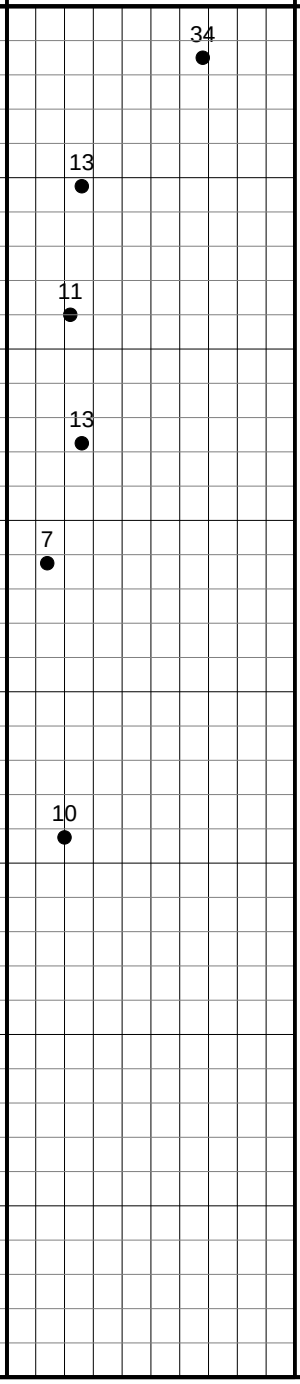
DRILLING DATE: January 27, 2026

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value
234.0	Ground Surface			
0.0	Dark brown **EARTH FILL** silty clay occ. rootlets	1	AS	0
233.2				
0.8	Brown, loose to compact **SILT** some sand to sandy a trace of clay	2	DO	10
		3	DO	7
		4	DO	11
231.0				
3.0	Brown, compact **SAND** fine grained a trace of silt	5	DO	11
		6	DO	18
228.9				
5.1	**END OF BOREHOLE** Installed 50 mm Ø PVC monitoring well to 4.6 m with 1.5 m screen Sand backfill from 2.7 to 4.6 m Bentonite seal from 0.0 m to 2.7 m Provided with monument casing **Water level reading:** Dry on Feb 10, 2026 Dry on Mar 10, 2026			









Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 102

FIGURE NO.: 17

PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

METHOD OF BORING: Hollow Stem Augers

PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: January 28, 2026

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)	Dynamic Cone (blows/30 cm) 10 30 50 70 90 / Shear Strength (kN/m²) 50 100 150 200 / Penetration Resistance (blows/30 cm) 10 30 50 70 90	Atterberg Limits PL LL / Moisture Content (%) 10 20 30 40	WATER LEVEL
224.5	Ground Surface							
0.0	**8 cm TOPSOIL**				0			
	Brown, soft to stiff **SILTY CLAY TILL** sandy, a trace of gravel — occ. topsoil	1	DO	2			39	
		2	DO	14	1		20	
		3	DO	7	2		26	
222.2								
2.3	Brown, compact, wet **SILT** some sand to sandy a trace of clay	4	DO	18			19	
		5	DO	24	3		20	
		6	DO	20	4		19	
219.4					5			
5.1	**END OF BOREHOLE**							
	Installed 50 mm Ø PVC monitoring well to 4.6 m with 1.5 m screen Sand backfill from 2.4 to 4.6 m Bentonite seal from 0.0 m to 2.4 m Provided with monument casing **Water level reading:** Frozen on Feb 10, 2026 Frozen on Mar 10, 2026				6			
					7			
					8			

Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 103

FIGURE NO.: 18

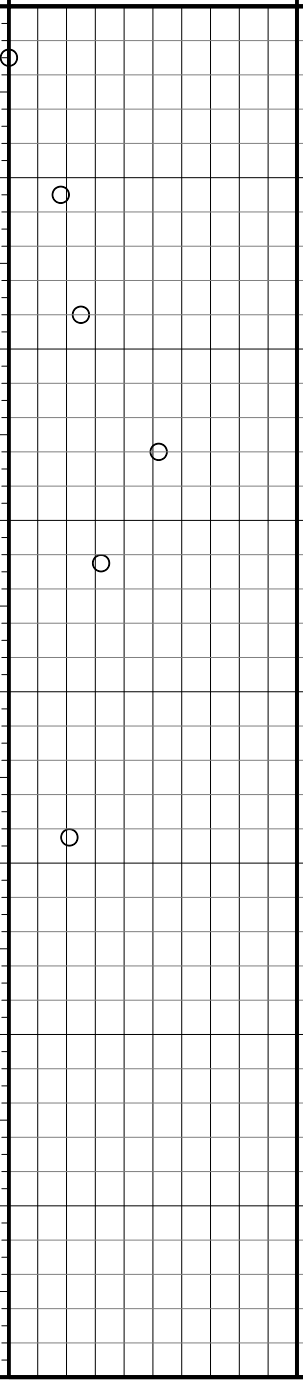
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

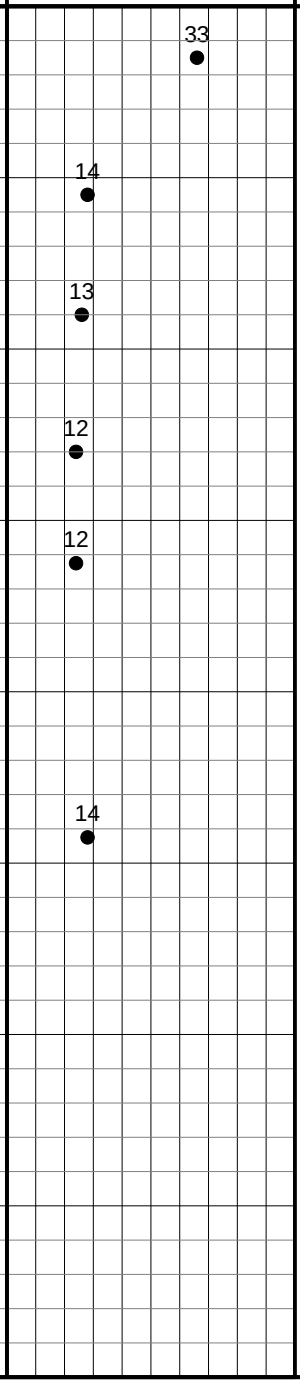
METHOD OF BORING: Solid Stem Augers

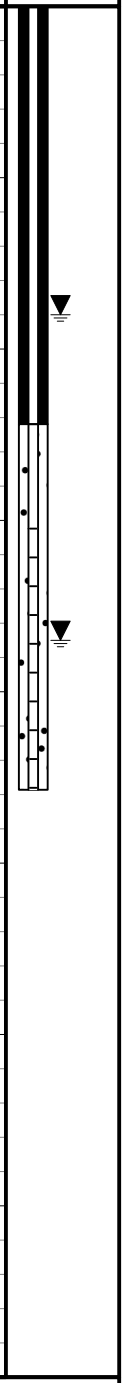
PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: January 28, 2026

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)
221.7	Ground Surface				
0.0	Very soft to hard **SILTY CLAY TILL** sandy, a trace of gravel	1	DO	0	0
	weathered	2	DO	18	1
		3	DO	25	2
		4	DO	52	
		5	DO	32	3
	brown grey				4
216.6		6	DO	21	5
5.1	**END OF BOREHOLE** Installed 50 mm Ø PVC monitoring well to 4.6 m with 1.5 m screen Sand backfill from 2.4 to 4.6 m Bentonite seal from 0.0 m to 2.4 m Provided with monument casing **Water level reading:** W.L. @ El. 218.0 masl on Feb 10, 2026 W.L. @ El. 219.9 masl on Mar 10, 2026				6 7 8







Soil Engineers Ltd.

JOB NO.: 2507-W174

LOG OF BOREHOLE:BH/MW 104

FIGURE NO.: 19

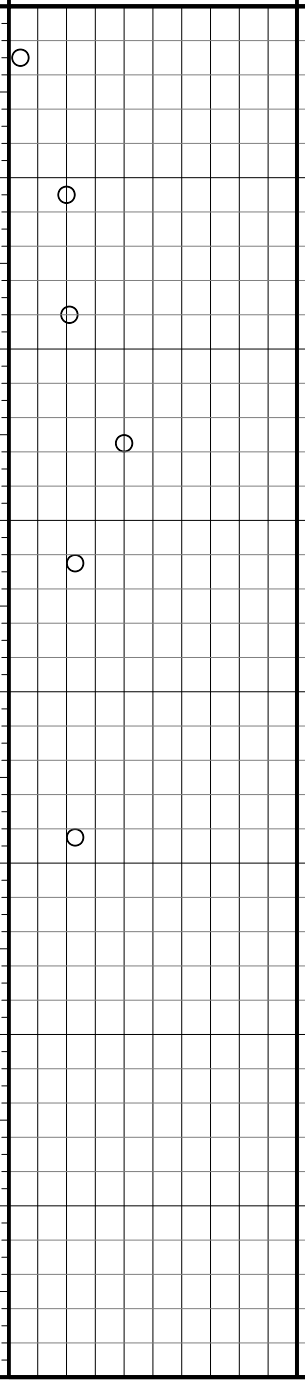
PROJECT DESCRIPTION: Proposed Commercial/Industrial Development

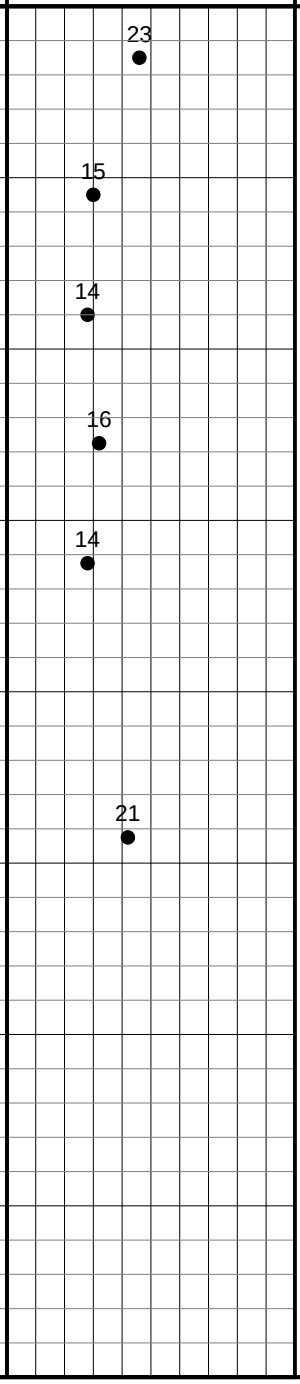
METHOD OF BORING: Solid Stem Augers

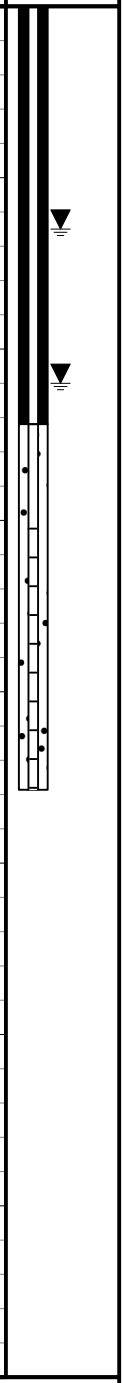
PROJECT LOCATION: 9094 Regional Road 25, Town of Halton Hills

DRILLING DATE: January 29, 2026

El. (m) / Depth (m)	SOIL DESCRIPTION	SAMPLES Number	Type	N-Value	Depth Scale (m)
222.7 / 0.0	Ground Surface				
	20 cm TOPSOIL				0
	Firm to hard **SILTY CLAY TILL** sandy, a trace of gravel — — weathered	1	DO	4	
		2	DO	20	1
		3	DO	21	2
		4	DO	40	
	— — — brown grey	5	DO	23	3
218.1 / 4.6	Grey, compact **SILT** some sand to sandy, a trace of clay	6	DO	23	4
217.6 / 5.1	**END OF BOREHOLE**				5
	Installed 50 mm Ø PVC monitoring well to 4.6 m with 1.5 m screen Sand backfill from 2.4 to 4.6 m Bentonite seal from 0.0 m to 2.4 m Provided with monument casing **Water level reading:** W.L. @ El. 220.5 masl on Feb 10, 2026 W.L. @ El. 221.4 masl on Mar 10, 2026				6 7 8







Soil Engineers Ltd.

Soil Engineers Ltd.

GRAIN SIZE DISTRIBUTION

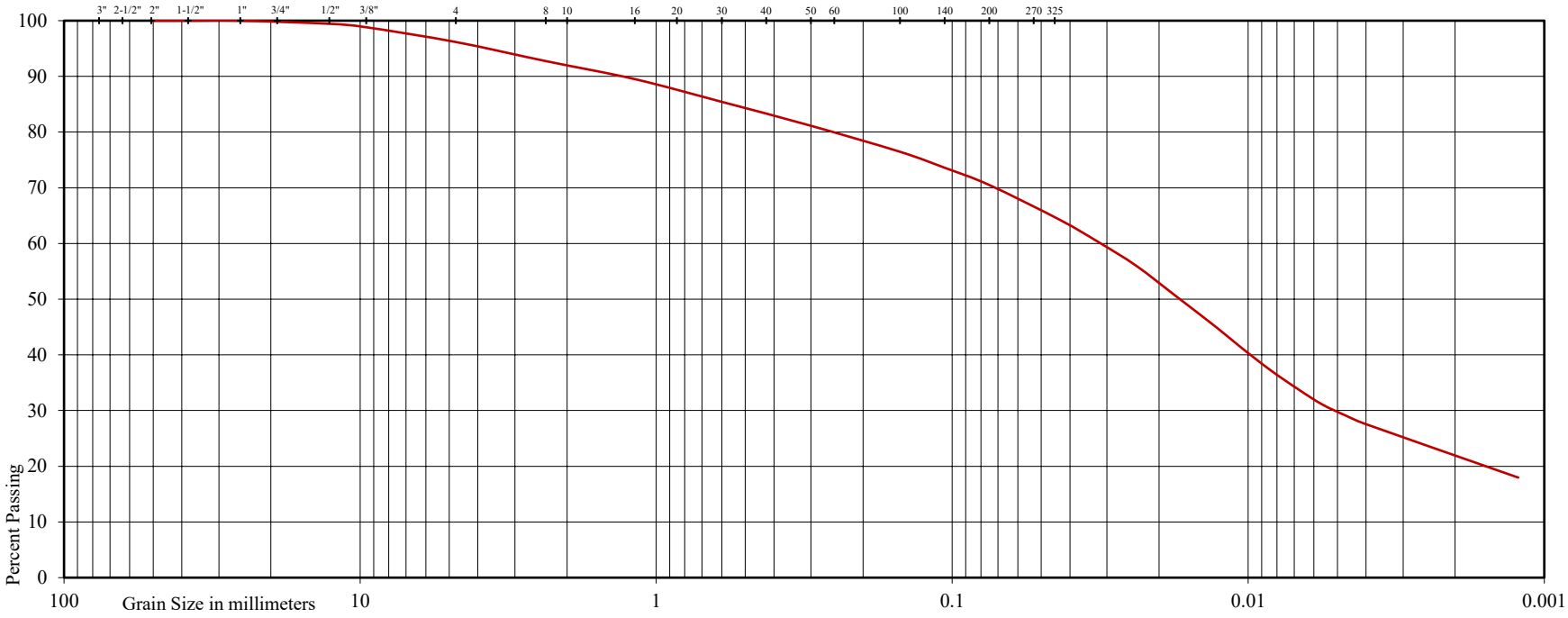
Reference No: 2507-S174

U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL		SAND				SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Commercial/Industrial Development

Location: 9094 Regional Road 25, Town of Halton Hills

BH./Sa. 5/4

Liquid Limit (%) = -

Plastic Limit (%) = -

Plasticity Index (%) = -

Moisture Content (%) = 13

Estimated Permeability (cm./sec.) = 10^{-7}

Borehole No: 5

Sample No: 4

Depth (m): 2.6

Elevation (m): 222.5

Classification of Sample [& Group Symbol]: SILTY CLAY TILL

sandy, a trace of gravel

Figure: 20

Soil Engineers Ltd.

GRAIN SIZE DISTRIBUTION

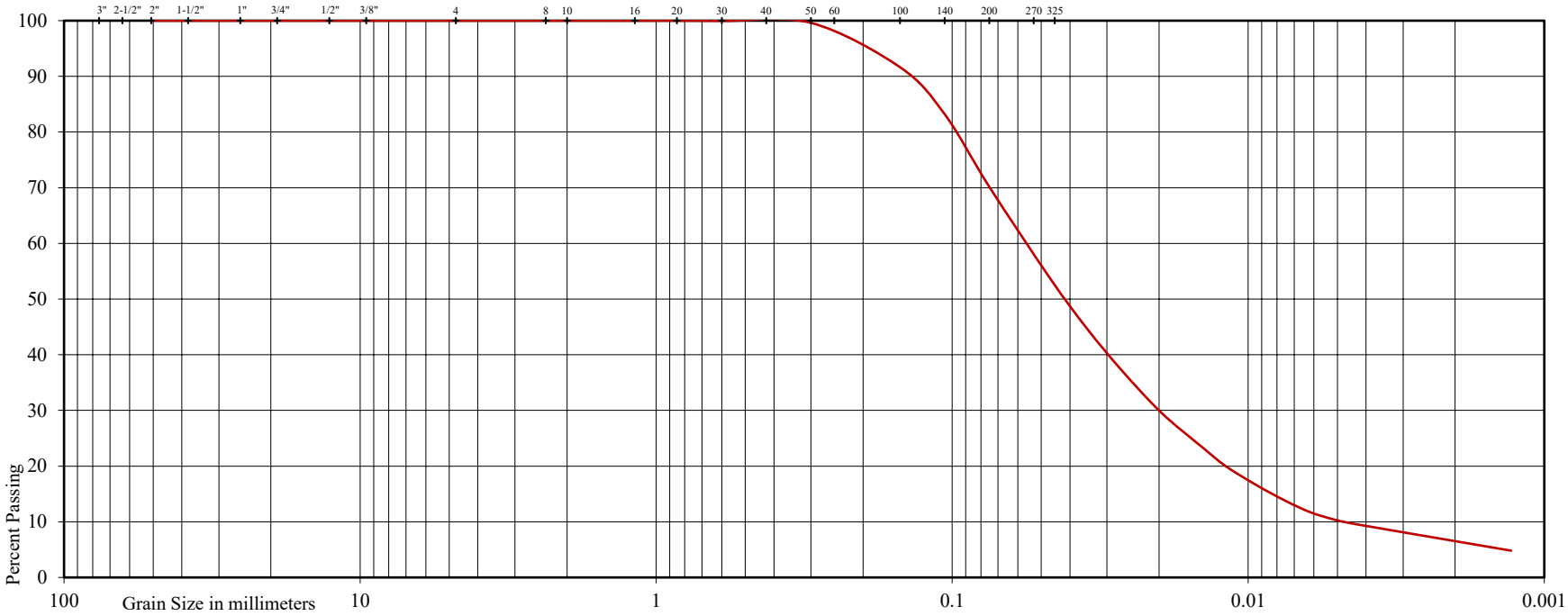
Reference No: 2507-S174

U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL		SAND				SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Commercial/Industrial Development

Location: 9094 Regional Road 25, Town of Halton Hills

BH./Sa. 2/6

Liquid Limit (%) = -

Plastic Limit (%) = -

Plasticity Index (%) = -

Moisture Content (%) = 19

Estimated Permeability (cm./sec.) = 10^{-5}

Borehole No: 2

Sample No: 6

Depth (m): 4.9

Elevation (m): 220.8

Classification of Sample [& Group Symbol]: SILT

sandy, a trace of clay

Figure: 21

Soil Engineers Ltd.

GRAIN SIZE DISTRIBUTION

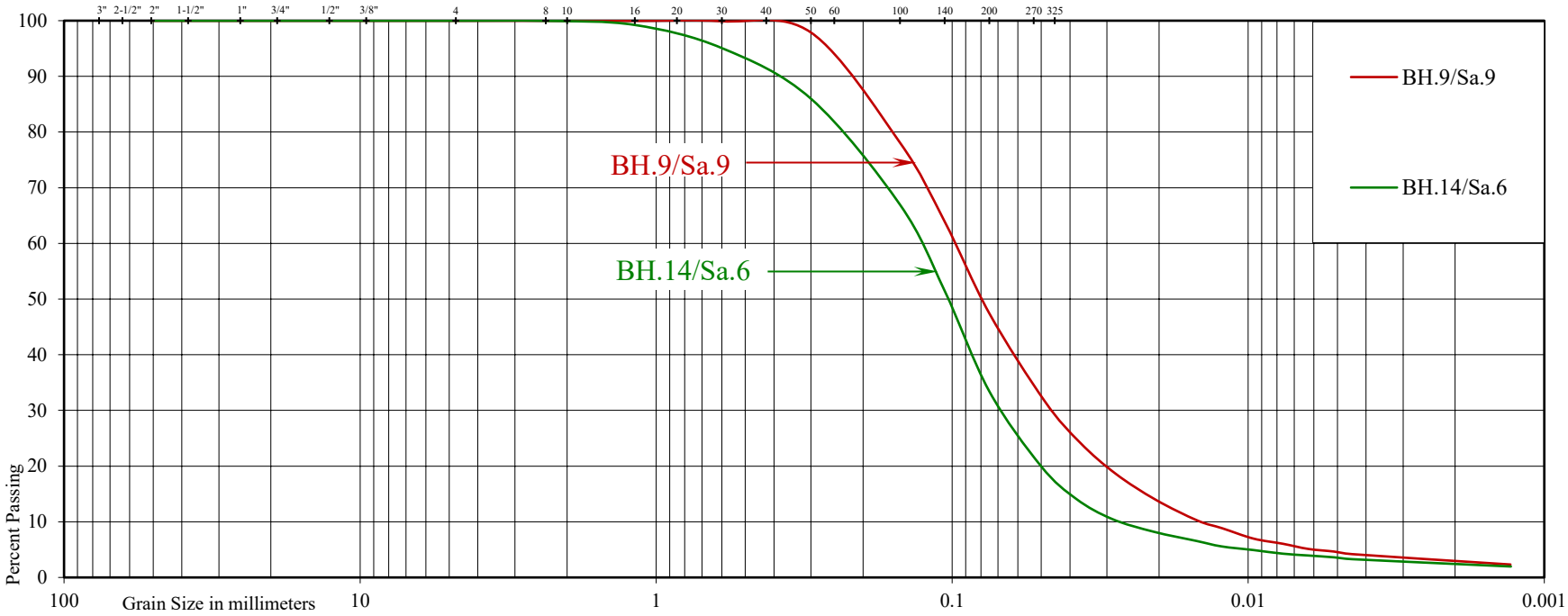
Reference No: 2507-S174

U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL		SAND				SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Commercial/Industrial Development

Location: 9094 Regional Road 25, Town of Halton Hills

Borehole No:	9	14
Sample No:	9	6
Depth (m):	9.4	4.9
Elevation (m):	216.7	233.8

BH./Sa.	9/9	14/6
Liquid Limit (%) =	-	-
Plastic Limit (%) =	-	-
Plasticity Index (%) =	-	-
Moisture Content (%) =	21	4
Estimated Permeability (cm./sec.) =	10^{-4}	10^{-4}

Classification of Sample [& Group Symbol]: SAND

silty grained, traces of clay and medium sand

Figure: 22

Soil Engineers Ltd.

GRAIN SIZE DISTRIBUTION

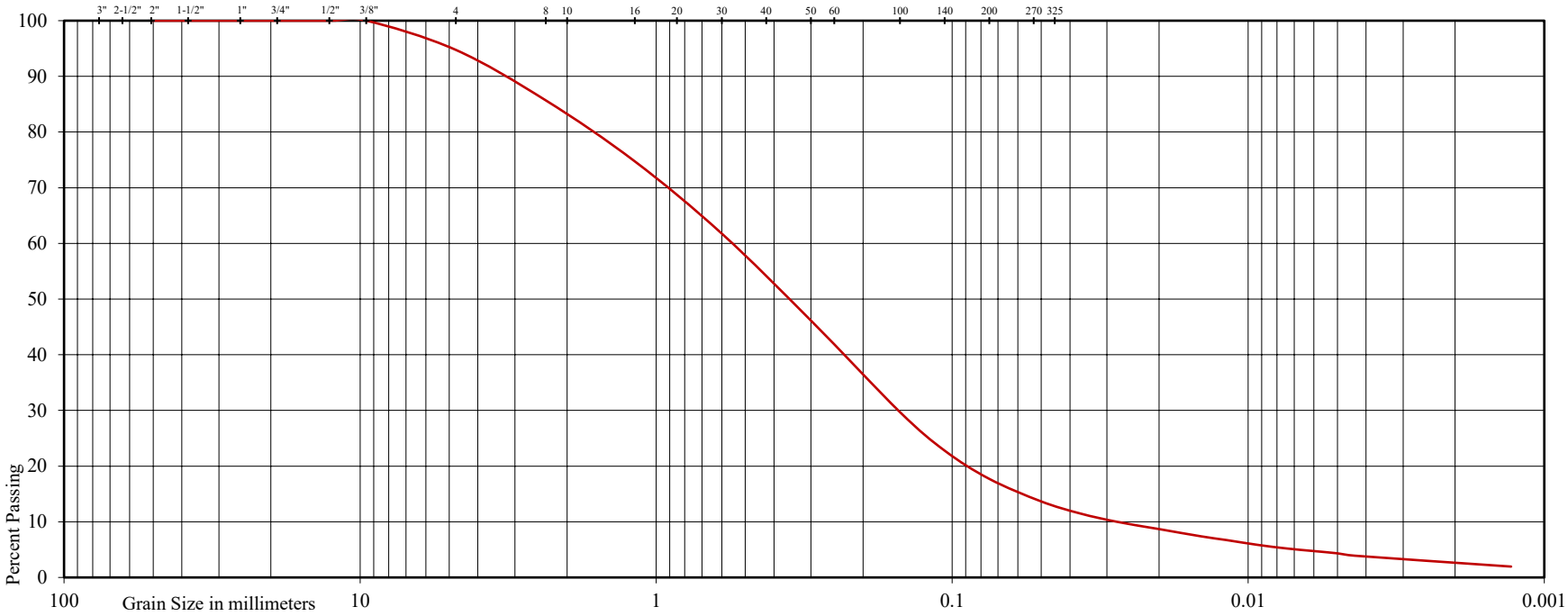
Reference No: 2507-S174

U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL		SAND				SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Commercial/Industrial Development

Location: 9094 Regional Road 25, Town of Halton Hills

BH./Sa. 1/5

Liquid Limit (%) = -

Borehole No: 1

Plastic Limit (%) = -

Sample No: 5

Plasticity Index (%) = -

Depth (m): 3.4

Moisture Content (%) = 4

Elevation (m): 231.1

Estimated Permeability (cm./sec.) = 10^{-4}

Classification of Sample [& Group Symbol]: SAND

fine to coarse grained, some silt, traces of clay and gravel

Figure: 23

Soil Engineers Ltd.

GRAIN SIZE DISTRIBUTION

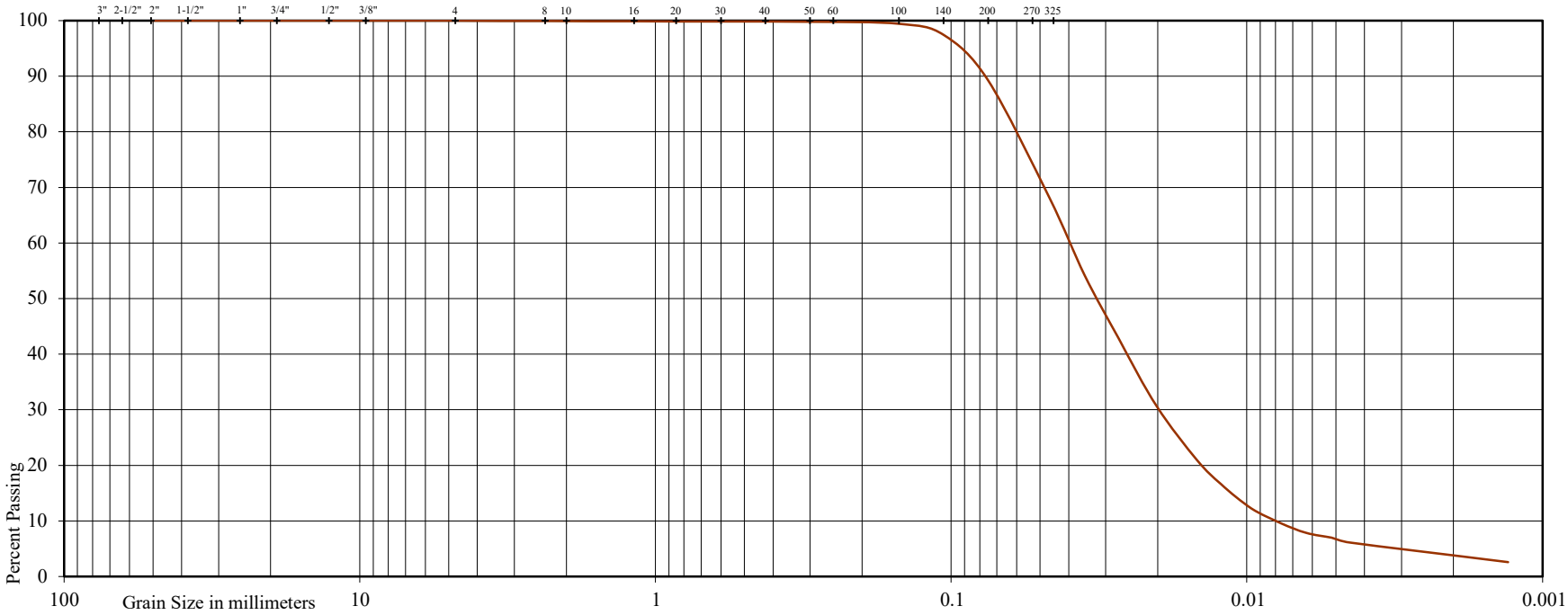
Reference No: 2507-W174

U.S. BUREAU OF SOILS CLASSIFICATION

GRAVEL		SAND				SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	V. FINE		

UNIFIED SOIL CLASSIFICATION

GRAVEL		SAND			SILT & CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	



Project: Proposed Commercial/Industrial Development

Location: 9094 Regional Road 25, Town of Halton Hills

BH./Sa. 2/5

Liquid Limit (%) = -

Borehole No: 2

Plastic Limit (%) = -

Sample No: 5

Plasticity Index (%) = -

Depth (m): 3.2

Moisture Content (%) = 20

Elevation (m): 0.0

Estimated Permeability (cm./sec.) = 10^{-5}

Classification of Sample [& Group Symbol]: SILT

some sand to sandy, a trace of clay

Figure: 24

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FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

APPENDIX 'B'

MECP WATER WELL RECORDS SUMMARY

REFERENCE NO. 2507-W174

MECP Well Records Summary

WELL ID	MECP* WWR ID	Construction Method	Well Depth (m)**	Well Usage		Static Water Level (m)**	Top of Screen Depth (m)**	Bottom of Screen Depth (m)**	Date Completed
				Final Status	First Use				
1	2800721	Cable Tool	19.2	Water Supply	Livestock	4.6	-	-	1959-09-18
2	2800722	Cable Tool	6.4	Water Supply	Domestic	1.8	-	-	1963-05-17
3	2800723	Cable Tool	11.0	Water Supply	Domestic	3.0	-	-	1964-10-22
4	2800724	Cable Tool	11.0	Water Supply	Domestic	4.9	-	-	1957-10-19
5	2800725	Boring	6.4	Water Supply	Public	2.4	-	-	1960-03-15
6	2800726	Cable Tool	6.1	Water Supply	Domestic	1.5	-	-	1960-03-18
7	2800728	Cable Tool	11.0	Water Supply	Domestic	3.4	-	-	1960-09-29
8	2800729	Cable Tool	14.3	Water Supply	Domestic	2.7	-	-	1961-06-05
9	2800730	Cable Tool	14.0	Water Supply	Domestic	2.1	-	-	1961-09-27
10	2800731	Boring	8.5	Water Supply	Domestic	4.6	-	-	1963-05-21
11	2800732	Cable Tool	14.9	Water Supply	Domestic	3.0	-	-	1963-05-21
12	2800733	Cable Tool	16.5	Water Supply	Domestic	2.4	-	-	1963-05-28
13	2800734	Cable Tool	21.6	Water Supply	Domestic	2.7	-	-	1967-03-11
14	2800736	Cable Tool	20.1	Water Supply	Domestic	11.6	-	-	1959-02-27
15	2800811	Cable Tool	27.4	Water Supply	Domestic	10.7	-	-	1956-10-19
16	2800813	Cable Tool	19.8	Water Supply	Domestic	8.8	-	-	1964-01-31
17	2802915	Cable Tool	11.0	Water Supply	Domestic	-0.6	-	-	1968-02-02
18	2802975	Cable Tool	19.5	Water Supply	Domestic	2.7	13.7	18.6	1968-09-15
19	2802999	Cable Tool	37.5	Water Supply	Domestic	2.4	-	-	1968-12-21
20	2803206	Boring	6.7	Water Supply	Domestic	2.4	-	-	1969-08-21
21	2803551	Cable Tool	24.7	Abandoned-Supply	Not Used	3.0	-	-	1971-04-14
22	2803588	Cable Tool	27.4	Water Supply	Domestic	2.4	-	-	1971-07-09
23	2804319	Cable Tool	29.9	Water Supply	Domestic	7.9	-	-	1973-02-04
24	2804429	Boring	7.9	Water Supply	Domestic	2.4	-	-	1973-04-30
25	2804454	Boring	8.2	Water Supply	Domestic	3.0	-	-	1973-09-29
26	2804732	Cable Tool	11.0	Water Supply	Domestic	3.4	-	-	1975-03-18
27	2805032	Cable Tool	19.5	Test Hole	Industrial	8.2	15.5	16.5	1977-02-28
28	2804846	Boring	10.7	Water Supply	Domestic	1.2	-	-	1976-03-09
29	2805279	Boring	7.3	Water Supply	Domestic	3.4	-	-	1978-07-04
30	2805316	Cable Tool	30.5	Water Supply	Domestic	7.3	-	-	1978-09-20
31	2805542	Boring	11.0	Water Supply	Domestic	3.7	-	-	1980-02-16
32	2806511	Cable Tool	34.7	Water Supply	Domestic	15.2	-	-	1986-10-02
33	2806653	Cable Tool	17.1	Water Supply	Commercial	1.2	-	-	1987-06-13
34	2806848	Cable Tool	20.7	Water Supply	Domestic	8.5	-	-	1988-02-10
35	2807163	Cable Tool	19.8	Water Supply	Domestic	3.4	-	-	1988-03-30
36	2807540	Cable Tool	19.8	Observation Wells	Not Used	4.0	15.5	16.5	1990-01-19
37	2807541	Rotary(Convemt.) (Reverse)	22.9	Observation Wells	Not Used	2.1	-	-	1990-01-22
38	2807542	Cable Tool	20.4	Observation Wells	Not Used	2.1	-	-	1990-01-23
39	2807559	Cable Tool	20.7	Water Supply	Domestic	3.4	-	-	1990-03-19

MECP Well Records Summary

WELL ID	MECP* WWR ID	Construction Method	Well Depth (m)**	Well Usage		Static Water Level (m)**	Top of Screen Depth (m)**	Bottom of Screen Depth (m)**	Date Completed
				Final Status	First Use				
40	2807567	Cable Tool	15.5	Water Supply	Domestic	3.0	-	-	1990-05-01
41	2808114	Cable Tool	26.8	Water Supply	Domestic	8.2	-	-	1992-11-20
42	2808278	Rotary(Air)	27.4	Water Supply	Domestic	4.9	-	-	1994-10-27
43	2808283	Cable Tool	18.3	Water Supply	Domestic	4.3	-	-	1994-11-23
44	2808359	Cable Tool	18.3	Water Supply	Domestic	11.6	-	-	1994-07-14
45	2808363	Cable Tool	22.6	Water Supply	Domestic	11.3	-	-	1994-05-20
46	2808567	Not Known	5.5	Water Supply	Domestic	-	-	-	1997-07-18
47	2809213	Cable Tool	23.8	Water Supply	Domestic	9.1	-	-	1999-11-22
48	2809223	Cable Tool	18.3	Water Supply	Domestic	11.3	-	-	1999-12-01
49	2809224	Cable Tool	21.0	Water Supply	Domestic	7.9	-	-	1999-11-16
50	2809488	Cable Tool	16.2	Water Supply	Domestic	4.3	-	-	2001-07-09
51	2809555	Rotary(Convemt.) (Reverse)	21.3	Test Hole	Not Used	3.0	20.4	21.3	2001-05-30
52	2809558	Rotary(Air)	10.4	Observation Wells	Not Used	-	8.5	10.1	2001-06-07
53	2809561	Rotary(Air)	26.2	Test Hole	Industrial	3.7	25.3	26.2	2001-06-13
54	2809562	Rotary(Air)	18.9	Test Hole	Industrial	1.5	17.4	18.3	2001-06-14
55	2809557	Rotary(Air)	27.7	Test Hole	Not Used	6.7	-	-	2001-06-06
56	2809563	Rotary(Air)	29.0	Test Hole	Not Used	10.4	-	-	2001-06-01
57	2809915	Rotary(Convemt.) (Reverse)	5.0	Observation Wells	Not Used	-	1.5	15.0	2004-02-17
58	2921036	Boring	8.0	Observation Wells	-	-	4.6	8.0	2005-08-15
59	2810576	Rotary(Air)	31.4	Water Supply	Domestic	9.8	-	-	2006-04-21
60	2810521	-	-	Abandoned-Supply	Domestic	5.5	-	-	2006-02-03
61	2810571	-	-	Abandoned-Supply	-	-	-	-	2006-04-24
62	7047691	Cable Tool	35.1	Water Supply	Domestic	4.6	-	-	2007-07-19
63	7051377	Boring	-	Abandoned-Other	-	-	-	-	2007-09-27
64	7052846	Cable Tool	30.8	Observation Wells	-	7.1	-	-	2007-11-06
65	7110221	-	-	Abandoned-Supply	Domestic	-	-	-	2008-07-30
66	7121152	Cable Tool	27.4	Water Supply	-	12.5	-	-	2009-01-07
67	7143943	-	-	Water Supply	Public	-	-	-	2010-03-31
68	7159393	-	-	Abandoned-Supply	-	-	-	-	2010-04-12
69	7159414	Cable Tool	14.3	Water Supply	Domestic	10.1	-	-	2010-03-22
70	7160591	Cable Tool	-	Abandoned-Supply	-	-	-	-	2010-12-24
71	7163124	-	-	Abandoned-Supply	Public	-	-	-	2011-05-05
72	7163125	Cable Tool	24.4	Water Supply	Public	4.6	21.9	22.9	2011-05-05
73	7192732	Other Method	6.1	Test Hole	Monitoring and Test Hole	-	3.0	6.1	2012-11-13
74	7200534	-	-	-	-	-	-	-	2013-04-10
75	7200057	Cable Tool	28.0	Water Supply	Industrial	2.2	-	-	2012-05-14
76	7264503	-	-	Water Supply	Industrial	3.0	-	-	-
77	7336144	Other Method	36.9	Water Supply	Domestic	10.1	-	-	2019-04-29

MECP Well Records Summary

WELL ID	MECP* WWR ID	Construction Method	Well Depth (m)**	Well Usage		Static Water Level (m)**	Top of Screen Depth (m)**	Bottom of Screen Depth (m)**	Date Completed
				Final Status	First Use				
78	7348882	AirPercussion	36.6	Water Supply	Domestic	5.5	-	-	2019-07-28
79	7370368	Boring	6.1	Other Status	Monitoring and Test Hole	-	3.0	6.1	2020-06-09
80	7389104	Other Method	35.1	Water Supply	Domestic	1.8	-	-	2021-05-06
81	7389177	-	-	Water Supply	Commercial	12.0	-	-	2021-05-03
82	7398135	H.S.A.	6.1	Observation Wells	Monitoring	-	3.0	6.1	2021-07-05
83	7398136	H.S.A.	6.1	Observation Wells	Monitoring	-	3.0	6.1	2021-07-05
84	7398137	H.S.A.	6.1	Observation Wells	Monitoring	-	3.0	6.1	2021-07-05
85	7398138	H.S.A.	6.1	Observation Wells	Monitoring	-	3.0	6.1	2021-07-05
86	7398139	H.S.A.	6.1	Observation Wells	Monitoring	-	3.0	6.1	2021-07-05
87	7411696	H.S.A.	7.6	Observation Wells	Monitoring	-	4.6	7.6	2021-12-23
88	7413400	H.S.A.	7.6	Observation Wells	Monitoring	-	4.6	7.6	2021-12-22
89	7413402	H.S.A.	7.6	Observation Wells	Monitoring	-	4.6	7.6	2021-12-22
90	7413403	H.S.A.	7.6	Observation Wells	Monitoring	-	4.6	7.6	2021-12-22
91	7413510	-	-	Abandoned-Other	-	-	2.4	5.5	2022-03-03
92	7421247	H.S.A.	-	Observation Wells	Monitoring	-	-	-	2022-04-01
93	7421249	H.S.A.	-	Observation Wells	Monitoring	-	-	-	2022-04-01
94	7421250	H.S.A.	-	Observation Wells	Monitoring	-	-	-	2022-04-01
95	7421251	H.S.A.	-	Observation Wells	Monitoring	-	-	-	2022-04-01
96	7425179	-	-	-	-	-	-	-	2022-03-07
97	7428654	H.S.A.	6.1	Observation Wells	Monitoring	-	3.0	6.1	2022-06-03
98	7434986	-	-	-	-	-	-	-	2022-10-12
99	7434987	-	-	-	-	-	-	-	2022-10-12
100	7435294	-	-	-	-	-	-	-	2022-08-24
101	7445241	-	-	-	-	-	-	-	2023-01-23
102	7445242	-	-	-	-	-	-	-	2023-01-23
103	7459421	H.S.A.	4.5	Observation Wells	Monitoring	-	3.0	4.5	2023-09-06
104	7459422	H.S.A.	4.5	Observation Wells	Monitoring	-	3.0	4.5	2023-09-07
105	7459424	H.S.A.	4.5	Observation Wells	Monitoring	-	3.0	4.5	2023-09-06
106	7459429	H.S.A.	4.5	Observation Wells	Monitoring	-	3.0	4.5	2023-09-09
107	7459433	H.S.A.	4.5	Observation Wells	Monitoring	-	3.0	4.5	2023-09-08
108	7459434	H.S.A.	4.5	Observation Wells	Monitoring	-	3.0	4.5	2023-09-07
109	7491333	-	-	-	-	-	-	-	2024-10-17
110	7491334	-	-	-	-	-	-	-	2024-10-28
111	7491336	-	-	-	-	-	-	-	2024-10-15

Notes:

*MECP WWID: Ministry of the Environment, Conservation and Parks Water Well Records Identification

**Metres below ground surface

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FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

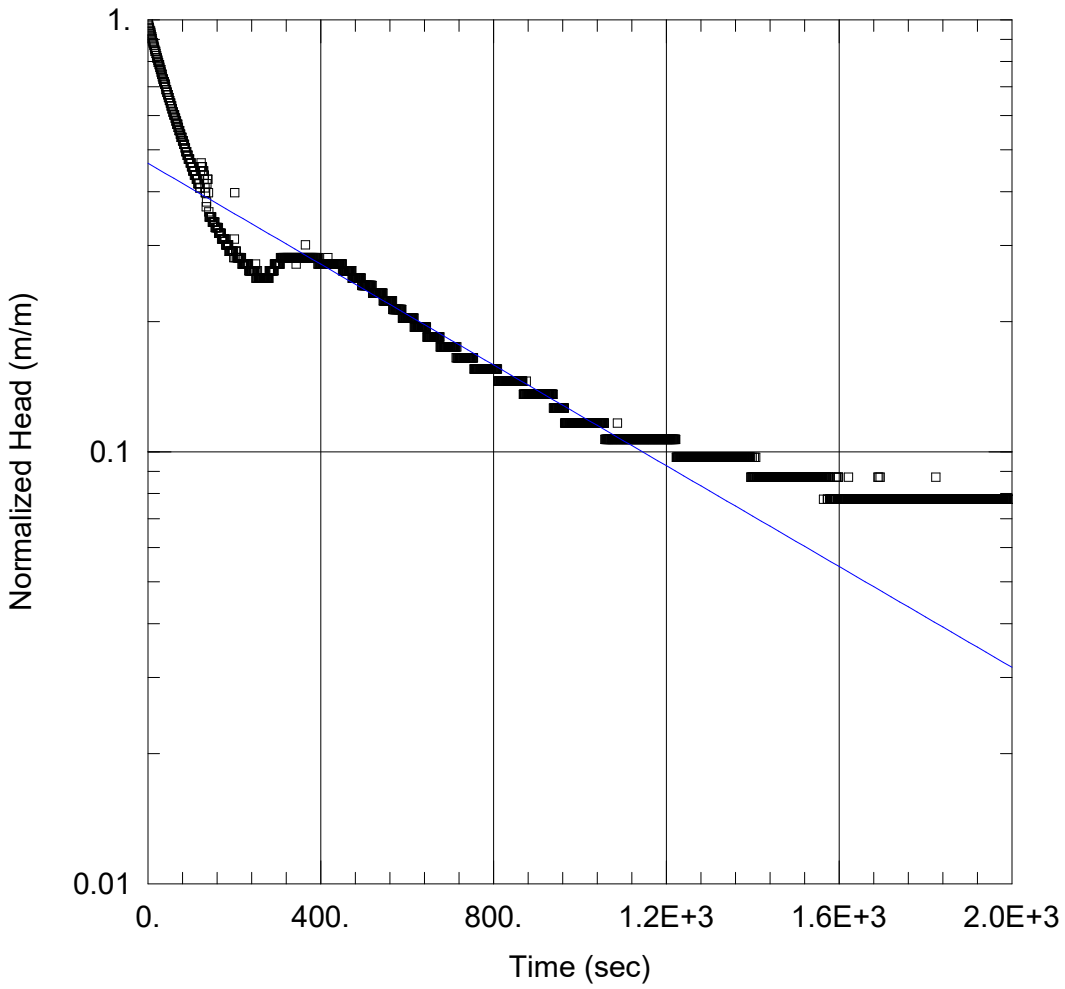
APPENDIX 'C'

IN-SITU HYDRAULIC CONDUCTIVITY TESTING DETAILS

REFERENCE NO. 2507-W174

Falling Head SWRT of BHMW 3

Prepared By:	Prepared For:
Soil Engineers Ltd.	Rice Group
Project:	Location:
2507-W174	9094 Regional Rd 25, Halton Hi



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 4.93E-7 m/sec y0 = 0.1437 m

AQUIFER DATA

Saturated Thickness: 4.7 m Anisotropy Ratio (Kz/Kr): 1.

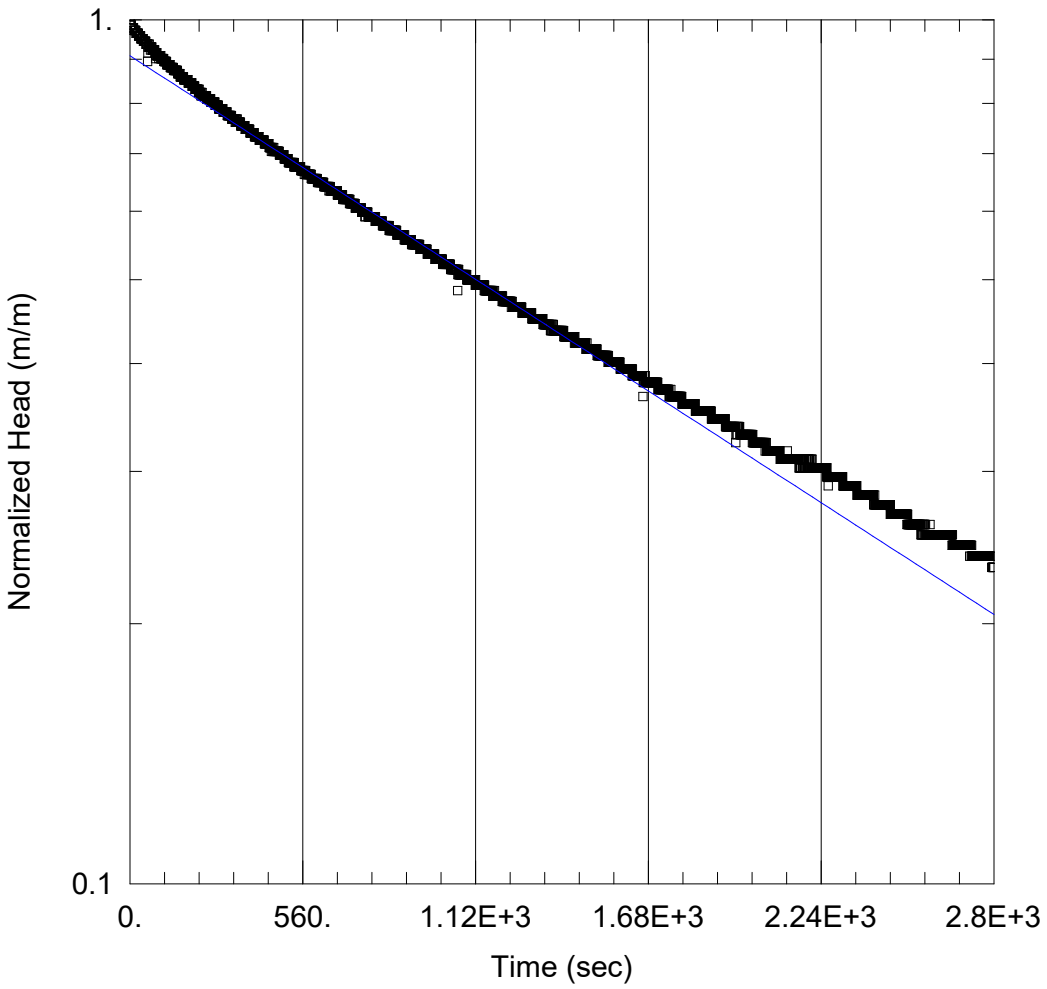
WELL DATA (BHMW 3)

Initial Displacement: 0.309 m
Static Water Column Height: 4.7 m
Total Well Penetration Depth: 4.7 m
Screen Length: 3. m
Casing Radius: 0.0254 m
Well Radius: 0.0508 m

Soil Engineers Ltd.

Rising Head SWRT of BHMW 8

Prepared By:	Prepared For:
Soil Engineers Ltd.	Rice Group
Project:	Location:
2507-W174	9094 Regional Rd 25, Halton Hi



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 2.106E-7 m/sec y0 = 0.387 m

AQUIFER DATA

Saturated Thickness: 7.3 m Anisotropy Ratio (Kz/Kr): 1.

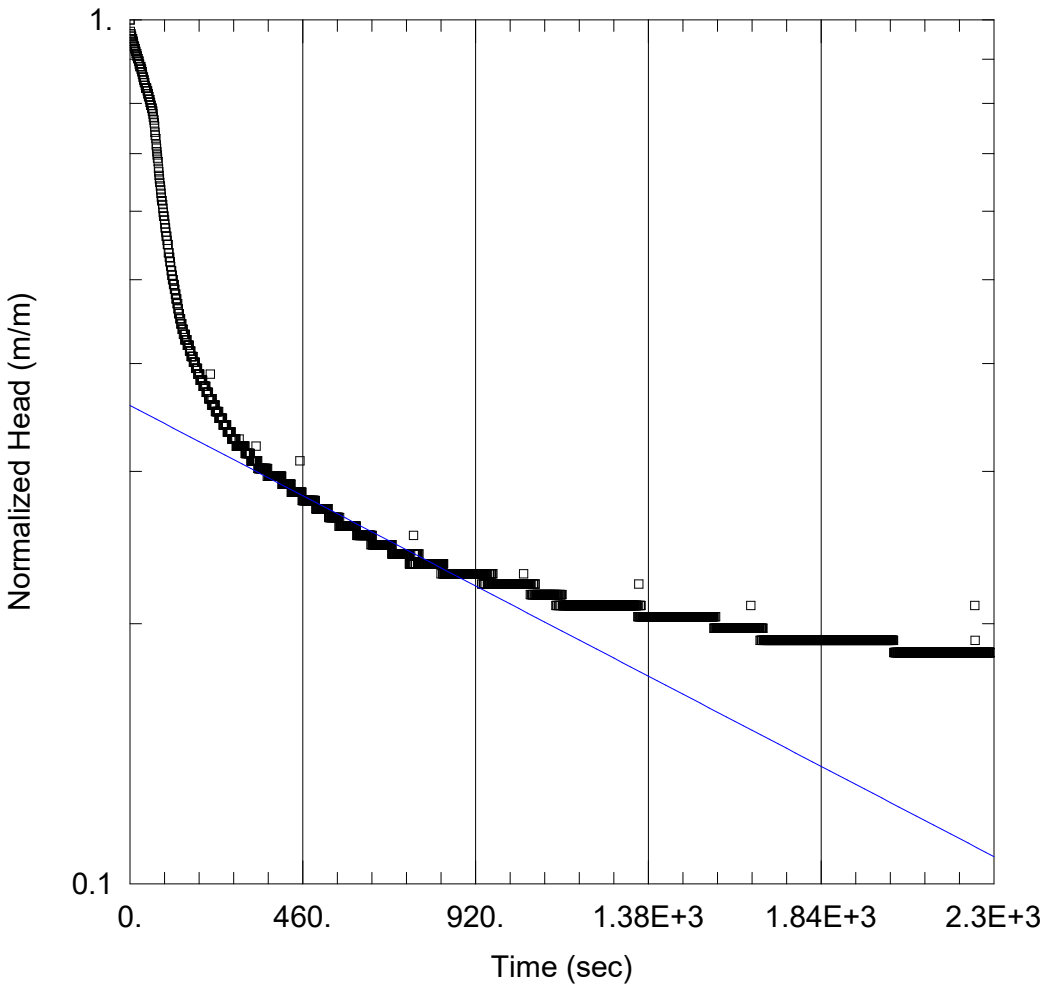
WELL DATA (BHMW 8)

Initial Displacement: 0.426 m
Static Water Column Height: 7.3 m
Total Well Penetration Depth: 7.3 m
Screen Length: 3. m
Casing Radius: 0.0254 m
Well Radius: 0.0508 m

Soil Engineers Ltd.

Falling Head SWRT of BHMW 11

Prepared By:	Prepared For:
Soil Engineers Ltd.	Rice Group
Project:	Location:
2507-W174	9094 Regional Rd 25, Halton Hi



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 3.074E-7 m/sec y0 = 0.1738 m

AQUIFER DATA

Saturated Thickness: 2. m Anisotropy Ratio (Kz/Kr): 1.

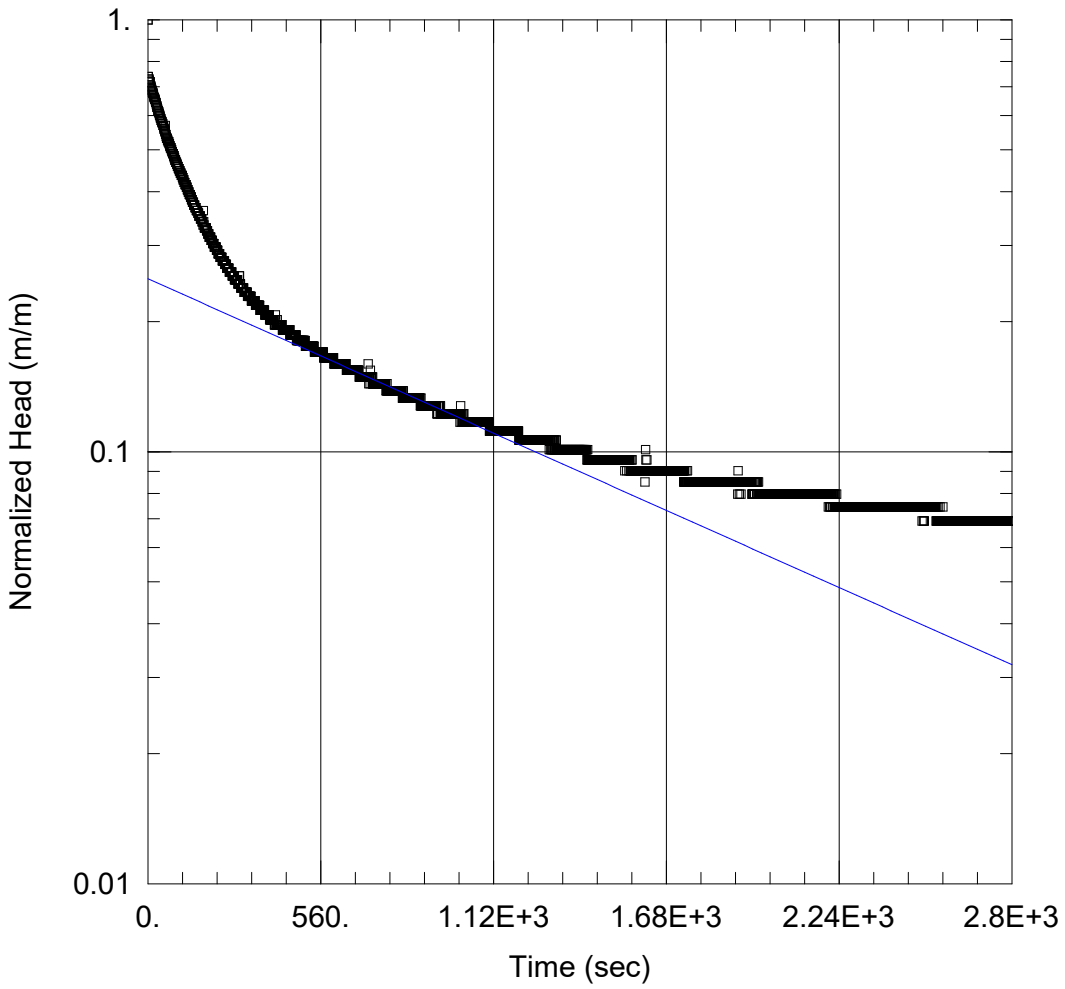
WELL DATA (BHMW 11)

Initial Displacement: 0.486 m
Static Water Column Height: 2. m
Total Well Penetration Depth: 2. m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0508 m

Soil Engineers Ltd.

Falling Head SWRT of BHMW 12

Prepared By:	Prepared For:
Soil Engineers Ltd.	Rice Group
Project:	**Location:**
2507-W174	9094 Regional Rd 25, Halton Hi



SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 5.354E-7 m/sec y0 = 0.1418 m

AQUIFER DATA

Saturated Thickness: 6.2 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (BHMW 12)

Initial Displacement: 0.564 m
Static Water Column Height: 6.2 m
Total Well Penetration Depth: 6.2 m
Screen Length: 1.5 m
Casing Radius: 0.0254 m
Well Radius: 0.0508 m

Soil Engineers Ltd.

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 684-4242	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

APPENDIX 'DI'

GROUNDWATER QUALITY RESULTS

REFERENCE NO. 2507-W174

FINAL REPORT

CA40293-OCT25 R1

2507-W174, 9094 Regional Rd 25, Halton Hillls

Prepared for

Soil Engineers Ltd.

FINAL REPORT

First Page

CLIENT DETAILS

Client	Soil Engineers Ltd.
Address	90 West Beaver Creek Rd Richmond, ON M1S 3A7. Canada
Contact	Tarek Agha
Telephone	437-215-8966
Facsimile	
Email	tarek.agha@soilengineersltd.com
Works #	
Project	2507-W174, 9094 Regional Rd 25, Halton Hillls
Reference	
Batch	
Samples	WATER (1)

LABORATORY DETAILS

Project Specialist	Brad Moore Hon. B.Sc
Laboratory	SGS Canada Inc.
Address	185 Concession St., Lakefield ON, K0L 2H0
Telephone	705-652-2143
Facsimile	705-652-6365
Email	brad.moore@sgs.com
SGS Reference	CA40293-OCT25
Received	2025-10-29
Approved	11/04/2025
Report Number	CA40293-OCT25 R1
Date Reported	11/04/2025

COMMENTS

RL - SGS Reporting Limit

Temperature of Sample upon Receipt: 7 degrees C
Cooling Agent Present:Yes
Custody Seal Present:Yes

Chain of Custody Number:045853

SIGNATORIES

Brad Moore Hon. B.Sc

TABLE OF CONTENTS

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hillls
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

Sample Number 8
Sample Name BH/MW8
Sample Matrix Ground Water
Sample Date 2025-10-28 00:00

L1 = SANSEW / WATER / - - Halton Sewer Use ByLaw - Sanitary and Combined Sewer Discharge - BL_2_03

L2 = SANSEW / WATER / - - Halton Sewer Use ByLaw - Storm Sewer Discharge - BL_2_03

Parameter	Units	RL	L1	L2	Result
General Chemistry					
Carbonaceous Biochemical Oxygen Demand	mg/L	2			< 4 ↑
Total Suspended Solids	mg/L	2	350		25
Total Kjeldahl Nitrogen	as N mg/L	0.5	100		< 0.5
Metals and Inorganics					
Cyanide (total)	mg/L	0.01	2		< 0.01
Fluoride	mg/L	0.06	10		0.19
Sulphate	mg/L	1	1500		17
Aluminum (total)	mg/L	0.001	50		0.019
Antimony (total)	mg/L	0.0009	5		< 0.0009
Arsenic (total)	mg/L	0.0002	1		0.0051
Beryllium (total)	mg/L	0.000007	5		< 0.000007
Cadmium (total)	mg/L	0.000003	1		0.000012
Chromium (total)	mg/L	0.00008	3		0.00008
Cobalt (total)	mg/L	0.000004	5		0.000102
Copper (total)	mg/L	0.001	3		< 0.001
Iron (total)	mg/L	0.007	50		0.017
Lead (total)	mg/L	0.00009	3		< 0.00009
Manganese (total)	mg/L	0.00001	5		0.0536
Molybdenum (total)	mg/L	0.0004	5		0.0011
Nickel (total)	mg/L	0.0001	3		0.0007

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hillls
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

L1 = SANSEW / WATER / - - Halton Sewer Use ByLaw - Sanitary and Combined Sewer Discharge - BL_2_03

L2 = SANSEW / WATER / - - Halton Sewer Use ByLaw - Storm Sewer Discharge - BL_2_03

Sample Number	8
Sample Name	BH/MW8
Sample Matrix	Ground Water
Sample Date	2025-10-28 00:00

Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Phosphorus (total)	mg/L	0.003	10		0.007
Selenium (total)	mg/L	0.00004	5		0.00009
Silver (total)	mg/L	0.00005	5		< 0.00005
Tin (total)	mg/L	0.00006	5		0.00021
Titanium (total)	mg/L	0.0001	5		0.0003
Zinc (total)	mg/L	0.002	3		0.017
Microbiology					
Ecoli	mpn/100mL	0		200	2
Oil and Grease					
Oil & Grease (total)	mg/L	2			< 2
Oil & Grease (animal/vegetable)	mg/L	4	150		< 4
Oil & Grease (mineral/synthetic)	mg/L	4	15		< 4
Other (ORP)					
pH	No unit	0.05	10	8.5	7.72
Mercury (total)	mg/L	0.00001	0.05		< 0.00001

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hillls
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

Sample Number 8
Sample Name BH/MW8
Sample Matrix Ground Water
Sample Date 2025-10-28 00:00

L1 = SANSEW / WATER / - - Halton Sewer Use ByLaw - Sanitary and Combined Sewer Discharge - BL_2_03

L2 = SANSEW / WATER / - - Halton Sewer Use ByLaw - Storm Sewer Discharge - BL_2_03

Parameter	Units	RL	L1	L2	Result
Phenols					
4AAP-Phenolics	mg/L	0.001	1		< 0.001
SVOCs - PAHs					
Naphthalene	mg/L	0.0005	0.14		< 0.0005
VOCs					
Chloroform	mg/L	0.0005	0.04		< 0.0005
1,4-Dichlorobenzene	mg/L	0.0005	0.08		< 0.0005
Methylene Chloride	mg/L	0.0005	2		< 0.0005
Tetrachloroethylene (perchloroethylene)	mg/L	0.0005	1		< 0.0005
Trichloroethylene	mg/L	0.0005	0.4		< 0.0005
VOCs - BTEX					
Benzene	mg/L	0.0005	0.01		< 0.0005
Ethylbenzene	mg/L	0.0005	0.16		< 0.0005
Toluene	mg/L	0.0005	0.016		< 0.0005

EXCEEDANCE SUMMARY

No exceedances are present above the regulatory limit(s) indicated

QC SUMMARY

Anions by discrete analyzer

Method: US EPA 375.4 | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-026

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Sulphate	DIO5033-OCT25	mg/L	1	<2	ND	20	108	80	120	105	75	125

Biochemical Oxygen Demand

Method: SM 5210 | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Carbonaceous Biochemical Oxygen Demand	BOD0057-OCT25	(CBOD5) mg/L	2	< 2	6	30	100	70	130	NV	70	130

Cyanide by SFA

Method: SM 4500 | Internal ref.: ME-CA-[ENVISFA-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Cyanide (total)	SKA0277-OCT25	mg/L	0.01	<0.01	ND	10	99	90	110	91	75	125

QC SUMMARY

Fluoride by Specific Ion Electrode

Method: SM 4500 I Internal ref.: ME-CA-[ENVIEWL-LAK-AN-014

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Fluoride	EWL0779-OCT25	mg/L	0.06	<0.06	ND	10	100	90	110	110	75	125

Mercury by CVAAS

Method: EPA 7471A/SM 3112B I Internal ref.: ME-CA-[ENVISPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (total)	EHG0070-OCT25	mg/L	0.00001	< 0.00001	ND	20	120	80	120	119	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-IENVISPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Silver (total)	EMS0363-OCT25	mg/L	0.00005	<0.00005	ND	20	100	90	110	NV	70	130
Aluminum (total)	EMS0363-OCT25	mg/L	0.001	<0.001	3	20	104	90	110	102	70	130
Arsenic (total)	EMS0363-OCT25	mg/L	0.0002	<0.0002	1	20	97	90	110	103	70	130
Beryllium (total)	EMS0363-OCT25	mg/L	0.000007	<0.000007	ND	20	98	90	110	100	70	130
Cadmium (total)	EMS0363-OCT25	mg/L	0.000003	<0.000003	9	20	100	90	110	100	70	130
Cobalt (total)	EMS0363-OCT25	mg/L	0.000004	<0.000004	2	20	99	90	110	100	70	130
Chromium (total)	EMS0363-OCT25	mg/L	0.00008	<0.00008	ND	20	97	90	110	95	70	130
Copper (total)	EMS0363-OCT25	mg/L	0.001	<0.001	8	20	100	90	110	100	70	130
Iron (total)	EMS0363-OCT25	mg/L	0.007	<0.007	4	20	100	90	110	100	70	130
Manganese (total)	EMS0363-OCT25	mg/L	0.00001	<0.00001	2	20	99	90	110	99	70	130
Molybdenum (total)	EMS0363-OCT25	mg/L	0.0004	<0.0004	7	20	99	90	110	99	70	130
Nickel (total)	EMS0363-OCT25	mg/L	0.0001	<0.0001	7	20	101	90	110	96	70	130
Lead (total)	EMS0363-OCT25	mg/L	0.00009	<0.00009	ND	20	100	90	110	97	70	130
Phosphorus (total)	EMS0363-OCT25	mg/L	0.003	<0.003	5	20	97	90	110	NV	70	130
Antimony (total)	EMS0363-OCT25	mg/L	0.0009	<0.0005	ND	20	103	90	110	104	70	130
Selenium (total)	EMS0363-OCT25	mg/L	0.00004	<0.00004	8	20	97	90	110	93	70	130
Tin (total)	EMS0363-OCT25	mg/L	0.00006	<0.00006	ND	20	99	90	110	NV	70	130
Titanium (total)	EMS0363-OCT25	mg/L	0.0001	<0.0001	ND	20	99	90	110	NV	70	130
Zinc (total)	EMS0363-OCT25	mg/L	0.002	<0.002	3	20	98	90	110	98	70	130

QC SUMMARY

Microbiology

Method: SM 9223B | Internal ref.: ME-CA-IENVIMIC-LAK-AN-021

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Ecoli	BAC9464-OCT25	mpn/100mL	-	ACCEPTED	ACCEPTED							

Oil & Grease

Method: MOE E3401 | Internal ref.: ME-CA-IENVIGC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (total)	GCM0495-OCT25	mg/L	2	<2	NSS	20	99	75	125			

QC SUMMARY

Oil & Grease-AV/MS

Method: MOE E3401/SM 5520F | Internal ref.: ME-CA-[ENV]GC-LAK-AN-019

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Oil & Grease (animal/vegetable)	GCM0495-OCT25	mg/L	4	< 4	NSS	20	NA	70	130			
Oil & Grease (mineral/synthetic)	GCM0495-OCT25	mg/L	4	< 4	NSS	20	NA	70	130			

pH

Method: SM 4500 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0778-OCT25	No unit	0.05	NA	0		101			NA		

Phenols by SFA

Method: SM 5530B-D | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
4AAP-Phenolics	SKA0006-NOV25	mg/L	0.001	<0.001	ND	10	94	80	120	106	75	125

QC SUMMARY

Semi-Volatile Organics

Method: EPA 3510C/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Naphthalene	GCM0494-OCT25	mg/L	0.0005	< 0.0005	NSS	30	102	50	140	NSS	50	140

Suspended Solids

Method: SM 2540D | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Suspended Solids	EWL0747-OCT25	mg/L	2	< 2	6	10	97	90	110	NA		

Total Nitrogen

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-002

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Kjeldahl Nitrogen	SKA0011-NOV25	as N mg/L	0.5	<0.5	1	10	104	90	110	97	75	125

QC SUMMARY

Volatile Organics

Method: EPA 5030B/8260C | Internal ref.: ME-CA-[ENV]GC-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
1,4-Dichlorobenzene	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	92	60	130	97	50	140
Benzene	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	92	60	130	99	50	140
Chloroform	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	92	60	130	97	50	140
Ethylbenzene	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	94	60	130	100	50	140
Methylene Chloride	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	78	60	130	81	50	140
Tetrachloroethylene (perchloroethylene)	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	93	60	130	98	50	140
Toluene	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	93	60	130	99	50	140
Trichloroethylene	GCM0016-NOV25	mg/L	0.0005	<0.0005	ND	30	92	60	130	98	50	140

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

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

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS	Insufficient sample for analysis.
RL	Reporting Limit.
↑	Reporting limit raised.
↓	Reporting limit lowered.
NA	The sample was not analysed for this analyte
ND	Non Detect

Results relate only to the sample tested.

Data reported represent the sample as submitted to SGS.

Test method information available upon request.

"Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

SGS Canada Inc. statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

-- End of Analytical Report --

Request for Laboratory Services and CHAIN OF CUSTODY

SGS

Industries & Environment - Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Fax: 705-652-6365 Web: www.sgs.com/environment
- London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361

No: 045853

Page _____ of _____

Laboratory Information Section - Lab use only

Received By: Scott Rus
Received Date: 10/29/25 (mm/dd/yy)
Received Time: 0730 (hr : min)
Received By (signature): _____
Custody Seal Present: Yes ☑ No ☐
Custody Seal Intact: Yes ☑ No ☐
Cooling Agent Present: Yes ☐ No ☐ Type: ice
Temperature Upon Receipt (°C): 7 & 3
CA40293-OCT25 AK
LAB LIMS #: _____

REPORT INFORMATION	INVOICE INFORMATION
Company: Soil Engineers Ltd	☐ (same as Report Information)
Contact: Tarek Aghal	Company:
Address: 90 West Beaver Creek Richmond Hill	Contact:
Phone: 416 754 8515	Address:
Fax:	Phone:
Email: Tarek.aghal@soilengineers ltd.com	Email:

Quotation #: _____ P.O. #: _____
Project #: 2507-W174 Site Location/ID: 9094 Regional Rd 25, Halton Hills

TURNAROUND TIME (TAT) REQUIRED

☐ Client Regular TAT ☑ Regular TAT (5-7days)

TAT's are quoted in business days (exclude statutory holidays & weekends). Samples received after 6pm or on weekends: TAT begins next business day

RUSH TAT (Additional Charges May Apply): ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days

PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION

Specify Due Date: _____

*NOTE: DRINKING (POTABLE) WATER SAMPLES FOR HUMAN CONSUMPTION MUST BE SUBMITTED WITH SGS DRINKING WATER CHAIN OF CUSTODY

REGULATIONS

☐ O.Reg 153/04 ☐ O.Reg 406/19

☐ Table 1 ☐ Res/Park Soil Texture: ☐ Coarse
☐ Table 2 ☐ Ind/Com ☐ Medium/Fine
☐ Table 3 ☐ Agri/Other
☐ Table _____ Appx. _____
Soil Volume ☐ <350m3 ☐ >350m3

Other Regulations:
☐ Reg 347/558 (3 Day min TAT)
☐ PWQO ☐ MMER
☐ CCME ☐ Other: _____
☐ MISA
☐ ODWS Not Reportable *See note

Sewer By-Law:
☑ Sanitary
☑ Storm
Municipality: Halton

RECORD OF SITE CONDITION (RSC) ☐ YES ☐ NO

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	# OF BOTTLES	MATRIX
1	BH/MW8	10·25·25	10:00	16	GW
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

	M & I				SVOC		PCB	PHC		VOC		Pest	Other (please specify)						SPLP	TCLP	
	Field Filtered (Y/N)	Metals & Inorganics incl CrVI, CN, Hg pH,(B(HWS),EC,SAR-soil) (Cl, Na-water)	Full Metals Suite ICP metals plus B(HWS-soil only) Hg, CrVI	ICP Metals only Sb,As,Ba,Be,B,Cd, Cr,Co,Cu,Pb,Mo,Ni,Se,Ag,Tl,U,V,Zn	PAHs only	SVOCs all incl PAHs, ABNs, CPs	PCBs Total ☐ Aroclor ☐	F1-F4 + BTEX	F1-F4 only no BTEX	VOCs all incl BTEX	BTEX only	Pesticides Organochlorine or specify other					Sewer Use: City of Hamilton Specify pkg: SAN+STM sewer	Water Characterization Pkg General ☐ Extended ☐	Specify tests ☐Metals ☐VOC ☐1,4-Dioxane ☐OCP ☐ABN	Specify tests ☐M&I ☐VOC ☐PCB ☐B(a)P ☐ABN ☐Ignit.	COMMENTS:
1	N																X				

Observations/Comments/Special Instructions

Sampled By (NAME): NAEIM RAFATI Signature: Naeim Rafati Date: 10/28/25 (mm/dd/yy)
Relinquished by (NAME): NAEIM RAFATI Signature: Naeim Rafati Date: 10/28/25 (mm/dd/yy)

Pink Copy - Client
Yellow & White Copy - SGS

Revision #: 1.8
Date of Issue: 06 SEP 2024

Note: Submission of samples to SGS is acknowledgement that you have been provided direction on sample collection/handling and transportation of samples. {2} Submission of samples to SGS is considered authorization for completion of work. Signatures may appear on this form or be retained on file in the contract, or in an alternative format (e.g. shipping documents). {3} Results may be sent by email to an unlimited number of addresses for no additional cost. Fax is available upon request. This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. (Printed copies are available upon request.) Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 684-4242	TEL: (905) 777-7956
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APPENDIX 'DII'

SURFACE WATER QUALITY RESULTS

REFERENCE NO. 2507-W174

FINAL REPORT

CA40292-OCT25 R1

2507-W174, 9094 Regional Rd 25, Halton Hills

Prepared for

Soil Engineers Ltd.

FINAL REPORT

CA40292-OCT25 R1

First Page

CLIENT DETAILS		LABORATORY DETAILS	
Client	Soil Engineers Ltd.	Project Specialist	Jill Campbell, B.Sc.,GISAS
Address	90 West Beaver Creek Rd Richmond, ON M1S 3A7. Canada	Laboratory	SGS Canada Inc.
		Address	185 Concession St., Lakefield ON, K0L 2H0
Contact	Tarek Agha		
Telephone	437-215-8966	Telephone	2165
Facsimile		Facsimile	705-652-6365
Email	tarek.agha@soilengineersltd.com	Email	jill.campbell@sgs.com
Works #		SGS Reference	CA40292-OCT25
Project Reference	2507-W174, 9094 Regional Rd 25, Halton Hills	Received	2025-10-29
		Approved	11/04/2025
Batch		Report Number	CA40292-OCT25 R1
Samples	WATER (1)	Date Reported	11/05/2025

COMMENTS

MAC - Maximum Acceptable Concentration
AO/OG - Aesthetic Objective / Operational Guideline
NR - Not reportable under applicable Provincial drinking water regulations as per client.

Temperature of Sample upon Receipt: 7 degrees C
Cooling Agent Present:Yes
Custody Seal Present:Yes

Chain of Custody Number:045854

SIGNATORIES

Jill Campbell, B.Sc.,GISAS

TABLE OF CONTENTS

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hills
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

L1 = PWQO_L / WATER / - - Table 2 - General - July 1999 PIBS 3303E

Sample Number	7
Sample Name	Creek On Site
Sample Matrix	Ground Water
Sample Date	2025-10-28 00:00

Parameter	Units	RL	L1	Result
General Chemistry				
Alkalinity	mg/L as CaCO3	2		302
Bicarbonate	mg/L as CaCO3	2		302
Carbonate	mg/L as CaCO3	2		< 2
OH	mg/L as CaCO3	2		< 2
Colour	TCU	3		11
Conductivity	uS/cm	2		706
Turbidity	NTU	0.10		16
Ammonia+Ammonium (N)	as N mg/L	0.1		< 0.1
Total Reactive Phosphorous (o-phosphate as P)	mg/L	0.03		< 0.03
Total Organic Carbon	mg/L	1		4
Metals and Inorganics				
Fluoride	mg/L	0.06		0.17
Bromide	mg/L	0.3		< 0.3
Nitrite (as N)	as N mg/L	0.03		< 0.03
Nitrate (as N)	as N mg/L	0.06		0.31
Sulphate	mg/L	2		44
Hardness	mg/L as CaCO3	0.05		349
Aluminum (total)	mg/L	0.001		0.388
Aluminum (0.2µm)	mg/L	0.001	0.075	0.002
Arsenic (total)	mg/L	0.0002	0.1	0.0016
Boron (total)	mg/L	0.002	0.2	0.049

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hills
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

L1 = PWQO_L / WATER / - - Table 2 - General - July 1999 PIBS 3303E

Sample Number	7
Sample Name	Creek On Site
Sample Matrix	Ground Water
Sample Date	2025-10-28 00:00

Metals and Inorganics (continued)

Parameter	Units	RL	L1	Result
Barium (total)	mg/L	0.00008		0.0844
Beryllium (total)	mg/L	0.000007	1.1	0.000027
Cobalt (total)	mg/L	0.000004	0.0009	0.000394
Calcium (total)	mg/L	0.01		92.4
Cadmium (total)	mg/L	0.000003	0.0005	0.000025
Copper (total)	mg/L	0.001	0.005	0.002
Chromium (total)	mg/L	0.00008		0.00042
Iron (total)	mg/L	0.007	0.3	1.26
Potassium (total)	mg/L	0.009		2.78
Magnesium (total)	mg/L	0.001		28.6
Manganese (total)	mg/L	0.00001		0.312
Molybdenum (total)	mg/L	0.0004	0.04	0.0004
Nickel (total)	mg/L	0.0001	0.025	0.0009
Sodium (total)	mg/L	0.01		21.4
Phosphorus (total)	mg/L	0.003	0.01	0.085
Lead (total)	mg/L	0.00009	0.025	0.00096
Silicon (total)	mg/L	0.02		5.86
Silver (total)	mg/L	0.00005	0.0001	< 0.00005
Strontium (total)	mg/L	0.00008		0.414
Thallium (total)	mg/L	0.000005	0.0003	0.000005
Tin (total)	mg/L	0.00006		0.00040
Titanium (total)	mg/L	0.0001		0.0060

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hills
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

L1 = PWQO_L / WATER / - - Table 2 - General - July 1999 PIBS 3303E

Sample Number 7
Sample Name Creek On Site
Sample Matrix Ground Water
Sample Date 2025-10-28 00:00

Metals and Inorganics (continued)

Parameter	Units	RL	L1	Result
Antimony (total)	mg/L	0.0009	0.02	< 0.0009
Selenium (total)	mg/L	0.00004	0.1	0.00010
Uranium (total)	mg/L	0.000002	0.005	0.000687
Vanadium (total)	mg/L	0.00001	0.006	0.00099
Zinc (total)	mg/L	0.002	0.02	0.013
Cation sum	meq/L	-9999		8.12
Anion Sum	meq/L	-9999		8.08
Anion-Cation Balance	% difference	-9999		0.22
Ion Ratio	-	-9999		1.00
Total Dissolved Solids (calculated)	mg/L	-9999		411
Conductivity (calculated)	uS/cm	-9999		810
Langeliers Index 4° C	@ 4° C	-9999		0.66
Saturation pH 4°C	pHs @ 4°C	-9999		7.52

Client: Soil Engineers Ltd.
Project: 2507-W174, 9094 Regional Rd 25, Halton Hills
Project Manager: Tarek Agha
Samplers: Naeim Rafati

MATRIX: WATER

L1 = PWQO_L / WATER / - - Table 2 - General - July 1999 PIBS 3303E

Sample Number 7
Sample Name Creek On Site
Sample Matrix Ground Water
Sample Date 2025-10-28 00:00

Parameter	Units	RL	L1	Result
Other (ORP)				
pH	No unit	0.05	8.6	8.18
Chloride	mg/L	1		40
Mercury (total)	mg/L	0.00001	0.0002	< 0.00001
Mercury (dissolved)	mg/L	0.00001	0.0002	< 0.00001

EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	PWQO_L / WATER / - - Table 2 - General - July 1999 PIBS 3303E L1
Creek On Site				
Iron	SM 3030/EPA 200.8	mg/L	1.26	0.3
Phosphorus	SM 3030/EPA 200.8	mg/L	0.085	0.01

QC SUMMARY

Alkalinity

Method: SM 2320 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Alkalinity	EWL0741-OCT25	mg/L as CaCO3	2	< 2	1	20	104	80	120	NA		

Ammonia by SFA

Method: SM 4500 I Internal ref.: ME-CA-IENVISFA-LAK-AN-007

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Ammonia+Ammonium (N)	SKA0004-NOV25	as N mg/L	0.1	<0.1	ND	10	100	90	110	100	75	125

QC SUMMARY

Anions by discrete analyzer

Method: US EPA 325.2 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-026

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Chloride	DIO5033-OCT25	mg/L	1	<1	ND	20	104	70	130	97	70	130
Sulphate	DIO5033-OCT25	mg/L	2	<2	ND	20	108	80	120	105	75	125

Anions by IC

Method: EPA300/MA300-Ions1.3 | Internal ref.: ME-CA-[ENV]IC-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Bromide	DIO0004-NOV25	mg/L	0.3	<0.3	ND	20	98	90	110	93	75	125
Nitrite (as N)	DIO0004-NOV25	mg/L	0.03	<0.03	1	20	101	80	120	96	70	130
Nitrate (as N)	DIO0004-NOV25	mg/L	0.06	<0.06	0	20	102	80	120	NV	70	130

QC SUMMARY

Carbon by SFA

Method: SM 5310 I Internal ref.: ME-CA-IENVISFA-LAK-AN-009

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Organic Carbon	SKA0280-OCT25	mg/L	1	<1	4	20	105	90	110	107	75	125

Carbonate/Bicarbonate

Method: SM 2320 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Carbonate	EWL0741-OCT25	mg/L as CaCO3	2	< 2	ND	10	NA	90	110	NA		
Bicarbonate	EWL0741-OCT25	mg/L as CaCO3	2	< 2	1	10	NA	90	110	NA		
OH	EWL0741-OCT25	mg/L as CaCO3	2	< 2	ND	10	NA	90	110	NA		

QC SUMMARY

Colour

Method: SM 2120 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-002

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Colour	EWL0758-OCT25	TCU	3	< 3	ND	10	90	80	120	NA		

Conductivity

Method: SM 2510 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Conductivity	EWL0741-OCT25	uS/cm	2	< 2	0	10	99	90	110	NA		

Fluoride by Specific Ion Electrode

Method: SM 4500 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-014

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Fluoride	EWL0752-OCT25	mg/L	0.06	<0.06	ND	10	103	90	110	98	75	125

QC SUMMARY

Mercury by CVAAS

Method: EPA 7471A/SM 3112B | Internal ref.: ME-CA-[ENVISPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Mercury (total)	EHG0070-OCT25	mg/L	0.00001	< 0.00001	ND	20	120	80	120	119	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-IENVISPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Silver (total)	EMS0363-OCT25	mg/L	0.00005	<0.00005	ND	20	100	90	110	NV	70	130
Aluminum (total)	EMS0363-OCT25	mg/L	0.001	<0.001	3	20	104	90	110	102	70	130
Aluminum (0.2µm)	EMS0363-OCT25	mg/L	0.001	<0.001	3	20	104	90	110	102	70	130
Arsenic (total)	EMS0363-OCT25	mg/L	0.0002	<0.0002	1	20	97	90	110	103	70	130
Barium (total)	EMS0363-OCT25	mg/L	0.00008	<0.00008	4	20	104	90	110	98	70	130
Beryllium (total)	EMS0363-OCT25	mg/L	0.000007	<0.000007	ND	20	98	90	110	100	70	130
Boron (total)	EMS0363-OCT25	mg/L	0.002	<0.002	4	20	96	90	110	83	70	130
Calcium (total)	EMS0363-OCT25	mg/L	0.01	<0.01	4	20	99	90	110	99	70	130
Cadmium (total)	EMS0363-OCT25	mg/L	0.000003	<0.000003	9	20	100	90	110	100	70	130
Cobalt (total)	EMS0363-OCT25	mg/L	0.000004	<0.000004	2	20	99	90	110	100	70	130
Chromium (total)	EMS0363-OCT25	mg/L	0.00008	<0.00008	ND	20	97	90	110	95	70	130
Copper (total)	EMS0363-OCT25	mg/L	0.001	<0.001	8	20	100	90	110	100	70	130
Iron (total)	EMS0363-OCT25	mg/L	0.007	<0.007	4	20	100	90	110	100	70	130
Potassium (total)	EMS0363-OCT25	mg/L	0.009	<0.009	5	20	97	90	110	99	70	130
Magnesium (total)	EMS0363-OCT25	mg/L	0.001	<0.001	4	20	100	90	110	101	70	130
Manganese (total)	EMS0363-OCT25	mg/L	0.00001	<0.00001	2	20	99	90	110	99	70	130
Molybdenum (total)	EMS0363-OCT25	mg/L	0.0004	<0.0004	7	20	99	90	110	99	70	130
Sodium (total)	EMS0363-OCT25	mg/L	0.01	<0.01	4	20	99	90	110	99	70	130
Nickel (total)	EMS0363-OCT25	mg/L	0.0001	<0.0001	7	20	101	90	110	96	70	130
Lead (total)	EMS0363-OCT25	mg/L	0.00009	<0.00009	ND	20	100	90	110	97	70	130

QC SUMMARY

Metals in aqueous samples - ICP-MS (continued)

Method: SM 3030/EPA 200.8 I Internal ref.: ME-CA-IENVISPE-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Phosphorus (total)	EMS0363-OCT25	mg/L	0.003	<0.003	5	20	97	90	110	NV	70	130
Antimony (total)	EMS0363-OCT25	mg/L	0.0009	<0.0005	ND	20	103	90	110	104	70	130
Selenium (total)	EMS0363-OCT25	mg/L	0.00004	<0.00004	8	20	97	90	110	93	70	130
Silicon (total)	EMS0363-OCT25	mg/L	0.02	<0.02	5	20	95	90	110	NV	70	130
Tin (total)	EMS0363-OCT25	mg/L	0.00006	<0.00006	ND	20	99	90	110	NV	70	130
Strontium (total)	EMS0363-OCT25	mg/L	0.00008	<0.00008	5	20	97	90	110	95	70	130
Titanium (total)	EMS0363-OCT25	mg/L	0.0001	<0.0001	ND	20	99	90	110	NV	70	130
Thallium (total)	EMS0363-OCT25	mg/L	0.000005	<0.000005	ND	20	99	90	110	95	70	130
Uranium (total)	EMS0363-OCT25	mg/L	0.000002	<0.000002	6	20	99	90	110	97	70	130
Vanadium (total)	EMS0363-OCT25	mg/L	0.00001	<0.00001	3	20	99	90	110	98	70	130
Zinc (total)	EMS0363-OCT25	mg/L	0.002	<0.002	3	20	98	90	110	98	70	130

pH

Method: SM 4500 I Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
pH	EWL0741-OCT25	No unit	0.05	NA	1		100			NA		

QC SUMMARY

Reactive Phosphorus by SFA

Method: SM 4500-P F | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Total Reactive Phosphorous (o-phosphate as P)	SKA0272-OCT25	mg/L	0.03	<0.03	ND	10	96	90	110	89	75	125

Turbidity

Method: SM 2130 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Recovery Limits (%)	
								Low	High		Low	High
Turbidity	EWL0738-OCT25	NTU	0.10	< 0.10	0	10	98	90	110	NA		

QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

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

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL.

Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS Insufficient sample for analysis.
RL Reporting Limit.
↑ Reporting limit raised.
↓ Reporting limit lowered.
NA The sample was not analysed for this analyte
ND Non Detect

Results relate only to the sample tested.
Data reported represent the sample as submitted to SGS.

Test method information available upon request.
"Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

SGS Canada Inc. statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

-- End of Analytical Report --

Request for Laboratory Services and CHAIN OF CUSTODY

No: 045854

SGS Industries & Environment - Lakefield: 185 Concession St., Lakefield, ON K0L 2H0 Phone: 705-652-2000 Fax: 705-652-6365 Web: www.sgs.com/environment
- London: 657 Consortium Court, London, ON, N6E 2S8 Phone: 519-672-4500 Toll Free: 877-848-8060 Fax: 519-672-0361

Page _____ of _____

Laboratory Information Section - Lab use only

Received By: Scott
Received By (signature): S
Received Date: 10/29/25 (mm/dd/yy)
Received Time: 07:30 (hr : min)
Custody Seal Present: Yes ☑ No ☐
Custody Seal Intact: Yes ☑ No ☐
Cooling Agent Present: Yes ☑ No ☐ Type: Ice
Temperature Upon Receipt (°C) 7°C+3
CA40292-OCT25 AK
LAB LIMS #:

REPORT INFORMATION

Company: Soil Engineers ltd
Contact: Tarek Agha
Address: 90 west Beaver Creek Richmond Hill
Phone: 4167548515
Fax:
Email: Tarek.Agha@soilengineersltd.com

INVOICE INFORMATION

☐ (same as Report Information)
Company:
Contact:
Address:
Phone:
Email:

Quotation #:
P.O. #:
Project #: 2507-W174
Site Location/ID: 9094 Regional Rd 25, Halton Hills

TURNAROUND TIME (TAT) REQUIRED

☐ Client Regular TAT ☑ Regular TAT (5-7days)

TAT's are quoted in business days (exclude statutory holidays & weekends). Samples received after 6pm or on weekends: TAT begins next business day

RUSH TAT (Additional Charges May Apply): ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days

PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION

Specify Due Date:

*NOTE: DRINKING (POTABLE) WATER SAMPLES FOR HUMAN CONSUMPTION MUST BE SUBMITTED WITH SGS DRINKING WATER CHAIN OF CUSTODY

REGULATIONS

☐ O.Reg 153/04 ☐ O.Reg 406/19

☐ Table 1 ☐ Res/Park Soil Texture: ☐ Coarse
☐ Table 2 ☐ Ind/Com ☐ Medium/Fine
☐ Table 3 ☐ Agri/Other
☐ Table _____ Appx. _____
Soil Volume ☐ <350m3 ☐ >350m3

Other Regulations:
☐ Reg 347/558 (3 Day min TAT)
☑ PWQO ☐ MMER
☐ CCME ☐ Other:
☐ MISA Halton
☐ ODWS Not Reportable *See note

Sewer By-Law:
☐ Sanitary
☐ Storm
Municipality:

RECORD OF SITE CONDITION (RSC) ☐ YES ☐ NO

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	# OF BOTTLES	MATRIX	Field Filtered (Y/N)	M&I: Metals & Inorganics (incl CrVI, CN, Hg pH,(B(HWS),EC,SAR-soil) (Cl, Na-water)	M&I: Full Metals Suite (ICP metals plus B(HWS-soil only) Hg, CrVI	M&I: ICP Metals only (Sb,As,Ba,Be,B,Cd, Cr,Co,Cu,Pb,Mo,Ni,Se,Ag,Tl,U,V,Zn	SVOC: PAHs only	SVOC: SVOCs (all incl PAHs, ABNs, CPs	PCB: PCBs (Total ☐ Aroclor ☐)	PHC: F1-F4 + BTEX	PHC: F1-F4 only (no BTEX	VOC: VOCs (all incl BTEX	VOC: BTEX only	Pest: Pesticides (Organochlorine or specify other	Other (please specify)	Other	Other	Other	Other: Sewer Use (Specify pkg:)	Other: Water Characterization Pkg (General ☑ Extended ☐)	SPLP (Specify tests: ☐Metals ☐VOC ☐1,4-Dioxane ☐OCP ☐ABN)	TCLP (Specify tests: ☐M&I ☐VOC ☐PCB ☐B(a)P ☐ABN ☐Ignit.)	COMMENTS:
1	Creek on Site	10.25.25	10:00	11	General water	N																X			
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Observations/Comments/Special Instructions

Sampled By (NAME): NAEIM RAFATI **Signature:** Naeim Rafati Date: 10/28/25 (mm/dd/yy)
Relinquished by (NAME): NAEIM RAFATI **Signature:** Naeim Rafati Date: 10/28/25 (mm/dd/yy)

Pink Copy - Client
Yellow & White Copy - SGS

Revision #: 1.8
Date of Issue: 06 SEP 2024

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 684-4242	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

APPENDIX 'E'

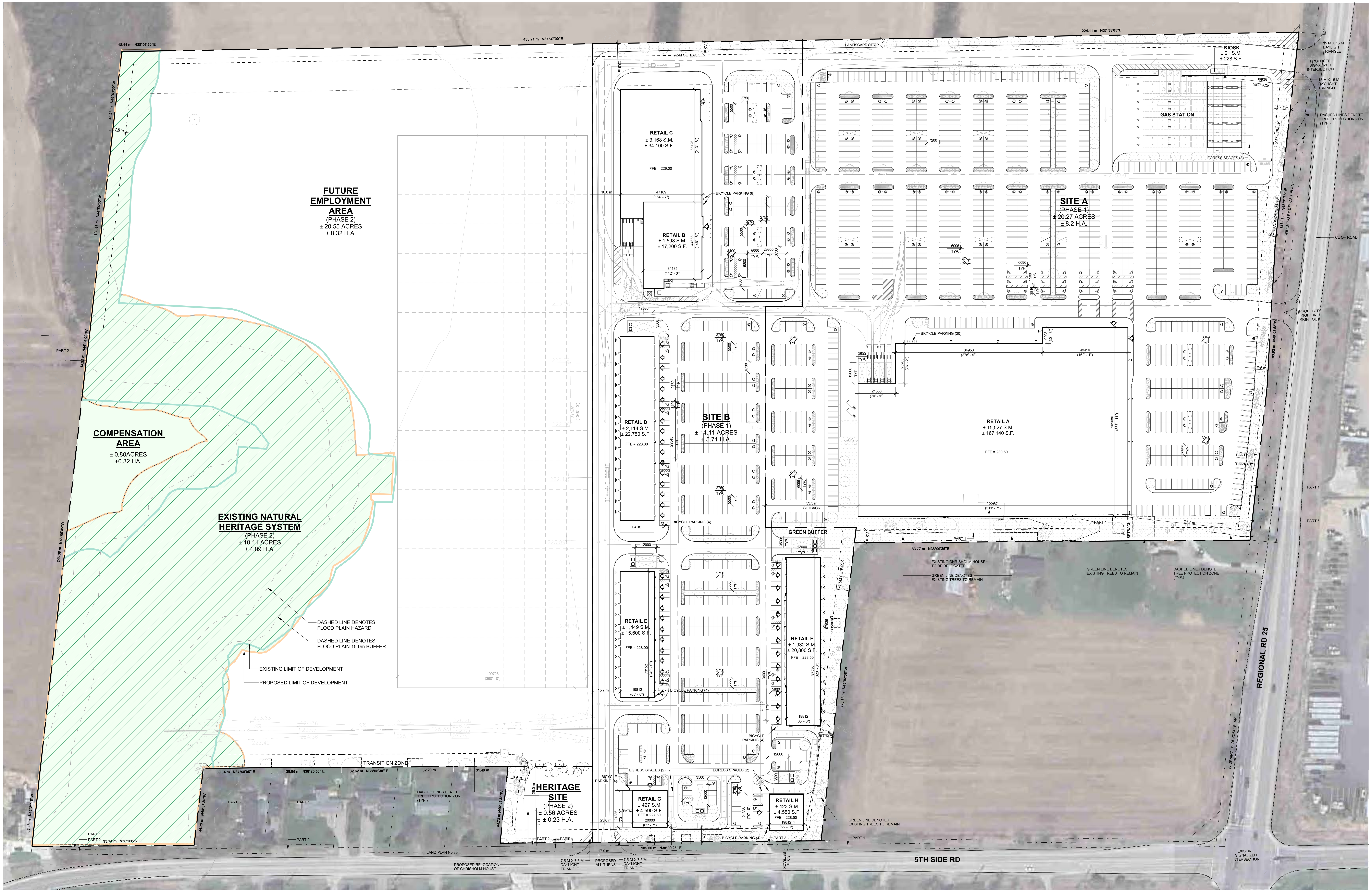
SHORT-TERM DEWATERING FLOW RATE ESTIMATES AND REVIEWED PLANS

REFERENCE NO. 2507-W174

SHORT-TERM DEWATERING FLOW RATES FOR THE CONSTRUCTION OF THE FOOINGS OF THE PROPOSED BUILDINGS

Parameter	Units	Building A	Building B	Building C	Building D	Building E	Building F	Building G	Building H
Total Anticipated Short Term Dewatering Flow including Storm Event and Safety Factor	**L/day**	**15,700.0**	**5,000.0**	**7,000.0**	**7,800.0**	**5,700.0**	**7,200.0**	**2,600.0**	**2,600.0**
Anticipated Storm Flow (2Year-3Hr event)	**L/day**	**15,700.0**	**5,000.0**	**7,000.0**	**7,800.0**	**5,700.0**	**7,200.0**	**2,600.0**	**2,600.0**
Storm Event (2Year-3Hr event)	**m**	0.03060	0.03060	0.03060	0.03060	0.03060	0.03060	0.03060	0.03060
Proposed Heighest Grading Elevation	**masl**	230.50	229.00	229.00	228.00	228.00	228.50	227.50	228.50
Highest Interpreted Groundwater Elevation	**masl**	225.00	224.50	225.00	224.00	224.50	224.80	224.00	224.80
Proposed Invert Elevation for the Excavation	**masl**	229.30	227.80	227.80	226.80	226.80	227.30	226.30	227.30
Width	**m**	99.6	34.1	47.1	19.8	19.8	19.8	20.0	19.8
Length	**m**	155.9	46.9	67.3	106.8	73.2	97.6	21.4	21.4
Area	**m2**	511.0	161.9	228.7	253.1	186.0	234.8	82.7	82.4
Perimeter	**m**	511.0	161.9	228.7	253.1	186.0	234.8	82.7	82.4
Q s.f. 2.0	**L/day**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Q	**L/day**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Q	**m^3/day**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
K	**m/day**	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
H	**m**	225.0	224.5	225.0	224.0	224.5	224.8	224.0	224.8
h	**m**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R_0	**m**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trench width (b)	**m**	99.6	34.1	47.1	19.8	19.8	19.8	20.0	19.8
r_s	**m**	49.8	17.1	23.6	9.9	9.9	9.9	10.0	9.9
x (a)	**m**	155.9	46.9	67.3	106.8	73.2	97.6	21.4	21.4
L	**m**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	a/b	1.6	1.4	1.4	5.4	3.7	4.9	1.1	1.1

Parameter	Units								
R_0	**m**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
H	**m**	225.0	224.5	225.0	224.0	224.5	224.8	224.0	224.8
K	**m/s**	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
S_y (Johnson,1967)		0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
t	**s**	1,209,600.0	1,209,600.0	1,209,600.0	1,209,600.0	1,209,600.0	1,209,600.0	1,209,600.0	1,209,600.0



1 ZBA-A100 SITE PLAN
1 : 1000

ZONING REQUIREMENT

TOWN OF HALTON HILLS
ZONING BY-LAW 2010-0050

* indicates non-compliance

CURRENT ZONING	A(9)-AGRICULTURAL
MIN. LOT FRONTAGE	180 M
MIN. LOT AREA	4.0 HA
MIN. FRONT YARD	15.0 M
MIN. REAR YARD	15.0 M
MIN. INT. SIDE YARD	15.0 M
MIN. EXT. SIDE YARD	15.0 M
MAX. HEIGHT	11.0 M

PROPOSED ZONING SITE A — 401 CORRIDOR GATEWAY ZONE (G)	REQUIRED	PROPOSED
MIN. LOT FRONTAGE	30.0 M	295 M
MIN. LOT AREA	0.4 HA	± 8.20 HA.
MIN. FRONT YARD (REGIONAL ROAD 25)	3.0 M	40.1 M
MIN. REAR YARD	3.0 M	53.5 M
MIN. INT. SIDE YARD	3.0 M	15.8 M
MIN. EXT. SIDE YARD	3.0 M	N/A
MIN. LOT COVERAGE	25%	18.96 % *
MAX. HEIGHT	-	15 M*
MAX. FLOOR SPACE (RETAIL)	2,750 S.M.	± 15,528 S.M. *
MIN. LANDSCAPED OPEN SPACE	10%	±12%
MIN. PLANTING STRIP WIDTH	3.0 M	3.0 M
MIN. SIZE OF LOADING SPACE	3.5 M x 12.0 M	3.5 M x 12.0 M
MIN. NUMBER OF LOADING SPACE	5 SPACES	5 SPACES
BICYCLE PARKING SPACES	18 SPACES	18 SPACES
CAR PARKING SPACES	776 SPACES	1083 SPACES
BARRIER FREE PRKG (11 SPACES +1%) PER PREMISE	22 SPACES	24 SPACES
SITE SPECIFIC EXCEPTION:	LARGE RETAIL FORMAT	

PROPOSED ZONING SITE B — 401 CORRIDOR GATEWAY ZONE (G)	REQUIRED	PROPOSED
MIN. LOT FRONTAGE	30.0 M	125.9 M
MIN. LOT AREA	0.4 HA	± 5.71 HA.
MIN. FRONT YARD (5TH SIDE ROAD)	3.0 M	7.9 M
MIN. REAR YARD	3.0 M	25.0 M
MIN. INT. SIDE YARD	3.0 M	15.7 M
MIN. EXT. SIDE YARD	3.0 M	N/A
MIN. LOT COVERAGE	25%	19.46 % *
MAX. HEIGHT	-	8.6 M
MAX. FLOOR SPACE (RETAIL)	2,750 S.M.	± 3,168 S.M. *
MIN. LANDSCAPED OPEN SPACE	10%	±26%
MIN. PLANTING STRIP WIDTH	3.0 M	3.0 M
MIN. SIZE OF LOADING SPACE	3.5 M x 12.0 M	3.5 M x 12.0 M
MIN. NUMBER OF LOADING SPACE	10 SPACES	10 SPACES
BICYCLE PARKING SPACES	14 SPACES	24 SPACES
CAR PARKING SPACES	564 SPACES	707 SPACES
BARRIER FREE PRKG (2 SPACES + 2%) PER PREMISE	17 SPACES	20 SPACES
MIN. DRIVE THROUGH INGRESS SPACES	12 SPACES	11 SPACES*
MIN. DRIVE THROUGH EGRESS SPACES	2 SPACES	1 SPACE*

PROPOSED ZONING HERITAGE SITE — RCC-RURAL CLUSTER COMMERCIAL	REQUIRED	PROPOSED
MIN. LOT FRONTAGE	30.0 M	59.6 M
MIN. LOT AREA	0.2 HA	± 0.23 HA.
MIN. FRONT YARD	7.5 M	19.0 M
MIN. REAR YARD	7.5 M	10.0 M
MIN. INT. SIDE YARD	4.5 M	11.9 M
MIN. EXT. SIDE YARD	7.5 M	N/A
MAX. HEIGHT	11.0 M	4 M (TBD)
MAX. NET FLOOR AREA	500 S.M.	138.5 S.M.

GENERAL PARKING PROVISIONS	REQUIRED	PROPOSED
MIN. DRIVE AISLE WIDTH	6.7 M	6.7 M
MIN. PARKING	W 2.75 M x L 5.5 M	W 2.75 M x L 5.5 M
MIN. ACCESSIBLE PARKING TYPE A	W 3.4 M x L 5.8 M	W 3.4 M x L 5.8 M
MIN. ACCESSIBLE PARKING TYPE B	W 2.4 M x L 5.8 M	W 3.4 M x L 5.8 M
MIN. ACCESS AISLE	1.5 M	6.7 M

TURNER FLEISCHER

Turner Fleischer Architects Inc.

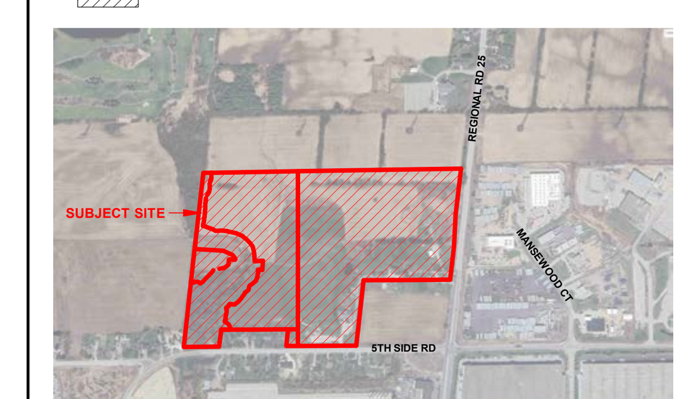
67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

STATISTICS

TOTAL SITE AREA	**± 66.40 AC.**	**± 26.87 HA.**
SITE AREA A	**± 20.27 AC.**	**± 8.20 HA.**
SITE AREA B	**± 14.11 AC.**	**± 5.71 HA.**
FUTURE EMPLOYMENT AREA	**± 20.55 AC.**	**± 8.32 HA.**
HERITAGE SITE AREA	**± 0.56 AC.**	**± 0.23 HA.**
EX. NATURAL HERITAGE SYSTEM	**± 10.11 AC.**	**± 4.09 HA.**
COMPENSATION AREA	**± 0.80 AC.**	**± 0.32 HA.**
KIOSK	± 228 S.F.	± 21 S.M.
RETAIL A	± 167,140 S.F.	± 15,528 S.M.
RETAIL B	± 17,200 S.F.	± 1,598 S.M.
RETAIL C	± 34,100 S.F.	± 3,168 S.M.
RETAIL D	± 22,750 S.F.	± 2,114 S.M.
RETAIL E	± 15,600 S.F.	± 1,449 S.M.
RETAIL F	± 20,800 S.F.	± 1,932 S.M.
RETAIL G	± 4,590 S.F.	± 427 S.M.
RETAIL H	± 4,550 S.F.	± 423 S.M.
TOTAL GFA	± 286,958 S.F.	± 26,659 S.M.
PARKING RETAIL (A)	6.48 /1000 S.F.	1083 CARS 6.97 /100 S.M.
PARKING RETAIL (B+C+D+E+F+G+H)	5.91 /1000 S.F.	707 CARS 6.36 /100 S.M.
TOTAL BICYCLE PARKING REQUIRED		
SITE A (2+1/1000S.M.)		18 SPACES
SITE B (2+1/1000S.M.)		14 SPACES
COVERAGE SITE A		**18.96%**
COVERAGE SITE B		**19.46%**

SITE PLAN LEGEND

- PROPOSED ENTRANCE ARROW
- PROPOSED EXIT ARROW
- PROPOSED CONCRETE SIDEWALK
- PROPOSED PAINTED LINES



CONTEXT PLAN

#	DATE	DESCRIPTION	BY
14	2023-03-31	ISSUED FOR COORDINATION (A1-25)	MHB
13	2026-03-30	ISSUED FOR REVIEW (A1-24)	MHB
12	2026-03-19	ISSUED FOR REVIEW (A1-23)	JKW
11	2026-03-16	ISSUED FOR REVIEW (A1-22)	AMC
10	2026-03-03	ISSUED FOR REVIEW (A1-21)	AMC
9	2026-02-23	ISSUED FOR REVIEW (A1-20)	AMC
8	2026-02-17	ISSUED FOR REVIEW (A1-19)	JKW
7	2026-02-12	ISSUED FOR REVIEW (A1-18)	MHB
6	2025-11-12	ISSUED FOR REVIEW (A1-16)	AMC
5	2025-11-04	ISSUED FOR REVIEW (A1-16)	AMC
4	2025-09-16	ISSUED FOR COORDINATION	AMC
3	2025-08-28	ISSUED FOR COORDINATION	AMC
2	2025-08-21	ISSUED FOR ZBA	AMC
1	2025-08-14	ISSUED FOR COORDINATION	AMC

RICE GROUP

PROJECT
9094 REGIONAL RD 25
HALTON HILLS, ON

DRAWING
SITE PLAN

PROJECT NO.
25.117P01

PROJECT DATE
2025-08-08

DRAWN BY
JKW

CHECKED BY
RLA

SCALE
As indicated

DRAWING NO.
ZBA-A100

REV.
14

2026-03-31 5:44:33 PM