Phase Two Environmental Site Assessment

1225 Dundas Street East, Mississauga, Ontario

Submitted to:
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Executive Summary

GEI Consulting Ltd. (GEI) was retained by Mr. Daniel Orellana on behalf of Dundix Realty Holdings (Client) to conduct a Phase Two Environmental Site Assessment (ESA) on the property located at 1225 Dundas Street East, in Mississauga, Ontario (Site).

This Phase Two ESA was conducted in accordance with the Phase Two ESA standard defined by Ontario Regulation 153/04 (O.Reg.153/04), as amended.

The objective of the Phase Two ESA was to assess the areas of potential environmental concern (APECs) identified in the Phase One ESA completed by GEI Consultants in June 2022; and, to obtain soil and groundwater data to characterize the Site to support the filing of a Record of Site Condition (RSC) on the Ontario Ministry of the Environment, Conservation and Parks (MECP) Brownfields Environmental Site Registry (BESR).

The findings of the Phase Two ESA conducted at the Site are summarized as follows:

1. The general stratigraphy at the Site, as revealed in the borehole, consists of a pavement structure consists of asphalt and granular underlain by earth fill comprised of clayey silt, to sand, to silty sand, to sandy silt followed by sand and glacial till deposits underlain by shale bedrock.
2. The native materials encountered, are comprised of sand and glacial till deposits. Grain size analysis was performed on nine (9) soil samples submitted from the overburden material. Seven (7) of the soil samples were found to be coarse textured. As a result, coarse textured standards were applied as part of this Phase Two ESA.
3. Groundwater depths within the groundwater table across the Site ranged between approximately 0.93 m and 1.99 m bgs on June 1, 2022.
4. The soil analytical results indicated that select parameters were detected at concentrations above the applicable MECP (2011a) Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and course soils including:

Parameter	MECP (2011) Table 3 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS	Maximum concentration detected (µg/g)
Metals and Inorganics				
Zinc	340	12	1	716
Lead	120	12	2	175

1) Not including duplicate samples

5. The groundwater analytical results indicated that no parameters were detected at concentrations above the applicable MECP (2011a) Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for All Property Use and course textured soils

Conclusion and Recommendation

The soil COCs identified at the Site are comprised of lead and zinc. No groundwater COCs were identified at the Site. Based on the former activities on-Site, the impacts are likely associated with

the former transport truck parking lot located on Site. Parked trucks and trailers could have leaked liquids from various vehicular parts (i.e., battery) containing lead and zinc to the ground.

Exceedances of the applicable Standards were identified in soil to a maximum depth of 2.29 m bgs. In order to proceed with the Record of Site Condition (RSC), the following steps are recommended:

1. Conduct a lateral delineation program in the vicinity of BH1, BH5 and BH12 and submit lateral delineation soil samples.
2. Conduct a remediation program consisting of the excavation and off-Site removal of impacted soil material.
3. Prepare a remediation report.
4. Submit an RSC.

1. Introduction

GEI Consulting Ltd. (GEI) was retained by Mr. Daniel Orellana on behalf of Dundix Realty Holdings (Client) to conduct a Phase Two Environmental Site Assessment (ESA) on the property located at 1225 Dundas Street East, in Mississauga, Ontario (Site).

The objective of the Phase Two ESA was to assess the areas of potential environmental concern (APECs) identified in the Phase One ESA completed by GEI in June 2022 and to obtain soil and groundwater data to characterize the Site to support the preparation of the filing of a Record of Site Condition (RSC) on the Ontario Ministry of the Environment, Conservation and Parks (MECP) Brownfields Environmental Site Registry (BESR). It is GEI's understanding that the Client is planning on redeveloping the Site for residential purposes in the future, which would require an RSC. Contact information for the Client is provided in Section 1.2.

1.1 Site Description

The Site is located northeast of Arena Road, southeast of Dundix road, and north of Dundas Street East, in Mississauga, Ontario, as shown on Figure 1. The Site is irregular in shape and measures approximately 12,300 m^2 (1.23 ha) in size. The Site is currently occupied by a slab-on-grade one (1)-storey commercial building with (9) retail units (Site building), six (6) of which are currently occupied. The Site building has a footprint of approximately 5,700 m^2 and occupies approximately 45% of the Site. The areas surrounding the Site building are predominately covered with asphalt and used for parking. A Site layout plan is shown on Figure 2.

For the simplicity of describing the surrounding properties, Dundas Street East is considered running west to east. The Site is bound by Dundix Road followed by residential properties to the north, a residential apartment building followed by Queen Frederica Drive to the east, Dundas Street East followed by several large commercial plazas to the south, and Arena Road followed by a mix of commercial and residential properties to the west. The surrounding properties are shown on Figure 3.

1.2 Legal Description and Property Ownership

The legal description of the Site and the Property Identification Number (PIN) as obtained from the legal survey are listed below:

Site Details	
Municipal Addresses	1225 Dundas Street East, Mississauga, Ontario.
Current Owner	Dundix Realty Holdings
Owner Address	3200 Highway 7, Vaughan, Ontario L4K 5Z5
Owner Contact Person	Mr. Daniel Orellana
Legal Description	Parcel 7-2 Section 43-Toronto Township-1 (NDS); Part Lot 7, Concession 1 NDS, Part 1 43R2899; Mississauga
Property Identification Number (PIN)	13335-0153 (LT)

Site Details	
Property Size	12700 m^2 (1.27 ha)
Approximate Universal Transverse Mercator (UTM) coordinates	Zone: 17 Easting: 613928.41 Northing: 4829119.43 (1 m, NAD83, ArcGIS)

1.3 Current and Proposed Future Uses

At the time of the Phase Two ESA investigation, the Site was zoned for commercial. The Site is currently occupied by a slab-on-grade one (1)-storey commercial building with (9) retail units, six (6) of which are currently occupied. The Site is being proposed to be redeveloped for a mid-rise residential development. Section 168.3.1 of the Environmental Protection Act does not prohibit the proposed future use of the Property. Current surrounding land uses are included in Figure 3.

1.4 Applicable Site Condition Standards

Analytical results obtained for Site soil and groundwater samples were assessed against Site Condition Standards (SCS) as established under subsection 169.4(1) of the Environmental Protection Act, and presented in the document MECP "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act', ("SGWS" Standards), (MECP, 2011a). Tabulated background SCS (Table 1) applicable to environmentally sensitive sites and effects based generic SCS (Tables 2 to 9) applicable to non-environmentally sensitive sites are provided in the SGWS Standards. The effects based SCS (Tables 2 to 9) are protective of human health and the environment for different groundwater conditions (potable and non-potable), land use scenarios (residential, parkland, institutional, commercial, industrial, community and agricultural/other), soil texture (coarse or medium/fine) and restoration depth (full or stratified).

Tables 1 to 9 of MECP are summarized as follows:

a) Table 1 - applicable to sites where background concentrations must be met (full depth), such as sensitive sites where site-specific criteria have not been derived;

b) Table 2 - applicable to sites with potable groundwater and full depth restoration;

c) Table 3 - applicable to sites with non-potable groundwater and full depth restoration;

d) Table 4 - applicable to sites with potable groundwater and stratified restoration;

e) Table 5 - applicable to sites with non-potable groundwater and stratified restoration;

f) Table 6 - applicable to sites with potable groundwater and shallow soils;

g) Table 7 - applicable to sites with non-potable groundwater and shallow soils;

h) Table 8 - applicable to sites with potable groundwater and that are within 30 m of a water body; and,

i) Table 9 - applicable to sites with non-potable groundwater and that are within 30 m of a water body.

Application of the generic or background SCS to a specific site is based on a consideration of site conditions related to soil pH (i.e., surface and subsurface soil), thickness and extent of overburden material, (i.e., shallow soil conditions), and proximity to an area of environmental sensitivity or of natural significance. For some chemical constituents, consideration is also given to soil textural classification with SCS having been derived for both coarse and medium/fine textured soil conditions.

For assessment purposes, GEI selected the MECP Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and course soils. The selection of this category was based on the following factors:

a) More than two-thirds of the Site has an overburden thickness greater than 2 m.

b) The Site is not located within 30 m of a surface water body or an area of natural significance.

c) The soil at the Site has a pH value between 5 and 9 for surficial soils; and, between 5 and 11 for subsurface soils.

d) The property is not within an area of natural significance; does not include, nor is it adjacent to an area of natural significance, nor is it part of such an area; and it does not include land that is within 30 m of an area of natural significance, nor is it part of such an area.

e) The Site is considered as non-potable for the following reasons: the Site is fully serviced by the City of Mississauga/Peel Region water distribution system, the property is not located within an area designated in a municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of groundwater, the property or one of the properties in the Phase One/Two study area does not have a well-used or intended for use as a source of water for human consumption or agriculture, and all properties located, in whole or in part, within 250 metres of the boundaries of the property, are supplied by a municipal drinking water system, as defined in the Safe Drinking Water Act, 2002.

f) The future land use of the Site is residential.

g) The predominant soil type on the Site was considered to be course textured as per the grain size analysis performed on soil samples taken during the Phase Two ESA (see Appendix G).

h) There was no intention to carry out a stratified restoration at the Site.

2. Background Information

2.1 Physical Setting

The following physiographic, geological and soil maps were reviewed as part of this Phase Two ESA:

a) Atlas of Canada – Toporama Topographic Map (Toporama).

b) Ontario Base Map (OBM).

c) Ontario Ministry of Energy, Northern Development and Mines (MENDM) website, Bedrock Geology of Ontario, 2011 – MRD 126; and Paleozoic Geology of Southern Ontario, 2007 – MRD 219 (KML format);

d) Ontario MENDM website, Surficial Geology of Southern Ontario, 2010. (KML format); and,

e) Ontario MENDM website, Physiography of Southern Ontario 2007.

The following information was obtained from these maps:

a) The Site is at an elevation of approximately 121 metres above sea level (m asl), generally at the same elevation as properties to the north of the Site. The surrounding properties to the west are generally at a slightly higher elevation than the Site. The surrounding properties to the south and east are generally at a slightly lower elevation than the Site. The Site is relatively flat.

b) No water bodies are located on the Site. Little Etobicoke Creek is situated approximately 400 m north of the Site. Lake Ontario is situated approximately 4.5 km southeast of the Site. The inferred groundwater flow direction is estimated towards the north.

c) The bedrock in the general area consists of shale, limestone, dolostone and siltstone and is part of the Georgian Bay Formation, Blue Mountain formation, Billings Formation, Collingwood Member and Eastview Member.

d) The surficial geology of the Site is described as coarse-textured glaciolacustrine deposits consisted of sand, gravel, minor silt and clay with foreshore and basinal deposits.

e) The physiography of the Site is within the Iroquois Plain and is characterized as sand plains.

2.2 Past Environmental Investigations

Previous environmental investigations have been conducted at the Site, including a Phase One ESA.

The following environmental investigation was reviewed in support of this Phase Two ESA report:

1. GEI (2022) Draft Phase One Environmental Site Assessment, 1225 Dundas Street East, Mississauga, Ontario. GEI Consultants Ltd. June 24, 2022.

A brief summary of the investigations is included below:

GEI (2022) Phase One Environmental Site Assessment	
Objective	Identify existing and former potential sources of environmental concern.

GEI (2022) Phase One Environmental Site Assessment	
Potential Sources of Environmental Concerns Identified	a) Importation of unknown fill material on Site. b) Use of de-icing salts on Site. c) Former transport truck parking lot located in the eastern portion of the Site in the 1960s. d) Former garbage compactor located in the western portion of the Site. e) Former transport truck terminal located adjacent to the Site at 1185 and 1195 Dundas Street East (including Arena Road) in the 1960s. f) Former orchards located approximately 35 m south of the Site from the at least the 1930's to the 1960's. g) The property located approximately 90 m south of the Site at 1202 Dundas Street East, is currently occupied by a Canadian Tire Gas Bar and associated with underground storage tanks (USTs).

3. Scope of Investigation

3.1 Overview of Site Investigation

The objective of the Phase Two ESA was to assess the APECs identified in GEI's Phase One ESA; and, to obtain soil and groundwater data to characterize the Site to support the filing of an RSC on the MECP's BESR.

3.1.1 Scope of Work

The scope of work for the Phase Two ESA was as follows:

a) Request public utility locating companies (e.g., cable, telephone, gas, hydro, water, sewer and storm water) to mark any underground utilities present at the Site;

b) Advance a total of twelve (12) boreholes (BH1 - BH12) up to a maximum depth of 9.2 m below ground surface (bgs).

c) Instrument all boreholes as monitoring wells (MW1 - MW12).

d) Collect representative soil samples for laboratory chemical analysis of petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylenes (BTEX), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), metals and inorganics.

e) Develop the newly installed groundwater monitoring wells;

f) Collect groundwater levels from the monitoring wells;

g) Collect groundwater samples from the monitoring wells for laboratory chemical analysis of PHCs, BTEX, VOCs, PAHs, organochlorine pesticides, metals and inorganics;

h) Complete an elevation survey of monitoring wells to determine the groundwater flow direction at the Site;

i) Analyze the data and prepare a report of the findings.

3.2 Media Investigated

The focus of the Phase Two ESA was on the environmental conditions of the surficial material, overburden materials and groundwater beneath the Site. As there was no surface water body on the Site, no sediment sampling was required.

A copy of the Site Sampling and Analysis Plan (SSAP) prepared for the Site is provided in Appendix A.

3.3 Phase One Conceptual Site Model

This section presents the Phase One Conceptual Site Model (P1CSM) providing a narrative, graphical and tabulated description integrating information related to the Site geologic and hydrogeologic conditions, areas of potential environmental concern/potential contaminating

activities, and the presence and distribution of potential contaminants of concern. These components are discussed in the following sections.

The Site is located northeast of Arena Road, southeast of Dundix road, and north of Dundas Street East, in Mississauga, Ontario, as shown on Figure 1. The Site is irregular in shape and measures approximately 12,300 m^2 (1.23 ha) in size. The Site is currently occupied by a slab-on-grade one (1)-storey commercial building with (9) retail units (Site building), six (6) of which are currently occupied. The Site building has a footprint of approximately 5,700 m^2 and occupies approximately 45% of the Site. The areas surrounding the Site building are predominately covered with asphalt and used for parking.

The legal description of the Site as obtained from the chain of title is “Parcel 7-2 Section 43-Toronto Township-1 (NDS); Part Lot 7, Concession 1 NDS, Part 1 43R2899; Mississauga”. The Property Identification Number (PIN) is 13335-0153 (LT).

The approximate Universal Transverse Mercator (UTM) coordinates for the Site centroid was NAD83 17- 4829119.43 m N, 613928.41 m E. The UTM coordinates are based on measurements obtained from ArcGIS. The accuracy of the centroid is estimated to range from 1 m.

Potentially Contaminating Activities

The Phase One ESA conducted by GEI in June 2022 identified the following PCAs:

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
1.	1225 Dundas Street East	Importation of fill material (PCA#30 – Importation of Fill Material of Unknown Quality)	On-Site	Yes	On-Site
2.		Usage of de-icing salts (PCA# Other – Use of de-icing salts)			
3.		Former transport truck parking lot (PCA#11 – Commercial Trucking and Container Terminals)			
4.		Former garbage compactor (PCA#Other – Hydraulic Machinery)			
5.	1185 and 1195 Dundas Street East (including Arena Road)	Former transport truck terminal (PCA#11 – Commercial	Off-Site (southwest adjacent)	Yes	Close proximity

		Trucking and Container Terminals)			
6.	1202 and 1224 Dundas Street East	Former orchards (PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications)	Off-Site (35 m southeast)	Yes	Upgradient
7.	1202 Dundas Street East	Canadian Tire gas bar (PCA#28- Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (90 m south)	Yes	Upgradient
8.	3070 Queen Frederica Drive	Former orchard (PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications)	Off-Site (25 m north)	No	Downgradient
9.	1248 Dundas Street East	Former orchard (PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications)	Off-Site (35 m southeast)	No	Trans-gradient
10.	1185 Dundas Street East	Former transport truck terminal (PCA#11 – Commercial Trucking and Container Terminals)	Off-Site (85 m southwest)	No	Trans-gradient

11.		Former publishing company/print shop (PCA#31 – Ink Manufacturing, Processing, and Bulk Storage)			
12.		Dry cleaners (PCA#37 – Operation of Dry-Cleaning Equipment (where chemicals are used))			
13.	1310 Dundas Street East	Former motorcycle shop (PCA#10 – Commercial Autobody Shops)	Off-Site (170 m east)	No	Trans-gradient
14.		Former transport truck terminal (PCA#11 – Commercial Trucking and Container Terminals)			
15.		Paint Shop (PCA#39 – Paints Manufacturing, Processing and Bulk Storage)			
16.	3034 Palstan Road	Former publisher (PCA#31 – Ink Manufacturing, Processing, and Bulk Storage)	Off-Site (200 m southwest)	No	Trans-gradient
17.	1334 Dundas Street East	Autobody Shop (PCA#10 – Commercial Autobody Shops)	Off-Site (205 m northeast)	No	Trans-gradient
18.		Gas Station (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks)			
19.	No Municipal Address	Former landfill (PCA#58 – Waste Disposal and Waste Management, including thermal treatment of waste,	Off-Site (240 m west)	No	Trans-gradient

		other than use of soils and soil conditioners)			
20.	1224 Dundas Street East	Equipment maintenance shop (PCA#Other – Small Equipment Repair and Maintenance)	Off-Site (245 m southeast)	No	Significant Distance
21.		Former adhesive manufacturer (PCA#2 – Adhesives and Resins Manufacturing, Processing and Bulk Storage)			
22.		Former machinery manufacturer (PCA#33 – Metal Treatment, Coating, Plating and Finishing)			
23.		Former machinery manufacturer (PCA#34 – Metal Fabrication)			
24.		Former plastics manufacturer (PCA#43 – Plastics (including Fibreglass) Manufacturing and Processing)			
25.		Former rubber manufacturer (PCA#47 – Rubber Manufacturing and Processing)			
26.		Former wooden door/cabinet manufacturer (PCA#59 – Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products)			
27.	1156 Dundas Street East	Marine equipment manufacturer	Off-Site	No	Significant Distance

		(PCA#7 – Boat Manufacturing)	(245 m southeast)		
28.		Auto centre (PCA##10 – Commercial Autobody Shop)			

1) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a Phase One study area.

No other PCAs that contribute to APECs were identified for the surrounding properties.

The identification of the PCAs both on-Site and off-Site within the Phase One study area are shown on Figure 3. Based on the rationale provided, it is the opinion of the Qualified Person (QP) that seven (7) PCAs are considered APECs at the Site. Further discussion is provided below.

Areas of Potential Environmental Concern

Based on the evaluation of the PCAs located on- and off-Site, seven (7) APECs were identified, as presented below:

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1: Importation of fill material	Exterior of the Site building	#30 – Importation of Fill Material of Unknown Quality	Fill could have potentially been imported to backfill the excavation and to regrade the Site.	On-Site	PAHs, metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-, Electrical Conductivity, SAR, Na, Cl-, low or high pH	Soil and Groundwater
APEC 2: Usage of de-icing salts	Exterior of the Site building	#Other – Use of de-icing salts	De-icing salts are used during the winter months for vehicular and pedestrian safety.	On-Site	Electrical conductivity, SAR, Na and Cl-	Soil and Groundwater
APEC 3: Former transport truck parking lot	Eastern portion	#11 – Commercial Trucking and Container Terminals.	Formerly parked transport trucks and trailers could have leaked COCs to the ground and into the groundwater	On-Site	PHCs, BTEX, metals, AS, Sb, Se, Cr (VI), Hg, B-HWS, CN-, Electrical Conductivity, SAR, Na, Cl-, low or high pH	Soil and Groundwater
APEC 4: Former garbage compactor	Western portion	#Other – Hydraulic Machinery	Former garbage compactor could have leaked COCs to the ground and into the groundwater	On-Site	PHCs, BTEX	Soil and Groundwater
APEC 5: Former transport truck terminal	Southwestern portion	#11 – Commercial Trucking and Container Terminals	Former transport truck maintenance bay could have leaked COCs to the ground which could	Off-Site (southwest adjacent)	PHCs, BTEX, and VOCs	Groundwater

			have migrated via groundwater			
APEC 6: Former Orchards	Southern and southeastern portions	#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large – Scale Applications	Former orchards could have leaked COCs to the ground which could have migrated via groundwater	Off-Site (35 m southeast)	Organochlorine pesticides	Groundwater
APEC 7: Canadian Tire gas station	Southern portion	#28 – Gasoline and Associated Products Storage in Fixed Tanks	Underground storage tanks could have leaked COCs in the ground which could have migrated via groundwater	Off-Site (90 m south)	PHCs and BTEX	Groundwater

1) *Areas of potential environmental concern means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,*
   a. *Identification of past or present uses in, on or under the phase one property, and*
   b. *Identification of potentially contaminating activity.*
2) *Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area.*

PHCs = petroleum hydrocarbons; BTEX = benzene, toluene, ethylbenzene and toluene; VOCs = volatile organic compounds; PAHs = polycyclic aromatic hydrocarbons; PCBs = polychlorinated biphenyls, As = arsenic, Sb = antimony, Se = selenium; Cr (VI) = chromium hexavalent; Hg = mercury; B-HWS = boron hot water soluble; CN- = cyanide; SAR = sodium adsorption ratio; Na = sodium; Cl- = chloride

The physiography of the Site is within Iroquois Plain and is characterized as sand plains. The surficial geology of the Site is coarse-textured glaciolacustrine deposits consisted of sand, gravel, minor silt and clay with foreshore and basinal deposits. The bedrock in the general area consists of shale, limestone, dolostone and siltstone and is part of Georgian Bay Formation, Blue Mountain Formations and Billings Formation, Collingwood Member and Eastview Member.

Based on the review of the OBM and Toporama map, the Site is at an average elevation of approximately 121 metres above sea level (m asl), generally at the same elevation as properties to the north of the Site. The surrounding properties to the west are generally at a slightly higher elevation than the Site. The surrounding properties to the south and east are generally at a slightly lower elevation than the Site. The Site is relatively flat.

No water bodies are located on the Site. Little Etobicoke Creek is situated approximately 400 m north of the Site. Lake Ontario is situated approximately 4.5 km southeast of the Site. The inferred groundwater flow direction is likely towards the north.

Based on the review of available resources from the Ministry of Natural Resources and Forestry, and the City of Mississauga on May 30th, 2022, no areas of natural significance were identified at the Site or within the Phase One Study Area.

Utilities and services were identified adjacent to the Site based on relevant utility infrastructure observed during the Site reconnaissance. The Site utilities are summarized in the table below. It is noted that the precise underground location of the utilities cannot be determined without professional locate services.

Utility	Source	Location	Site Entry
Storm and Sanitary Sewer	Municipality – City of Mississauga/Peel Region	Southeast & Northwest	One (1) manhole was observed on the southeastern portion of the Site. Three (3) catch basins were observed located on site along Dundas Street East, and two (2) catch basins were observed along Dundix Road. The storm and sewer lines are anticipated to be connected to the Site via Dundix Road and Dundas Street East.
Natural Gas	Enbridge	East	A natural gas line is entering the Site from the eastern corner via Dundas Street East.
Water	Municipality – City of Mississauga	West	Waterlines appear to be entering the Site via Arena Road from the western corner.
Electricity	Alectra Utilities	Southeast	An overhead hydro line was observed along Dundas Street East. It is anticipated that the hydro line enters the Site from the southeast Site boundary.

3.4 Deviation from Sampling and Analysis Plan

The field investigative and sampling program was carried out following the requirements of the SSAP, shown in Appendix A. No deviations from the SSAP were reported with respect to the sampling and data quality objectives for the Site.

3.5 Impediments

The Site was accessible at the time of the investigation. No impediments were encountered that blocked access to the Site.

4. Investigation Method

4.1 General

The Site investigative activities consisted of the drilling of twelve (12) boreholes to facilitate the collection of soil samples for geologic characterization and chemical analysis; and the installation of monitoring wells for hydrogeologic property characterization and the collection of groundwater samples for chemical analysis.

Boreholes were advanced in the surficial fill and overburden soils by a licensed drilling company under the full-time supervision of GEI staff. The drilling equipment used to advance the boreholes is described below. No petroleum-based greases or solvents were used during drilling activities. Monitoring wells were installed in the boreholes by a MECP licensed well contractor in accordance with Ontario Regulation 903/90, as amended (O.Reg.903) using manufactured well components (i.e., riser pipes and screens) and materials (i.e., sand pack and grout) from documented sources.

4.2 Borehole Drilling

Prior to the commencement of drilling activities, the locations of underground utilities including cable, telephone, natural gas, electrical lines, as well as water, sewer, storm water and sanitary lateral conduits were marked out by public locating companies. In addition, a private utility locating service was also retained to clear the individual borehole locations.

The fieldwork for the soil investigative portion of the Phase Two ESA was carried out between May 24 and May 26, 2022.

The boreholes were advanced by Young's Drilling Inc. under full-time supervision of GEI staff using a truck-mount power probe to a maximum depth of 9.2 m bgs to sufficiently assess the APECs identified in the Phase One ESA. Rock coring was completed at BH9, BH11, and BH12 to a maximum depth of 7.8 m bgs. The approximate locations of the boreholes and monitoring wells are shown on Figure 4.

GEI continuously monitored the drilling activities to record the physical characteristics of the soil, depth of soil sample collection and total depth of boreholes. Field observations are summarized on the borehole logs provided in Appendix C. Representative soil samples were recovered at regular intervals using a stainless-steel split spoon sampler in all boreholes.

4.3 Soil Sampling

Soil samples for geologic characterization and chemical analysis were collected on a discrete basis in the overburden materials using 5 cm diameter, 60 cm long, split spoon samples advanced in to the subsurface using a truck mounted power probe. The soil cores were extruded from the samplers upon retrieval by drilling personnel. Geologic details of the recovered cores were logged by GEI field staff and samples were collected from selected cores for chemical analysis. Field observations are summarized on the borehole logs prepared from the field logs and provided in Appendix C.

Measures were taken in the field and during transport to preserve sample integrity prior to chemical analysis. Recommended volumes of soil samples selected for chemical analysis were collected from the recovered cores into pre-cleaned, laboratory-supplied glass sample jars/vials identified for the specified analytical test group. All soil samples were placed in clean coolers containing ice prior to and during transportation to the subcontract laboratory, Caduceon Environmental Laboratories (Caduceon) of Barrie, Ontario. The samples were transported/submitted within the acceptable holding time to Caduceon following Chain of Custody protocols for chemical analysis.

Decontamination and other protocols were followed during sample collection and handling to minimize the potential for sample cross-contamination. New disposable nitrile gloves were used for the handling and sampling of each retrieved soil core. All twelve (12) of the boreholes that were advanced were installed with monitoring wells (MW1 - MW12).

Soil samples submitted for specific chemical analysis were selected on the basis of visual inspection of the recovered cores, sample location and depth interval.

Geologic details of the soil cores recovered from the boreholes advanced at the Site are provided in boreholes logs presented in Appendix C.

Four (4) duplicate soil sample were collected for QA/QC purposes as summarized below:

Borehole	Duplicate Sample Identification	Analytical Test Group
BH3-1	Dup31	Metals and Inorganics
		PAHs
BH3-3	Dup33	PHCs and BTEX
		VOCs
BH6-1	Dup61	Metals and Inorganics
		PAHs
BH7-1	Dup72	PHCs and BTEX
		VOCs

4.4 Field Screening Measurements

A portion of each soil core was placed in a sealed “Ziploc®” plastic bag and allowed to reach ambient temperature prior to field screening using a RKI Instruments Eagle 2, calibrated with hexane and isobutylene gases. The measurements were made by inserting the instrument’s probe into the plastic bag while manipulating the sample to ensure volatilization of the soil gases. These readings provide a real-time indication of the relative concentration of combustible vapours encountered in the subsurface during drilling and are used to aid in the assessment of the vertical and horizontal extent of contamination and the selection of soil samples for analysis.

The field screening measurements, in parts per million (ppm) hexane and isobutylene equivalents, are presented on the borehole logs in Appendix C.

Each sample was additionally examined for visual, textural, and olfactory classification at the time of sampling.

4.5 Groundwater: Monitoring Well Installation

Twelve (12) boreholes were instrumented with groundwater monitoring wells at the Site (MW1 - MW12). The monitoring wells were installed in general accordance with the Ontario Water Resources Act - R.R.O. 1990, Regulation 903/90 - amended to O.Reg.128/03 and were installed by a licensed well contractor.

Monitoring wells MW1, MW2, MW4, MW5, MW6, and MW7 consisted of a 1.5 m length, 32 mm diameter PVC screen, and an appropriate length of PVC riser pipe. Monitoring well MW8, consisted of a 2.1 m length, 32 mm diameter PVC screen, and an appropriate length of PVC riser pipe. Monitoring wells MW3, MW9, MW10, MW11, and MW12 consisted of a 3.0 m length, 32 mm diameter PVC screen, and an appropriate length of PVC riser pipe. All pipe connections were factory machined threaded flush couplings. The annular space around the wells was backfilled with sand to an average height of 0.3 m above the top of the screen. A bentonite seal was added from the top of the sand pack to approximately 0.3 m below ground surface.

When the monitoring wells are no longer required, they must be decommissioned in accordance with the procedure outlined in the Ontario Water Resources Act - R.R.O. 1990, Regulation 903 - amended to O.Reg.128/03. Monitoring well completion details are summarized in Table 3.

Measures taken to minimize the potential for cross contamination or the introduction of contaminants during well construction included:

a) The use of well pipe components (e.g., riser pipe and well screens) with factory machine threaded flush coupling joints;

b) Construction of wells without the use of glues or adhesives;

c) Removing the protective plastic wraps from well components at the time of borehole insertion to prevent contact with the ground and other surfaces; and,

d) Cleaning of augers between sampling locations.

4.6 Monitoring Well Development

Upon completion of monitoring well installation, the new monitoring wells were developed to remove fine sediment particles from the sand pack and enhance hydraulic communication with the surrounding formation waters. The monitoring wells were developed on June 3, 2022 using dedicated Waterra to disturb the water column and recover groundwater containing dislodged sediment particles.

4.7 Groundwater Monitoring

Groundwater monitoring activities, which consisted of measuring the depths to groundwater in each monitoring well, were conducted on newly installed monitoring wells so that groundwater flow and direction below the Site could be assessed and groundwater samples can be collected. These groundwater monitoring activities were conducted on June 1, 2022. Water levels were measured with respect to the top of casing by means of an electronic water level meter. The water level measurements were recorded on water level log sheets or in a bound field notebook. The water level meter probe was decontaminated between monitoring well locations.

4.8 Monitoring Well Purging

Monitoring wells were purged prior to groundwater sample collection. Approximately three (3) wetted well volumes of water, or until dry, were purged from each well to remove standing water and draw in fresh formation water. Water levels and wetted well volumes were determined by means of an electronic water level meter.

Well purging was monitored by taking field measurements of turbidity, redox, pH, specific conductance and temperature and water level for every standing well (i.e., wetted casing) volume removed. Well purging continued until the purged water had chemically stabilized as indicated by field parameter measurements, and the water was of sufficient clarity as indicated by turbidity measurements. The groundwater was considered to be chemically stable when the pH measurements of three (3) successive purge well volumes agreed to within ± 1 pH units, the specific conductance within ± 10%, and turbidity ± 10% of the average value of the three readings with the temperature within ± 3%. Field parameters including pH, conductivity and temperature were monitored during monitoring well purging using a Horiba U-52 WQA multiparameter water quality meter.

Equipment used during groundwater monitoring were thoroughly cleaned and decontaminated between wells. Well purging details were documented on a log sheet or in a bound hard cover notebook.

4.9 Field Measurements of Water Quality Parameters

Field parameters including pH, conductivity, and temperature were monitored during well development using a Horiba U-52 WQA multiparameter water quality meter.

4.10 Groundwater Sampling

Upon completion of purging, the newly installed monitoring wells MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW9, MW10, MW11, and MW12 were sampled on June 3, 2022. Recommended groundwater sample volumes were collected into laboratory-supplied vials or bottles provided with analytical test group specific preservatives, as required. The samples were placed in an insulated cooler pre-chilled with ice immediately upon collection. The groundwater samples were transported to Caduceon under Chain of Custody protocols, within 24 hours of sample collection or approved holding times.

4.11 Sediment Sampling

As no water body was present at the Site, sediment sampling was not part of the Phase Two ESA.

4.12 Analytical Testing

All analytical testing was performed by Caduceon, which is an accredited laboratory. Caduceon is accredited under the Standards Council of Canada/Canadian Association of Environmental Analytical Laboratories (Accredited Laboratory No. 4090) in accordance with ISO/IEC

17025:2017 - “General Requirements for the Competence of Testing and Calibration Laboratories”.

4.12.1 Soil Sampling

Representative soil samples from each borehole and test pit were selected for laboratory analysis based on field screening results, sample location and depth interval. The requested laboratory analysis was based on the identified contaminants of concern. The representative soil samples selected for laboratory analysis, the rationale for each sample and the requested analyses are summarized below.

Table 2 – Summary of Soil Samples Submitted for Chemical Analysis

Soil Sample ID	Rationale	Requested Analyses	Soil Sample Depth (m bgs)	Consultant
BH1-2	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH1-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH1-4	Vertical delineation	Zinc	2.29-2.90	GEI
BH2-1	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH2-2	APEC 3 characterization	PHCs, BTEX, VOCs	0.76 – 1.37	GEI
BH3-1	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH3-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH4-1	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH4-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH5-2	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH5-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH5-4	Vertical delineation	Lead	2.29-2.90	GEI
BH6-1	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH7-1	APECs 1, 2, and 4 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	0-0.61	GEI
BH8-1	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH9-2	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH10-2	APEC 3 Characterization	PHCs, BTEX,	0.76 – 1.37	GEI

		VOCs		
BH10-3	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	1.52 – 2.13	GEI
BH11-1	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH12-2	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH12-3	Vertical delineation	Lead	1.52-2.13	GEI
BH12-4	APEC 3 characterization	PHCs, BTEX, VOCs	2.29 - 2.90	GEI

4.12.2 Groundwater Sampling

Representative groundwater samples were submitted for specific chemical analysis based on the identified contaminants of concern. The representative groundwater samples selected for lab analysis, the rationale for each sample, and the required analyses are summarized below.

Table 4 – Summary of Groundwater Samples Submitted for Chemical Analysis

Monitoring Well ID	Rationale	Requested Analyses	Consultant
MW1	APECs 1, 2, 3, 5, 6, 7 characterization	PHCs, BTEX, VOCs, PAHs Metals and Inorganics, OC Pesticides	GEI
MW3	APECs 1, 2, 3, 6 characterization	PHCs, BTEX, VOCs, PAHs Metals and Inorganics, OC Pesticides	GEI
MW4	APECs 1, 2, 3 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	GEI
MW5	APECs 1, 2, 3 characterization	Metals and Inorganics	GEI
MW6	APECs 1, 2 characterization	PAHs, Metals and Inorganics	GEI
MW7	APEC 4 characterization	PHCs, BTEX, VOCs	GEI
MW9	APECs 1, 2, 5 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	GEI
MW10	APECs 1, 2, 3, 5 characterization	PHCs, BTEX, VOCs	GEI
MW12	APECs 1, 2, 3 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	GEI

4.13 Elevation Survey

An elevation survey was conducted to obtain vertical control of the newly installed borehole and monitoring well locations. The ground surface elevations of each newly installed monitoring well locations were surveyed relative to a local benchmark (top of storm catch basin located to the north of Dundas Street East approximately 15.0 m northeast/east of Arena Road). The local benchmark was assigned an elevation of 119.88 metres based on *Plan CDU-42-18, Dundas Street East Segment B 'Priority', in the City of Mississauga by Callon Dietz Locates Incorporated.* A summary of groundwater levels and elevations is provided below and in Table 3.

Water Level Depths and Elevations

BH/MW Well ID	Ground Surface Elevation	Top of Well Screen (m bgs)	Bottom of Well Screen (m bgs)	Groundwater Level (m bgs)	Groundwater Elevation (m asl)	Groundwater Monitoring Date
BH/MW1	120.44	1.52	3.05	2.16	118.28	June 1, 2022
BH/MW2	120.47	1.22	2.74	2.76	117.71	June 1, 2022
BH/MW3	120.42	1.52	4.57	3.45	116.97	June 1, 2022
BH/MW4	120.33	1.22	2.74	2.30	118.03	June 1, 2022
BH/MW5	120.23	1.52	3.05	2.07	118.16	June 1, 2022
BH/MW6	120.65	1.22	2.74	2.69	117.96	June 1, 2022
BH/MW7	120.57	0.97	3.97	2.64	117.93	June 1, 2022
BH/MW8	120.95	0.61	2.74	Dry	NA	June 1, 2022
BH/MW9	120.73	4.57	7.62	2.89	117.84	June 1, 2022
BH/MW10	120.62	6.10	9.14	2.98	117.64	June 1, 2022
BH/MW11	120.82	4.57	7.62	3.20	117.62	June 1, 2022
BH/MW12	120.73	4.57	7.62	3.33	117.40	June 1, 2022

The elevation survey was completed using a Topcon RL-HSA. The survey equipment was calibrated by GEI personnel prior to use.

4.14 Quality Assurance and Quality Control Measures

Quality Assurance/Quality Control (QA/QC) measures, as set out in the Sampling and Analysis Plan, were implemented during sample collection, storage and transport to provide accurate data representative of conditions in the surficial fill and upper overburden soils and the water table aquifer. The QA/QC measures included decontamination procedures to minimize the potential for sample cross contamination, the execution of standard operating procedures to collect representative and unbiased samples, the collection of quality control samples to evaluate sample precision and accuracy, and the implementation of measures to preserve sample integrity.

Decontamination protocols were followed during sample collection and handling to minimize the potential for cross-contamination. During the collection of soil samples, split-spoon samplers were scraped and decontaminated between sampling intervals by washing with a potable water/phosphate-free detergent solution followed by a rinse with potable water. New disposable nitrile gloves were used for the handling and collection of samples from each soil core and for sample collection from each borehole.

Soil samples selected for chemical analyses were collected from the retrieved soil cores and placed directly into pre-cleaned, laboratory-supplied glass jars or vials. Sample volumes were consistent with analytical test group requirements as specified by the receiving laboratory.

Groundwater samples were collected into pre-clean laboratory-supplied vials or bottles provided with analytical test group specific preservatives, as required. Recommended analytical test group specific sample volumes were collected as specified by the contractual laboratory. Sample vials for analysis of PHCs, BTEX, and VOCs were inspected for the presence of gas bubbles and the presence of head space, where volatiles may partition into.

Measures were followed to preserve sample integrity between collection and receipt by the contractual laboratory. All samples, both soil and groundwater, immediately upon collection were

placed in insulated coolers pre-chilled with ice for storage and transport to the contractual laboratory. Samples were received by the contractual laboratory within specific analytical test group holding time requirements.

Documentation procedures were followed to confirm sample identification and tracked sample movement. Each sample was assigned a unique identification ID number, which was recorded along with the date, time of sampling and requested analyses on labels affixed to the sampling containers, and in a bound field notebook. Chain of Custody protocols were followed to track sample handling and movement until receipt by the contractual laboratory.

Field QA/QC samples were collected during the soil and groundwater sampling. A duplicate sample was collected to evaluate sampling precision and a trip blank was included to evaluate the potential for sample cross-contamination during handling and transport.

Four (4) duplicate soil samples were collected for QA/QC purposes as summarized below.

Borehole	Duplicate Sample Identification	Analytical Test Group
BH3-1	Dup31	Metals and Inorganics
		PAHs
BH3-3	Dup33	PHCs and BTEX
		VOCs
BH6-1	Dup61	Metals and Inorganics
		PAHs
BH7-1	Dup72	PHCs and BTEX
		VOCs

Two (2) duplicate groundwater samples were collected for QA/QC purposes as summarized below.

Monitoring Well	Duplicate Sample Identification	Analytical Test Group
MW1	DUP1	PHCs and BTEX
		VOCs
MW3	DUP2	Metals and Inorganics
		PAH
		OC Pesticides

There were no significant deviations from the SSAP.

5. Review and Evaluation

5.1 Geology

The soil investigation conducted at the Site consisted of the advancement of twelve (12) boreholes into the surficial soil and the underlying native materials to a maximum depth of 9.2 m bgs. Borehole logs describing geologic details of the soil cores recovered during the Site drilling activities are presented in Appendix C. Boundaries of soil indicated on the log sheets are intended to reflect transition zones for the purpose of environmental assessment and should not be interpreted as exact planes of geological change.

The general stratigraphy at the Site, as revealed in the borehole logs, consists of a pavement structure consists of asphalt and granular underlain by earth fill comprised of clayey silt, to sand, to silty sand, to sandy silt followed by sand and glacial till deposits underlain by shale bedrock.

A brief description of the soil stratigraphy at the Site, in order of depth, is summarized in the following sections. The interpreted Site geology is shown on the enclosed cross sections (Figures 7 and 8).

5.1.1 Surficial Material

All boreholes encountered a pavement structure at the ground surface consisting of 25 to 100 mm of asphalt underlain by 50 to 150 mm of granular material.

5.1.2 Fill Material

Boreholes BH1 to BH4 and BH6 to BH12 encountered granular fill underlying the pavement structure. The granular fill extended to depths of 0.8 to 1.5 m below grade (Elev. 120.2 to 119.3 m) and was brown and moist.

The granular fill was underlain by common earth fill in Boreholes BH1 to BH4, BH7, BH10 and BH12, and the common earth fill was encountered below the pavement structure in Borehole BH5. The earth fill extended to depths of 0.9 to 2.3 m below grade (Elev. 119.7 to 118.0 m) and ranged in composition from clayey silt, to sand, to silty sand, to sandy silt, typically with trace to some gravel and some organic zones. The earth fill was moist and ranged in colour from brown, to grey, to black.

5.1.3 Native Material

Sand and Glacial Till Deposits

Cohesionless deposits of sand, some gravel to gravelly, with trace silt and clay were encountered underlying the fill material in Boreholes BH1, BH2, BH5 to BH7, and BH9 to BH12. The sands were encountered at depths of 0.8 to 1.5 m below grade (Elev. 119.9 to 118.7 m) and extended to 1.5 to 2.6 m (Elev. 119.2 to 117.9 m). The sands were brown to greyish brown and moist.

Boreholes BH3, BH6, BH11 and BH12 encountered a deposit of glacial till with a cohesive matrix comprising sandy silt, with some clay and trace to some gravel. Cobbles and boulders are likely embedded within the deposit. The glacial till was encountered underlying the earth fill or sand deposits at depths of 1.5 to 2.4 m below grade (Elev. 119.2 to 118.1 m) and extended to 2.3 to 3.0 m (Elev. 118.4 to 117.4 m).

5.1.4 Bedrock

Bedrock of the Georgian Bay Formation (laminated to thinly bedded grey shale with limestone interbeds) was encountered in all borehole locations underlying the overburden soils. The bedrock was inferred in Boreholes BH1 to BH8 and BH10 by drilling observations, auger grinding, and samples recovered from the split spoon sampler. Based on the borehole results, the inferred weathered bedrock surface was encountered at depths of 0.8 to 3.0 m below grade (Elev. 119.5 to 117.4 m), or at Elev. 118.3 m on average.

Refer to the geological cross sections in Figures 7 and 8 for an overview of the Site stratigraphy.

5.2 Groundwater Elevations and Flow Direction

The monitoring well network advanced at the Site consists of twelve (12) monitoring wells advanced by GEI screened within the overburden. The 1.5, 2.1 and 3.0 m long screens were installed within the fill, sand/silty sand/sandy silt glacial till and shale bedrock to intercept the overburden groundwater aquifer.

Based on the topography and the distance of the Site to Little Etobicoke Creek and Lake Ontario, the inferred groundwater flow direction is likely towards the north in the Phase One ESA. The groundwater data collected from across the Site on June 1, 2022, identified that the groundwater flow direction at the Site is towards the east/southeast.

5.2.1 Groundwater: Hydraulic Gradients

The horizontal hydraulic gradient, between each monitoring well pair, is calculated using the following equation:

$$i = Ah/As$$

Where,

i = horizontal hydraulic gradient;
Ah (m) = groundwater elevation difference; and,
As (m) = separation distance.

The horizontal hydraulic gradient in groundwater, based on groundwater measurements collected on June 1, 2022, was 0.038 m/m between BH/MW3 and BH/MW5 and 0.011 m/m between BH/MW2 and BH/MW4 with a geometric mean of 0.020 m/m.

It is noted that vertical hydraulic gradients were not evaluated for this Site as a second water bearing unit was not identified at the depths investigated at the Site.

5.2.2 Groundwater: Hydraulic Conductivity

Hydraulic conductivity testing was completed by GEI. Single Well Response Test (SWRT) analysis was conducted at selected monitoring wells (MW3, MW4, MW5, MW7, MW10 and MW11). The hydraulic conductivity values for each of the tested wells were calculated from the SWRT using Aqtesolv Software and the Hvorlsev solution for unconfined conditions. They hydraulic conductivity (K) ranged from 1.1 $x10^{-7}$ to 1.5 x 10^{-5} m/s, with a geometric mean of 6.2 x 10^{-7} m/s. For design purposes, the hydraulic conductivity of the overburden deposits and shale bedrock is 5.0 x 10^{-7} m/s.

5.3 Soil Texture

The native materials encountered, are comprised of silty sand to sand and silty sand/sandy silt glacial till. Grain size analysis was performed on nine (9) soil samples submitted from the overburden material. Seven (7) of the soil samples were found to be coarse textured. As a result, coarse textured standards were applied as part of this Phase Two ESA. The grain size distribution curves are provided in Appendix G.

5.4 Soil Field Screening

All soil samples were submitted for chemical analyses based on field observations, location, and depth.

5.5 Soil Quality

In accordance with the scope of work, chemical analyses were performed on selected soil samples recovered from the boreholes. The selection of representative “worst case” soil samples was based on field screening, visual and/or olfactory evidence of impacts, and the presence of potential water bearing zones. Copies of the laboratory Certificates of Analysis for the analyzed soil samples are provided in Appendix F.

5.5.1 PHCs/BTEX

The soil samples submitted for PHCs/BTEX analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the soil results analyzed for PHCs/BTEX.

5.5.2 VOCs

The soil samples submitted for VOCs analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the soil results analyzed for VOCs.

5.5.3 PAHs

The soil samples submitted for PAHs analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the soil results analyzed for PAHs.

5.5.4 Metals

The soil samples submitted for metal analysis indicated that the following selected parameters were detected at concentrations above the applicable MECP Table 3 SCS:

Parameter	MECP (2011a) Table 3 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS	Maximum concentration detected (µg/g)
Metals				
Lead	120	12	2	175
Zinc	340	12	1	716

1) Not including duplicate samples

The remaining parameters were all detected below the applicable MECP Table 3 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the soil results analyzed for metals.

5.5.5 Inorganics (Incl. EC and SAR)

EC and SAR were detected in soil in exceedance of the applicable MECP Table 3 SCS. However, under the newly amended O.Reg.153/04 (O.Reg.407/19), if a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under the conditions of snow or ice or both (i.e., application of de-icing salts), its related parameters are not deemed to be in exceedance of the MECP Table 3 SCS. As de-icing salts were used at the Site, EC and SAR are not considered as a contaminant of concern.

The remaining parameters were all detected below the applicable MECP Table 3 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the soil results analyzed for inorganics.

5.5.6 Chemical Transformation and Soil Contaminant Sources

Lead and zinc were identified in soil as COCs at concentrations in exceedance of the applicable MECP Table 3 SCS. However, given the nature of the compounds it is not expected that any chemical transformations (i.e., presence of parent compounds and daughter products) has occurred on the Site. Further assessment would need to be conducted to assess whether any natural attenuation processes have occurred.

5.5.7 Evidence of Non-Aqueous Phase Liquid

Inspection of the soil cores retrieved from the boreholes did not indicate the presence of non-aqueous phase liquid (NAPL), staining or sheen .

5.6 Groundwater Quality

Representative groundwater samples were collected from the newly installed monitoring wells to assess groundwater quality at the Site. Evidence of free product (i.e., visible film or sheen) was not observed during well purging, no odour was noticed during well purging (noted in Section 5.6.9).

Analytical results summary tables are provided in Appendix B and copies of the laboratory Certificates of Analysis for the analyzed groundwater samples are provided in Appendix F.

5.6.1 PHCs/BTEX

Groundwater samples submitted for PHCs/BTEX analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the groundwater results analyzed for PHCs/BTEX.

5.6.2 VOCs

Groundwater samples submitted for VOCs analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the groundwater results analyzed for VOCs.

5.6.3 PAHs

Groundwater samples submitted for PAHs analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the groundwater results analyzed for PAHs.

5.6.4 OC Pesticides

Groundwater samples submitted for OC pesticides analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the groundwater results analyzed for OC pesticides.

5.6.5 Metals

Groundwater samples submitted for metals analysis indicated that all parameters were detected below the applicable MECP Table 3 SCS; and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the groundwater results analyzed for metals.

5.6.6 Inorganics (Incl. Sodium and Chloride)

Sodium was detected in groundwater in exceedance of the applicable MECP Table 3 SCS. However, under the newly amended O.Reg.153/04 (O.Reg.407/19), if a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under the conditions of snow or ice or both (i.e., application of de-icing salts), its related parameters are not deemed to be in exceedance of the MECP Table 3 SCS. As de-icing salts were used at the Site, sodium is not considered as a contaminant of concern.

The remaining parameters were all detected below the applicable MECP Table 3 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Appendix B for a summary of the groundwater results analyzed for inorganics, including sodium and chloride.

5.6.7 Chemical Transformation and Contaminant Sources

As no COCs were detected in groundwater at the Site, chemical transformations do not need to be considered further.

5.6.8 Evidence of Non-Aqueous Phase Liquid

Inspection of the purged groundwater retrieved from the monitoring wells did not indicate the presence of NAPL, staining, or sheen.

5.7 Sediment Quality

As no surface water body was located on-Site, the Phase Two ESA did not include sediment sampling.

5.8 Quality Assurance and Quality Control Measures

QA/QC measures were taken during the field activities to meet the objectives of the sampling and QA plan to collect unbiased and representative samples to characterize existing conditions in the fill/upper overburden materials and water table aquifer unit at the Site. QA/QC measures included:

a) The collection of soil and groundwater samples following standard operating procedures;
b) The implementation of decontamination procedures to minimize the potential for sample cross contamination;
c) The collection of recommended analytical test group specific volumes into pre-cleaned laboratory supplied containers provided with necessary preservatives as required;
d) Sample preservation in insulated coolers pre-chilled with ice and meeting holding time requirements;
e) Sample documentation including Chain of Custody protocols; and
f) The collection of QC samples.

Review of field activity documentation indicated that recommended sample volumes were collected from soil and groundwater for each analytical test group into appropriate containers and preserved with proper chemical reagents in accordance with the protocols set out in the “Protocol

for Analytical Methods used in the Assessment of Properties under Part XV.1 of the *Environmental Protection Act',* dated March 9, 2004, amended as of July 1, 2011 (MECP 2011b). Samples were preserved at the required temperatures in pre-chilled insulated coolers and met applicable holding time requirements, when relinquished to the receiving laboratory.

Field QA/QC samples were collected during the soil and groundwater sampling. Duplicate samples were collected to evaluate sampling precision.

Four (4) duplicate soil samples were collected for QA/QC purposes as summarized below.

Borehole	Duplicate Sample Identification	Analytical Test Group
BH3-1	Dup31	Metals and Inorganics
		PAHs
BH3-3	Dup33	PHCs and BTEX
		VOCs
BH6-1	Dup61	Metals and Inorganics
		PAHs
BH7-1	Dup72	PHCs and BTEX
		VOCs

Two (2) duplicate groundwater samples were collected for QA/QC purposes as summarized below.

Monitoring Well	Duplicate Sample Identification	Analytical Test Group
MW1	DUP1	PHCs and BTEX
		VOCs
MW3	DUP2	Metals and Inorganics
		PAH
		OC Pesticides

The field duplicate sample results were quantitatively evaluated by calculating the relative percent difference (RPD). Assessment of the duplicate soil and groundwater samples, where quantifiable, showed that the results met analytical test group specific acceptance criteria, as specified in the "Protocol for Analytical Methods used in the Assessment of Properties under Part XV.1 of the *Environmental Protection Act',* dated March 9, 2004, amended as of July 1,2011 (MECP, 2011b. The overall assessment indicates that the soil and groundwater samples were collected within an acceptable level of precision, and the data is acceptable quality for meeting the objectives of the Phase Two ESA.

The subcontract laboratory used during this investigation, Caduceon, is accredited by the Standards Council of Canada/Canadian Association of Environmental Analytical Laboratories (Accredited Laboratory No. 4090) in accordance with ISO/IEC 17025:2017 - "General Requirements for the Competence of Testing and Calibration Laboratories".

Certificates of Analysis were received from Caduceon reporting the results of all the chemical analyses performed on the submitted soil samples. Copies of the Caduceon Certificates of Analysis are provided in Appendix F. Review of the Certificates of Analysis prepared by Caduceon indicates that they were in compliance with the requirements set out under subsection 47(3) of O.Reg.153/04.

The analytical program conducted by Caduceon included analytical test group specific QA/QC measures to evaluate the accuracy and precision of the analytical results and the efficiency of

analyte recovery during solute extraction procedures. The laboratory QA/QC program consisted of the preparation and analysis of laboratory duplicate samples to assess precision and sample homogeneity, method blanks to assess analytical bias, spiked blanks and QC standards to evaluate analyte recovery, matrix spikes to evaluate matrix interferences, and surrogate compound recoveries (VOCs only) to evaluate extraction efficiency. The laboratory QA/QC results are presented in the Quality Assurance Report provided in the Certificate of Analysis prepared by Caduceon. The QA/QC results are reported as percent recoveries for matrix spikes, spike blanks and QC standards, RPDs for laboratory duplicates, and analyte concentrations for method blanks.

The Caduceon QA/QC results were assessed against test group control limits in the case of spiked blanks, matrix spikes and surrogate recoveries, and alert criteria in the case of method blanks and laboratory duplicates. Review of the laboratory QA/QC results reported by Caduceon indicated that they were within acceptable control limits or below applicable alert criteria for the sampled media and analytical test groups. Based on the assessment of the QA/QC, the analytical results reported by Caduceon are of acceptable quality and data qualifications are not required.

5.9 Phase Two Conceptual Site Model

This section presents a Conceptual Site Model (CSM) providing a narrative, graphical and tabulated description integrating information related to the Site geologic and hydrogeologic conditions, areas of potential environmental concern/potential contaminating activities, the presence and distribution of potential contaminants of concern, contaminant fate and transport, and potential exposure pathways.

5.9.1 Introduction

The Site is located northeast of Arena Road, southeast of Dundix road, and north of Dundas Street East, in Mississauga, Ontario, as shown on Figure 1. The Site is irregular in shape and measures approximately 12,300 m^2 (1.23 ha) in size. The Site is currently occupied by a slab-on-grade one (1)-storey commercial building with (9) retail units (Site building), six (6) of which are currently occupied. The Site building has a footprint of approximately 5,700 m^2 and occupies approximately 45% of the Site. The areas surrounding the Site building are predominately covered with asphalt and used for parking. A Site layout plan is shown on Figure 2.

For the simplicity of describing the surrounding properties, Dundas Street East is considered running west to east. The Site is bound by Dundix Road followed by residential properties to the north, a residential apartment building followed by Queen Frederica Drive to the east, Dundas Street East followed by several large commercial plazas to the south, and Arena Road followed by a mix of commercial and residential properties to the west. The surrounding properties are shown on Figure 3.

Refer to the following table for the Site identification information.

Site Details	
Municipal Addresses	1225 Dundas Street East, Mississauga, Ontario.
Current Owner	Dundix Realty Holdings
Owner Address	3200 Highway 7, Vaughan, Ontario L4K 5Z5
Owner Contact Person	Mr. Daniel Orellana

Site Details	
Legal Description	Parcel 7-2 Section 43-Toronto Township-1 (NDS); Part Lot 7, Concession 1 NDS, Part 1 43R2899; Mississauga
Property Identification Number (PIN)	13335-0153 (LT)
Property Size	12700 m^2 (1.27 ha)
Approximate Universal Transverse Mercator (UTM) coordinates	Zone: 17 Easting: 613928.41 Northing: 4829119.43 (1 m, NAD83, ArcGIS)

5.9.2 Potentially Contaminating Activities and Areas of Potential Environmental Concern

A Phase One ESA, in accordance with O. Reg. 153/04, as amended, has been conducted by GEI for the Site. The surrounding land use plan and PCAs identified On-Site and in the Phase One ESA Study Area are shown on Figure 2. A list of all PCA's identified at the Site and within the Phase One ESA Study Area are presented below:

Table 2: Potentially Contaminating Activities in the Phase One Study Area

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
29.	1225 Dundas Street East	Importation of fill material (PCA#30 – Importation of Fill Material of Unknown Quality)	On-Site	Yes	On-Site
30.		Usage of de-icing salts (PCA# Other – Use of de-icing salts)			
31.		Former transport truck parking lot (PCA#11 – Commercial Trucking and Container Terminals)			
32.		Former garbage compactor (PCA#Other – Hydraulic Machinery)			
33.	1185 and 1195 Dundas Street East (including Arena Road)	Former transport truck terminal (PCA#11 – Commercial	Off-Site (southwest adjacent)	Yes	Close proximity

		Trucking and Container Terminals)			
34.	1202 and 1224 Dundas Street East	Former orchards (PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications)	Off-Site (35 m southeast)	Yes	Upgradient
35.	1202 Dundas Street East	Canadian Tire gas bar (PCA#28- Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (90 m south)	Yes	Upgradient
36.	3070 Queen Frederica Drive	Former orchard (PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications)	Off-Site (25 m north)	No	Downgradient
37.	1248 Dundas Street East	Former orchard (PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications)	Off-Site (35 m southeast)	No	Trans-gradient
38.	1185 Dundas Street East	Former transport truck terminal (PCA#11 – Commercial Trucking and Container Terminals)	Off-Site (85 m southwest)	No	Trans-gradient

39.		Former publishing company/print shop (PCA#31 – Ink Manufacturing, Processing, and Bulk Storage)			
40.		Dry cleaners (PCA#37 – Operation of Dry-Cleaning Equipment (where chemicals are used))			
41.	1310 Dundas Street East	Former motorcycle shop (PCA#10 – Commercial Autobody Shops)	Off-Site (170 m east)	No	Trans-gradient
42.		Former transport truck terminal (PCA#11 – Commercial Trucking and Container Terminals)			
43.		Paint Shop (PCA#39 – Paints Manufacturing, Processing and Bulk Storage)			
44.	3034 Palstan Road	Former publisher (PCA#31 – Ink Manufacturing, Processing, and Bulk Storage)	Off-Site (200 m southwest)	No	Trans-gradient
45.	1334 Dundas Street East	Autobody Shop (PCA#10 – Commercial Autobody Shops)	Off-Site (205 m northeast)	No	Trans-gradient
46.		Gas Station (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks)			
47.	No Municipal Address	Former landfill (PCA#58 – Waste Disposal and Waste Management, including thermal treatment of waste,	Off-Site (240 m west)	No	Trans-gradient

		other than use of soils and soil conditioners)			
48.	1224 Dundas Street East	Equipment maintenance shop (PCA#Other – Small Equipment Repair and Maintenance)	Off-Site (245 m southeast)	No	Significant Distance
49.		Former adhesive manufacturer (PCA#2 – Adhesives and Resins Manufacturing, Processing and Bulk Storage)			
50.		Former machinery manufacturer (PCA#33 – Metal Treatment, Coating, Plating and Finishing)			
51.		Former machinery manufacturer (PCA#34 – Metal Fabrication)			
52.		Former plastics manufacturer (PCA#43 – Plastics (including Fibreglass) Manufacturing and Processing)			
53.		Former rubber manufacturer (PCA#47 – Rubber Manufacturing and Processing)			
54.		Former wooden door/cabinet manufacturer (PCA#59 – Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products)			
55.	1156 Dundas Street East	Marine equipment manufacturer	Off-Site	No	Significant Distance

		(PCA#7 – Boat Manufacturing)	(245 m southeast)		
56.		Auto centre (PCA##10 – Commercial Autobody Shop)			

1) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area.

The identification of the PCAs both on-Site and off-Site within the Phase One study area are shown on Figure 3.

Based on the rationale provided, it is the opinion of the Qualified Person (QP) that seven (7) PCAs are considered APECs at the Site. Further discussion is provided below.

5.9.3 Areas of Potential Environmental Concern

Based on the evaluation of the PCAs located on- and off-Site, seven (7) APECs were identified, as presented below:

Table 3: Areas of Potential Environmental Concern (APECs):

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1: Importation of fill material	Exterior of the Site building	#30 – Importation of Fill Material of Unknown Quality	Fill could have potentially been imported to backfill the excavation and to regrade the Site.	On-Site	PAHs, metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-, Electrical Conductivity, SAR, Na, Cl-, low or high pH	Soil and Groundwater
APEC 2: Usage of de-icing salts	Exterior of the Site building	#Other – Use of de-icing salts	De-icing salts are used during the winter months for vehicular and pedestrian safety.	On-Site	Electrical conductivity, SAR, Na and Cl-	Soil and Groundwater
APEC 3: Former transport truck parking lot	Eastern portion	#11 – Commercial Trucking and Container Terminals.	Formerly parked transport trucks and trailers could have leaked COCs to the ground and into the groundwater	On-Site	PHCs, BTEX, metals, AS, Sb, Se, Cr (VI), Hg, B-HWS, CN-, Electrical Conductivity, SAR, Na, Cl-, low or high pH	Soil and Groundwater
APEC 4: Former garbage compactor	Western portion	#Other – Hydraulic Machinery	Former garbage compactor could have leaked COCs to the ground and into the groundwater	On-Site	PHCs, BTEX	Soil and Groundwater
APEC 5:	Southwestern portion	#11 – Commercial	Former transport truck maintenance bay	Off-Site	PHCs, BTEX, and VOCs	Groundwater

Former transport truck terminal		Trucking and Container Terminals	could have leaked COCs to the ground which could have migrated via groundwater	(southwest adjacent)		
APEC 6: Former Orchards	Southern and southeastern portions	#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk Storage and Large – Scale Applications	Former orchards could have leaked COCs to the ground which could have migrated via groundwater	Off-Site (35 m southeast)	Organochlorine pesticides	Groundwater
APEC 7: Canadian Tire gas station	Southern portion	#28 – Gasoline and Associated Products Storage in Fixed Tanks	Underground storage tanks could have leaked COCs in the ground which could have migrated via groundwater	Off-Site (90 m south)	PHCs and BTEX	Groundwater

1) Areas of potential environmental concern means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,

a. Identification of past or present uses in, on or under the phase one property, and

b. Identification of potentially contaminating activity.

2) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area. PHCs = petroleum hydrocarbons; BTEX = benzene, toluene, ethylbenzene and toluene; VOCs = volatile organic compounds; PAHs = polycyclic aromatic hydrocarbons; PCBs = polychlorinated biphenyls; As = arsenic, Sb = antimony, Se = selenium; Cr (VI) = chromium hexavalent; Hg = mercury; B-HWS = boron hot water soluble; CN- = cyanide; SAR = sodium adsorption ratio; Na = sodium; Cl- = chloride

Refer to Figures 4 and 5 for the Site plan illustrating the borehole/monitoring well locations and APECs.

5.9.4 Underground Utilities

An underground Hydro Line was located running along the southern portion of the Site. Two water lines were located entering the property at the westernmost corner of the Site. A storm sewer main was also located within the western corner of the property.

Please refer to Figure 2 for the Utilities Plan.

5.9.5 Physical Site Description

The Phase Two CSM provides a narrative and graphical interpretation of the Site surface features, near surface geologic and hydrogeologic conditions, potential contaminants of concern, contaminant fate and transport mechanisms and relevant receptors and exposure pathways. These components are discussed in the following sections.

Surface Features

The Site is irregular in shape and measures approximately 12,300 m^2 (1.23 ha) in size. The Site is currently occupied by a slab-on-grade one (1)-storey commercial building with (9) retail units (Site building), six (6) of which are currently occupied. The Site building has a footprint of approximately 5,700 m^2 and occupies approximately 45% of the Site. The areas surrounding the Site building are predominately covered with asphalt and used for parking

Geologic Setting

Information on the overburden and bedrock geology of the general Site area was obtained during the Phase One ESA. Based on the review, the following was summarized:

The Site is located in the physiographic region within the Iroquois Plain and is characterized as sand plains. The surficial geology of the Site is described as coarse-textured glaciolacustrine deposits consisted of sand, gravel, minor silt and clay with foreshore and basinal deposits. The bedrock in the general area consists of shale, limestone, dolostone and siltstone and is part of the Georgian Bay Formation, Blue Mountain formation, Billings Formation, Collingwood Member and Eastview Member.

Based on the review of the OBM and Toporama map, the Site is at an elevation of approximately 121 metres above sea level (m asl), generally at the same elevation as properties to the north of the Site. The surrounding properties to the west are generally at a slightly higher elevation than the Site. The surrounding properties to the south and east are generally at a slightly lower elevation than the Site. The Site is relatively flat.

Based on the review of available resources from the Ministry of Natural Resources, City of Mississauga on May 30, 2022, no areas of natural significance were identified at the Site or within the Phase One Study Area.

The general stratigraphy of the Phase One/Two Study Area as outlined in the borehole records consist of a pavement structure consists of asphalt and granular underlain by earth fill comprised of clayey silt, to sand, to silty sand, to sandy silt followed by sand and glacial till deposits underlain by shale bedrock. As previously indicated, more than two-thirds (2/3) of the Site consisted of soil equal to or greater than 2 m in depth. Bedrock was encountered at the Site.

A brief description of the soil stratigraphy at the Site, in order of depth, is summarized in the following sections. The interpreted Site geology is shown on the enclosed cross sections.

Surface Material

All boreholes encountered a pavement structure at the ground surface consisting of 25 to 100 mm of asphalt underlain by 50 to 150 mm of granular material.

Fill Material

Boreholes BH1 to BH4 and BH6 to BH12 encountered granular fill underlying the pavement structure. The granular fill extended to depths of 0.8 to 1.5 m below grade (Elev. 120.2 to 119.3 m) and was brown and moist.

The granular fill was underlain by common earth fill in Boreholes BH1 to BH4, BH7, BH10 and BH12, and the common earth fill was encountered below the pavement structure in Borehole BH5. The earth fill extended to depths of 0.9 to 2.3 m below grade (Elev. 119.7 to 118.0 m) and ranged in composition from clayey silt, to sand, to silty sand, to sandy silt, typically with trace to some gravel and some organic zones. The earth fill was moist and ranged in colour from brown, to grey, to black.

Native Material

Sand and Glacial Till Deposits

Cohesionless deposits of sand, some gravel to gravelly, with trace silt and clay were encountered underlying the fill material in Boreholes BH1, BH2, BH5 to BH7, and BH9 to BH12. The sands were encountered at depths of 0.8 to 1.5 m below grade (Elev. 119.9 to 118.7 m) and extended to 1.5 to 2.6 m (Elev. 119.2 to 117.9 m). The sands were brown to greyish brown and moist.

Boreholes BH3, BH6, BH11 and BH12 encountered a deposit of glacial till with a cohesive matrix comprising sandy silt, with some clay and trace to some gravel. Cobbles and boulders are likely embedded within the deposit. The glacial till was encountered underlying the earth fill or sand deposits at depths of 1.5 to 2.4 m below grade (Elev. 119.2 to 118.1 m) and extended to 2.3 to 3.0 m (Elev. 118.4 to 117.4 m).

Bedrock

Bedrock of the Georgian Bay Formation (laminated to thinly bedded grey shale with limestone interbeds) was encountered in all borehole locations underlying the overburden soils. The bedrock was inferred in Boreholes BH1 to BH8 and BH10 by drilling observations, auger grinding, and samples recovered from the split spoon sampler. Based on the borehole results, the inferred weathered bedrock surface was encountered at depths of 0.8 to 3.0 m below grade (Elev. 119.5 to 117.4 m), or at Elev. 118.3 m on average.

Refer to the geological cross sections in Figures 7 and 8 for an overview of the Site stratigraphy.

Hydrogeologic Setting

One (1) hydrostratigraphic unit was encountered at the Site which acts as aquifers.

The on-Site monitoring well network consists of a total of twelve (12) monitoring wells advanced by GEI screened within the overburden and bedrock.

Groundwater depths within the groundwater table across the Site ranged between approximately 0.93 m and 1.99 m bgs on June 1, 2022.

Based on the topography and the distance of the Site to Little Etobicoke Creek, the inferred groundwater flow direction is likely towards the north. The groundwater data collected from across the Site on June 1, 2022, identified that the groundwater flow direction at the Site is towards the east/southeast. The interpreted groundwater flow direction is presented on Figure 6.

Hydraulic conductivity testing was completed by GEI. Single Well Response Test (SWRT) analysis was conducted at selected monitoring wells (MW3, MW4, MW5, MW7, MW10 and MW11). The hydraulic conductivity values for each of the tested wells were calculated from the SWRT using Aqtesolv Software and the Hvorlsev solution for unconfined conditions. They hydraulic conductivity (K) ranged from 1.1 $x10^{-7}$ to 1.5 x 10^{-5} m/s, with a geometric mean of 6.2 x 10^{-7} m/s. For design purposes, the hydraulic conductivity of the overburden deposits and shale bedrock is 5.0 x 10^{-7} m/s.

The horizontal hydraulic gradient in groundwater, based on groundwater measurements collected on June 1, 2022, was 0.038 m/m between BH/MW3 and BH/MW5 and 0.011 m/m between BH/MW2 and BH/MW4 with a geometric mean of 0.020 m/m.

It is noted that vertical hydraulic gradients were not evaluated for this Site as a second water bearing unit was not identified at the depths investigated at the Site.

5.9.6 Site Sensitivity

The Site Sensitivity classification with respect to the conditions set out under Section 41 and 43.1 of O.Reg.153/04 were evaluated to determine if the Site is sensitive, as presented in the table below:

Table 4: Site Sensitivity

Sensitivity	Classification	Does Sensitivity Apply to Site?
Section 41 applies if	(i) property is within an area of natural significance	No
	(ii) property includes or is adjacent to an area of natural significance or part of such an area	No
	(iii) property includes land that is within 30 m of an area of natural significance or part of such an area	No
	(iv) soil at property has a pH value for surface soil less than 5 or greater than 9	No
	(v) soil at property has a pH value for sub-surface soil less than 5 or greater than 11	No
	(vi) a qualified person is of the opinion that, given the characteristics of the property and the certifications the qualified person would be required to make in a record of site condition in relation to the property as specified in Schedule A, it is appropriate to apply this section to the property	No
Section 43.1 applies if	(i) property is a shallow soil property	No
	(ii) property includes all or part of a water body or is adjacent to a water body or includes land that is within 30 m of a water body	No

5.9.7 Remediation

No remediation has occurred at the Site.

5.9.8 Soil Importation

No soil has been imported to the Site.

5.9.9 Land Use

The Site is currently used for commercial purposes with a slab-on-grade one (1)-storey commercial building with (9) retail units, six (6) of which are currently occupied. It is GEI's understanding that the Client is planning on redeveloping the Site for residential purposes in the future.

5.9.10 Contaminants of Concern

The MECP (2011a) Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soils were considered applicable for determining contaminants of concern (COCs), based on the reasons presented below:

Table 5: Site Condition Standards

Descriptor	Site-Specific Condition
Section 41 Site Sensitivity	Not applicable o The soil at the Site has pH values between 5 and 9 for surficial soil; and, between 5 and 11 for subsurface soil. o The Site is not located within, or adjacent to, an area of natural significance, or part of such an area; and, the Site does not include land that is within 30 m of an area of natural significance, or part of such an area.
Section 43.1 Site Sensitivity	Not applicable o The Site is not considered a shallow soil property, based on the recovered soil cores, which indicated that more than two-thirds of the Site has an overburden thickness in excess of 2 m; and, o The Site is not located within 30 m of a surface water body; the nearest surface water body, Lake Ontario is located approximately 140 m south/southwest of the Site.
Ground Water	Non-Potable o The Site is supplied by the City of Mississauga municipal water system. o The Site is not located within an area designated in a municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of groundwater. o The Site, and all other properties located, in whole or in part, within 250 metres of the boundaries of the property, are supplied by a municipal drinking water system, as defined in the Safe Drinking Water Act, 2002. o The Peel Region has been notified about the non-potable status on June 22, 2022.
Land Use	Residential o The future use of the Site will be residential use.
Soil Texture	Coarse Textured o As per the grain size analysis (Appendix G), coarse textured standards were applied.

The COCs identified in soil are presented in the tables below. No COCs were detected in groundwater.

Table 6: Contaminants of Concern in Soil

Parameter Analyzed	Maximum concentration (µg/g)	Site Condition Standard (1) (µg/g)	Maximum Concentration Above Applicable SCS
Lead	175	120	Yes
Zinc	716	340	Yes

1) MECP (2011a) Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Industrial/Commercial/Community Property Use and medium/fine textured soils.

5.9.11 Soil and Groundwater Impacts

Information regarding the reasons for discharge, distribution and delineation of the impacts detected in soil and groundwater are summarized in the below tables.

Table 7: Reasons for Discharge of Soil and Groundwater Impacts

Parameter Group and Media	Contaminants associated with each parameter group	Reason for Discharge
Metal parameters in soil	Lead, Zinc	Likely associated with the former transport truck parking lot located on Site in the 1960s.

Table 8: Distribution of Soil and Groundwater Impacts

Parameter group and media	Contaminants associated with each group	Distribution
Metal parameters in soil	Lead, Zinc	Impacts are present in the eastern portion of the site.

Table 9: Delineation of Soil and Groundwater Impacts

Parameter group and media	Contaminant associated with each group	Horizontal Delineation	Associated Figures	Vertical Delineation	Associated Figures
Metals parameters in soil	Lead, Zinc	Eastern portion	12	2.29-2.90 m at BH1 and BH5; 1.52-2.13 m bgs at BH12	13 and 14

5.9.12 Contaminant Fate and Transport

Soil Media

The soil COCs that were present at the Site include lead and zinc.

Based on the former activities on-Site, the impacts are likely associated with the former transport truck parking lot located on Site in the 1960s. The parked trucks and trailers could have leaked liquids from various vehicular parts (i.e., battery) containing zinc and lead into the ground.

A variety of physical, chemical, and biochemical mechanisms affect the fate and transport of the potential COCs in soil, the contribution of which is dependent on the soil conditions and the chemical/physical properties of the COCs. Relevant fate and transport mechanisms are natural attenuation mechanisms, including advection mixing, mechanical dispersion/molecular diffusion, phase partitions (i.e., sorption and volatilization), and possibly abiotic or biotic chemical reactions, which effectively reduce COC concentrations.

Concentrations of COCs in soil will be reduced by the effects of molecular diffusion and the creation of concentration gradients. No COCs at the Site are volatile chemical constituents (i.e., moderate Henry's Law Constant and saturated vapour pressure), volatile COCs can volatilize into soil gas and be transported through soil gas under the influence of pressure (e.g., water table fluctuations) and partial pressure gradients in the unsaturated zone. The transport of volatile COCs can also be retarded by sorption on to organic material that may be associated with the soil mineral particles throughout the overburden material.

As a result of the various natural attenuation mechanisms in the soil environment, the concentrations of COCs in soil may be expected to reduce at the Site in the long-term.

There are no known preferential pathways for contaminants present in soil media.

Groundwater Media

There were no groundwater COCs present at the Site.

5.9.13 Preferential Pathways

The preferential pathways for contaminants present in soil and groundwater media typically include various underground utilities, building footings and surface features.

Underground utilities were identified at the Site; therefore, which may be possible preferential pathways.

5.9.14 Climate Conditions

It is noted that climatic or meteorological conditions may have influenced the distribution and migration of COCs at the Site. Seasonal fluctuations in groundwater due to cyclical increases and decreases in precipitation can affect groundwater recharge. Groundwater levels may be elevated in the spring and fall due to snow melt and/or increases in precipitation; and groundwater levels may be lowered in the winter and summer due to snow storage and/or increased evaporation. Such fluctuations can increase the vertical distribution of COCs in the capillary zone, as well as alter the direction of groundwater flow paths based on changes in infiltration rates. However, based on the conditions observed at the Site, it is not anticipated that the climatic or meteorological changes will have resulted in significant alterations in the distribution of contaminants previously present at the Site.

5.9.15 Soil Vapour Migration

Given the lack of volatile parameters in soil and groundwater, soil vapour intrusion is not anticipated to be a potential contaminant transport mechanism.

5.9.16 Receptors and Exposure Pathways

Human Health Receptors and Exposure Pathways

The on-Site human receptor exposure pathways for the future residential land use at the RSC property are presented in the table below:

Scenario	Receptor	Exposure Pathways
Property Residents	Adult (including pregnant female), Teen, Child, Toddler, Infant	Soil inhalation, soil dermal contact, soil ingestion, garden produce ingestion
Workers – Long Term (indoor)	Adult (including pregnant female)	
Workers – Short Term (outdoor)	Adult (including pregnant female)	
Property Visitor - Recreational	Adult (including pregnant female), Teen, Child, Toddler, Infant	
Property Visitor - Trespassers	Adult (including pregnant female), Teen, Child, Toddler, Infant	
Workers – Construction/Remediation	Adult (including pregnant female)	

The human health conceptual on-Site model is included in Figure D.1 in Appendix D.

Ecological Receptors and Exposure Pathways

The Site will be comprised of residential condo building(s) with potential landscaped areas that are capable of supporting minimum to some terrestrial ecological receptors adapted to living in urban environments. Relevant terrestrial receptors are terrestrial vegetation, such as trees, grasses and weeds; soil invertebrates, such as earthworms, millipedes and beetles; terrestrial birds, such as pigeons, sparrows and robins; and, terrestrial mammals, such as moles, voles and mice. The on-Site ecological receptor exposure pathways for the future residential land use at the RSC property are presented in the table below:

Primary Source	Secondary Source	Receptor	Exposure Pathway
Impacted soil	Impacted soil	Terrestrial vegetation	Root uptake
		Soil invertebrates	Soil inhalation, soil dermal contact, soil ingestion
		Terrestrial mammals and birds	Soil inhalation, soil dermal contact, soil ingestion
	Impacted plant & animal tissue	Soil invertebrates	Ingestion of prey/food
		Terrestrial mammals and birds	Ingestion of prey/food

The ecological health conceptual on-Site model is included in Figure D.2 in Appendix D.

6. Summary of Findings

The findings of the Phase Two ESA conducted at the Site are summarized as follows:

1. The general stratigraphy at the Site, as revealed in the borehole, consists of a pavement structure consists of asphalt and granular underlain by earth fill comprised of clayey silt, to sand, to silty sand, to sandy silt followed by sand and glacial till deposits underlain by shale bedrock.
2. The native materials encountered, are comprised of sand and glacial till deposits. Grain size analysis was performed on nine (9) soil samples submitted from the overburden material. Seven (7) of the soil samples were found to be coarse textured. As a result, coarse textured standards were applied as part of this Phase Two ESA.
3. Groundwater depths within the groundwater table across the Site ranged between approximately 0.93 m and 1.99 m bgs on June 1, 2022.
4. The soil analytical results indicated that select parameters were detected at concentrations above the applicable MECP (2011a) Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and course soils including:

Parameter	MECP (2011a) Table 3 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS	Maximum concentration detected (µg/g)
Metals				
Lead	120	12	2	175
Zinc	340	12	1	716

1) Not including duplicate samples

5. The groundwater analytical results indicated that no parameters were detected at concentrations above the applicable MECP (2011a) Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for All Property Use and course textured soils.

7. Conclusions and Recommendations

The soil COCs identified at the Site are comprised of lead and zinc. No groundwater COCs were identified at the Site. Based on the former activities on-Site, the impacts are likely associated with the former transport truck parking lot located on Site. Parked trucks and trailers could have leaked liquids from various vehicular parts (i.e., battery) containing lead and zinc to the ground.

Exceedances of the applicable Standards were identified in soil to a maximum depth of 2.29 m bgs. In order to proceed with the Record of Site Condition (RSC), the following steps are recommended:

5. Conduct a lateral delineation program in the vicinity of BH1, BH5 and BH12 and submit lateral delineation soil samples.
6. Conduct a remediation program consisting of the excavation and off-Site removal of impacted soil material.
7. Prepare a remediation report.
8. Submit an RSC.

8. General Limitations

The information presented in this report is based on a limited investigation designed to provide information to support an assessment of the current environmental conditions within the subject property. The conclusions and recommendations presented in this report reflect Site conditions existing at the time of the investigation.

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GEI Consultants

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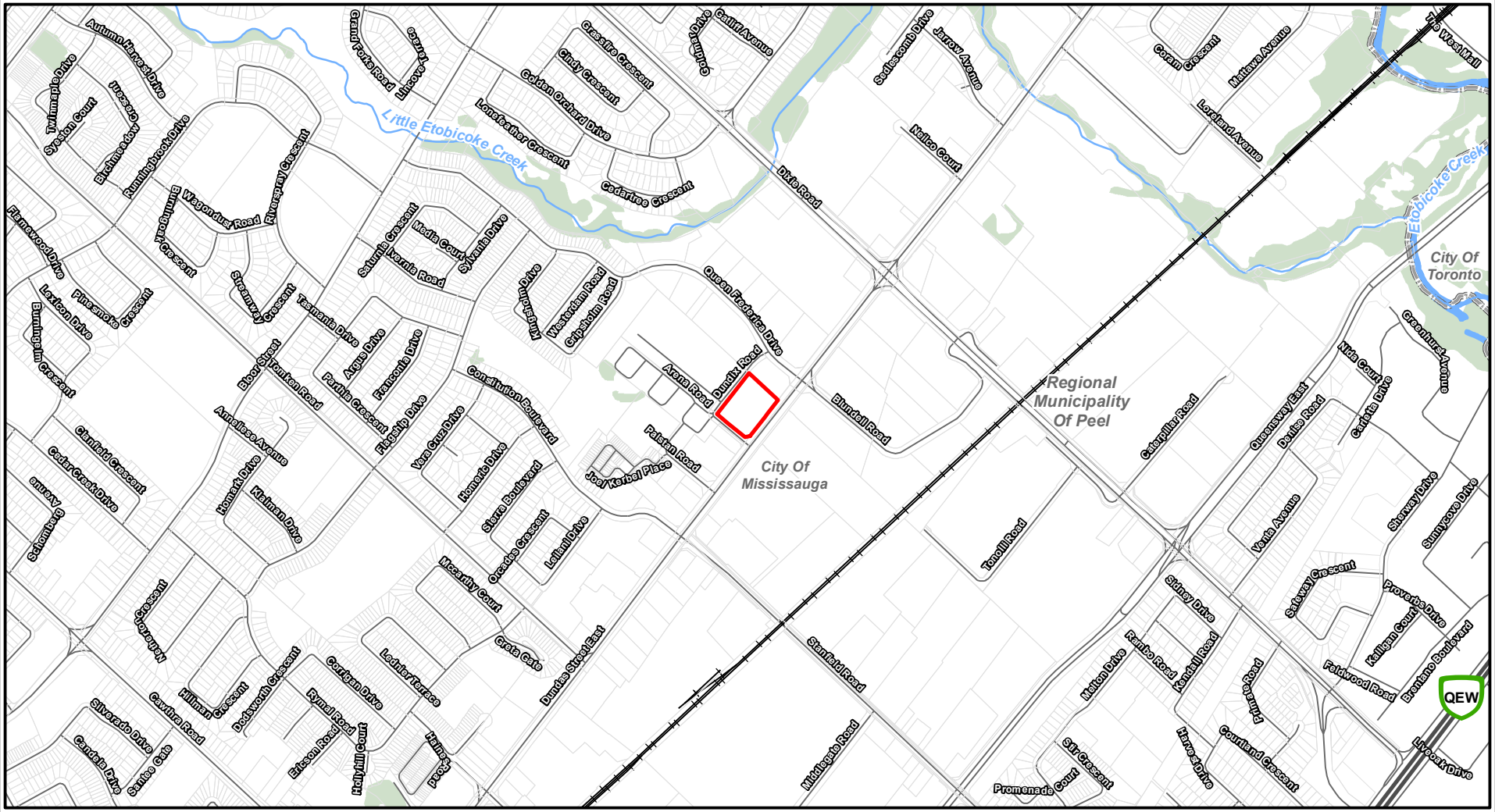
9. References

1. MECP (2011a) “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act”. PIBS 7382e01;*
2. *MECP (2011b) Protocol for Analytical Methods Used in the Assessment of Properties under Prt XV.1 of the Environmental Protection Act. PIBS 4696e01;*
3. *MECP (2020); Well Records Map. Retrieved from https://www.ontario.ca/environment-and-energy/map-well-records*
4. *NHIC (2020); Make a Natural Heritage Map. Retrieved from http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US*
5. *Toporama. Retrieved from* http://www.atlas.gc.ca/toporama/en/index.html
6. *Plan CDU-42-18, Dundas Street East Segment B ‘Priority’, in the City of Mississauga by Callon Dietz Locates Incorporated.*

The following is a list of the environmental investigations reviewed in support of this report:

1. GEI (2022) Draft Phase One Environmental Site Assessment, 1225 Dundas Street East, Mississauga, Ontario. GEI Consultants Ltd. June 24, 2022.

Figures



Legend

Site Boundary | Parcels | Railway | Highway | Road | Watercourse | Waterbody | Wooded Area

NOTES:

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Mississauga Parcel data (approximate), City of Mississauga via Arcgis Online (May 2022).

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Phase Two ESA
1225 Dundas St. E
Mississauga, Ontario

Dundix Realty Holdings

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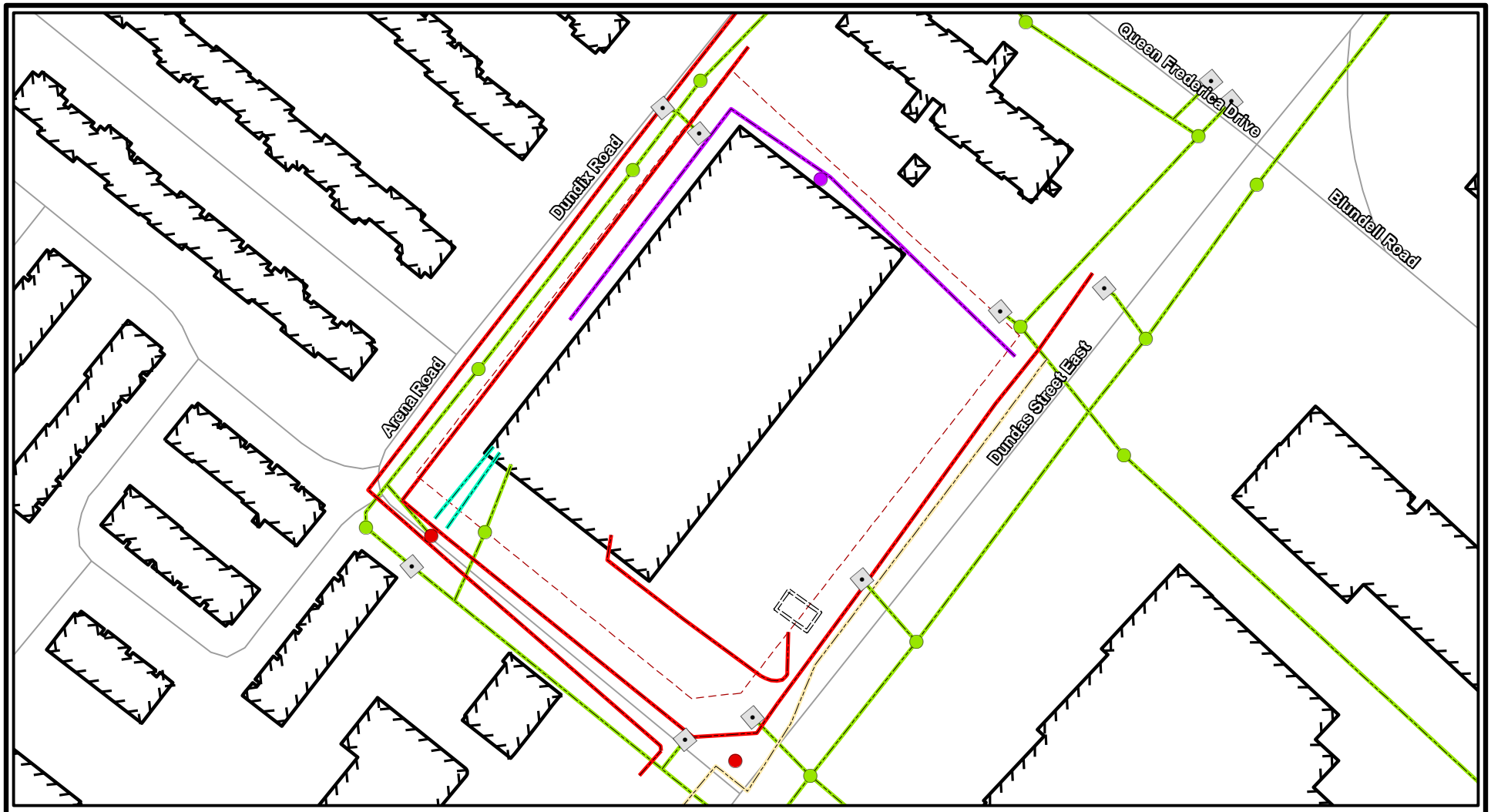
SITE LOCATION PLAN

Project 2202029 | June 2022 | Fig. 1



Legend

- Approximate Site Boundary
- Road
- Building Location
- Catch Basin
- Gas Main
- Hydro Pole
- Manhole
- Gas Service
- Hydro Line
- PSN Utility
- Storm Sewer Main
- Water
- Sign

NOTES:

1. Coordinate System: NAD 1983 UTM Zone 17N.
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3. Building Outlines, City of Mississauga via Arcgis Online (May 2022).

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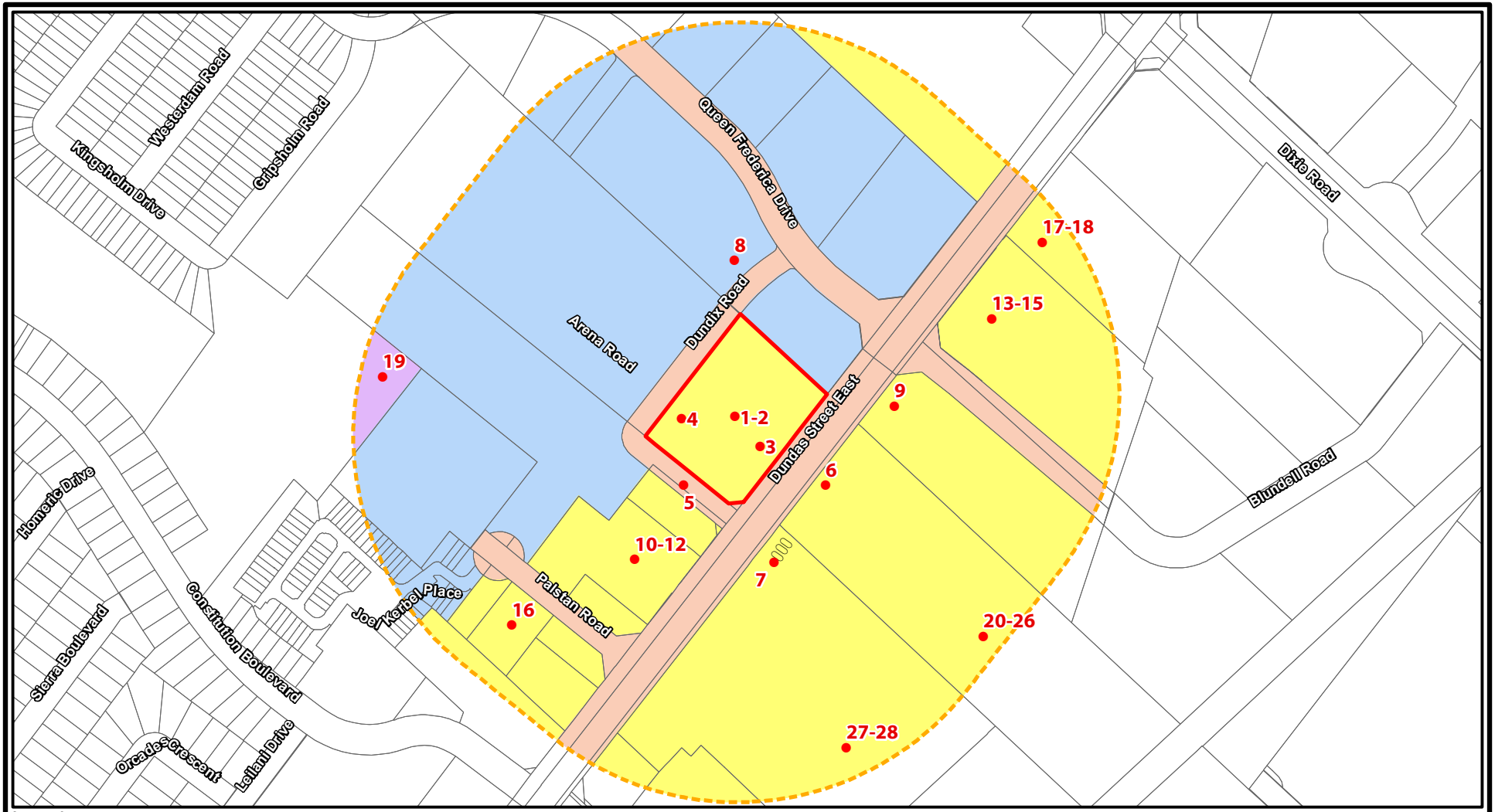
SITE LAYOUT & UTILITIES PLAN

Project 2202029 | June 2022 | Fig. 2



Legend

- Approximate Site Boundary
- Phase Two Study Area
- Commercial Land Use
- Community Land Use
- Parkland Land Use
- Residential Land Use
- PCA Identifier
- Approximate Locations of USTs

NOTES:

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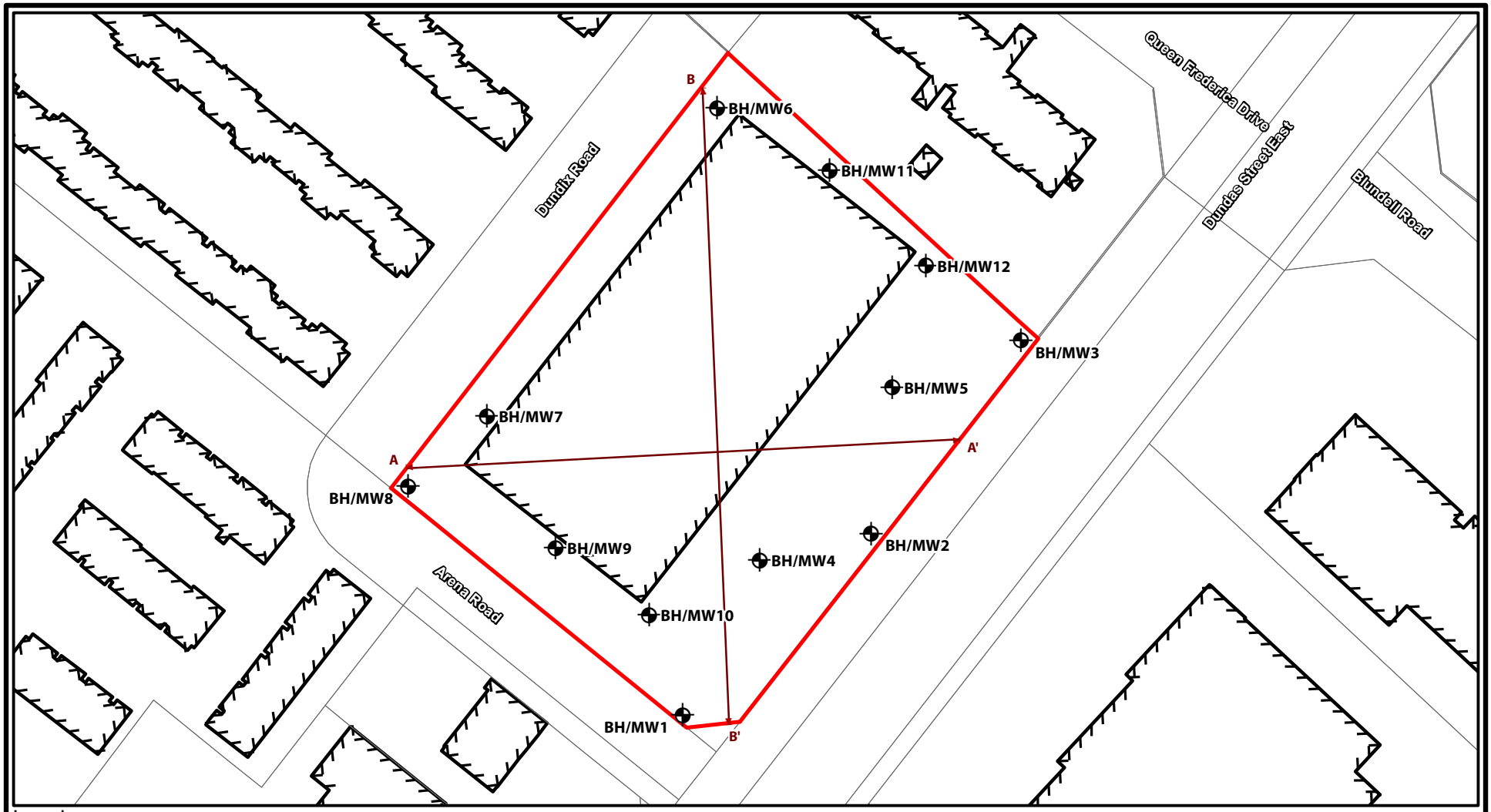
PHASE TWO STUDY AREA AND POTENTIALLY CONTAMINATING ACTIVITIES (PCAs)

June 2022 Fig. 3



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- Cross Section Location

NOTES:

1. Coordinate System: NAD 1983 UTM Zone 17N.
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Mississauga, Ontario

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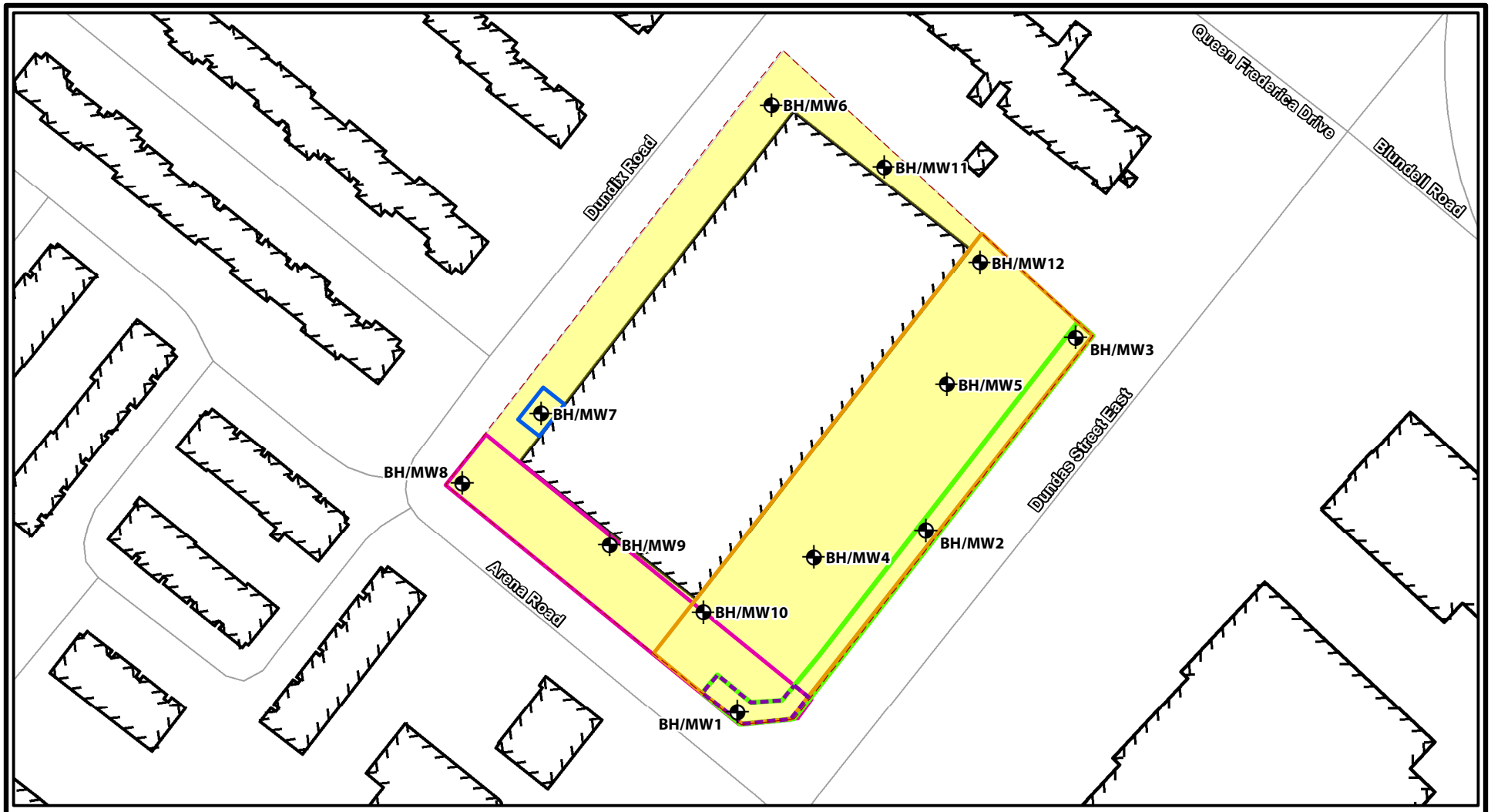
BOREHOLE/MONITORING WELL LOCATION PLAN

Project 2202029 | June 2022 | Fig. 4



Legend

- Approximate Site Boundary
- Road
- Building Location
- APEC 1,2
- APEC 3
- APEC 4
- APEC 5
- APEC 6
- APEC 7
- Borehole/Monitoring Well Location

NOTES:

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3. Building Outlines, City of Mississauga via Arcgis Online (May 2022).

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Mississauga, Ontario

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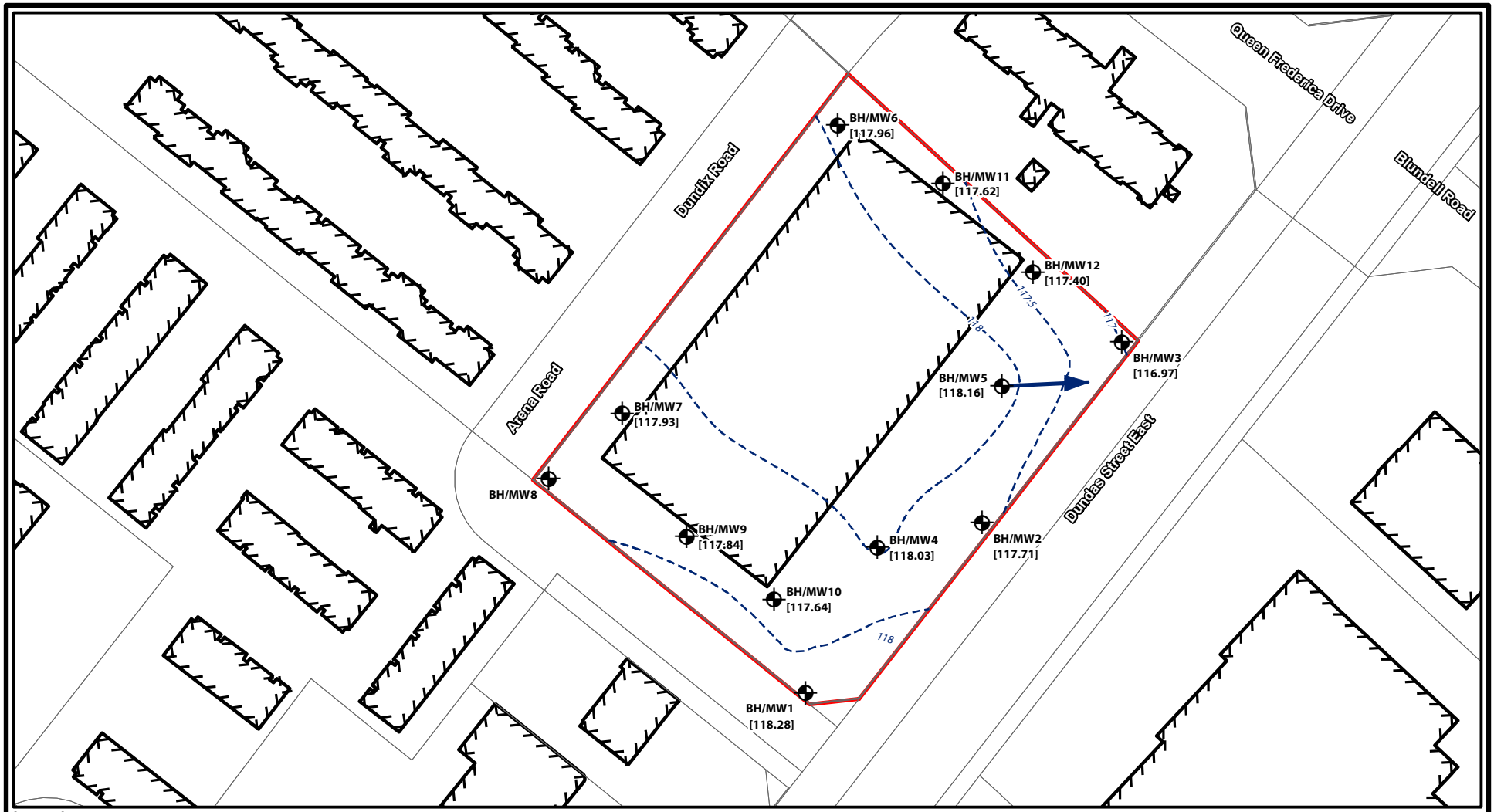
BOREHOLE/MONITORING WELL LOCATION PLAN WITH AREAS OF POTENTIAL ENVIRONMENTAL CONCERN (APECs)

Project 2202029 | June 2022 | Fig. 5



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- [xx.xx] Water Level (m asl)
- Groundwater Contour
- Interpreted Direction of Groundwater Flow

NOTES:

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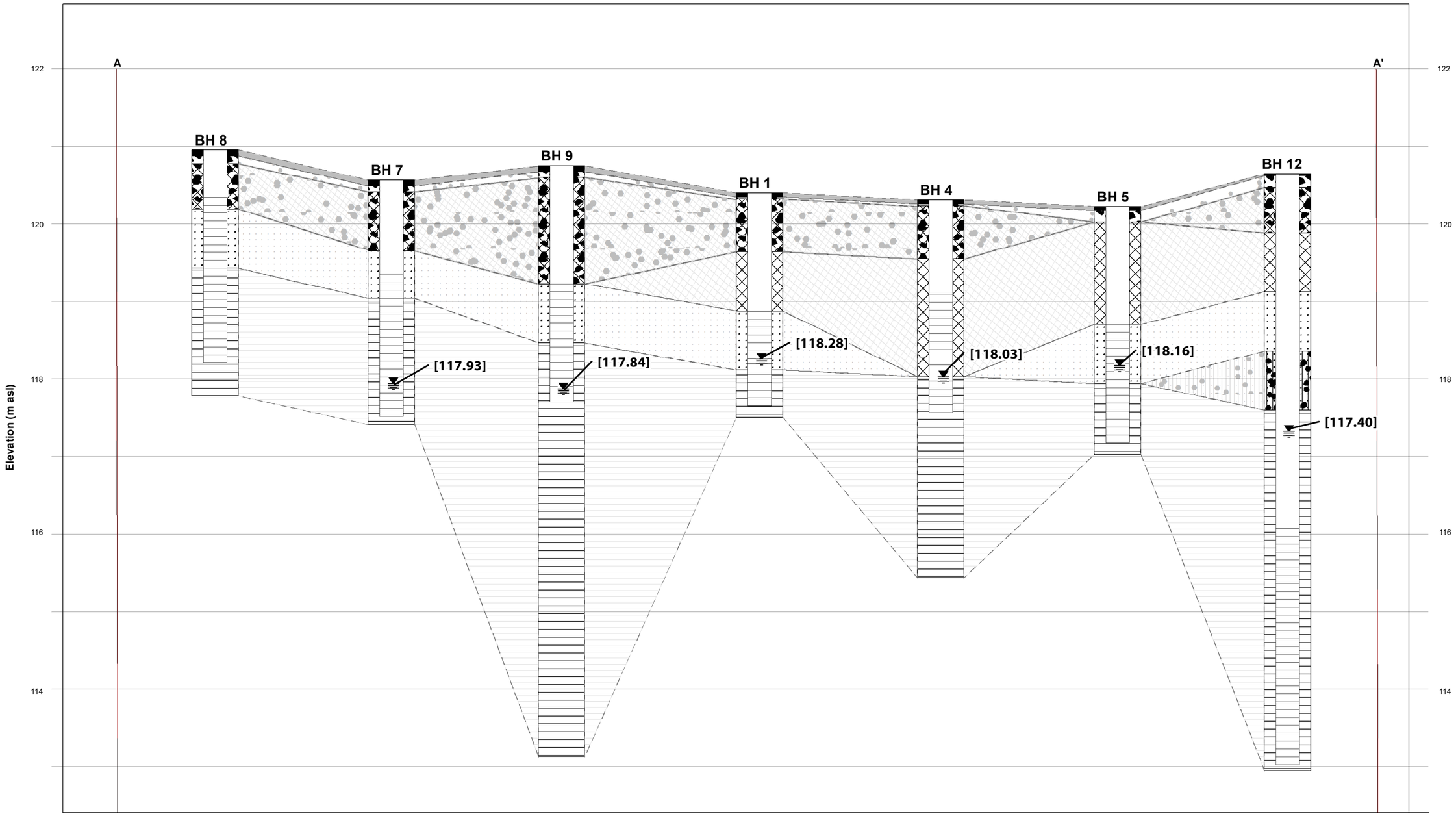
GROUNDWATER CONTOUR PLAN

Project 2202029 | June 2022 | Fig. 6



NOTES:
1. Subsurface conditions known only at borehole locations.
2. Horizontal distances are not to scale.

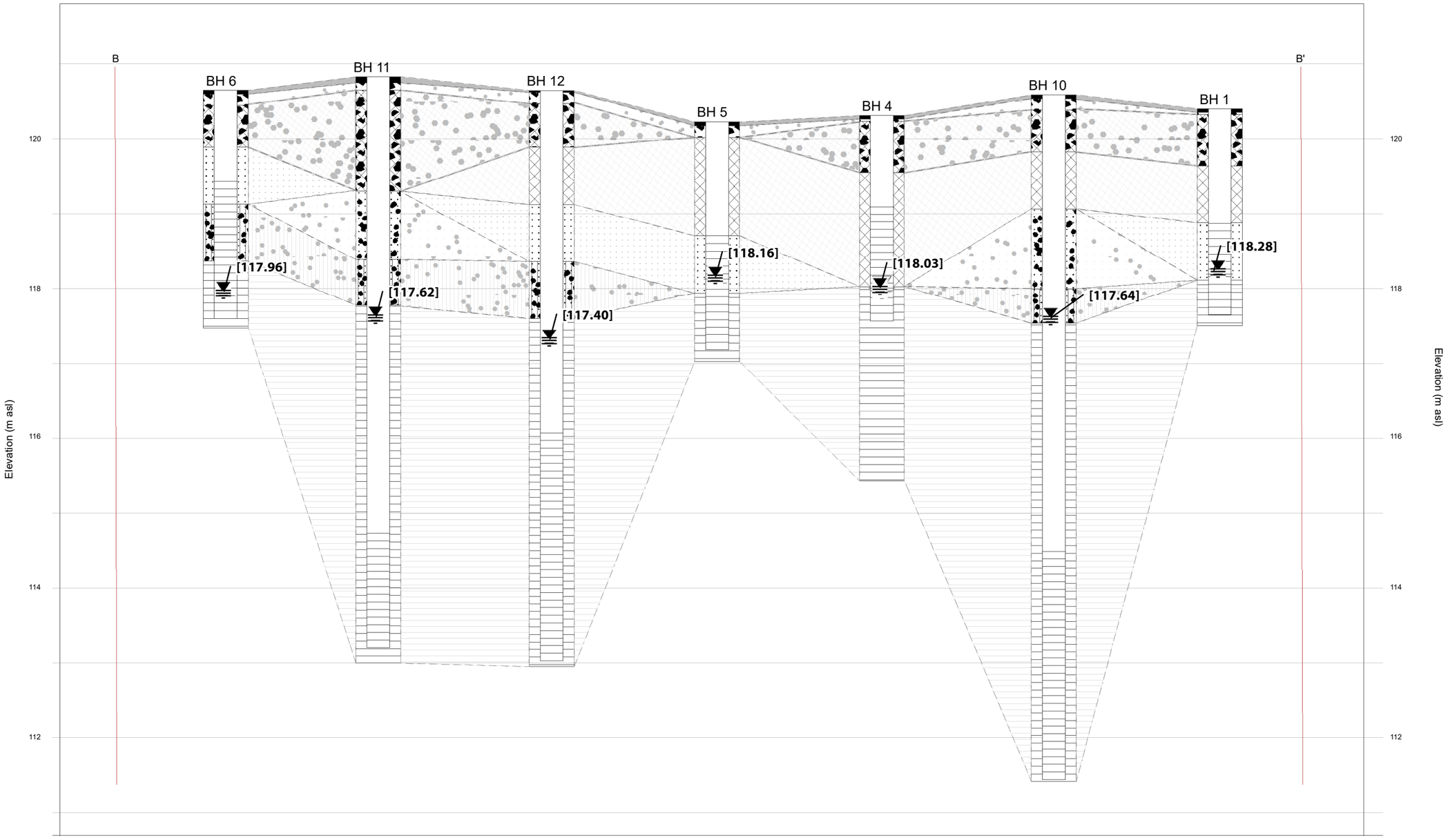
Legend

Water Level in Monitoring Well
[xx.xx] Water Levels (masl) Measured 2022-06-01

Strata

- Paving
- Granular
- Granular Fill
- Fill
- Sandy Silt Glacial Till
- Sand
- Shale Bedrock

Phase Two ESA 1225 Dundas St. E Mississauga, Ontario	GEI Consultants	GEOLOGICAL CROSS SECTION A-A'
Dundix Realty Holdings	Project 2202029	June 2022 Fig. 7



NOTES:
1. Subsurface conditions known only at borehole locations.
2. Horizontal distances are not to scale.

Legend

Water Level in Monitoring Well
[xx.xx] Water Levels (masl) Measured 2022-06-01

Strata

- Paving
- Granular
- Granular Fill
- Fill
- Sand to Sandy Silt Glacial Till
- Sand Glacial Till
- Sand
- Shale Bedrock

Phase Two ESA
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Mississauga, Ontario

Dundix Realty Holdings

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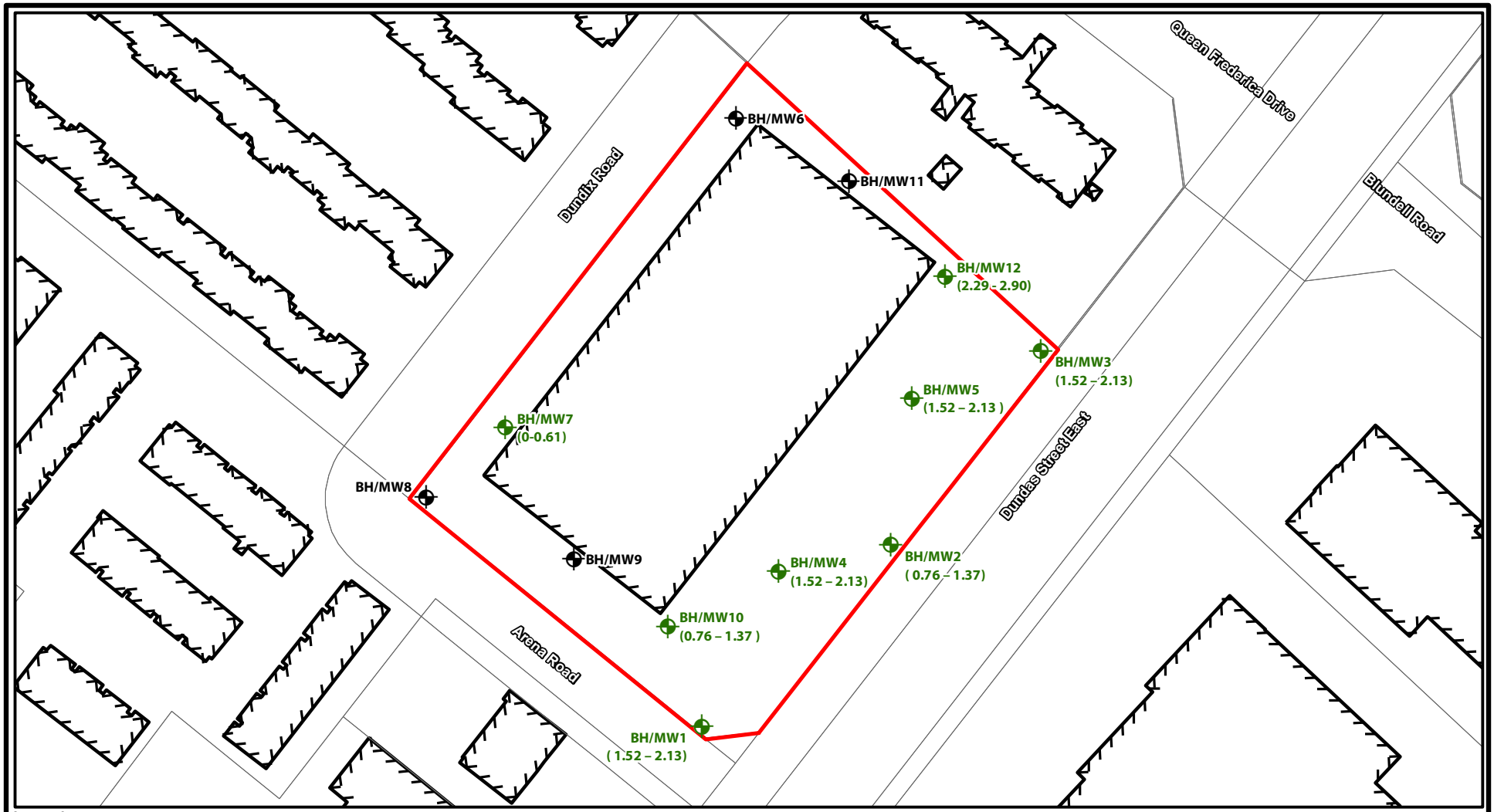
GEOLOGICAL CROSS SECTION B-B'

Project 2202029 | June 2022 | Fig. 8



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Soil Sample Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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0 10 20 m

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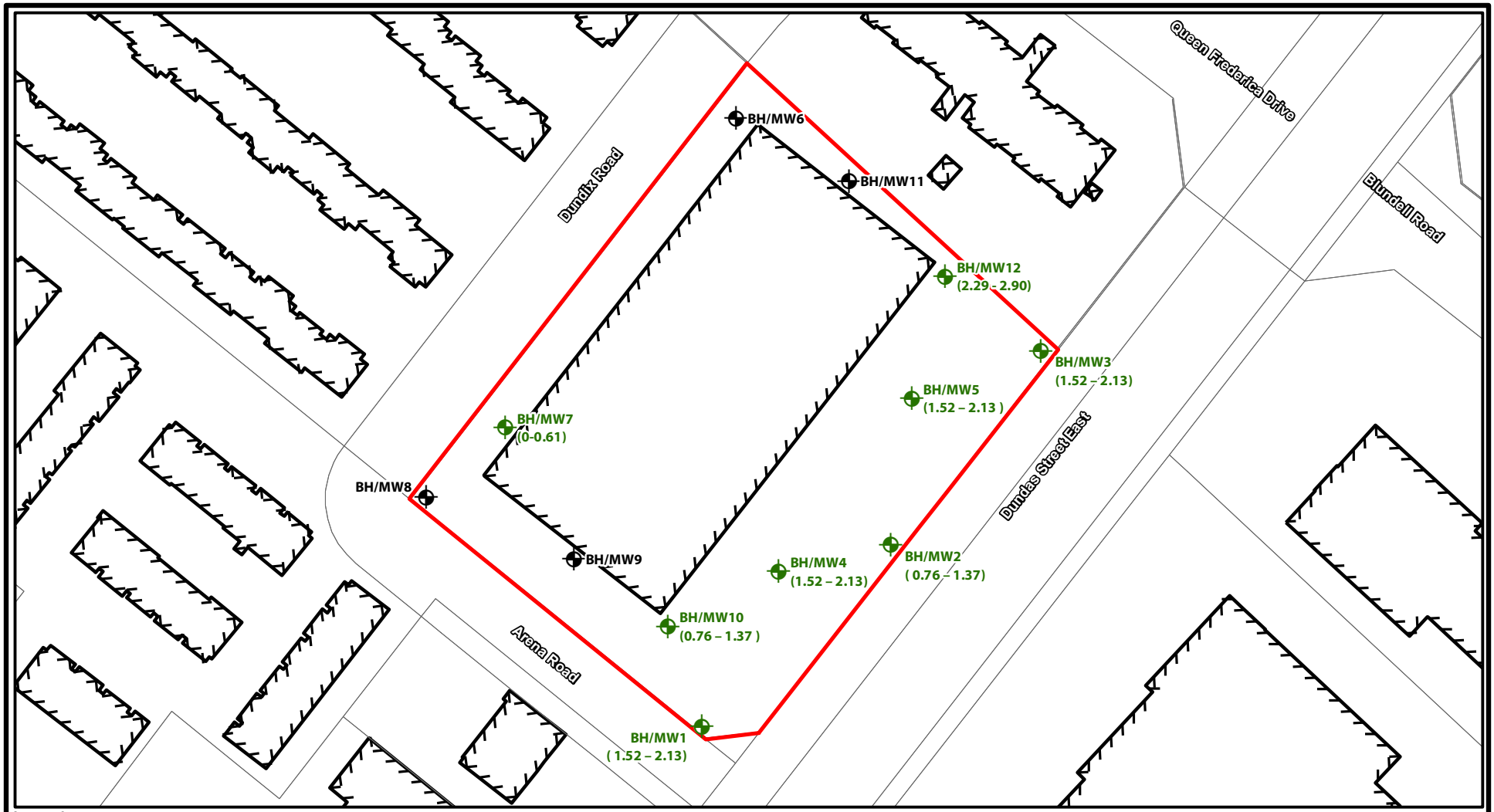
1225 Dundas St. E
Mississauga, Ontario

Dundix Realty Holdings

GEI Consultants

PHC/BTEX
CONCENTRATIONS IN SOIL

Project 2202029 | June 2022 | Fig. 9



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Soil Sample Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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Phase Two ESA
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Mississauga, Ontario

Dundix Realty Holdings

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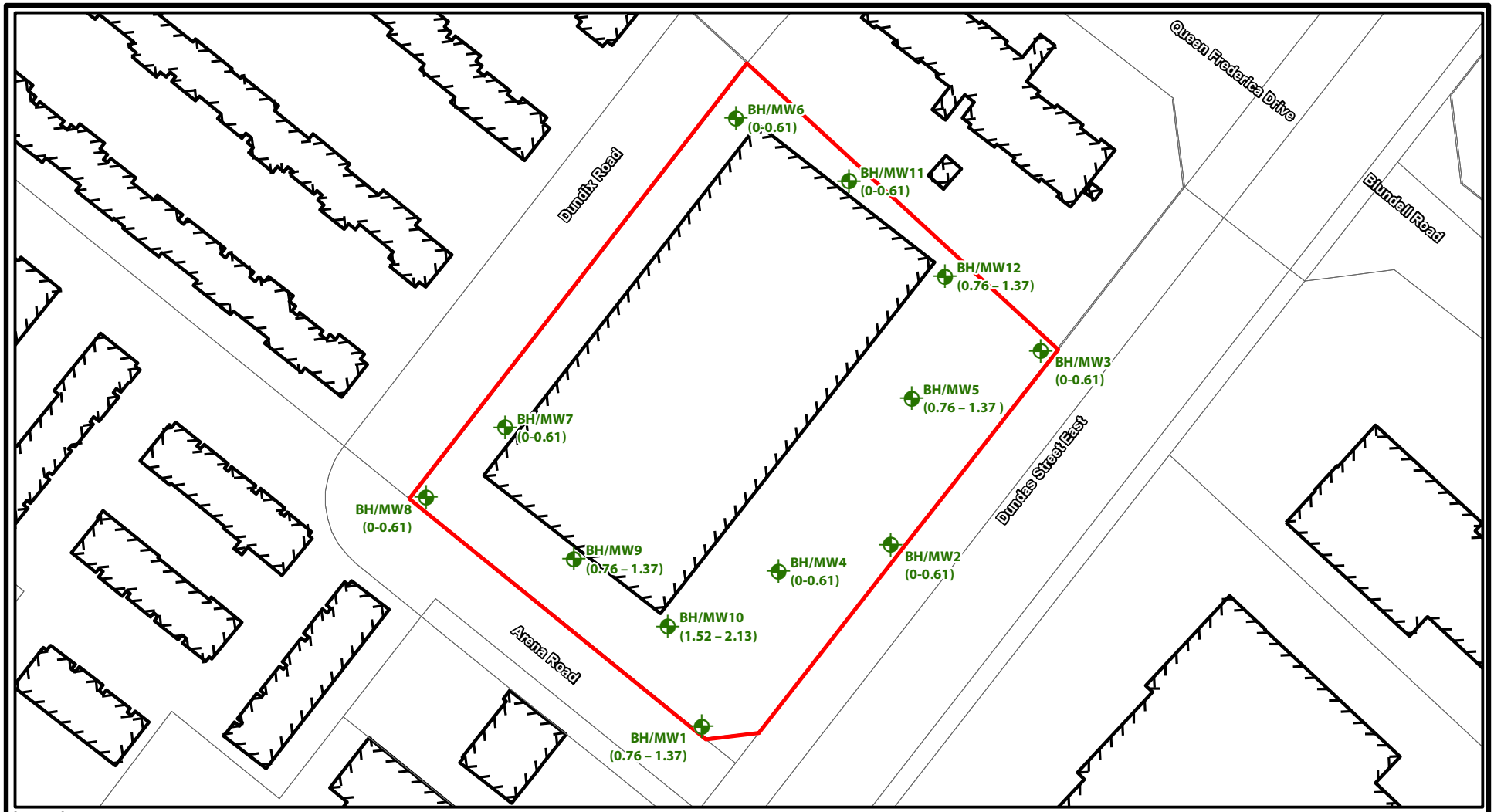
VOC CONCENTRATIONS IN SOIL

Project 2202029 | June 2022 | Fig. 10



Legend

- Approximate Site Boundary
- Parcels
- Parcels
- Borehole/Monitoring Well Location
- (xx.xx) Soil Sample Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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Phase Two ESA
1225 Dundas St. E
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Dundix Realty Holdings

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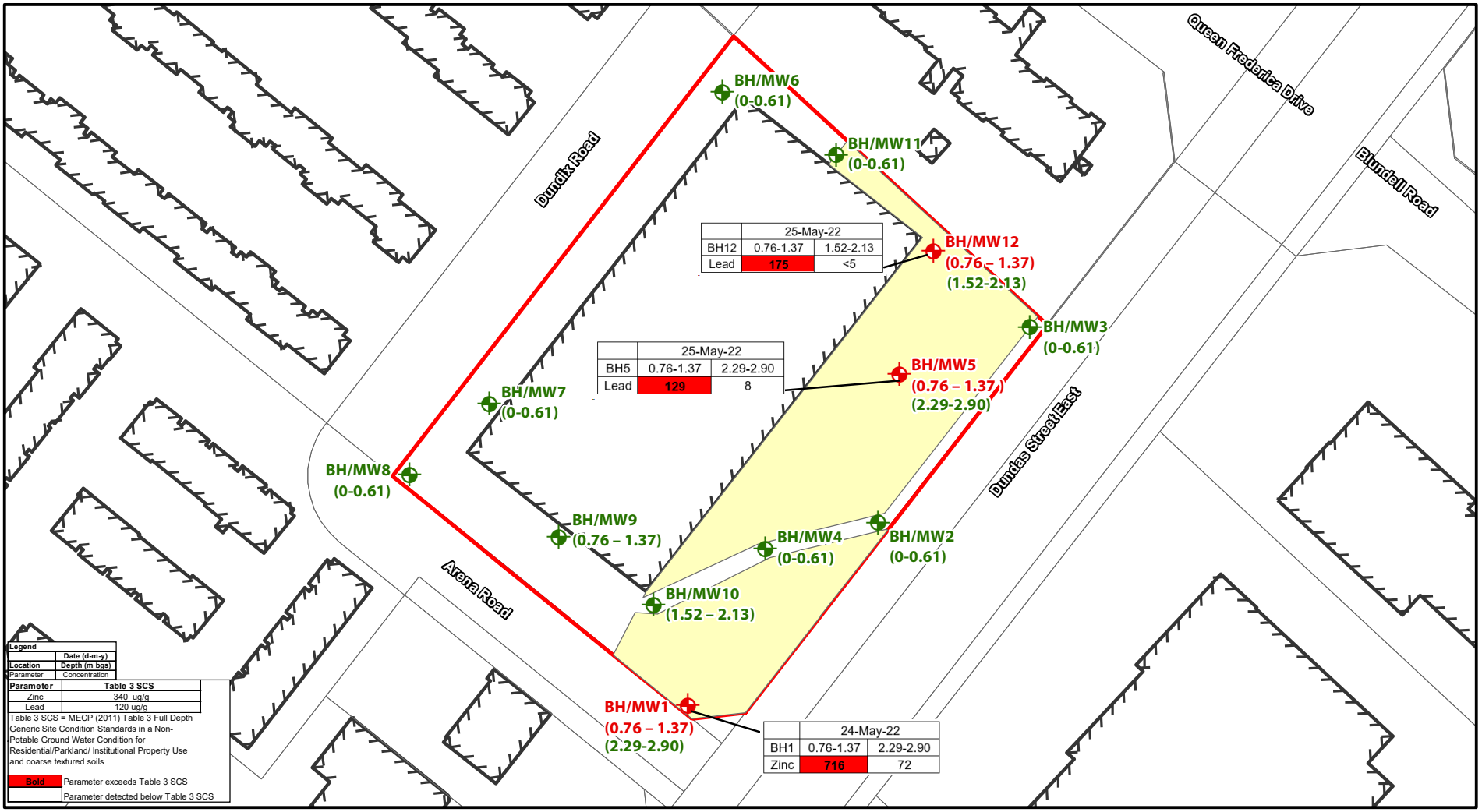
PAH CONCENTRATIONS IN SOIL

Project 2202029 | June 2022 | Fig. 11



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Soil Sample Depth (m bgs)
- Area of Impact
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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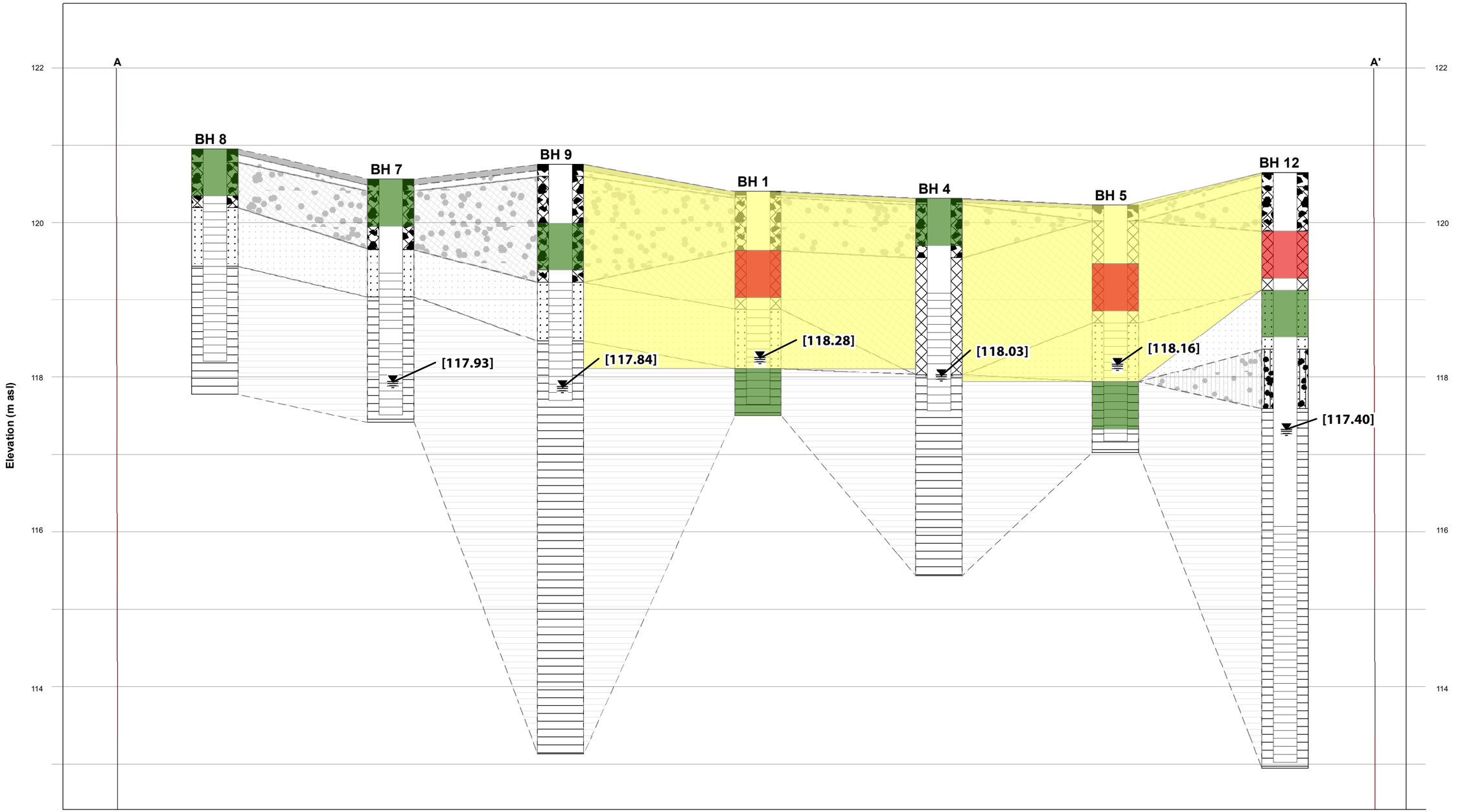
Metals, As, Sb. Se, Cr(VI), Hg, B-HWS Concentrations in Soil

June 2022

Fig. 12



NOTES:
1. Subsurface conditions known only at borehole locations.
2. Horizontal distances are not to scale.

Legend

- Water Level in Monitoring Well
- [xx.xx] Water Levels (masl) Measured 2022-06-01
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS
- Extent of Impact

Strata

- Paving
- Granular
- Granular Fill
- Fill
- Sandy Silt Glacial Till
- Sand
- Shale Bedrock

Phase Two ESA
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Mississauga, Ontario

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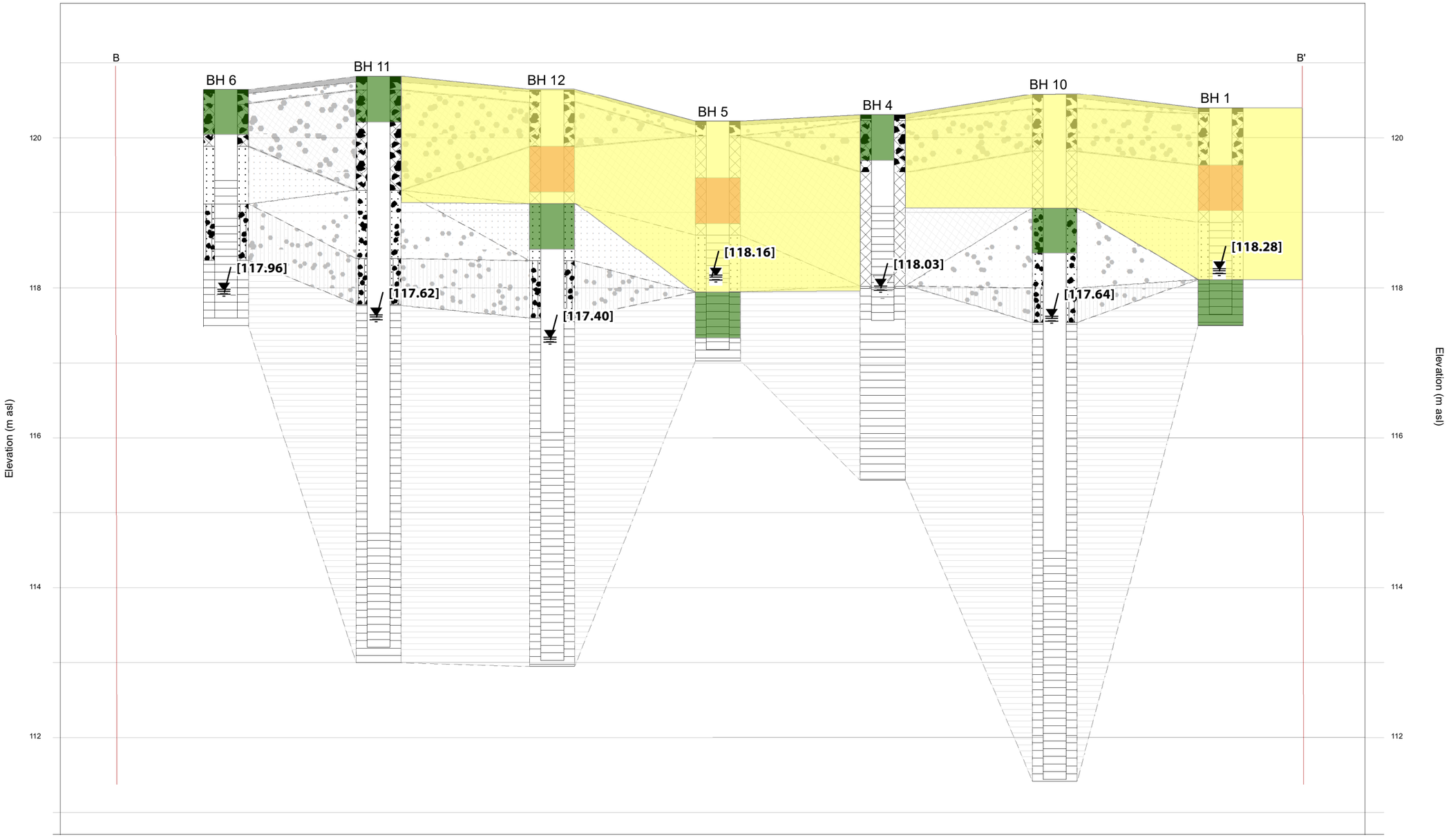
GEOLOGICAL CROSS SECTION A-A' WITH METAL IMPACTS IN SOIL

June 2022 Fig. 13



NOTES:
1. Subsurface conditions known only at borehole locations.
2. Horizontal distances are not to scale.

Legend

- Water Level in Monitoring Well
  [xx.xx] Water Levels (masl) Measured 2022-06-01
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS
- Extent of Impact

Strata

- Paving
- Granular
- Granular Fill
- Fill
- Sand to Sandy Silt Glacial Till
- Sand Glacial Till
- Sand
- Shale Bedrock

Phase Two ESA
1225 Dundas St. E
Mississauga, Ontario

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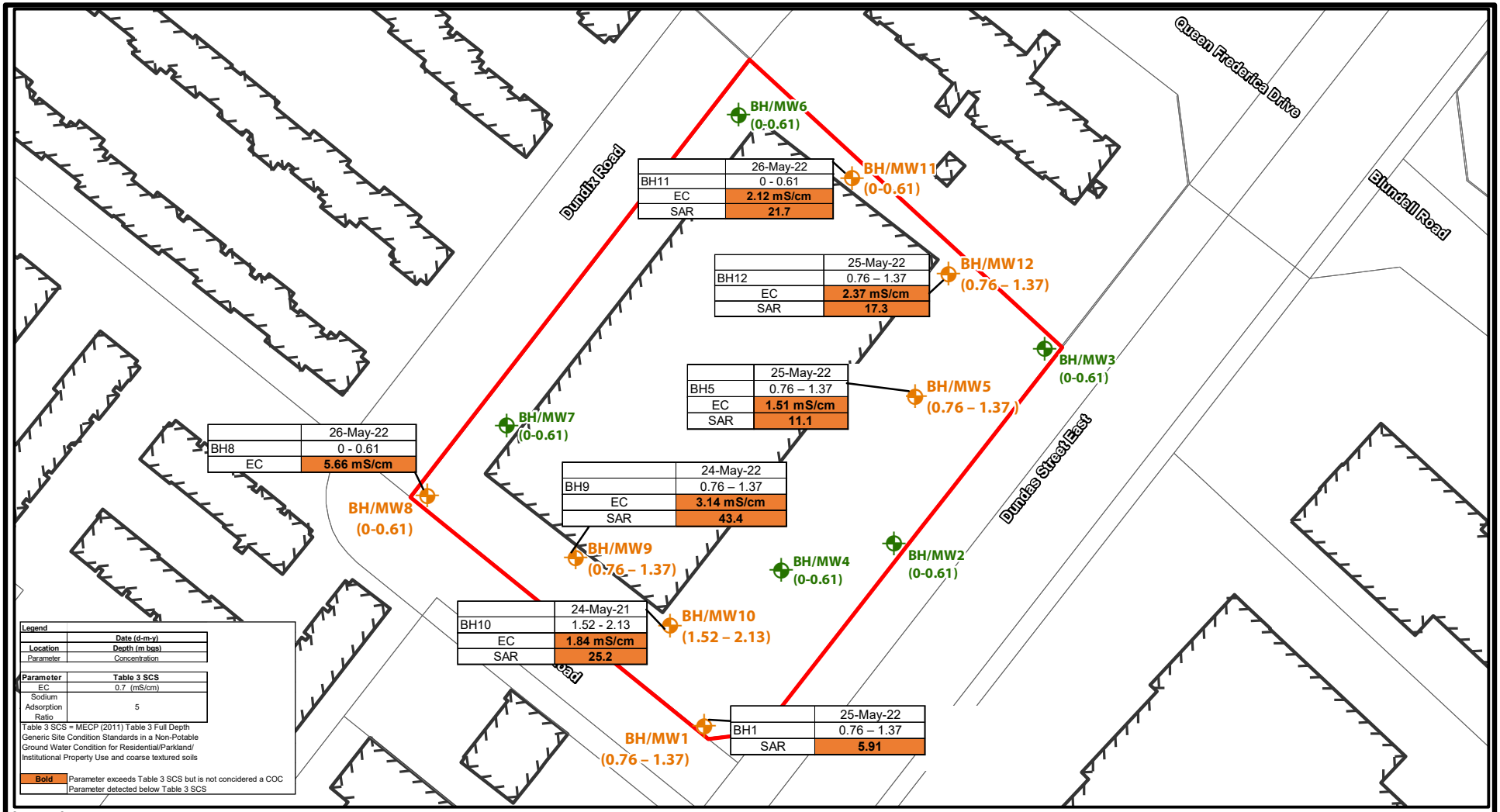
GEOLOGICAL CROSS SECTION B-B' WITH METAL IMPACTS IN SOIL

Project 2202029 | June 2022 | Fig. 14



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Soil Sample Depth (m bgs)
- Parameter Exceeds Table 3 SCS But is Not Considered a COC
- Meets MECP Table 3 SCS

NOTES:

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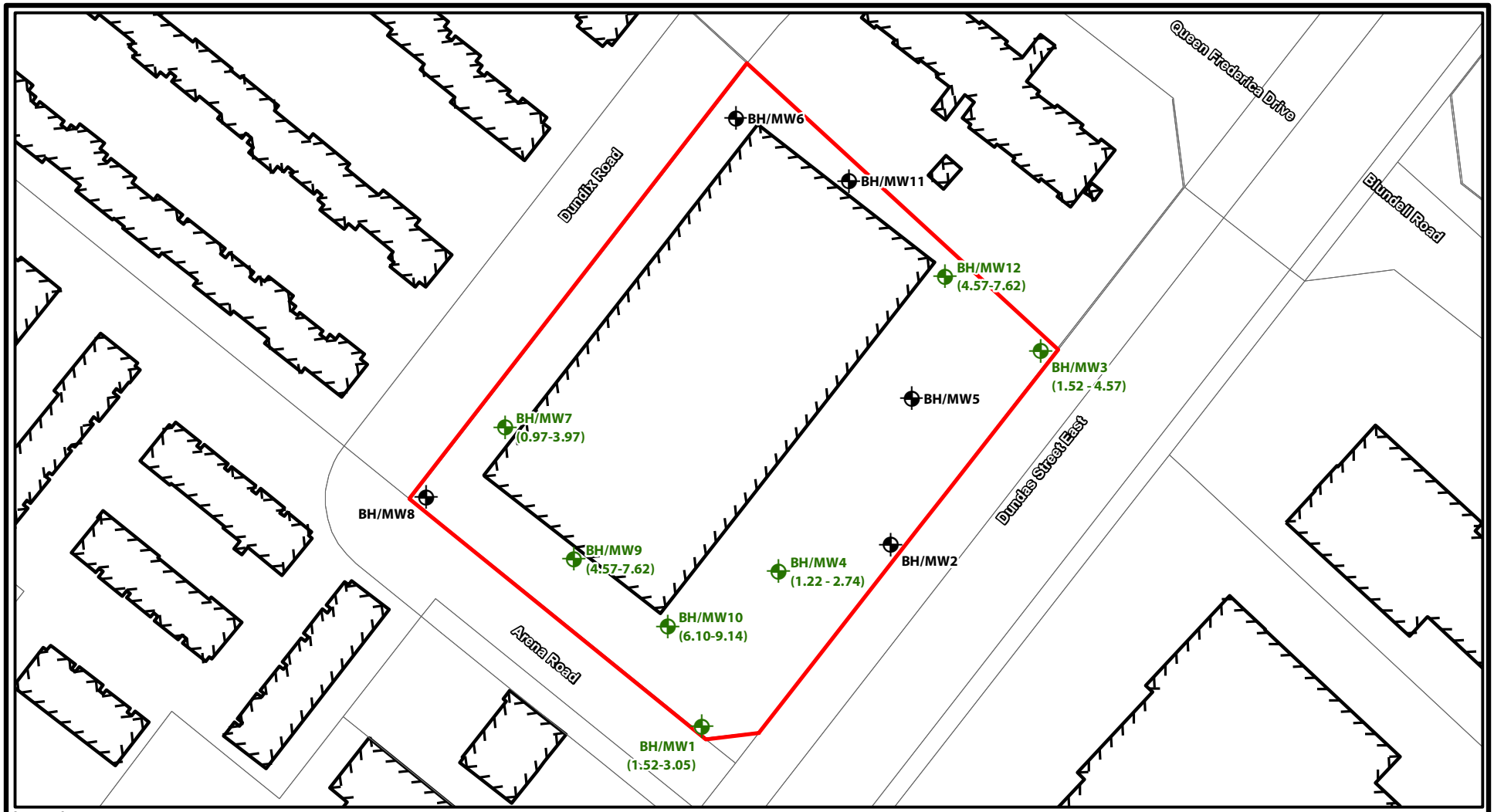
Electrical Conductivity, SAR, CN-, Na, Cl-, Low or High pH Concentrations in Soil

June 2022 Fig. 15



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Screen Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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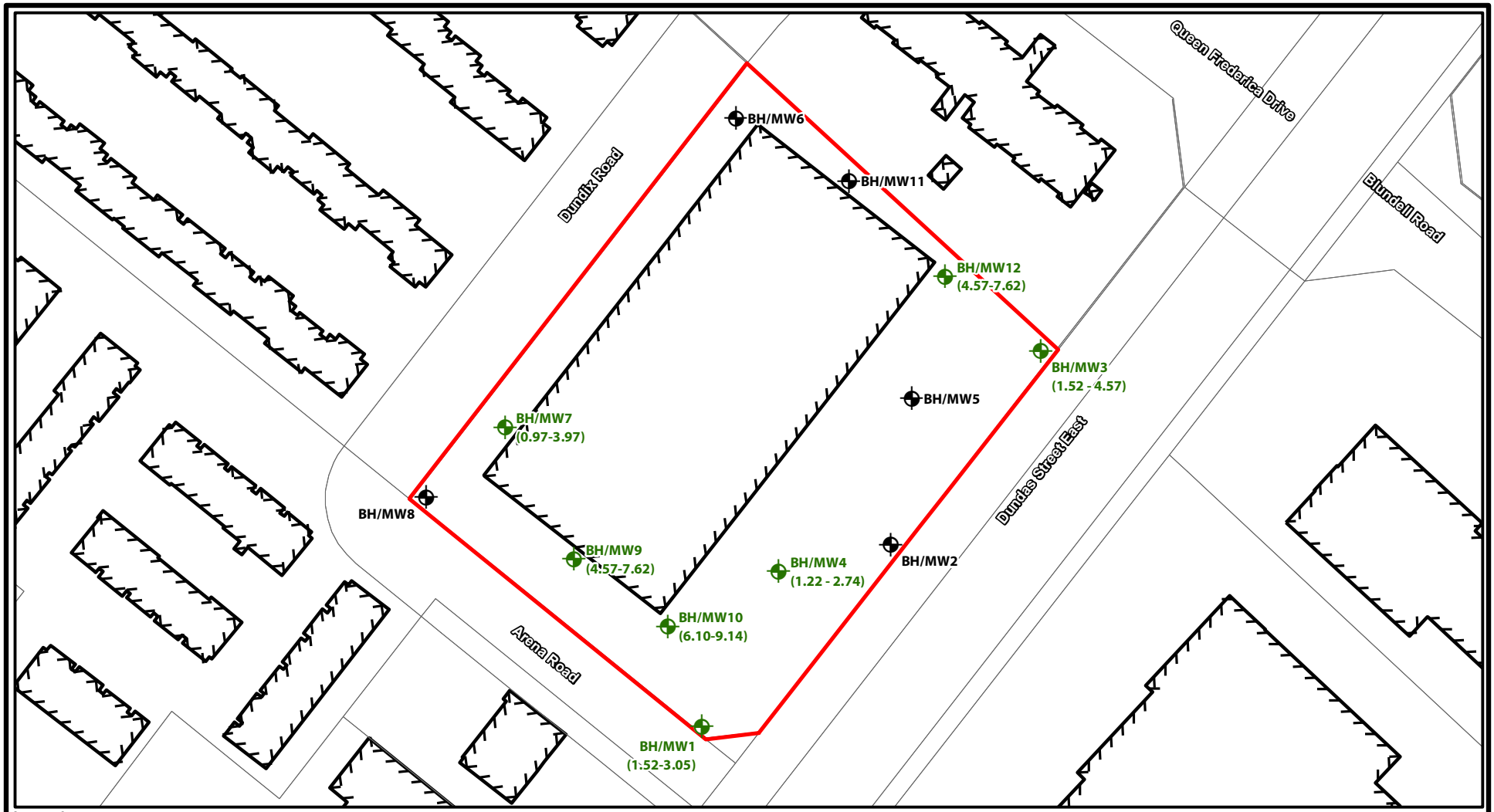
PHC/BTEX CONCENTRATIONS IN GROUNDWATER

Project 2202029 | June 2022 | Fig. 16



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Screen Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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Mississauga, Ontario

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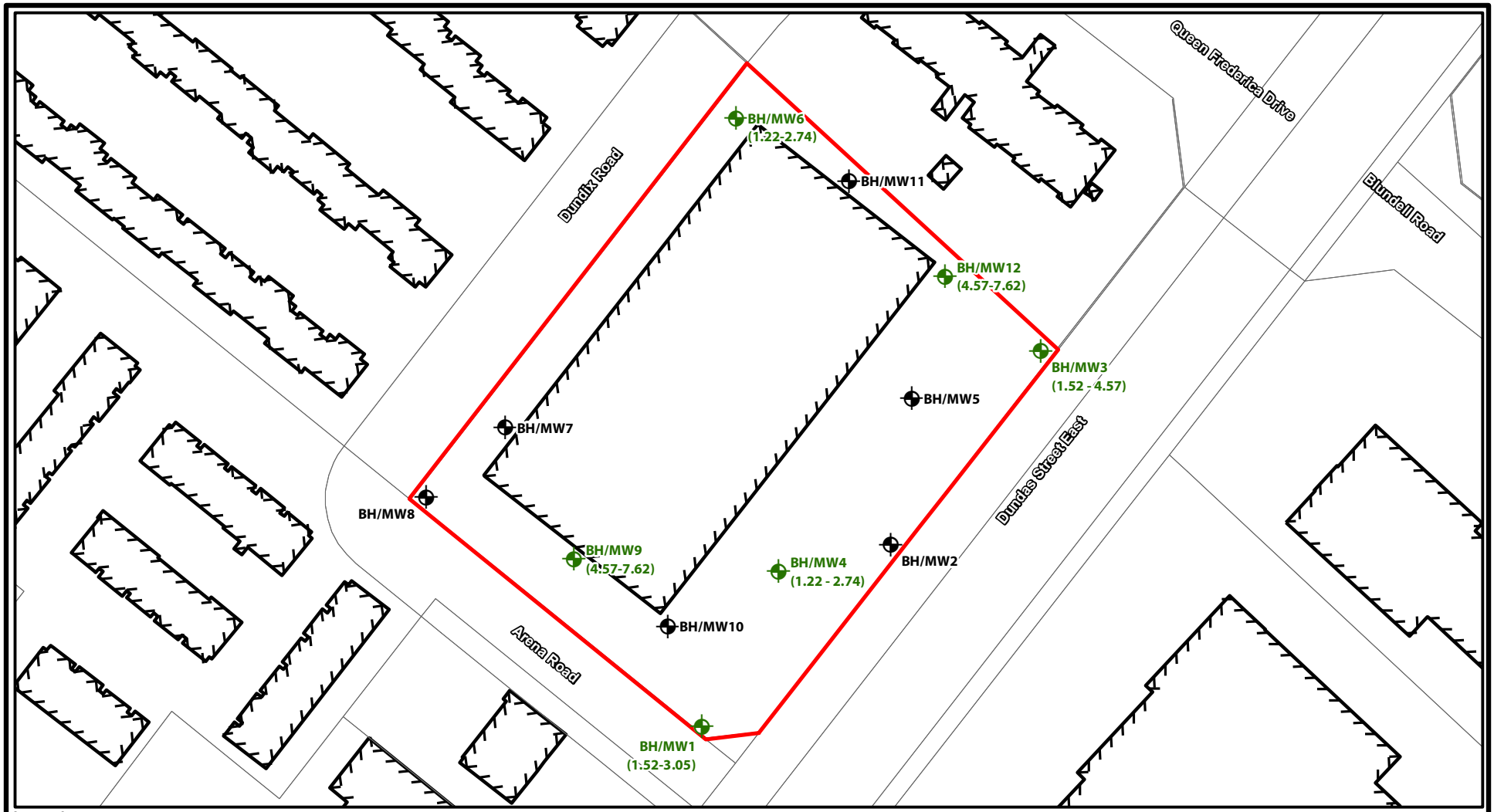
VOC CONCENTRATIONS IN GROUNDWATER

Project 2202029 | June 2022 | Fig. 17



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Screen Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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Mississauga, Ontario

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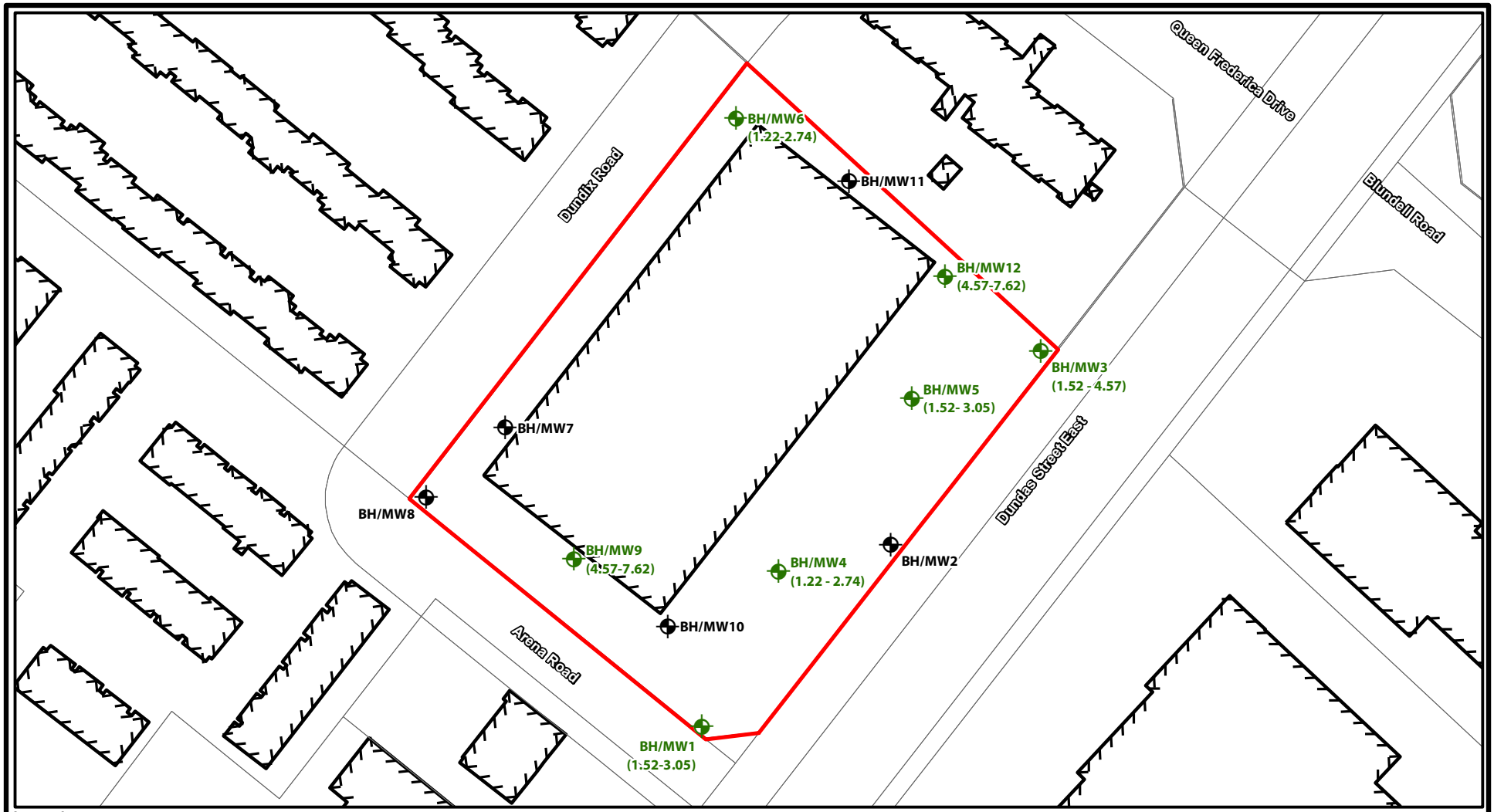
PAH CONCENTRATIONS IN GROUNDWATER

Project 2202029 | June 2022 | Fig. 18



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Screen Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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1225 Dundas St. E
Mississauga, Ontario

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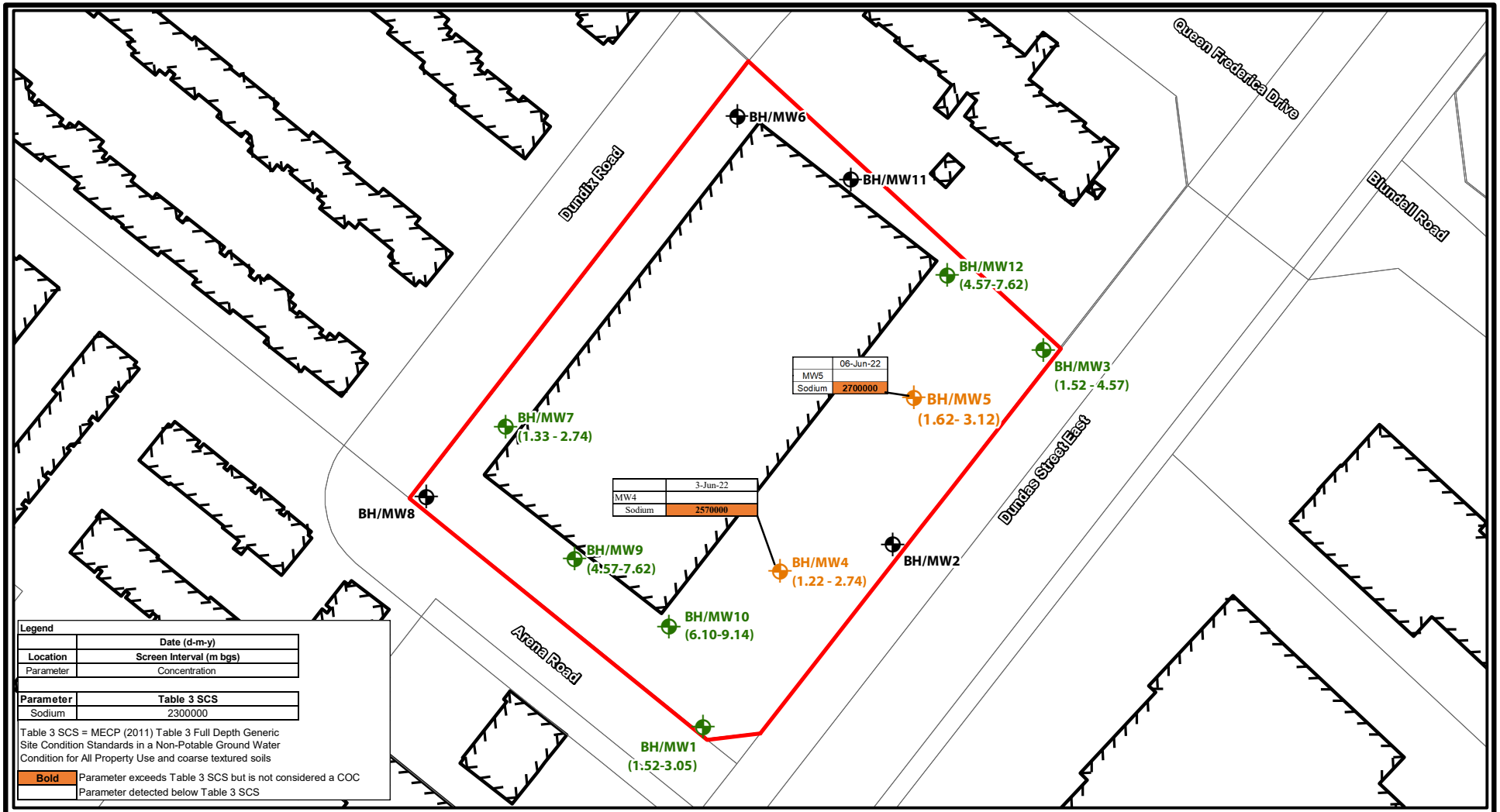
METALS CONCENTRATIONS IN GROUNDWATER

Project 2202029 | June 2022 | Fig. 19



Legend	
	Date (d-m-y)
Location	Screen Interval (m bgs)
Parameter	Concentration

Parameter	Table 3 SCS
Sodium	2300000

Table 3 SCS = MECP (2011) Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for All Property Use and coarse textured soils

Bold	Parameter exceeds Table 3 SCS but is not considered a COC
	Parameter detected below Table 3 SCS

Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Screen Depth (m bgs)
- Parameter Exceeds Table 3 SCS But is Not Considered a COC
- Meets MECP Table 3 SCS

NOTES:

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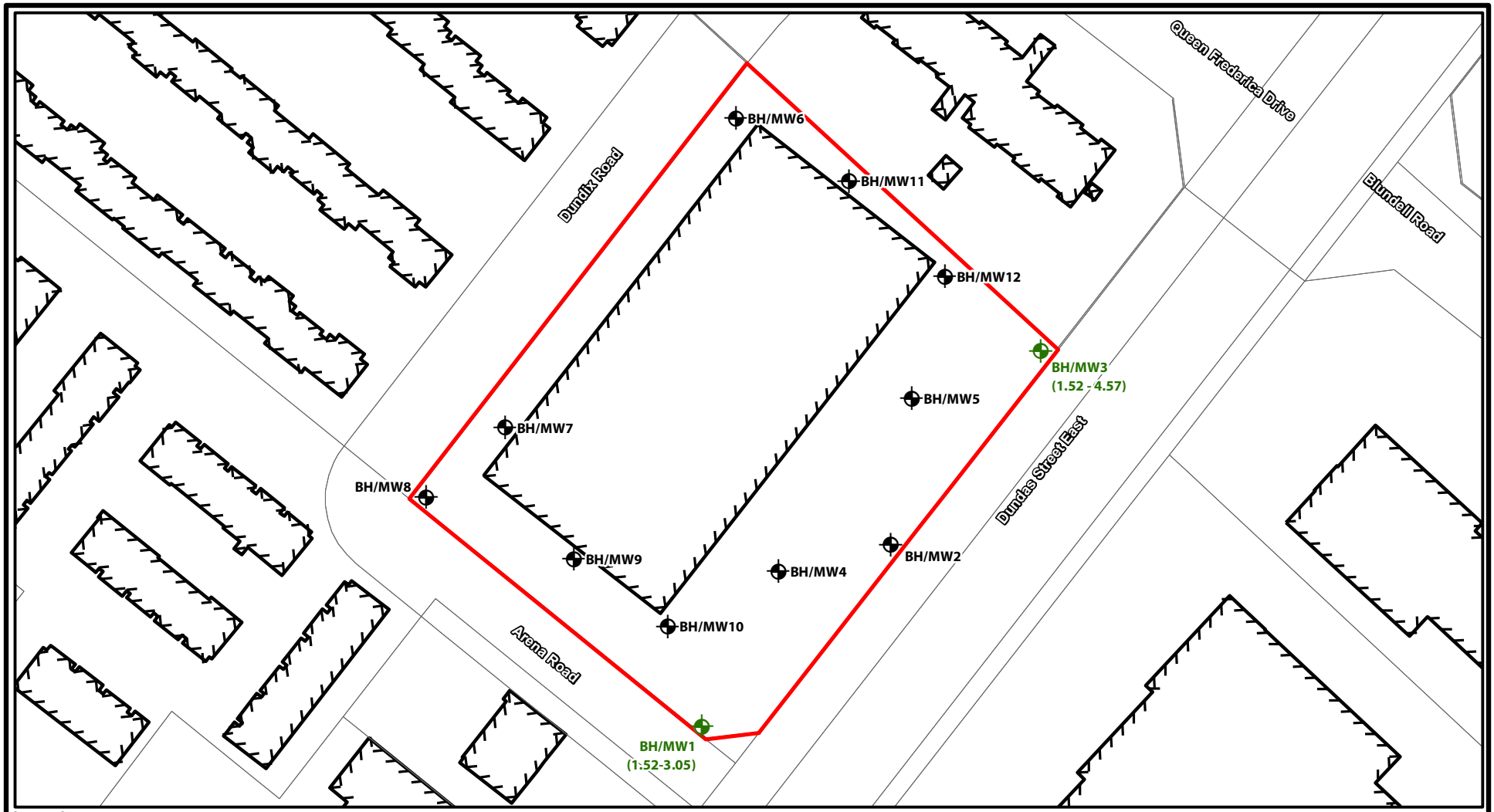
INORGANICS, SODIUM AND CHLORIDE CONCENTRATIONS IN GROUNDWATER

Project 2202029 | June 2022 | Fig. 20



Legend

- Approximate Site Boundary
- Parcels
- Building Location
- Borehole/Monitoring Well Location
- (xx.xx) Screen Depth (m bgs)
- Exceeds MECP Table 3 SCS
- Meets MECP Table 3 SCS

NOTES:

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2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Mississauga Parcel data (approximate), City of Mississauga via Arcgis Online (May 2022).

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Phase Two ESA
1225 Dundas St. E
Mississauga, Ontario

Dundix Realty Holdings

GEI Consultants

OC PESTICIDE CONCENTRATIONS IN GROUNDWATER

Project 2202029 | June 2022 | Fig. 21

Tables

TABLE 1 – Areas of Potential Environmental Concern (APECs)

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1: Importation of fill material	Exterior of the Site building	#30 – Importation of Fill Material of Unknown Quality	Fill could have potentially been imported to backfill the excavation and to regrade the Site.	On-Site	PAHs, metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-, Electrical Conductivity, SAR, Na, Cl-, low or high pH	Soil and Groundwater
APEC 2: Usage of de-icing salts	Exterior of the Site building	#Other – Use of de-icing salts	De-icing salts are used during the winter months for vehicular and pedestrian safety.	On-Site	Electrical conductivity, SAR, Na and Cl-	Soil and Groundwater
APEC 3: Former transport truck parking lot	Eastern portion	PCA#11 – Commercial Trucking and Container Terminals.	Formerly parked transport trucks and trailers could have leaked COCs to the ground and into the groundwater	On-Site	PHCs, BTEX, metals, AS, Sb, Se, Cr (VI), Hg, B-HWS, CN-, Electrical Conductivity, SAR, Na, Cl-, low or high pH	Soil and Groundwater
APEC 4: Former garbage compactor	Western portion	#Other – Hydraulic Machinery	Former garbage compactor could have leaked COCs to the ground	On-Site	PHCs, BTEX	Soil and Groundwater
APEC 5: Former Transport Truck Terminal	Southwestern portion	#11 – Commercial Trucking and Container Terminals	Former transport truck terminal could have leaked COCs to the ground which could have migrated via groundwater	Off-Site (Southwest adjacent)	PHCs, BTEX, and VOCs	Groundwater
APEC 6: Former Orchards	Southern and southeastern portions	#40 – Pesticides (including Herbicides, Fungicides and Anti-fouling Agents) Manufacturing, Processing, Bulk	Former orchards could have leaked COCs to the ground which could have migrated via groundwater	Off-Site (35 m southeast)	Organochlorine pesticides	Groundwater

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
		Storage and Large – Scale Applications				
APEC 7: Canadian Tire gas station	Southern portion	#28 – Gasoline and Associated Products Storage in Fixed Tanks	Underground storage tanks could have leaked COCs to the ground which could have migrated via groundwater	Off-Site (90 m south)	PHCs and BTEX	Groundwater

1) Area of Potential Environmental Concern means the area on, in or under a Phase One Study Area where one or more contaminants are potentially present, as determined through the Phase One ESA, including through:
   a) identification of post or current uses on, in or under the phase one property, and
   b) identification of potentially contaminating activities.
2) Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area.

PHCs = petroleum hydrocarbons; BTEX = benzene, toluene, ethylbenzene, xylenes; VOCs = volatile organic compounds; PAHs = polycyclic aromatic hydrocarbons; EC = electrical conductivity; SAR = sodium adsorption ratio; As = arsenic; Sb = antimony; Se = selenium; B-HWS = boron hot water soluble; Hg = mercury; Cr(VI) = chromium (VI) and CN- = cyanide; Na = sodium; Cl - = chloride

TABLE 2 – Summary of Soil Samples Submitted for Chemical Analysis

Soil Sample ID	Rationale	Requested Analyses	Soil Sample Depth (m bgs)	Consultant
BH1-2	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH1-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH1-4	Vertical delineation	Zinc	2.29-2.90	GEI
BH2-1	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH2-2	APEC 3 characterization	PHCs, BTEX, VOCs	0.76 – 1.37	GEI
BH3-1	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH3-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH4-1	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH4-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH5-2	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH5-3	APEC 3 characterization	PHCs, BTEX, VOCs	1.52 – 2.13	GEI
BH5-4	Vertical delineation	Lead	2.29-2.90	GEI
BH6-1	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH7-1	APECs 1, 2, and 4 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	0-0.61	GEI
BH8-1	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH9-2	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH10-2	APEC 3 Characterization	PHCs, BTEX, VOCs	0.76 – 1.37	GEI
BH10-3	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	1.52 – 2.13	GEI
BH11-1	APECs 1 and 2 characterization	PAHs, Metals and Inorganics	0-0.61	GEI
BH12-2	APECs 1, 2, and 3 characterization	PAHs, Metals and Inorganics	0.76 – 1.37	GEI
BH12-3	Vertical delineation	Lead	1.52-2.13	GEI
BH12-4	APEC 3 characterization	PHCs, BTEX, VOCs	2.29 - 2.90	GEI

TABLE 3 – Monitoring Well Installation Details

Well ID	Consultant	Ground Elevation (m asl)	Stick down (m)	Top of screen (m bgs)	Bottom of screen (m bgs)	Screen length (m)	Top of screen (m asl)	Bottom of screen (m asl)	Geologic Units Intercepted by Well Screen	Well Condition
BH/MW1	GEI (2022)	120.44	0.1	1.52	3.05	1.5	117.35	118.88	Sand, Georgian Bay Formation Weathered Shale	Intact
BH/MW2	GEI (2022)	120.47	0.08	1.22	2.74	1.5	117.68	119.20	Sand, Georgian Bay Formation Weathered Shale	Intact
BH/MW3	GEI (2022)	120.42	0.1	1.52	4.57	3.0	115.87	118.92	Georgian Bay Formation Weathered Shale	Intact
BH/MW4	GEI (2022)	120.33	0.08	1.22	2.74	1.5	117.57	119.10	Fill, Georgian Bay Formation Weathered Shale	Intact
BH/MW5	GEI (2022)	120.23	0.09	1.52	3.05	1.5	117.48	119.01	Sand, Georgian Bay Formation Weathered Shale	Intact
BH/MW6	GEI (2022)	120.65	0.08	1.22	2.74	1.5	117.90	119.43	Sand, Sandy Silt Glacial Till, Georgian Bay Formation Weathered Shale	Intact
BH/MW7	GEI (2022)	120.57	0.1	0.97	3.97	1.5	117.83	119.36	Sand, Georgian Bay Formation Weathered Shale	Intact

BH/MW8	GEI (2022)	120.95	0.13	0.61	2.74	2.1	118.22	120.35	Granular Fill, Sand, Georgian Bay Formation Weathered Shale	Intact
BH/MW9	GEI (2022)	120.73	0.12	4.57	7.62	3.0	113.13	116.18	Sand, Georgian Bay Formation Shale	Intact
BH/MW10	GEI (2022)	120.62	0.09	6.10	9.14	3.0	111.45	114.49	Inferred Sound Bedrock (Shale)	Intact
BH/MW11	GEI (2022)	120.82	0.12	4.57	7.62	3.0	113.21	116.26	Inferred Sound Bedrock (Shale)	Intact
BH/MW12	GEI (2022)	120.73	0.17	4.57	7.62	3.0	113.03	116.08	Gerogian Bay Formation Shale, Inferred Sound Bedrock (Shale)	Intact

TABLE 4 – Summary of Groundwater Samples Submitted for Chemical Analysis

Monitoring Well ID	Rationale	Requested Analyses	Consultant
MW1	APECs 1, 2, 3, 5, 6, 7 characterization	PHCs, BTEX, VOCs, PAHs Metals and Inorganics, OC Pesticides	GEI
MW3	APECs 1, 2, 3, 6 characterization	PHCs, BTEX, VOCs, PAHs Metals and Inorganics, OC Pesticides	GEI
MW4	APECs 1, 2, 3 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	GEI
MW5	APECs 1, 2, 3 characterization	Metals and Inorganics	GEI
MW6	APECs 1, 2 characterization	PAHs, Metals and Inorganics	GEI
MW7	APEC 4 characterization	PHCs, BTEX, VOCs	GEI
MW9	APECs 1, 2, 5 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	GEI
MW10	APECs 1, 2, 3, 5 characterization	PHCs, BTEX, VOCs	GEI
MW12	APECs 1, 2, 3 characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	GEI

TABLE 5 – Water Level Depths and Elevations

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (m asl)	Groundwater Monitoring Date
BH/MW1	120.44	2.16	118.28	June 1, 2022
BH/MW2	120.47	2.76	117.71	June 1, 2022
BH/MW3	120.42	3.45	116.97	June 1, 2022
BH/MW4	120.33	2.30	118.03	June 1, 2022
BH/MW5	120.23	2.07	118.16	June 1, 2022
BH/MW6	120.65	2.69	117.96	June 1, 2022
BH/MW7	120.57	2.64	117.93	June 1, 2022
BH/MW8	120.95	Dry	NA	June 1, 2022
BH/MW9	120.73	2.89	117.84	June 1, 2022
BH/MW10	120.62	2.98	117.64	June 1, 2022
BH/MW11	120.82	3.20	117.62	June 1, 2022
BH/MW12	120.73	3.33	117.40	June 1, 2022

Appendix A

Sampling and Analysis Plan

GEI Consultants

Consulting Engineers and Scientists

SITE SAMPLING AND ANALYSIS PLAN

1225 Dundas Street East, Mississauga, Ontario

Submitted to:
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June 24, 2022
Project 2202029

Table of Contents

1. Introduction

This Sampling and Analysis Plan (SAAP) that was developed in support of the Soil Characterization Report which will be conducted to provide further characterization of the Site subsurface conditions. The SAAP presents the procedures and measures that will be undertaken during field investigative activities to characterize the Site conditions and meet the data quality objectives of the Phase Two ESA.

The SAAP presents the sampling program proposed for the Site, the recommended procedures and protocols for sampling and related field activities, the data quality objectives, and the quality assurance/ quality control (QA/QC) measures that will be undertaken to provide for the collection of accurate, reproducible and representative data. These components are described in further detail below.

2. Field Sampling Program

2.1 Field Sampling Program

The field sampling program was developed to provide for the collection of samples of the surficial and subsurface soil materials for chemical analysis of parameters identified as potential contaminants of concern identified in the Phase One ESA.

The soil samples will be collected from of the surficial fill and overburden material. The groundwater samples will be collected from each monitoring well.

The monitoring wells will be installed at selected boreholes to intercept the groundwater table aquifer. The monitoring wells will be installed with 1.5, 2.1 or 3.0 m long screens extending to a maximum depth of approximately 9.1 m below grade.

Elevation of the boreholes and monitoring wells will be obtained through the completion of an elevation survey with reference to a Site temporary benchmark or a local geodetic benchmark. Groundwater flow will be determined through groundwater level measurements and the relative groundwater elevations established in the Site elevation survey.

3. Field Methods

To meet the requirements of the field sampling program, the following field investigative methods will be undertaken:

- Borehole Drilling;
- Soil Sampling;
- Monitoring Well Installation;
- Monitoring Well Development;
- Groundwater Level Measurements;
- Elevation Survey;
- Groundwater Sampling; and

- Residue Management Procedures.

The field investigative methods will be performed as described below:

3.1 Borehole Drilling

Boreholes will be advanced at the Site to facilitate the collection of soil samples for chemical analysis and geologic characterization and for the installation of groundwater monitoring wells. Boreholes will be advanced at the Site to a maximum depth of approximately 9.2 m below grade, within the overburden materials to provide for the collection of soil samples beneath the Site. The borehole locations will be selected to assess soil and groundwater (if required) quality at the Site.

Prior to borehole drilling, utility clearances will be obtained from public locators, as required. Boreholes will be advanced into the surficial fill and overburden soils by a drilling company under the full-time supervision of GEI staff. A track mounted drilling machine equipped with hollow stem augers and split spoons will be utilized to advance the boreholes through the overburden materials.

3.2 Soil Sampling

Soil samples for geologic characterization and chemical analysis will be collected from the overburden boreholes using 5 cm diameter, 60 cm long, stainless steel split-spoon sampling devices advanced ahead of the augers. The split-spoon samplers will be attached to drill rods and advanced into the soil by means of a machine-driven hammer. Spilt-spoon soil samples will be collected where possible, beginning at the ground surface and subsequently at continuous intervals. Geologic and sampling details of the recovered cores will be logged and the samples will be assessed for the potential presence of non-aqueous phase liquids. A portion of each soil sample will be placed in a sealed “zip-lock” plastic bag and allowed to reach ambient temperature prior to field screening with a photoionization detector (PID) that will be calibrated by the supplier with an appropriate reference gas and zeroed in ambient conditions prior to use. The vapour measurements will be made by inserting the instrument’s probe into the plastic bag while manipulating the sample to ensure volatilization of the soil gases. These readings will provide a real-time indication of the relative concentration of volatile organic vapours encountered in the subsurface during drilling. Samples for chemical analysis will be selected on the basis of visual, combustible gas and olfactory evidence of impacts and at specific intervals to define the lateral and vertical extent of suspected impacts.

Recommended volumes of soil samples selected for chemical analysis will be collected into pre-cleaned, laboratory supplied, analytical test group specific containers. The samples will be placed into clean insulated coolers chilled with ice for storage and transport. Samples intended for PHC and/or VOC and/or BTEX analysis will be collected using a laboratory-supplied soil core sampler, placed into the vials containing methanol for preservation purposes and sealed using Teflon lined septa lids. The samples will be assigned unique identification numbers, and the date, time, location, and requested analyses for each sample will be documented in a bound field notebook. The samples will be submitted to a CAEL certified laboratory within analytical test group holding times under Chain of Custody (COC) protocols. New disposable chemical resistant gloves will be used during the handling and sample collection for each soil core to prevent sample cross-contamination.

3.3 Monitoring Well Installation

Monitoring wells will be installed in general accordance with Ontario Regulation 903/90, as amended and will be installed by a licensed well contractor.

The monitoring wells will be constructed using 50 mm diameter, Schedule 40, PVC riser pipe and number 10 slot size (0.25 mm) well screens. The base of the well screens will be sealed with PVC end caps. All well pipe connections will be factory machined threaded flush couplings. The pipe components will be pre-wrapped in plastic, which will be removed prior to insertion in the borehole to minimize the potential for contamination. No lubricants or adhesives will be used in the construction of the monitoring wells. The annular space around the well screens will be backfilled with silica sand to at least 0.3 m above the top of the screen. Granular bentonite will be placed in the borehole annulus from the top of the sand pack to approximately grade. The monitoring wells will be completed with protective casings.

3.4 Monitoring Well Development

Monitoring wells will be developed to remove fine sediment particles potentially lodged in the sand pack and well screen to enhance contact with the surrounding formation groundwater and will be developed using dedicated bailers. Monitoring well development will be monitored by multiparameter water quality meter visual observations of turbidity, and by taking field measurements of pH and conductivity for every well volume removed. Standing water volumes will be determined by means of a water level meter. Water quality parameter measurements will be recorded using a multiparameter water quality meter. A minimum of approximately three (3) well volumes will be removed; and, well development will continue until the purged water has chemically stabilized as indicated by field parameters measurements.

Well development details will be documented on a well development log sheet or in a bound hard cover notebook. All water accumulated during well development will be collected and stored in sealed containers.

3.5 Groundwater Level Measurements

Groundwater level measurements will be recorded from monitoring wells to determine groundwater flow and direction at the Site. Water levels will be measured with respect to the top of the casing by means of a groundwater level meter. The water levels will be recorded on water level log sheets or in a bound field notebook. The water level meter probe will be decontaminated between monitoring well locations.

3.6 Elevation Survey

An elevation survey will be conducted to obtain vertical control of the newly installed monitoring well locations. The top of casing and ground surface elevation of each monitoring well location will be surveyed against a known geodetic benchmark, or if unavailable, against a suitable arbitrary temporary benchmark. Elevations measured against a geodetic benchmark will be recorded as meters above mean sea level (m AMSL). The arbitrary temporary benchmark will be assigned an elevation of 100.00 m. The elevation survey will be accurate to within ± 1 cm.

3.7 Groundwater Sampling

If required, groundwater samples will be collected from monitoring wells for chemical analysis. The monitoring wells will be purged first of three to five wetted well volumes of water to remove standing water and draw in fresh formation water as previously described. Dedicated well materials will be used for well purging and sample collection.

Recommended groundwater sample volumes will be collected into pre-cleaned, laboratory-supplied vials or bottles provided with analytical test group specific preservatives, as required. The samples will be placed in an insulated cooler chilled with ice for storage and transport. Where needed, bottles will be checked for headspace.

All groundwater samples will be assigned unique identification numbers, and the date, time, project number and company name will be specified on each bottle. The samples will be submitted to the contractual laboratory within analytical test group holding times under COC protocols. New disposable chemical resistant gloves will be used for each sampling location to prevent sample cross-contamination.

3.8 Residue Management Procedures

The residue materials produced during the borehole drilling, soil sampling programs and monitoring well sampling programs comprised of decontamination fluids from equipment cleaning, and waters from well development and purging will be placed in sealed drums for future off-Site disposal.

4. Field Quality Assurance/Quality Control Program

The objective of the field quality assurance/quality control (QA/QC) program is to obtain soil and groundwater samples and other field measurements that provide data of acceptable quality that meets the objectives of the Phase Two ESA. The objectives of the QA/QC program will be achieved through the implementation of procedures for the collection of unbiased (i.e., non-contaminated) samples, sample documentation and the collection of appropriate QC samples to provide a measure of sample reproducibility and accuracy. The field QA/QC measures will comprise:

- Decontamination Protocols;
- Equipment Calibration;
- Sample Preservation;
- Sample Documentation; and,
- Field Quality Control Samples.

Details on the field QA/QC measures are provided in the following sections.

4.1 Decontamination Protocols

Decontamination protocols will be followed during field sampling where non-dedicated sampling equipment is used to prevent sample cross contamination. For the borehole drilling and soil sampling, split soil sampling devices will be cleaned/decontaminated between sampling intervals and auger flights between borehole locations. For the monitoring well installation, well components are not to come into contact with the ground surface prior to insertion into boreholes. Electronic water level meters will be decontaminated between monitoring well locations during well development, purging activities and rising head tests. All decontamination fluids will be collected and stored in sealed containers.

4.2 Equipment Calibration

All equipment requiring calibration will be calibrated according to manufacturer's requirements using analytical grade reagents, or by the supplier prior to conducting field activities.

4.3 Sample Preservation

All samples will be preserved using appropriate analytical test group specific reagents, as required, and upon collection placed in ice-filled insulated coolers for storage and transport.

4.4 Sample Documentation

All samples will be assigned a unique identification number, which is to be recorded along with the date, time, project number and company name. All samples will be handled and transported following COC protocols.

4.5 Field Quality Control Samples

Field quality controls samples will be collected to evaluate the accuracy and reproducibility of the field sampling procedures. Where required, for groundwater samples, a trip blank prepared by a laboratory will be submitted for chemical analysis to evaluate the potential for sample cross-contamination or bias. The recommended alert criteria for the trip blank sample are the detections of any test group analyte at a concentration in excess of laboratory detection limits.

4.6 Accredited Laboratory Quality Assurance/Quality Control

All soil and groundwater analytical testing will be performed by Caduceon, which is an accredited laboratory. Caduceon is accredited under the Standards Council of Canada/Canadian Association of Environmental Analytical Laboratories (Accredited Laboratory No. 4090) in accordance with ISO/IEC 17025:2017 - “General Requirements for the Competence of Testing and Calibration Laboratories”.

Certificates of Analysis are expected from Caduceon reporting the results of all the chemical analyses performed on the submitted soil samples. Review of the Certificates of Analysis prepared by Caduceon is required to determine that they were in compliance with the requirements set out under subsection 47(3) of O.Reg.153/04.

The analytical program conducted by Caduceon includes analytical test group specific QA/QC measures to evaluate the accuracy and precision of the analytical results and the efficiency of analyte recovery during solute extraction procedures. The laboratory QA/QC program consists of the preparation and analysis of laboratory duplicate samples to assess precision and sample homogeneity, method blanks to assess analytical bias, spiked blanks and QC standards to evaluate analyte recovery, matrix spikes to evaluate matrix interferences and surrogate compound recoveries (VOCs only) to evaluate extraction efficiency. The laboratory QA/QC results will be presented in the Quality Assurance Report provided in the Certificate of Analysis prepared by Caduceon. The QA/QC results will be reported as percent recoveries for matrix spikes, spike blanks and QC standards, RPDs for laboratory duplicates and analyte concentrations for method blanks.

Appendix B

Analytical Results

Sample ID	MECP (2011) Table 3: Full Depth Generic SCS in a Non-Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH1/SS3	BH2/SS2	BH3/SS3	BH4/SS3	BH5/SS3	BH7/SS1	BH10/SS2	BH12/SS4	DUP33	DUP72
Lab ID		B22-15955-1	B22-15955-2	B22-15955-3	B22-15955-6	B22-15955-5	B22-15955-9	B22-15955-7	B22-15955-8	B22-15955-4	B22-15955-10
Sampling Date		24-May-22	25-May-22	25-May-22	25-May-22	25-May-22	26-May-22	24-May-22	25-May-22	25-May-22	26-May-22
Sample Depth Interval (m)		1.52 - 2.13	0.76 - 1.37	1.52 - 2.13	1.52 - 2.13	1.52 - 2.14	0-0.61	0.76 - 1.37	2.29 - 2.90	1.52 - 2.13	0.76 - 1.37
Consultant		GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Laboratory		Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon
Acetone	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.21	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Bromodichloromethane	13	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Bromoform	0.27	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Bromomethane	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Carbon Tetrachloride	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chlorobenzene	2.4	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chloroform	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Dibromochloromethane	9.4	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,2-Dichlorobenzene	3.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	4.8	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	0.083	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dichlorodifluoromethane	16	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,1-Dichloroethane	3.5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,2-Dichloroethane	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1-Dichloroethylene	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
cis-1,2-Dichloroethylene	3.4	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
trans-1,2-Dichloroethylene	0.084	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,2-Dichloropropane	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
cis-1,3-Dichloropropene	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
trans-1,3-Dichloropropene	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
cis- & trans-1,3-Dichloropropene	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Ethylbenzene	2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Ethylene Dibromide (1,2-Dibromoethan	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Hexane (n)	2.8	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Methyl ethyl ketone (2-Butanone)	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Isobutyl Ketone	1.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl t-butyl ether (MTBE)	0.75	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methylene chloride (Dichloromethane)	0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Styrene	0.7	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,1,1,2-Tetrachloroethane	0.058	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1,2,2-Tetrachloroethane	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tetrachloroethylene	0.28	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Toluene	2.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,1,1-Trichloroethane	0.38	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1,2-Trichloroethane	0.05	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Trichloroethylene	0.061	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Trichlorofluoromethane	4	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Vinyl Chloride	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
m-Xylene + p-Xylene	NV	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
o-Xylene	NV	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Xylenes (Total)	3.1	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PHC F1 (C6-C10)	55	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
PHC F2 (C10-C16)	98	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	6
PHC F3 (C16-C34)	300	12	21	18	57	12	12	12	13	16	18
PHC F4 (C34-C50)	2800	< 10	< 10	12	27	< 10	< 10	< 10	< 10	13	< 10

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value

Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

PAHs in Soil

Phase Two ESA
1225 Dundas Street East, Mississauga ,Ontario
Project Number: 2202029
June 2022

Sample ID	MECP (2011) Table 3: Full Depth Generic SCS in a Non-Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH1/SS2	BH2/SS1	BH3/SS1	BH4/SS1	BH5/SS2	BH6/SS1	BH7/SS1	BH8/SS1	BH9/SS2	BH10/SS3	BH11/SS1	BH12/SS2	DUP 31	Dup 61
Lab ID		B22-15955-1	B22-15955-2	B22-15955-3	B22-15955-6	B22-15955-5	B22-15957-12	B22-15957-9	B22-15957-10	B22-15957-11	B22-15957-7	B22-15957-13	B22-15957-8	B22-15957-7	B22-15957-14
Sampling Date		24-May-22	25-May-22	25-May-22	25-May-22	25-May-22	26-May-22	26-May-22	26-May-22	24-May-22	24-May-22	26-May-22	25-May-22	24-May-22	26-May-22
Sample Depth Interval (m)		0.76 – 1.37	0-0.61	0-0.61	0-0.61	0.76 – 1.37	0-0.61	0-0.61	0-0.61	0.76 – 1.37	1.52 – 2.13	0-0.61	0.76 – 1.37	0-0.61	0-0.61
Consultant		GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Laboratory		Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon
Acenaphthene	7.9	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	0.15	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	0.67	< 0.05	< 0.05	< 0.05	< 0.05	0.08	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	0.5	< 0.05	< 0.05	< 0.05	< 0.05	0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	< 0.05	< 0.05
Benzo(a)pyrene	0.3	< 0.05	< 0.05	< 0.05	< 0.05	0.19	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	< 0.05	< 0.05
Benzo(b)fluoranthene	0.78	< 0.05	< 0.05	< 0.05	< 0.05	0.23	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	< 0.05	< 0.05
Benzo(ghi)perylene	6.6	< 0.05	< 0.05	< 0.05	< 0.05	0.12	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.06	< 0.05	< 0.05
Benzo(k)fluoranthene	0.78	< 0.05	< 0.05	< 0.05	< 0.05	0.11	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	7	< 0.05	< 0.05	< 0.05	< 0.05	0.24	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	< 0.05	< 0.05
Dibenz(a,h)anthracene	0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	0.69	< 0.05	< 0.05	< 0.05	< 0.05	0.47	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2	< 0.05	< 0.05
Fluorene	62	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	0.38	< 0.05	< 0.05	< 0.05	< 0.05	0.13	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05
Methylnaphthalene,1-	NV	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methylnaphthalene,2-	NV	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1&2-Methylnaphthalene	0.99	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	0.6	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	6.2	< 0.05	< 0.05	< 0.05	< 0.05	0.33	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	< 0.05	< 0.05
Pyrene	78	< 0.05	< 0.05	< 0.05	< 0.05	0.42	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.18	< 0.05	< 0.05

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

Metals Inorganics in Soil

Phase Two ESA
1225 Dundas Street East, Mississauga ,Ontario
Project Number: 2202029
June 2022

Sample ID	MECP (2011) Table 3: Full Depth Generic	BH1/SS2	BH1/SS4	BH2/SS1	BH3/SS1	BH4/SS1	BH5/SS2	BH5/SS4	BH6/SS1	BH7/SS1	BH8/SS1	BH9/SS2	BH10/SS3	BH11/SS1	BH12/SS2	BH12/SS3	DUP 31	Dup 61
Lab ID	SCS in a Non-Potable Groundwater	B22-15955-1	B22-18776-1	B22-15955-2	B22-15955-3	B22-15955-6	B22-15955-5	B22-18776-2	B22-15957-12	B22-15957-9	B22-15957-10	B22-15957-11	B22-15957-7	B22-15957-13	B22-15957-8	B22-18776-3	B22-15957-4	B22-15957-14
Sampling Date	Condition	24-May-22	24-May-22	25-May-22	25-May-22	25-May-22	25-May-22	25-May-22	26-May-22	26-May-22	26-May-22	24-May-22	24-May-22	26-May-22	25-May-22	25-May-22	24-May-22	26-May-22
Sample Depth Interval (m)	Residential/Parkland/Institutional Land	0.76 – 1.37	2.29-2.90	0-0.61	0-0.61	0-0.61	0.76 – 1.37	2.29-2.90	0-0.61	0-0.61	0-0.61	0.76 – 1.37	1.52 – 2.13	0-0.61	0.76 – 1.37	1.52 – 2.13	0-0.61	0-0.61
Consultant	Use	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Laboratory	(coarse textured soil)	Caudeceon	Caduceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.53	-	7.74	8.02	7.94	7.85	-	7.46	7.74	7.73	7.87	7.97	7.59	8	-	7.88	7.69
Electrical Conductivity (mS/cm)	0.7	0.482	-	0.299	0.17	0.243	**1.51**	-	0.479	0.321	0.482	**3.14**	**1.84**	**2.12**	**2.37**	-	0.2	0.398
Free Cyanide	0.051	< 0.5	-	< 0.05	< 0.05	< 0.05	***< 0.05***	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	< 0.05
Sodium Adsorption Ratio (unitless)	5	**5.91**	-	3.12	1.79	2.8	**11.1**	-	2.83	3.62	**5.66**	**43.4**	**25.2**	**21.7**	**17.3**	-	2.24	2.62
Antimony	7.5	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.7	-	< 0.5	< 0.5
Arsenic	18	5.5	-	6.3	2.5	2.7	2.6	-	4.3	6.1	4.4	4.7	1.2	3.7	3.9	-	2.8	4.7
Barium	390	63	-	44	16	24	190	-	59	96	59	52	14	48	241	-	22	64
Beryllium	4	0.3	-	0.2	< 0.2	0.2	0.3	-	0.4	0.4	0.3	0.3	< 0.2	0.3	0.6	-	0.2	0.5
Boron (total)	120	6.1	-	9.6	4.6	6.8	6.6	-	7.7	3.9	6.3	5.5	3.7	6.2	6.4	-	4.8	5.9
Cadmium	1.2	< 0.5	-	< 0.5	< 0.5	< 0.5	0.6	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	-	< 0.5	< 0.5
Chromium (total)	160	9	-	9	6	7	15	-	15	14	11	10	4	10	36	-	8	15
Chromium VI	8	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2
Cobalt	22	4	-	4	3	4	5	-	7	8	5	4	2	5	9	-	5	9
Copper	140	28	-	14	11	14	17	-	20	49	36	27	11	29	27	-	15	21
Lead	120	32	-	25	15	30	**129**	8	25	103	88	21	***< 5***	21	**175**	***<5***	12	19
Mercury	0.27	0.142	-	0.042	0.008	0.048	0.127	-	0.033	0.056	0.053	0.059	0.006	0.051	0.166	-	0.028	0.021
Molybdenum	6.9	< 1	-	< 1	< 1	< 1	< 1	-	< 1	< 1	1	< 1	< 1	< 1	< 1	-	< 1	< 1
Nickel	100	8	-	8	6	7	11	-	15	16	11	9	4	10	20	-	9	18
Selenium	2.4	1	-	0.6	< 0.5	< 0.5	0.7	-	0.7	0.7	0.7	0.7	0.6	0.8	0.9	-	< 0.5	0.6
Silver	20	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	< 0.2	< 0.2
Thallium	1	< 0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	-	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	< 0.1	0.1
Uranium	23	0.5	-	0.4	0.3	0.3	0.5	-	0.5	0.6	0.5	0.6	0.3	0.6	0.8	-	0.4	0.5
Vanadium	86	14	-	16	13	12	21	-	19	24	19	15	6	16	32	-	14	23
Zinc	340	**716**	72	43	29	63	185	-	59	57	99	153	11	46	204	-	37	61

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided
pH exceeds MECP (2011) SCS

PHCs VOCs in Groundwater

Phase Two ESA
1225 Dundas Street East, Mississauga ,Ontario
Project Number: 2202029
June 2022

Sample ID	MECP (2011) Table 3: Full Depth Generic SCS in a Non-Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW1	MW3	MW4	MW7	MW9	MW10	MW12	Dup 1	Trip Blank
Lab ID		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-5	B22-16857-6	B22-16857-7	B22-16857-8	B22-16857-10	B22-16857-9
Sampling Date		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22
Screen Depth Interval (m)		1.52-3.05	1.52-4.57	1.22-2.74	0.97-3.97	4.57-7.62	6.10-9.14	4.57-7.62	1.52-3.05	NA
Consultant		GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Laboratory		Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon
Acetone	130000	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30	< 30
Benzene	44	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	85000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromoform	380	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromomethane	5.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.79	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chlorobenzene	630	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	2.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	82000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dichlorobenzene	4600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	9600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	4400	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	320	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethylene	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	5.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	5.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis- & trans-1,3-Dichloropropene	5.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	2300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethylene Dibromide (1,2-Dibromoetha	0.25	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Hexane (n)	51	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl ethyl ketone (2-Butanone)	470000	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Methyl Isobutyl Ketone	140000	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Methyl t-butyl ether (MTBE)	190	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methylene chloride (Dichloromethane	610	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Styrene	1300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1,2-Tetrachloroethane	3.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	3.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethylene	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	18000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	640	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	4.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2500	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	0.5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
m-Xylene + p-Xylene	NV	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	NV	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes (Total)	4200	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
PHC F1 (C6-C10)	750	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
PHC F2 (C10-C16)	150	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
PHC F3 (C16-C34)	500	< 400	< 400	< 400	< 400	< 400	< 400	< 400	< 400	< 400
PHC F4 (C34-C50)	500	< 400	< 400	< 400	< 400	< 400	< 400	< 400	< 400	< 400

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

PAHs in Groundwater

Sample ID	MECP (2011) Table 3: Full Depth Generic SCS in a Non-Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW1	MW3	MW4	MW6	MW9	MW12	Dup 2
Lab ID		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-4	B22-16857-6	B22-16857-8	B22-16857-11
Sampling Date		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22
Screen Depth Interval (m)		1.52-3.05	1.52-4.57	1.22-2.74	1.22-2.74	4.57-7.62	4.57-7.62	1.52-4.57
Consultant		GEI	GEI	GEI	GEI	GEI	GEI	GEI
Laboratory		Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon
Acenaphthene	600	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05
Acenaphthylene	1.8	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	2.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	4.7	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	0.81	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	0.75	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	0.4	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	0.52	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	400	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	0.2	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1-Methylnaphthalene	1800	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	1800	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1&2-Methylnaphthalene	1800	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	1400	< 0.05	< 0.05	< 0.05	< 0.05	0.08	< 0.05	< 0.05
Phenanthrene	580	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	68	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

Metals Inorganics in Groundwater

Phase Two ESA
1225 Dundas Street East, Mississauga ,Ontario
Project Number: 2202029
June 2022

Sample ID	MECP (2011) Table 3: Full Depth Generic SCS in a Non-Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW1	MW3	MW4	MW5	MW6	MW9	MW12	Dup 2
Lab ID		B22-10563-3	B22-10563-9	B22-10563-11	B22-16929-11	B22-16857-4	B22-16857-6	B22-16857-8	B22-16857-11
Sampling Date		03-Jun-22	03-Jun-22	03-Jun-22	06-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22
Screen Depth Interval (m)		1.52-3.05	1.52-4.57	1.22-2.74	1.62-3.12	1.22-2.74	4.57-7.62	4.57-7.62	1.52-4.57
Consultant		GEI	GEI	GEI	GEI	GEI	GEI	GEI	GEI
Laboratory		Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon	Caudeceon
pH (pH units)	0	7.53	7.57	7.69	7.48	7.48	7.72	7.50	7.58
Electrical Conductivity (mS/cm)	NA	9.46	8.52	13.3	15.3	10.1	4.58	5.65	9.47
Free Cyanide	66	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Sodium	2300000	1810000	906000	**2570000**	**2700000**	1640000	568000	558000	1870000
Antimony	20000	< 2	< 2	< 2	< 2	< 2	< 1	< 1	< 2
Arsenic	1900	< 2	< 2	11.6	<2	< 2	< 1	< 1	< 2
Barium	29000	282	404	214	689	303	191	511	307
Beryllium	67	< 2	< 2	< 2	< 2	< 2	< 1	< 1	< 2
Boron (total)	45000	240	332	141	157	163	254	535	240
Cadmium	2.7	< 0.28	< 0.28	< 0.28	< 0.28	< 0.28	< 0.14	< 0.14	< 0.28
Chromium (total)	810	< 2	< 2	3	<2	< 2	< 2	< 2	< 2
Chromium VI	140	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Cobalt	66	< 2	3.3	< 2	4.4	3.4	< 1	1.5	< 2
Copper	87	18	< 2	29	17	8	< 2	5	18
Lead	25	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.2	< 0.2	0.74
Mercury	0.29	< 0.02	< 0.02	< 0.02	0.05	< 0.02	< 0.02	< 0.02	< 0.02
Molybdenum	9200	< 2	2.2	< 2	< 2	< 2	7.9	16.4	< 2
Nickel	490	< 4	< 4	5.1	8.1	4.6	< 2	3.3	< 4
Selenium	63	< 20	< 20	< 20	< 20	< 20	< 10	< 10	< 20
Silver	1.5	< 0.4	< 0.4	< 0.4	0.4	1.3	0.7	0.8	1
Thallium	510	< 1	< 1	< 1	< 1	< 1	< 0.5	< 0.5	< 1
Uranium	420	3.91	7.42	2.16	7.31	8.41	0.77	< 0.5	4.01
Vanadium	250	< 2	< 2	17.6	<2	< 2	< 1	< 1	< 2
Zinc	1100	15	9	9	9	25	17	28	17

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

OC Pesticides in Groundwater

Phase Two ESA
1225 Dundas Street East, Mississauga ,Ontario
Project Number: 2202029
June 2022

Sample ID	MECP (2011) Table 3: Full Depth Generic SCS in a Non-Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW 1	MW 3	DUP 2
Lab ID		B22-16857-1	B22-16857-2	B22-16857-11
Sampling Date		03-Jun-22	03-Jun-22	03-Jun-22
Screen Depth Interval (m)		1.52-3.05	1.52-4.57	1.52-4.57
Consultant		GEI	GEI	GEI
Laboratory		Caudeceon	Caudeceon	Caudeceon
Aldrin	8.5	< 0.01	< 0.01	< 0.01
Chlordane	28	< 0.05	< 0.05	< 0.05
DDD	45	< 0.05	< 0.05	< 0.05
DDE	20	< 0.01	< 0.01	< 0.01
DDT	2.8	< 0.05	< 0.05	< 0.05
Dieldrin	0.75	< 0.01	< 0.01	< 0.01
Gamma-hexachlorocyclohexane	1.2	< 0.01	< 0.01	< 0.01
Endosulfan	1.5	< 0.05	< 0.05	< 0.05
Endrin	0.48	< 0.05	< 0.05	< 0.05
Heptachlor	2.5	< 0.004	< 0.004	< 0.004
Heptachlor Epoxide	0.048	< 0.006	< 0.006	< 0.006
Hexachlorobenzene	3.1	< 0.01	< 0.01	< 0.01
Hexachlorobutadine	0.44	< 0.01	< 0.01	< 0.01
Hexachloroethane	94	< 0.01	< 0.01	< 0.01
Methoxychlor	6.5	< 0.009	< 0.009	< 0.009

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

Appendix C

Borehole Logs

RECORD OF BOREHOLE No. 1

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829045** Date Started: **May 24/22**
Reviewed By: **AW** Easting: **613929** Date Completed: **May 24/22**

Lithology Plot	DESCRIPTION	Geodetic	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)
		0.0 / 120.4					0	120
	ASPHALT: 50 mm	0.1 / 120.3						
	GRANULAR: 75 mm		SS	1	100	12		
	GRANULAR FILL: Gravelly sand, some silt, compact, dark brown, moist	0.8 / 119.6						
	FILL: Clayey silt with granular inclusions, some sand, trace organics, loose to firm, black, moist		AS	2	0	4	1.2	118.8
		1.5 / 118.9						
	SAND: Some silt, trace gravel, loose, brown, moist		SS	3	100	8		
		2.3 / 118.1						
	GEORGIAN BAY FORMATION SHALE - - - Highly weathered - - -		SS	4	100	76	2.4	117.6
		2.9 / 117.5						
	Borehole Terminated at 2.9 m							

FIELD TESTING
Shear Strength Testing (kPa)
× Other Test
+ Pocket Penetrometer
▲ Field Vane (Intact)
△ Field Vane (Remolded)
40 80 120 160
Penetration Testing
○ SPT ● DCPT
10 20 30 40
12
4
8
76

LAB TESTING
△ Combustible Organic Vapour (ppm)
▲ Combustible Organic Vapour (%LEL)
◇ Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL LL
○ Water Content (%)
10 20 30 40
8
27
20
13

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR	SA	SI	CL
1	79	17	3

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 2.2 m.
Groundwater Elevation: 118.2 m

RECORD OF BOREHOLE No. 2

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829090** Date Started: **May 25/22**
Reviewed By: **AW** Easting: **613965** Date Completed: **May 25/22**

Geodetic	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)
0.0 / 120.5						0	
0.1 / 120.4	ASPHALT: 75 mm						
0.2 / 120.3	GRANULAR: 125 mm	SS	1	65	12		120
	GRANULAR FILL: Sand, some gravel, some silt, compact, brown, moist						
0.8 / 119.7							
	FILL: Silty sand, trace clay, trace gravel, loose, brown, moist	SS	2	70	6	1.2	
1.5 / 119.0							118.8
	SAND: Trace to some silt, compact, brown, moist	SS	3	100	12		
2.3 / 118.2						2.4	
	GEORGIAN BAY FORMATION SHALE - - - Highly Weathered - - -	SS	4	100	19		117.6
3.1 / 117.4	- - - Weathered - - -	SS	5	100	100+		
	Borehole Terminated at 3.1 m						

FIELD TESTING: Shear Strength Testing (kPa) — Other Test; Pocket Penetrometer; Field Vane (Intact); Field Vane (Remolded); 40 80 120 160. Penetration Testing — SPT; DCPT; 10 20 30 40.

LAB TESTING: Combustible Organic Vapour (ppm); Combustible Organic Vapour (%LEL); Total Organic Vapour (ppm); 100 200 300 400. Atterberg Limits — PL; LL; Water Content (%); 10 20 30 40.

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR	SA	SI	CL
3	71	21	5

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 2.8 m.
Groundwater Elevation: 117.7 m

RECORD OF BOREHOLE No. 3

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829137** Date Started: **May 25/22**
Reviewed By: **AW** Easting: **613999** Date Completed: **May 25/22**

Geodetic	Description	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	Depth (m)	Elevation (m)
0.0 / 120.4						0	120
0.1 / 120.3	ASPHALT: 75 mm						
0.2 / 120.2	GRANULAR: 100 mm	SS	1	65	10		
	GRANULAR FILL: Sand and gravel, some silt, compact, brown, moist					1.2	118.8
0.8 / 119.6	FILL: Sand and silt, trace to some clay, trace gravel, loose to very loose, blackish brown to greyish brown, moist	SS	2	85	7		
	- - - Some gravel - - -	SS	3	50	3		
2.3 / 118.1	SANDY SILT GLACIAL TILL: Some gravel, some clay, cobbles and boulders, firm to stiff, brownish grey, moist	SS	4	40	8	2.4	117.6
3.0 / 117.4	GEORGIAN BAY FORMATION SHALE - - - Weathered - - -	SS	5	80	56	3.6	116.4
4.6 / 115.8	Borehole Terminated at 4.6 m	SS	6	100	100+		

FIELD TESTING
Shear Strength Testing (kPa)
× Other Test
+ Pocket Penetrometer
▲ Field Vane (Intact)
△ Field Vane (Remolded)
40 80 120 160
Penetration Testing
○ SPT ● DCPT
10 20 30 40

LAB TESTING
△ Combustible Organic Vapour (ppm)
▲ Combustible Organic Vapour (%LEL)
◇ Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL LL
○ Water Content (%)
10 20 30 40

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR	SA	SI	CL
18	25	41	16

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 3.5 m.
Groundwater Elevation: 116.9 m

RECORD OF BOREHOLE No. 4

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829080** Date Started: **May 25/22**
Reviewed By: **AW** Easting: **613936** Date Completed: **May 25/22**

Geodetic	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	Instrumentation Installation	COMMENTS & GRAIN SIZE DISTRIBUTION (%) GR	SA	SI	CL
0.0 / 120.3	ASPHALT: 50 mm					0	120							
0.1 / 120.2	GRANULAR: 75 mm	SS	1	75	17			17	7					
	GRANULAR FILL: Sand, some gravel, trace to some silt, compact, brown, moist													
0.8 / 119.5	FILL: Sand, some silt, some gravel, trace clay, very loose, dark brown, moist	SS	2	55	4	1.2	118.8	4	12					
		SS	3	55	3			3	12		16	63	16	5
2.3 / 118.0	GEORGIAN BAY FORMATION SHALE - - - Highly weathered - - -	SS	4	90	100+	2.4	117.6	100+	10					
	- - - Weathered - - -	SS	5	100	100+	3.6	116.4	100+	7					
4.9 / 115.4		SS	6	100	100+	4.8		100+						
	Borehole Terminated at 4.9 m													

FIELD TESTING: Shear Strength Testing (kPa) — Other Test; Pocket Penetrometer; Field Vane (Intact); Field Vane (Remolded); 40 80 120 160. Penetration Testing — SPT; DCPT; 10 20 30 40.

LAB TESTING: Combustible Organic Vapour (ppm); Combustible Organic Vapour (%LEL); Total Organic Vapour (ppm); 100 200 300 400. Atterberg Limits — PL; LL. Water Content (%); 10 20 30 40.

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 2.3 m.
Groundwater Elevation: 118.0 m

RECORD OF BOREHOLE No. 5

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829127** Date Started: **May 25/22**
Reviewed By: **AW** Easting: **613974** Date Completed: **May 25/22**

Geodetic	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)
0.0 / 120.2						0	120
0.1 / 120.1							
0.2 / 120.0	ASPHALT: 50 mm GRANULAR: 150 mm FILL: Sandy silt, some clay, trace gravel, compact to very loose, brown, moist	SS	1	100	13		
		SS	2	100	4	1.2	118.8
1.5 / 118.7	SAND: Some silt, trace gravel, very dense, brown, moist	SS	3	100	100+		
2.3 / 117.9	GEORGIAN BAY FORMATION SHALE - - - Highly weathered - - -	SS	4	65	75	2.4	117.6
3.2 / 117.0	Borehole Terminated at 3.2 m	SS	5	100	100+		

FIELD TESTING
Shear Strength Testing (kPa)
× Other Test
+ Pocket Penetrometer
▲ Field Vane (Intact)
△ Field Vane (Remolded)
40 80 120 160
Penetration Testing
○ SPT ● DCPT
10 20 30 40

LAB TESTING
△ Combustible Organic Vapour (ppm)
▲ Combustible Organic Vapour (%LEL)
◇ Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL LL
○ Water Content (%)
10 20 30 40

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 2.1 m.
Groundwater Elevation: 118.1 m

RECORD OF BOREHOLE No. 6

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829194** Date Started: **May 26/22**
Reviewed By: **AW** Easting: **613926** Date Completed: **May 26/22**

Geodetic	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)
0.0 / 120.7						0	
0.1 / 120.6							
0.2 / 120.5	ASPHALT: 50 mm GRANULAR: 125 mm						
	GRANULAR FILL: Gravelly sand, some silt, compact, brown, moist	SS	1	0	10		
0.8 / 119.9							
	SAND: Some gravel, trace silt, trace clay, compact, brown, moist	SS	2	50	27	1.2	120
1.5 / 119.2							
	SANDY SILT GLACIAL TILL: Some clay, trace gravel, stiff, greyish brown, moist	SS	3	50	9		118.8
2.3 / 118.4							
	GEORGIAN BAY FORMATION SHALE - - - Very highly weathered - - -	SS	4	100	100+	2.4	
3.2 / 117.5	- - - Weathered - - -	SS	5	75	100+		117.6
	Borehole Terminated at 3.2 m						

FIELD TESTING
Shear Strength Testing (kPa)
× Other Test
+ Pocket Penetrometer
▲ Field Vane (Intact)
△ Field Vane (Remolded)
40 80 120 160
Penetration Testing
○ SPT ● DCPT
10 20 30 40

LAB TESTING
△ Combustible Organic Vapour (ppm)
▲ Combustible Organic Vapour (%LEL)
◇ Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL LL
○ Water Content (%)
10 20 30 40

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR	SA	SI	CL
17	74	7	2
7	28	46	19

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 2.7 m.
Groundwater Elevation: 118.0 m

RECORD OF BOREHOLE No. 7

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829118** Date Started: **May 26/22**
Reviewed By: **AW** Easting: **613870** Date Completed: **May 26/22**

Geodetic	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)
0.0 / 120.6	ASPHALT: 100 mm					0	
0.1 / 120.5	GRANULAR: 100 mm						
0.2 / 120.4	GRANULAR FILL: Sand, some gravel, some silt, compact, brown, moist	SS	1	85	16		120
			2A				
0.9 / 119.7	SAND: Some silt, trace gravel, compact, greyish brown, moist	SS	2B	60	13	1.2	
1.5 / 119.1	GEORGIAN BAY FORMATION SHALE - - - Highly weathered - - -	SS	3	100	100+		118.8
	- - - Weathered - - -	SS	4	65	100+	2.4	
3.1 / 117.5	Borehole Terminated at 3.1 m	SS	5	100	100+		117.6

FIELD TESTING
Shear Strength Testing (kPa)
× Other Test
+ Pocket Penetrometer
▲ Field Vane (Intact)
△ Field Vane (Remolded)
40 80 120 160
Penetration Testing
○ SPT ● DCPT
10 20 30 40

LAB TESTING
△ Combustible Organic Vapour (ppm)
▲ Combustible Organic Vapour (%LEL)
◇ Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL LL
○ Water Content (%)
10 20 30 40

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

Groundwater depth encountered on completion of drilling: Dry
Groundwater depth observed on: Jun 1/22 at depth of: 2.6 m.
Cave depth after auger removal: Open
Groundwater Elevation: 118.0 m

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RECORD OF BOREHOLE No. 8

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829098** Date Started: **May 26/22**
Reviewed By: **AW** Easting: **613855** Date Completed: **May 26/22**

Lithology Plot	DESCRIPTION (Geodetic)	Sample Type	Sample Number	Recovery (%)	SPT "N" Value	DEPTH (m)	ELEVATION (m)
	0.0 / 121.0					0	
	0.1 / 120.9						
	0.2 / 120.8 ASPHALT: 75 mm						
	GRANULAR: 100 mm	SS	1	85	20		
	GRANULAR FILL: Sand, some gravel, trace silt, compact, brown, moist						
	0.8 / 120.2						
	SAND: Some gravel, trace silt, compact, brown, moist	SS	2	85	20	1.2	120
	1.5 / 119.5						
	GEORGIAN BAY FORMATION SHALE - - - Highly Weathered - - -	SS	3	65	25		
	- - - Weathered - - -	SS	4	65	100+	2.4	118.8
	3.2 / 117.8	SS	5	100	100+		
	Borehole Terminated at 3.2 m						

FIELD TESTING
Shear Strength Testing (kPa)
× Other Test
+ Pocket Penetrometer
▲ Field Vane (Intact)
△ Field Vane (Remolded)
40 80 120 160
Penetration Testing
○ SPT ● DCPT
10 20 30 40
Values: 20, 20, 25, 100+, 100+

LAB TESTING
△ Combustible Organic Vapour (ppm)
▲ Combustible Organic Vapour (%LEL)
◇ Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL ○ LL
Water Content (%)
10 20 30 40
Values: 7, 6, 15, 11, 6

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

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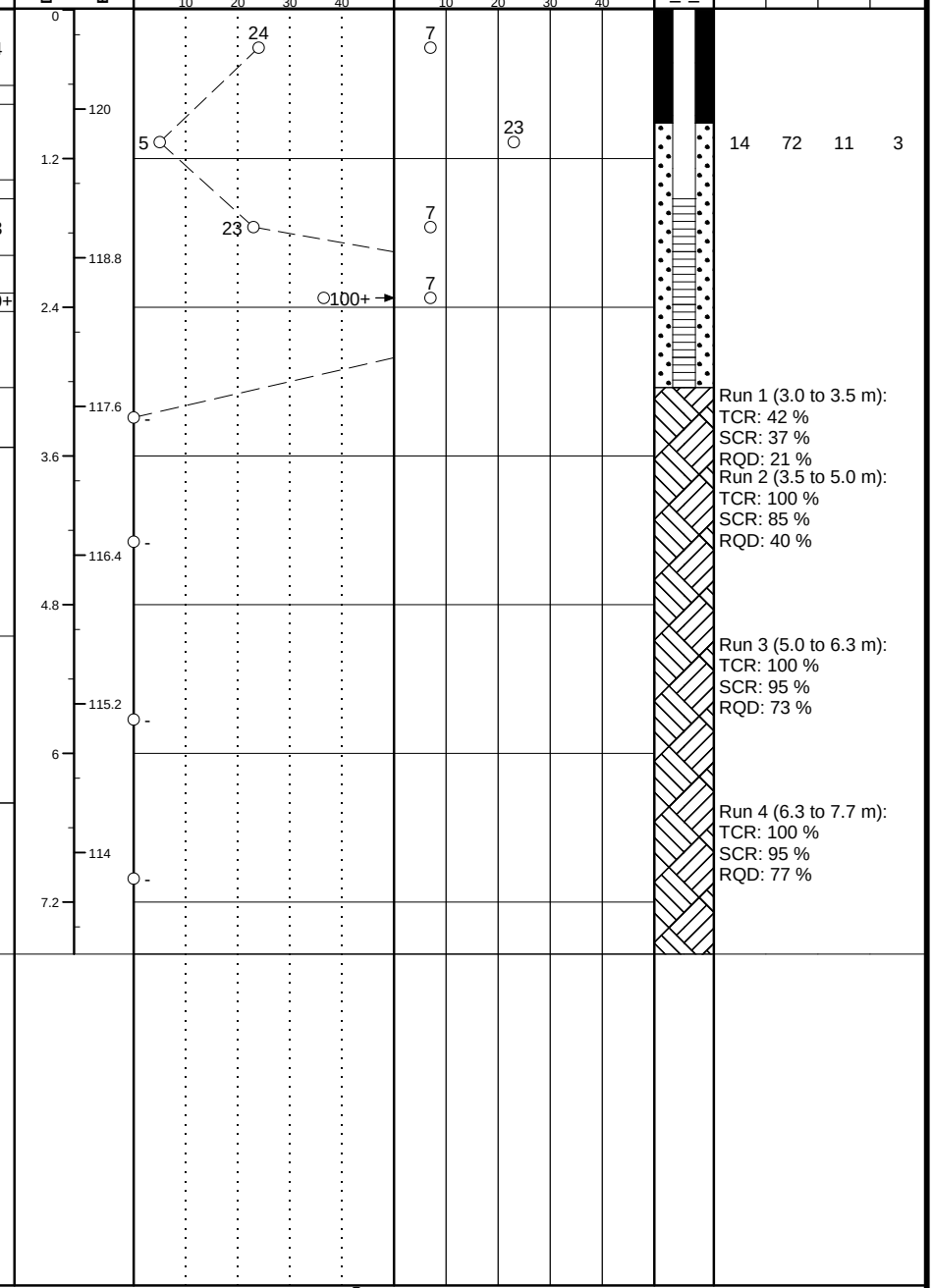
Groundwater depth encountered on completion of drilling: Dry
Groundwater depth observed on: Jun 1/22 at depth of: 0.0
Cave depth after auger removal: Open
Groundwater Elevation:

RECORD OF BOREHOLE No. 9

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers & Coring** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829082** Date Started: **May 24/22**
Reviewed By: **AW** Easting: **613888** Date Completed: **May 24/22**

Geodetic	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT "N" Value
0.0 / 120.8	ASPHALT: 75 mm				
0.2 / 120.6	GRANULAR: 75 mm	SS	1	70	24
	GRANULAR FILL: Trace clay, compact, brown, moist				
	- - - Loose - - -	SS	2	15	5
1.5 / 119.3	SAND: Some gravel, trace silt, loose, brown, moist	SS	3	25	23
2.3 / 118.5	GEORGIAN BAY FORMATION SHALE	SS	4	50	100+
	2 % Hard Limestone Layers (Weathered)	Run	1	-	-
4.4 / 116.4	SOUND BEDROCK	Run	2	-	-
		Run	3	-	-
7.6 / 113.2		Run	4	-	-
	Borehole Terminated at 7.6 m Coring ends				



GR	SA	SI	CL
14	72	11	3

Run 1 (3.0 to 3.5 m):
TCR: 42 %
SCR: 37 %
RQD: 21 %

Run 2 (3.5 to 5.0 m):
TCR: 100 %
SCR: 85 %
RQD: 40 %

Run 3 (5.0 to 6.3 m):
TCR: 100 %
SCR: 95 %
RQD: 73 %

Run 4 (6.3 to 7.7 m):
TCR: 100 %
SCR: 95 %
RQD: 77 %

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Groundwater depth encountered on completion of drilling: Dry
Groundwater depth observed on: Jun 1/22 at depth of: 0.0
Cave depth after auger removal: Open
Groundwater Elevation:

RECORD OF BOREHOLE No. 10

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829073** Date Started: **May 24/22**
Reviewed By: **AW** Easting: **613915** Date Completed: **May 24/22**

Geodetic	Description	Sample Type	Sample Number	Recovery (%)	SPT "N" Value
0.0 / 120.6	ASPHALT: 50 mm				
0.2 / 120.4	GRANULAR: 150 mm	SS	1	100	18
	GRANULAR FILL: Gravelly sand, some silt, compact, brown, moist				
0.8 / 119.8	FILL: Silty sand, some gravel, trace clay, very loose to loose, dark brown, moist	SS	2	100	4
1.5 / 119.1	GRAVELLY SAND: trace to some silt, brick inclusions, compact, brown, moist	SS	3	100	29
2.6 / 118.0	SANDY SILT GLACIAL TILL: Some clay, trace gravel, stiff, brown, moist	SS	4A, 4B	100	15
3.0 / 117.6	GEORGIAN BAY FORMATION SHALE - - - Highly weathered - - -	SS	5	100	100+
4.6 / 116.0	INFERRED SOUND BEDROCK	SS	6	100	100+
		SS	7	100	100+
		SS	8	100	100+
9.2 / 111.4	Borehole Terminated at 9.2 m	SS	9	100	100+

FIELD TESTING: Shear Strength Testing (kPa) — Other Test; Pocket Penetrometer; Field Vane (Intact); Field Vane (Remolded); Penetration Testing: SPT, DCPT

LAB TESTING: Combustible Organic Vapour (ppm); Combustible Organic Vapour (%LEL); Total Organic Vapour (ppm); Atterberg Limits (PL, LL); Water Content (%)

COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR	SA	SI	CL
15	58	21	6

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Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 3.0 m.
Groundwater Elevation: 117.6 m

RECORD OF BOREHOLE No. 11

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers & Coring** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829179** Date Started: **May 26/22**
Reviewed By: **AW** Easting: **613956** Date Completed: **May 26/22**

Geodetic	Description	Sample Type	Sample Number	Recovery (%)	SPT "N" Value
0.0 / 120.8					
0.1 / 120.7					
0.2 / 120.6	ASPHALT: 75 mm				
	GRANULAR: 50 mm	SS	1	60	12
	GRANULAR FILL: Sand and silt, some gravel, compact, dark brown, moist				
	- - - Very loose - - -	SS	2	75	4
1.5 / 119.3					
	GRAVELLY SAND: Some silt, trace clay, compact, brown, moist	SS	3	75	15
2.4 / 118.4					
	SANDY SILT GLACIAL TILL: Some clay, trace gravel, very stiff, brownish grey, moist	SS	4A / 4B	80	17
3.0 / 117.8					
	GEORGIAN BAY FORMATION SHALE 4 % Hard Limestone Layers (Weathered)	SS	5	100	100+
4.0 / 116.8	SOUND BEDROCK	Run	1	-	-
		Run	2	-	-
7.8 / 113.0		Run	3	-	-
	Borehole Terminated at 7.8 m Coring ends				

DEPTH (m): 0, 1.2, 2.4, 3.6, 4.8, 6, 7.2
ELEVATION (m): 120, 118.8, 117.6, 116.4, 115.2, 114

FIELD TESTING
Shear Strength Testing (kPa)
Other Test
Pocket Penetrometer
Field Vane (Intact)
Field Vane (Remolded)
40 80 120 160
Penetration Testing
SPT DCPT
10 20 30 40

LAB TESTING
Combustible Organic Vapour (ppm)
Combustible Organic Vapour (%LEL)
Total Organic Vapour (ppm)
100 200 300 400
Atterberg Limits
PL LL
Water Content (%)
10 20 30 40

Instrumentation Installation

COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR	SA	SI	CL
24	63	10	3

Run 1 (3.6 to 5.1 m):
TRC: 100 %
SCR: 92 %
RQD: 58 %

Run 2 (5.1 to 6.6 m):
TRC: 100 %
SCR: 100 %
RQD: 83 %

Run 3 (6.6 to 7.8 m):
TRC: 100 %
SCR: 96 %
RQD: 93 %

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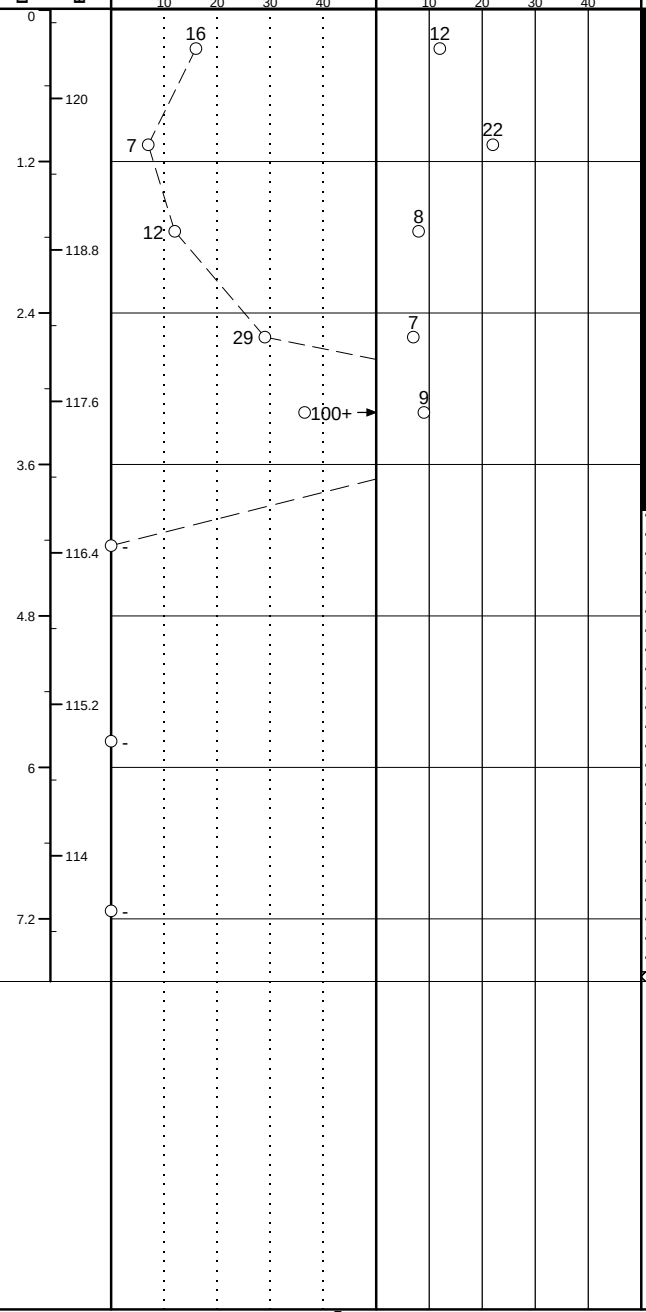
Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 3.2 m.
Groundwater Elevation: 117.6 m

RECORD OF BOREHOLE No. 12

Project Number: **2202029**
Project Client: **Dundix Realty Holdings**
Project Name: **1225 Dundas Street East, Mississauga, ON**
Project Location: **Mississauga, ON**
Drilling Location: **See Borehole Location Plan**
Local Benchmark: **N/A (Geodetic)**

Drilling Method: **Hollow Stem Augers & Coring** Drilling Machine: **Track Mount**
Logged By: **SY** Northing: **4829154** Date Started: **May 26/22**
Reviewed By: **AW** Easting: **613976** Date Completed: **May 26/22**

Geodetic	Description	Sample Type	Sample Number	Recovery (%)	SPT "N" Value
120.7					
0.2 / 120.5	ASPHALT: 25 mm GRANULAR: 150 mm	SS	1	45	16
0.8 / 119.9	GRANULAR FILL: Gravel and sand, some silt, compact, brown, moist				
1.5 / 119.2	FILL: Sandy silt, some clay, trace gravel, trace deleterious material, loose, grey and black, moist	SS	2	50	7
2.3 / 118.4	SAND: Trace to some silt, compact, brown, moist	SS	3	45	12
3.0 / 117.7	SANDY SILT GLACIAL TILL: Trace gravel, trace clay, very stiff, brownish grey, moist	SS	4	100	29
	GEORGIAN BAY FORMATION SHALE 2 % Hard Limestone Layers (Weathered)	SS	5	100	100+
4.5 / 116.2	SOUND BEDROCK	Run	1	-	-
		Run	2	-	-
7.7 / 113.0		Run	3	-	-
	Borehole Terminated at 7.7 m Coring ends				



COMMENTS & GRAIN SIZE DISTRIBUTION (%)

GR | SA | SI | CL

Run 1 (3.5 to 5.0 m):
TRC: 100 %
SCR: 93 %
RQD: 33 %

Run 2 (5.0 to 6.6 m):
TRC: 100 %
SCR: 100 %
RQD: 77 %

Run 3 (6.6 to 7.7 m):
TRC: 94 %
SCR: 94 %
RQD: 90 %

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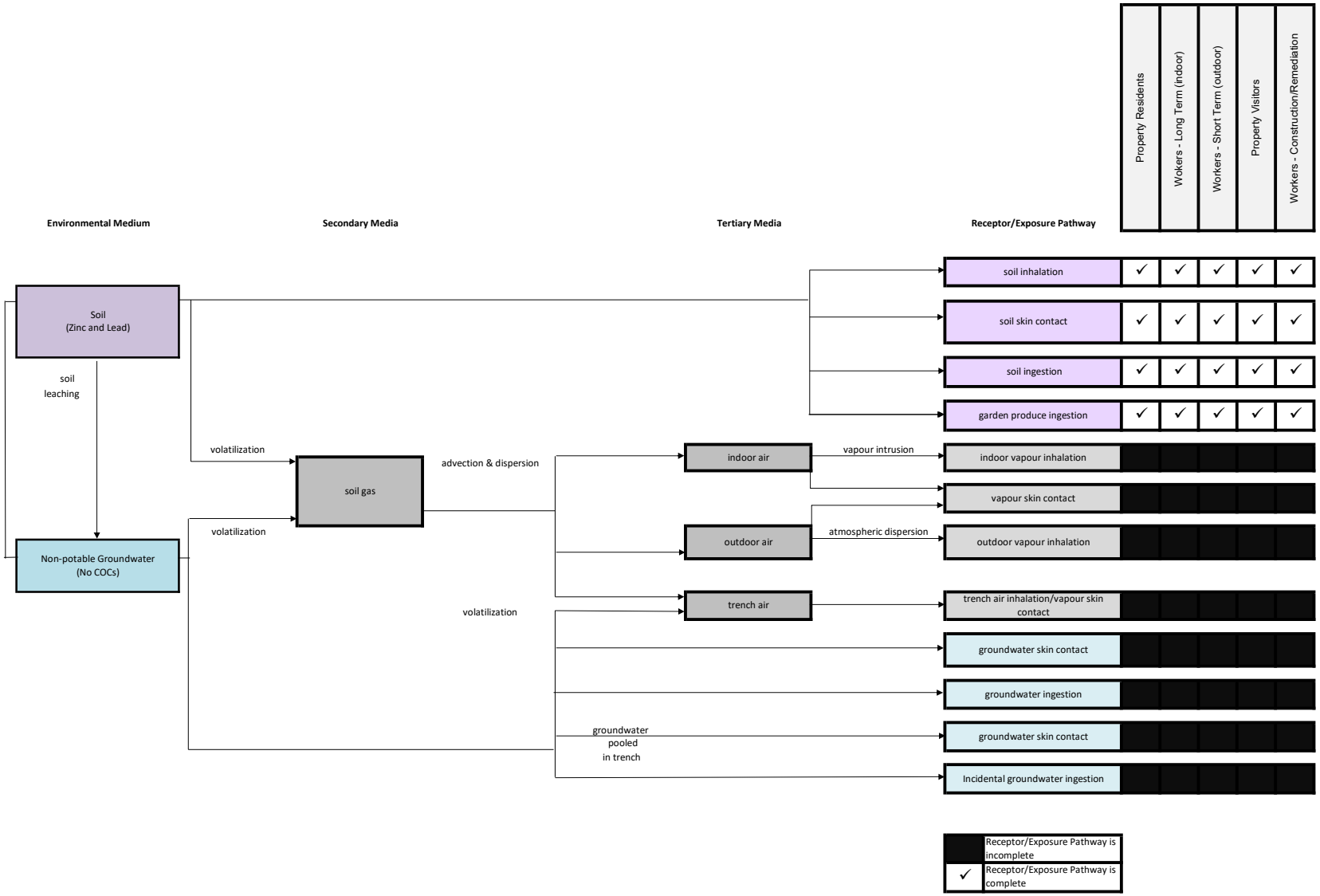
Groundwater depth encountered on completion of drilling: Dry
Cave depth after auger removal: Open
Groundwater depth observed on: Jun 1/22 at depth of: 3.3 m.
Groundwater Elevation: 117.4 m

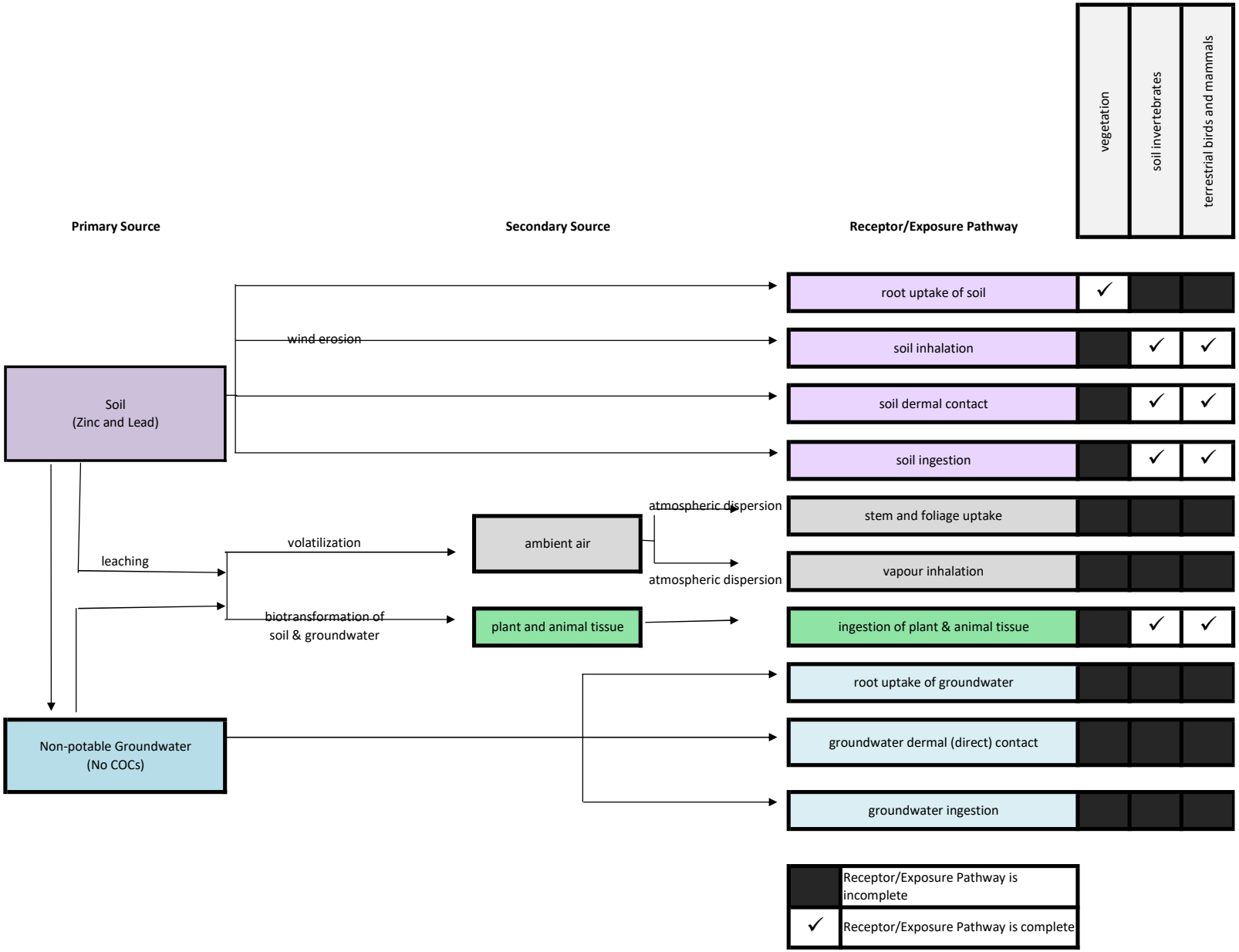
Appendix D

Conceptual Site Models

Appendix D.1 - Human Health Conceptual On-Site Model

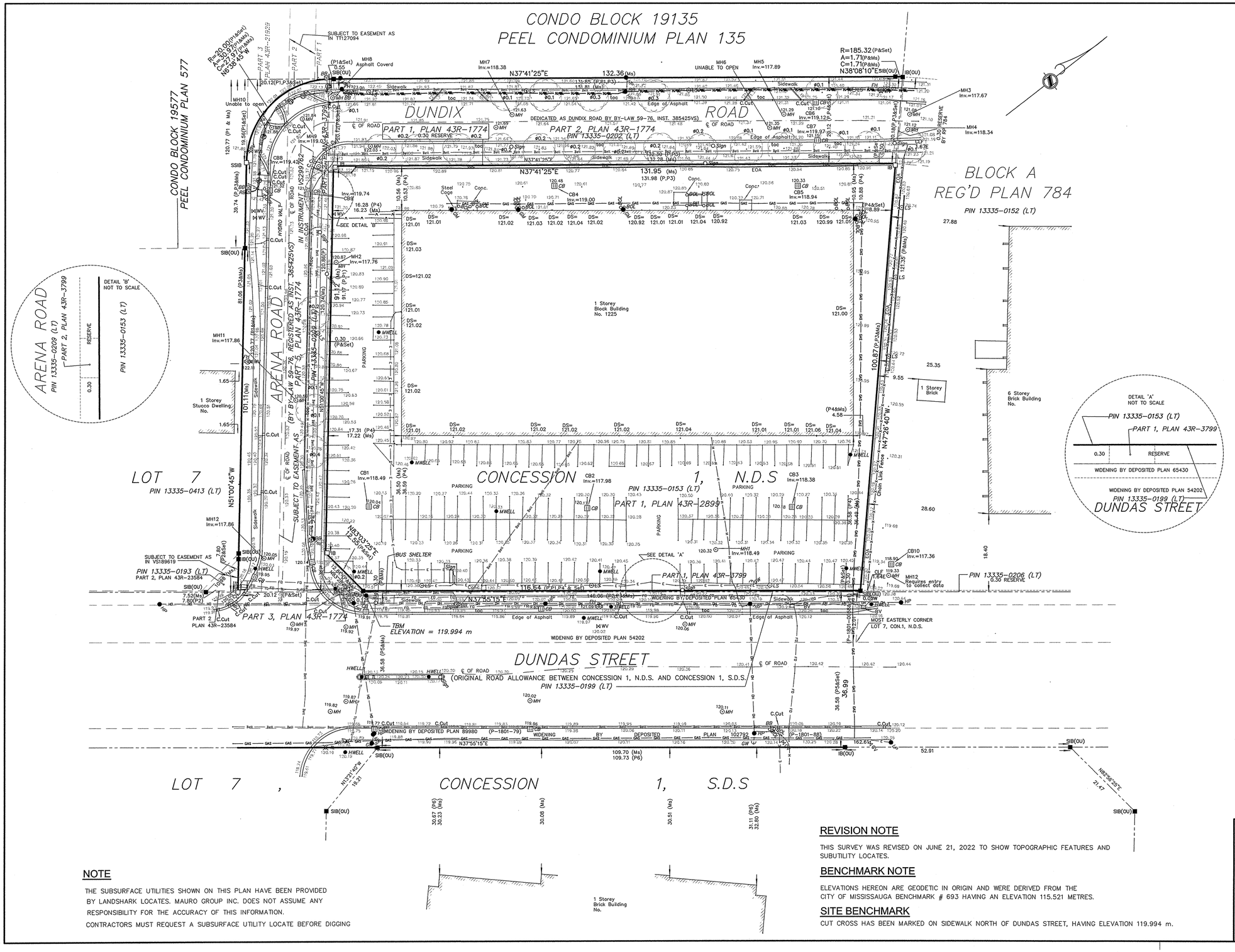


Appendix D.2 - Ecological Conceptual On-Site Model



Appendix E

Survey Plan



PLAN OF SURVEY
SHOWING TOPOGRAPHIC FEATURES OF

PART OF LOT 7
CONCESSION 1
NORTH AND SOUTH OF DUNDAS STREET

CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

SCALE 1:500

10 0 10 20 Metres

MAURO GROUP INC.
ONTARIO LAND SURVEYORS

METRIC

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

BEARING NOTE

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK (TOPNET) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010).

BEARING ROTATION NOTE

ADJUST FOR BEARING COMPARISONS, A ROTATION OF 1°01'00" COUNTER-CLOCKWISE WAS APPLIED TO ASTRONOMIC BEARINGS ON PLAN 43R-2899 TO CONVERT TO UTM ZONE 17, NAD 83 (CSRS).

DISTANCE NOTE

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999746

LEGEND

■	DENOTES FOUND BAR
□	DENOTES PLANTED BAR
SIB	DENOTES STANDARD IRON BAR
CC	DENOTES CUT CROSS
IB	DENOTES IRON BAR
PB	DENOTES PLASTIC BAR
REG'D	DENOTES REGISTERED PLAN
Ms	DENOTES MEASURED
WIT	DENOTES WITNESS
OU	DENOTES ORIGIN UNKNOWN
P	DENOTES 43R-2899
P1	DENOTES 43R-21929
P2	DATED 43R-23584
P3	DENOTES 43R-1774
P4	DATED PLAN OF SURVEY BY UNWIN, MURPHY AND ESTEN, LTD DATED AUGUST 14, 1975
P5	DENOTES PLAN P-1801-88
P6	DENOTES PLAN OF SURVEY BY MARSHALL MACKLIN MONAGHAN LIMITED DATED JULY 22, 1976
NDS	DENOTES NORTH OF DUNDAS STREET
SDS	DENOTES SOUTH OF DUNDAS STREET
CB	DENOTES CATCH BASIN
HP	DENOTES HYDRO POLE
TL	DENOTES TRAFFIC LIGHT
BOL	DENOTES BOLLARD
LS	DENOTES LIGHT STANDARD
FH	DENOTES TOP OF HYDRANT
MWELL	DENOTES MONITORING WELL
HWELL	DENOTES HAND WELL
DS	DENOTES DOOR SILL
MH	DENOTES MANHOLE
GW	DENOTES GUY WIRE
WV	DENOTES WATER VALVE
BB	DENOTES BELL BOX
GM	DENOTES GAS METER
OH	DENOTES OVERHEAD WIRE
C.Cut	DENOTES CURB CUT
toc	DENOTES TOP OF CURB
EOA	DENOTES EDGE OF ASPHALT
TBM	DENOTES TEMPORARY BENCHMARK
BV	DENOTES BELL VALT

H — DENOTES HYDRO LINE
OH — DENOTES OVERHEAD WIRE
E — DENOTES ELECTRIC LINE
W — DENOTES WATER LINE
FO — DENOTES FIBER OPTIC
GAS — DENOTES GAS LINE
TV — DENOTES CABLE TV
RB DENOTES ROGERS BOX
R — DENOTES ROGERS TV
TL — DENOTES TRAFFIC LIGHT
HAL — DENOTES HYDRO AND STREET LIGHT

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, AND THE REGULATIONS MADE MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 10th DAY OF MAY, 2022

JUNE 22/2022
DATE

JAMES A. AGYEMANG B.Eng.
ONTARIO LAND SURVEYOR

NOTE

THE SUBSURFACE UTILITIES SHOWN ON THIS PLAN HAVE BEEN PROVIDED BY LANDSHARK LOCATES. MAURO GROUP INC. DOES NOT ASSUME ANY RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.
CONTRACTORS MUST REQUEST A SUBSURFACE UTILITY LOCATE BEFORE DIGGING

REVISION NOTE

THIS SURVEY WAS REVISED ON JUNE 21, 2022 TO SHOW TOPOGRAPHIC FEATURES AND SUBUTILITY LOCATES.

BENCHMARK NOTE

ELEVATIONS HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM THE CITY OF MISSISSAUGA BENCHMARK # 693 HAVING AN ELEVATION 115.521 METRES.

SITE BENCHMARK

CUT CROSS HAS BEEN MARKED ON SIDEWALK NORTH OF DUNDAS STREET, HAVING ELEVATION 119.994 m.

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
V-25910

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29(3).

MAURO GROUP INC.
ONTARIO LAND SURVEYORS
2 HOLLAND DRIVE, UNIT 5, BOLTON, ONTARIO L7E 1E1
PHONE 905.951.6000 – FAX 905.857.4811
www.youngsurveying.ca – info@youngsurveying.ca

PARTY CHIEF: BP | DRAWN BY: IG | CHECKED BY: JA
CLIENT: SMART CENTRES
PATH=F:\PROJECTS\2022\B7880\MSCAD\B7880_POS_T.DWG

PROJECT No. 22-B7880

CONDO BLOCK 19135
PEEL CONDOMINIUM PLAN 135

CONDO BLOCK 19577
PEEL CONDOMINIUM PLAN 577

SUBJECT TO EASEMENT AS IN TT127094

PART 3, PLAN 43R-21952

PART 2, PLAN 43R-21952

PART 1, PLAN 43R-21952

(P1&Set) 0.55 SIB(OU)

N37°41'25"E 132.36 (Ms)
131.85 (P,P1,P3)
131.81 (Ms)

R=185.32 (P&Set)
A=1.71 (P&Ms)
C=1.71 (P&Ms)
N38°08'10"E

IB(OU)

DUNDIX ROAD
DEDICATED AS DUNDIX ROAD BY BY-LAW 59-76, INST. 385425VS)
PART 2, PLAN 43R-1774
PIN 13335-0202 (LT)

R=20.00 (P&Set)
A=36.97 (P&Ms)
C=27.27 (P&Ms)
N6°39'45"W

20.12(P1,P3&Set)

120.77 (P1 & Ms)

19.56 (P1&Set)

SSIB

PART 1, PLAN 43R-1774
0.30 RESERVE

N37°41'25"E 132.30 (P,P3)
N37°41'25"E 132.28 (Ms)
131.95 (Ms)
131.98 (P,P3)

IB

20.12 (P&Set)

20.12 (P,P3&Set)

20.18 (P,P3&Set)

0.30 RESERVE BY RP 784

CLF 1.67E

(P&Set) 0.30

10.56 (Ms)
10.53 (P4)

10.95 (Ms)
10.88 (P4)

16.28 (P4)
16.23 (Ms)

SEE DETAIL 'B'

8.89 (P4&Set)

BLOCK A
REG'D PLAN 784
PIN 13335-0152 (LT)

27.88

39.74 (P,P3&Ms)

SIB(OU)

PART 2, PLAN 43R-3799

IN INSTRUMENT VS299762

PART 2, PLAN 43R-1774

120.86 (P)

120.74 (Ms)

91.12 (Ms)
91.17 (P,P1)

1 Storey
Block Building
No. 1225

121.35 (P&Ms)

0.30 (P&Set)

81.06 (P,P3&Ms)

120.77 (P1&Ms)

1.65

1 Storey
Stucco Dwelling
No.

1.65

101.11(Ms)

ARENA ROAD
(BY BY-LAW 59-76, REGISTERED AS INST. 385425VS)
PART 5, PLAN 43R-1774
PIN 13335-0209 (LT)

100.87 (P,P3&Ms)

25.35

9.55

1 Storey
Brick

6 Storey
Brick Building
No.

17.31 (P4)
17.22 (Ms)

(P4&Ms) 4.58

N47°26'40"W

N51°00'45"W

LOT 7
PIN 13335-0413 (LT)

SUBJECT TO EASEMENT AS IN VS299762

CONCESSION 1, N.D.S
PIN 13335-0153 (LT)

Chain Link Fence

36.50 (Ms)
36.59 (P4)

36.58 (P4)
36.49 (Ms)

28.60

18.40

SUBJECT TO EASEMENT AS IN VS189619

PIN 13335-0193 (LT)
PART 2, PLAN 43R-23584

7.80 (P2&Set)

SIB(OU)
IB(OU)

10.89 (Ms)

SIB(OU) 7.82(Ms)
7.82(P2) CC

20.12, (P&Set)

IB N53°03'25"E 12.55 (P&Ms)
12.51 (Ms)
N53°03'25"E

SIB(OU) 0.05S 0.12E

0.30 (P&Ms)

SEE DETAIL 'A'

PART 1, PLAN 43R-3799

116.64 (P,P1,P4 & Set)
146.06 (P2,P3&Ms)

WIDENING BY DEPOSITED PLAN 65430

N37°55'15"E

CLF 1.64E

PIN 13335-0206 (LT)
0.30 RESERVE

(P&Set) 0.30

SIB(OU) 0.05W

(P-1801-0658&Set) 12.01

MOST EASTERLY CORNER
LOT 7, CON.1, N.D.S.

PART 3, PLAN 43R-1774

PART 2
PLAN 43R-23584

WIDENING BY DEPOSITED PLAN 54202

DUNDAS STREET
(ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSION 1, N.D.S. AND CONCESSION 1, S.D.S.
PIN 13335-0199 (LT)

36.58 (P5&Ms)

36.58 (P5&Set)
36.99

WIDENING BY DEPOSITED PLAN 89980 (P-1801-79)

SIB(OU)

N37°55'15"E

WIDENING BY DEPOSITED PLAN 102792 (P-1801-88)

109.70 (Ms)
109.73 (P6)

162.61

IB(OU)

52.91

SIB(OU)

N37°21'40"W 19.21

N82°38'25"E 21.47

SIB(OU)

SIB(OU)

30.67 (P6)
30.23 (Ms)

30.08 (Ms)

30.51 (Ms)

31.11 (P6)
32.80 (Ms)

LOT 7, CONCESSION 1, S.D.S

1 Storey
Brick Building
No.

DETAIL 'B'
NOT TO SCALE

ARENA ROAD
PIN 13335-0208 (LT)
PART 2, PLAN 43R-3799

RESERVE
0.30

PIN 13335-0153 (LT)

DETAIL 'A'
NOT TO SCALE

PIN 13335-0153 (LT)
PART 1, PLAN 43R-3799

0.30 RESERVE

WIDENING BY DEPOSITED PLAN 65430

WIDENING BY DEPOSITED PLAN 54202
PIN 13335-0199 (LT)

DUNDAS STREET

PLAN OF SURVEY OF
PART OF LOT 7
CONCESION 1
NORTH OF DUNDAS STREET
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

SCALE 1:500
10 0 10 20 Metres

MAURO GROUP INC.
ONTARIO LAND SURVEYORS

METRIC

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

BEARING NOTE

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK (TOPNET) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010).

BEARING ROTATION NOTE

ADJUST FOR BEARING COMPARISONS, A ROTATION OF 1°01'00" COUNTER-CLOCKWISE WAS APPLIED TO ASTRONOMIC BEARINGS ON PLAN 43R-2899 TO CONVERT TO UTM ZONE 17, NAD 83 (CSRS).

DISTANCE NOTE

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999746

LEGEND

■	DENOTES FOUND BAR
□	DENOTES PLANTED BAR
SIB	DENOTES STANDARD IRON BAR
CC	DENOTES CUT CROSS
IB	DENOTES IRON BAR
PB	DENOTES PLASTIC BAR
REG'D	DENOTES REGISTERED PLAN
Ms	DENOTES MEASURED
WIT	DENOTES WITNESS
OU	DENOTES ORIGIN UNKNOWN
P	DENOTES 43R-2899
P1	DENOTES 43R-21929
P2	DATED 43R-23584
P3	DENOTES 43R-1774
P4	DATED PLAN OF SURVEY BY UNWIN, MURPHY AND ESTEN, LTD DATED AUGUST 14, 1975
P5	DENOTES PLAN P-1801-88
P6	DENOTES PLAN OF SURVEY BY MARSHALL MACKLIN MONAGHAN LIMITED DATED JULY 22, 1976
NDS	DENOTES NORTH OF DUNDAS STREET
SDS	DENOTES SOUTH OF DUNDAS STREET

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, AND THE REGULATIONS MADE MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 10th DAY OF MAY, 2022

MAY 11/2022
DATE

JAMES A. AGYEMANG B.Eng.
ONTARIO LAND SURVEYOR

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
V-25910

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR
In accordance with Regulation 1026, Section 29(3).

MAURO GROUP INC.
ONTARIO LAND SURVEYORS
2 HOLLAND DRIVE, UNIT 5, BOLTON, ONTARIO L7E 1E1
PHONE 905.951.6000 – FAX 905.857.4811
www.youngsurveying.ca – info@youngsurveying.ca

PARTY CHIEF: BP | DRAWN BY: IG | CHECKED BY: JA
CLIENT: SMART CENTRES
PATH=F:\PROJECTS\2022\B7880\MSCAD\B7880_POS_T.DWG

PROJECT No. 22-B7880

Appendix F

Laboratory Certificates of Analysis

CADUCEON™ ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: --- **REPORT No. B22-15955**

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
% Moisture	10	Richmond Hill	FAL	31-May-22	A-% moisture RH	
PHC(F2-F4)	10	Kingston	KPR	31-May-22	C-PHC-S-001 (k)	CWS Tier 1
VOC's	10	Richmond Hill	FAL	31-May-22	C-VOC-02 (rh)	EPA 8260
PHC(F1)	10	Richmond Hill	FAL	31-May-22	C-VPHS-01 (rh)	CWS Tier 1

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		1-3	2-2	3-3	Dup33	O. Reg. 153	
	Sample I.D.		B22-15955-1	B22-15955-2	B22-15955-3	B22-15955-4	Tbl. 3 - RPI	
	Date Collected		24-May-22	25-May-22	25-May-22	25-May-22	Soil	
Parameter	**Units**	**R.L.**						
Acetone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	
Benzene	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.21	
Bromodichloromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	13	
Bromoform	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.27	
Bromomethane	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Carbon Tetrachloride	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Monochlorobenzene (Chlorobenzene)	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	2.4	
Chloroform	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dibromochloromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	9.4	
Dichlorobenzene,1,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	3.4	
Dichlorobenzene,1,3-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	4.8	
Dichlorobenzene,1,4-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.083	
Dichlorodifluoromethane	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	16	
Dichloroethane,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	3.5	
Dichloroethane,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethylene,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethene, cis-1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	3.4	
Dichloroethene, trans-1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.084	
Dichloropropane,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloropropene, cis-1,3-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Dichloropropene, trans-1,3-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

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REPORT No. B22-15955

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GEI Consultants
647 Welham Rd, Unit 14,
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Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		1-3	2-2	3-3	Dup33	O. Reg. 153	
	Sample I.D.		B22-15955-1	B22-15955-2	B22-15955-3	B22-15955-4	Tbl. 3 - RPI Soil	
	Date Collected		24-May-22	25-May-22	25-May-22	25-May-22		
Parameter	**Units**	**R.L.**						
Dichloropropene 1,3-cis+trans	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Ethylbenzene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	2	
Dibromoethane,1,2-(Ethylene Dibromide)	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Hexane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	2.8	
Methyl Ethyl Ketone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	
Methyl Isobutyl Ketone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.7	
Methyl-t-butyl Ether	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.75	
Dichloromethane (Methylene Chloride)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	
Styrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.7	
Tetrachloroethane,1,1,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.058	
Tetrachloroethane,1,1,2,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Tetrachloroethylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.28	
Toluene	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	2.3	
Trichloroethane,1,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.38	
Trichloroethane,1,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Trichloroethylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.061	
Trichlorofluoromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	4	
Vinyl Chloride	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	
Xylene, m,p-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03		
Xylene, o-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

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Christine Burke
Lab Manager

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Attention: Fernando Contento

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112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		1-3	2-2	3-3	Dup33	O. Reg. 153	
	Sample I.D.		B22-15955-1	B22-15955-2	B22-15955-3	B22-15955-4	Tbl. 3 - RPI	
	Date Collected		24-May-22	25-May-22	25-May-22	25-May-22	Soil	
Parameter	**Units**	**R.L.**						
Xylene, m,p,o-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03	3.1	
PHC F1 (C6-C10)	µg/g	10	< 10	< 10	< 10	< 10	55	
PHC F2 (>C10-C16)	µg/g	5	< 5	< 5	< 5	< 5	98	
PHC F3 (>C16-C34)	µg/g	10	12	21	18	16	300	
PHC F4 (>C34-C50)	µg/g	10	< 10	< 10	12	13	2800	
% moisture	%		15.9	17.0	13.6	11.0		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		5-3	4-3	10-2	12-4	O. Reg. 153	
	Sample I.D.		B22-15955-5	B22-15955-6	B22-15955-7	B22-15955-8	Tbl. 3 - RPI	
	Date Collected		25-May-22	25-May-22	24-May-22	25-May-22	Soil	
Parameter	**Units**	**R.L.**						
Acetone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	
Benzene	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.21	
Bromodichloromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	13	
Bromoform	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.27	
Bromomethane	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Carbon Tetrachloride	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Monochlorobenzene (Chlorobenzene)	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	2.4	
Chloroform	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dibromochloromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	9.4	
Dichlorobenzene,1,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	3.4	
Dichlorobenzene,1,3-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	4.8	
Dichlorobenzene,1,4-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.083	
Dichlorodifluoromethane	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	16	
Dichloroethane,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	3.5	
Dichloroethane,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethylene,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloroethene, cis-1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	3.4	
Dichloroethene, trans-1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.084	
Dichloropropane,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Dichloropropene, cis-1,3-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02		
Dichloropropene, trans-1,3-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

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Christine Burke
Lab Manager

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Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		5-3	4-3	10-2	12-4	O. Reg. 153	
	Sample I.D.		B22-15955-5	B22-15955-6	B22-15955-7	B22-15955-8	Tbl. 3 - RPI	
	Date Collected		25-May-22	25-May-22	24-May-22	25-May-22	Soil	
Parameter	**Units**	**R.L.**						
Dichloropropene 1,3-cis+trans	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Ethylbenzene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	2	
Dibromoethane,1,2-(Ethylene Dibromide)	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Hexane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	2.8	
Methyl Ethyl Ketone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	
Methyl Isobutyl Ketone	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.7	
Methyl-t-butyl Ether	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.75	
Dichloromethane (Methylene Chloride)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	
Styrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.7	
Tetrachloroethane,1,1,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.058	
Tetrachloroethane,1,1,2,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	
Tetrachloroethylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.28	
Toluene	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	2.3	
Trichloroethane,1,1,1-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.38	
Trichloroethane,1,1,2-	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	
Trichloroethylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.061	
Trichlorofluoromethane	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	4	
Vinyl Chloride	µg/g	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	
Xylene, m,p-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03		
Xylene, o-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Christine Burke
Lab Manager

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-15955

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		5-3	4-3	10-2	12-4	O. Reg. 153	
	Sample I.D.		B22-15955-5	B22-15955-6	B22-15955-7	B22-15955-8	Tbl. 3 - RPI	
	Date Collected		25-May-22	25-May-22	24-May-22	25-May-22	Soil	
Parameter	**Units**	**R.L.**						
Xylene, m,p,o-	µg/g	0.03	< 0.03	< 0.03	< 0.03	< 0.03	3.1	
PHC F1 (C6-C10)	µg/g	10	< 10	< 10	< 10	< 10	55	
PHC F2 (>C10-C16)	µg/g	5	< 5	< 5	< 5	< 5	98	
PHC F3 (>C16-C34)	µg/g	10	12	57	12	13	300	
PHC F4 (>C34-C50)	µg/g	10	< 10	27	< 10	< 10	2800	
% moisture	%		6.0	11.8	13.4	11.8		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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Final Report

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Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		7-1	Dup7-2			O. Reg. 153	
	Sample I.D.		B22-15955-9	B22-15955-10			Tbl. 3 - RPI	
	Date Collected		26-May-22	26-May-22			Soil	
Parameter	**Units**	**R.L.**						
Acetone	µg/g	0.5	< 0.5	< 0.5			16	
Benzene	µg/g	0.02	< 0.02	< 0.02			0.21	
Bromodichloromethane	µg/g	0.02	< 0.02	< 0.02			13	
Bromoform	µg/g	0.02	< 0.02	< 0.02			0.27	
Bromomethane	µg/g	0.05	< 0.05	< 0.05			0.05	
Carbon Tetrachloride	µg/g	0.05	< 0.05	< 0.05			0.05	
Monochlorobenzene (Chlorobenzene)	µg/g	0.02	< 0.02	< 0.02			2.4	
Chloroform	µg/g	0.02	< 0.02	< 0.02			0.05	
Dibromochloromethane	µg/g	0.02	< 0.02	< 0.02			9.4	
Dichlorobenzene,1,2-	µg/g	0.05	< 0.05	< 0.05			3.4	
Dichlorobenzene,1,3-	µg/g	0.05	< 0.05	< 0.05			4.8	
Dichlorobenzene,1,4-	µg/g	0.05	< 0.05	< 0.05			0.083	
Dichlorodifluoromethane	µg/g	0.05	< 0.05	< 0.05			16	
Dichloroethane,1,1-	µg/g	0.02	< 0.02	< 0.02			3.5	
Dichloroethane,1,2-	µg/g	0.02	< 0.02	< 0.02			0.05	
Dichloroethylene,1,1-	µg/g	0.02	< 0.02	< 0.02			0.05	
Dichloroethene, cis-1,2-	µg/g	0.02	< 0.02	< 0.02			3.4	
Dichloroethene, trans-1,2-	µg/g	0.02	< 0.02	< 0.02			0.084	
Dichloropropane,1,2-	µg/g	0.02	< 0.02	< 0.02			0.05	
Dichloropropene, cis-1,3-	µg/g	0.02	< 0.02	< 0.02				
Dichloropropene, trans-1,3-	µg/g	0.02	< 0.02	< 0.02				

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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CERTIFICATE OF ANALYSIS

Final Report

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GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		7-1	Dup7-2			O. Reg. 153	
	Sample I.D.		B22-15955-9	B22-15955-10			Tbl. 3 - RPI	
	Date Collected		26-May-22	26-May-22			Soil	
Parameter	**Units**	**R.L.**						
Dichloropropene 1,3-cis+trans	µg/g	0.02	< 0.02	< 0.02			0.05	
Ethylbenzene	µg/g	0.05	< 0.05	< 0.05			2	
Dibromoethane,1,2-(Ethylene Dibromide)	µg/g	0.02	< 0.02	< 0.02			0.05	
Hexane	µg/g	0.02	< 0.02	< 0.02			2.8	
Methyl Ethyl Ketone	µg/g	0.5	< 0.5	< 0.5			16	
Methyl Isobutyl Ketone	µg/g	0.5	< 0.5	< 0.5			1.7	
Methyl-t-butyl Ether	µg/g	0.05	< 0.05	< 0.05			0.75	
Dichloromethane (Methylene Chloride)	µg/g	0.05	< 0.05	< 0.05			0.1	
Styrene	µg/g	0.05	< 0.05	< 0.05			0.7	
Tetrachloroethane,1,1,1,2-	µg/g	0.02	< 0.02	< 0.02			0.058	
Tetrachloroethane,1,1,2,2-	µg/g	0.05	< 0.05	< 0.05			0.05	
Tetrachloroethylene	µg/g	0.05	< 0.05	< 0.05			0.28	
Toluene	µg/g	0.2	< 0.2	< 0.2			2.3	
Trichloroethane,1,1,1-	µg/g	0.02	< 0.02	< 0.02			0.38	
Trichloroethane,1,1,2-	µg/g	0.02	< 0.02	< 0.02			0.05	
Trichloroethylene	µg/g	0.05	< 0.05	< 0.05			0.061	
Trichlorofluoromethane	µg/g	0.02	< 0.02	< 0.02			4	
Vinyl Chloride	µg/g	0.02	< 0.02	< 0.02			0.02	
Xylene, m,p-	µg/g	0.03	< 0.03	< 0.03				
Xylene, o-	µg/g	0.03	< 0.03	< 0.03				

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

R.L. = Reporting Limit
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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Christine Burke
Lab Manager

CADUCEON™ ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: --- **REPORT No. B22-15955**

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		7-1	Dup7-2			O. Reg. 153	
	Sample I.D.		B22-15955-9	B22-15955-10			Tbl. 3 - RPI	
	Date Collected		26-May-22	26-May-22			Soil	
Parameter	**Units**	**R.L.**						
Xylene, m,p,o-	µg/g	0.03	< 0.03	< 0.03			3.1	
PHC F1 (C6-C10)	µg/g	10	< 10	< 10			55	
PHC F2 (>C10-C16)	µg/g	5	< 5	6			98	
PHC F3 (>C16-C34)	µg/g	10	12	18			300	
PHC F4 (>C34-C50)	µg/g	10	< 10	< 10			2800	
% moisture	%		6.8	11.7				

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

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DATE RECEIVED: 27-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

R.L. = Reporting Limit
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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

B22-15955

TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site:
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: — [ ] Other:

REPORT NUMBER (Lab Use)

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [ ] Richmond Hill [ ] Windsor [x] Barrie [ ] London

Organization: GEI Consultants	Address and Invoicing Address (if different): 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7
Contact: Fernando Contento	
Tel: 647 966 6894	
Fax: -	Quote No.: 2021_EPD
Email: fcontento@geiconsultants.com	P.O. No.: 2202029
	Project Name: 1225 Dundas
	Additional Info: -

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date:

ANALYSES REQUESTED (Print Test in Boxes)

Full metals; Inorganics Suite 2; PHC F1-F4; PAHs; OC Pesticides; BTEX; VOCs; PCBs; Mercury; Suspected Highly Contaminated

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Full metals	Inorganics Suite 2	PHC F1-F4	PAHs	OC Pesticides	BTEX	VOCs	PCBs	Mercury	Suspected Highly Contaminated	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
1	1-3	-	S	22-05-24	PM			✓				✓					-	-	3	-
2	2-2	-	S	22-05-25	PM			✓				✓					-	-	3	-
3	3-3 (BH3 SS3)	-	S	22-05-25	PM			✓				✓					-	-	3	-
4	Dup33	-	S	22-05-25	PM			✓				✓					-	-	3	-
	~~1-2~~	-	S	~~22-05-24~~	PM	✓	✓		✓					✓			-	-	~~2~~	-
	~~2-1~~	-	S	~~22-05-24~~	PM	✓	✓		✓					✓			-	-	~~2~~	-
	~~3-1~~	-	S	~~22-05-24~~	PM	✓	✓		✓					✓			-	-	~~2~~	-
	~~Dup31~~	-	S	~~22-05-24~~	PM	✓	✓		✓					✓			-	-	~~2~~	-
		-	S		PM												-	-		-
		-	S		PM												-	-		-
	Jar -> lk	-	S		PM												-	-		-
	vials -> RH	2	S		PM												-	-		-

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-05-27	22-05-27
	Date (yy-mm-dd)/Time: 4:30 pm	Date (yy-mm-dd)/Time: 4:35 pm

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice: [ ]

# of Pieces: 20

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): Alie — Signature: [signature]

Date Received (yy-mm-dd): 22-05-27 — Time Received: 16:35

Laboratory Prepared Bottles: [x] Yes [ ] No

Sample Temperature °C: 7.4

Labeled by: GS

Comments:

G

CADUCEON

B22-15955

[X] O.Reg 153 Table 3 [ ] Medium/Fine [X] Coarse [ ] MISA Guidelines
[X] RPI [ ] ICC [ ] Agricultural (O.Reg 153) [ ] O.Reg 558 Leachate Analysis
[X] Yes [ ] No Record of Site Condition (O.Reg 153) Disposal Site:
[ ] Provincial Water Quality Objectives [ ] Landfill Monitoring
[ ] Sewer Use By-Law: [ ] Other:

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [X] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [ ] Richmond Hill [ ] Windsor [X] Barrie [ ] London

Organization:	Address and Invoicing Address (if different)	
GEI Consultants	647 Welham Road, Unit 14 Barrie, Ontario L4N 0B7	
Contact: Fernando Contento		
Tel: 647 966 6894		
Fax: -	Quote No.: 2021_EPD	Project Name: 1225 Dundas
Email: fcontento@geiconsultants.com:	P.O. No.: 2202029	Additional Info: -

ANALYSES REQUESTED (Print Test in Boxes)

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum 200% Surcharge
- [ ] Gold 100% Surcharge
- [ ] Silver 50% Surcharge
- [ ] Bronze 25% Surcharge
- [X] Standard 5-7 days
- [ ] Specific Date:

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Full Metals	Inorganics Suite 2	PHC F1-F4	PAHs	OC Pesticides	BTEX	VOCs	PCBs	Mercury				Suspected Highly Contaminated	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
5	5-3 (BH5 SS3)	-	S	22-05-25	PM			✓				✓								-	-	3	-
6	4-3	-	S	22-05-25	PM			✓				✓								-	-	3	-
7	10-2	-	S	22-05-24	PM			✓				✓								-	-	3	-
8	12-4 (BH12 SS4)	-	S	22-05-25	PM			✓				✓								-	-	3	-
9	7-1	-	S	22-05-26	PM			✓				✓								-	-	3	-
~~-~~	~~7-2 (on hold)~~	~~-~~	S	~~22-05-26~~	~~PM~~			✓				✓								-	-	~~3~~	-
10	Dup7-2	-	S	22-05-26	PM			✓				✓								-	-	3	-
-	4-1	-	S	22-05-25	PM	✓	✓		✓					✓								~~2~~	-
-	5-2	-	S	22-05-25	PM	✓	✓		✓					✓								~~2~~	-
-	10-3	-	S	22-05-04	PM	✓	✓		✓					✓						-	-	~~2~~	-
-	12-2	-	S	22-05-25	PM	✓	✓		✓					✓						-	-	~~2~~	-
-	7-1	-	S	22-05-26	PM	✓	✓		✓					✓						-	-	~~2~~	-

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-05-27	22-05-27
	Date (yy-mm-dd)/Time: 4:38 pm	Date (yy-mm-dd)/Time: 4:50 pm

SHIPPING INFORMATION

- Client's Courier [ ]
- Caduceon's Courier [ ]
- Drop Off [X]
- Caduceon (Pick-up) [ ]

Invoice [ ]

# of Pieces 41

REPORTING / INVOICING

- Report by Fax [ ]
- Report by Email [X]
- Invoice by Email [X]
- Invoice by Mail [ ]

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

- Received By (print): Eli Signature: ES
- Date Received (yy-mm-dd): 22-05-27 Time Received: 16:55
- Laboratory Prepared Bottles: [X] Yes [ ] No
- Sample Temperature °C: 2.4 Labeled by: GS

Comments:
PHCs and VOCs preserved on date of drilling

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-15957 (i)

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 30-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
Cyanide	14	Kingston	kwe	03-Jun-22	A-CN s K	in house
Conductivity	14	Holly Lane	ST	01-Jun-22	A-COND-01 (o)	SM 2510B
pH	14	Richmond Hill	nka	31-May-22	A-pH-02 (rh)	MOEE3530
Chromium (VI)	14	Holly Lane	ST	01-Jun-22	D-CRVI-02 (o)	EPA7196A
Mercury	14	Holly Lane	PBK	01-Jun-22	D-HG-01 (o)	EPA 7471A
Sodium Adsorption Ratio	14	Holly Lane	AHM	01-Jun-22	D-ICP-01 SAR (o)	SM 3120
Metals - ICP-OES	14	Holly Lane	AHM	01-Jun-22	D-ICP-02 (o)	EPA 6010
Metals - ICP-MS	14	Holly Lane	TPR	02-Jun-22	D-ICPMS-01 (o)	EPA 6020

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-15957 (i)

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 30-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		1-2	2-1	3-1	Dup31	O. Reg. 153	
	Sample I.D.		B22-15957-1	B22-15957-2	B22-15957-3	B22-15957-4	Tbl. 1 - All	
	Date Collected		24-May-22	24-May-22	24-May-22	24-May-22		
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.53	7.74	8.02	7.88		
Conductivity @25°C	mS/cm	0.001	0.482	0.299	0.17	0.2	0.57	
Cyanide (Free)	µg/g	0.05	**< 0.5**	< 0.05	< 0.05	< 0.05	0.051	
Sodium Adsorption Ratio	units		**5.91**	**3.12**	1.79	2.24	2.4	
Antimony	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.3	
Arsenic	µg/g	0.5	5.5	6.3	2.5	2.8	18	
Barium	µg/g	1	63	44	16	22	220	
Beryllium	µg/g	0.2	0.3	0.2	< 0.2	0.2	2.5	
Boron	µg/g	0.5	6.1	9.6	4.6	4.8	36	
Cadmium	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	
Chromium	µg/g	1	9	9	6	8	70	
Chromium (VI)	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.66	
Cobalt	µg/g	1	4	4	3	5	21	
Copper	µg/g	1	28	14	11	15	92	
Lead	µg/g	5	32	25	15	12	120	
Mercury	µg/g	0.005	0.142	0.042	0.008	0.028	0.27	
Molybdenum	µg/g	1	< 1	< 1	< 1	< 1	2	
Nickel	µg/g	1	8	8	6	9	82	
Selenium	µg/g	0.5	1.0	0.6	< 0.5	< 0.5	1.5	
Silver	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.5	
Thallium	µg/g	0.1	< 0.1	< 0.1	< 0.1	< 0.1	1	
Uranium	µg/g	0.1	0.5	0.4	0.3	0.4	2.5	
Vanadium	µg/g	1	14	16	13	14	86	
Zinc	µg/g	3	**716**	43	29	37	290	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

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DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		4-1	5-2	10-3	12-2	O. Reg. 153	
	Sample I.D.		B22-15957-5	B22-15957-6	B22-15957-7	B22-15957-8	Tbl. 1 - All	
	Date Collected		25-May-22	25-May-22	04-May-22	25-May-22		
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.94	7.85	7.97	8.00		
Conductivity @25°C	mS/cm	0.001	0.243	**1.51**	**1.84**	**2.37**	0.57	
Cyanide (Free)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.051	
Sodium Adsorption Ratio	units		**2.80**	**11.1**	**25.2**	**17.3**	2.4	
Antimony	µg/g	0.5	< 0.5	< 0.5	< 0.5	0.7	1.3	
Arsenic	µg/g	0.5	2.7	2.6	1.2	3.9	18	
Barium	µg/g	1	24	190	14	**241**	220	
Beryllium	µg/g	0.2	0.2	0.3	< 0.2	0.6	2.5	
Boron	µg/g	0.5	6.8	6.6	3.7	6.4	36	
Cadmium	µg/g	0.5	< 0.5	0.6	< 0.5	< 0.5	1.2	
Chromium	µg/g	1	7	15	4	36	70	
Chromium (VI)	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.66	
Cobalt	µg/g	1	4	5	2	9	21	
Copper	µg/g	1	14	17	11	27	92	
Lead	µg/g	5	30	**129**	< 5	**175**	120	
Mercury	µg/g	0.005	0.048	0.127	0.006	0.166	0.27	
Molybdenum	µg/g	1	< 1	< 1	< 1	< 1	2	
Nickel	µg/g	1	7	11	4	20	82	
Selenium	µg/g	0.5	< 0.5	0.7	0.6	0.9	1.5	
Silver	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.5	
Thallium	µg/g	0.1	< 0.1	< 0.1	< 0.1	< 0.1	1	
Uranium	µg/g	0.1	0.3	0.5	0.3	0.8	2.5	
Vanadium	µg/g	1	12	21	6	32	86	
Zinc	µg/g	3	63	185	11	204	290	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

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SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		7-1	8-1	9-2	6-1	O. Reg. 153	
	Sample I.D.		B22-15957-9	B22-15957-10	B22-15957-11	B22-15957-12	Tbl. 1 - All	
	Date Collected		26-May-22	26-May-22	24-May-22	26-May-22		
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.74	7.73	7.87	7.46		
Conductivity @25°C	mS/cm	0.001	0.321	0.482	**3.14**	0.479	0.57	
Cyanide (Free)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.051	
Sodium Adsorption Ratio	units		**3.62**	**5.66**	**43.4**	**2.83**	2.4	
Antimony	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.3	
Arsenic	µg/g	0.5	6.1	4.4	4.7	4.3	18	
Barium	µg/g	1	96	59	52	59	220	
Beryllium	µg/g	0.2	0.4	0.3	0.3	0.4	2.5	
Boron	µg/g	0.5	3.9	6.3	5.5	7.7	36	
Cadmium	µg/g	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	
Chromium	µg/g	1	14	11	10	15	70	
Chromium (VI)	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.66	
Cobalt	µg/g	1	8	5	4	7	21	
Copper	µg/g	1	49	36	27	20	92	
Lead	µg/g	5	103	88	21	25	120	
Mercury	µg/g	0.005	0.056	0.053	0.059	0.033	0.27	
Molybdenum	µg/g	1	< 1	1	< 1	< 1	2	
Nickel	µg/g	1	16	11	9	15	82	
Selenium	µg/g	0.5	0.7	0.7	0.7	0.7	1.5	
Silver	µg/g	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.5	
Thallium	µg/g	0.1	< 0.1	< 0.1	< 0.1	0.1	1	
Uranium	µg/g	0.1	0.6	0.5	0.6	0.5	2.5	
Vanadium	µg/g	1	24	19	15	19	86	
Zinc	µg/g	3	57	99	153	59	290	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
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SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		11-1	Dup61			O. Reg. 153	
	Sample I.D.		B22-15957-13	B22-15957-14			Tbl. 1 - All	
	Date Collected		26-May-22	26-May-22				
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.59	7.69				
Conductivity @25°C	mS/cm	0.001	**2.12**	0.398			0.57	
Cyanide (Free)	µg/g	0.05	< 0.05	< 0.05			0.051	
Sodium Adsorption Ratio	units		**21.7**	**2.62**			2.4	
Antimony	µg/g	0.5	< 0.5	< 0.5			1.3	
Arsenic	µg/g	0.5	3.7	4.7			18	
Barium	µg/g	1	48	64			220	
Beryllium	µg/g	0.2	0.3	0.5			2.5	
Boron	µg/g	0.5	6.2	5.9			36	
Cadmium	µg/g	0.5	< 0.5	< 0.5			1.2	
Chromium	µg/g	1	10	15			70	
Chromium (VI)	µg/g	0.2	< 0.2	< 0.2			0.66	
Cobalt	µg/g	1	5	9			21	
Copper	µg/g	1	29	21			92	
Lead	µg/g	5	21	19			120	
Mercury	µg/g	0.005	0.051	0.021			0.27	
Molybdenum	µg/g	1	< 1	< 1			2	
Nickel	µg/g	1	10	18			82	
Selenium	µg/g	0.5	0.8	0.6			1.5	
Silver	µg/g	0.2	< 0.2	< 0.2			0.5	
Thallium	µg/g	0.1	< 0.1	0.1			1	
Uranium	µg/g	0.1	0.6	0.5			2.5	
Vanadium	µg/g	1	16	23			86	
Zinc	µg/g	3	46	61			290	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

Christine Burke
Lab Manager

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SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

Table 1 - Res/Park/Institutional/Indus/Com/Commun

1-2	Found Value	Limit
Sodium Adsorption Ratio (units)	5.91	2.4
Cyanide (Free) (µg/g)	< 0.5	0.051
Zinc (µg/g)	716	290
2-1	Found Value	Limit
Sodium Adsorption Ratio (units)	3.12	2.4
4-1	Found Value	Limit
Sodium Adsorption Ratio (units)	2.80	2.4
5-2	Found Value	Limit
Lead (µg/g)	129	120
Conductivity @25°C (mS/cm)	1.51	0.57
Sodium Adsorption Ratio (units)	11.1	2.4
10-3	Found Value	Limit
Conductivity @25°C (mS/cm)	1.84	0.57
Sodium Adsorption Ratio (units)	25.2	2.4
12-2	Found Value	Limit
Conductivity @25°C (mS/cm)	2.37	0.57
Barium (µg/g)	241	220
Sodium Adsorption Ratio (units)	17.3	2.4

O. Reg. 153 - Soil, Ground Water and Sediment Standards
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Table 1 - Res/Park/Institutional/Indus/Com/Commun

12-2	Found Value	Limit
Lead (µg/g)	175	120
7-1	Found Value	Limit
Sodium Adsorption Ratio (units)	3.62	2.4
8-1	Found Value	Limit
Sodium Adsorption Ratio (units)	5.66	2.4
9-2	Found Value	Limit
Sodium Adsorption Ratio (units)	43.4	2.4
Conductivity @25°C (mS/cm)	3.14	0.57
6-1	Found Value	Limit
Sodium Adsorption Ratio (units)	2.83	2.4
11-1	Found Value	Limit
Sodium Adsorption Ratio (units)	21.7	2.4
Conductivity @25°C (mS/cm)	2.12	0.57
Dup61	Found Value	Limit
Sodium Adsorption Ratio (units)	2.62	2.4

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SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
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Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
SVOC	14	Kingston	esi	01-Jun-22	C-NAB-S-001 (k)	EPA 8270

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

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P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		1-2	2-1	3-1	Dup31	O. Reg. 153	
	Sample I.D.		B22-15957-1	B22-15957-2	B22-15957-3	B22-15957-4	Tbl. 1 - All	
	Date Collected		24-May-22	24-May-22	24-May-22	24-May-22		
Parameter	**Units**	**R.L.**						
Acenaphthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.072	
Acenaphthylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.093	
Anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.16	
Benzo(a)anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.36	
Benzo(a)pyrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.3	
Benzo(b)fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.47	
Benzo(b+k)fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05		
Benzo(g,h,i)perylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.68	
Benzo(k)fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.48	
Chrysene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	2.8	
Dibenzo(a,h)anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	
Fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.56	
Fluorene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	
Indeno(1,2,3,-cd)pyrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.23	
Methylnaphthalene,1-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Methylnaphthalene,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Methylnaphthalene 2-(1-)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Naphthalene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	
Phenanthrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.69	
Pyrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
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SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		4-1	5-2	10-3	12-2	O. Reg. 153	
	Sample I.D.		B22-15957-5	B22-15957-6	B22-15957-7	B22-15957-8	Tbl. 1 - All	
	Date Collected		25-May-22	25-May-22	04-May-22	25-May-22		
Parameter	**Units**	**R.L.**						
Acenaphthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.072	
Acenaphthylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.093	
Anthracene	µg/g	0.05	< 0.05	0.08	< 0.05	< 0.05	0.16	
Benzo(a)anthracene	µg/g	0.05	< 0.05	0.20	< 0.05	0.10	0.36	
Benzo(a)pyrene	µg/g	0.05	< 0.05	0.19	< 0.05	0.09	0.3	
Benzo(b)fluoranthene	µg/g	0.05	< 0.05	0.23	< 0.05	0.12	0.47	
Benzo(b+k)fluoranthene	µg/g	0.05	< 0.05	0.34	< 0.05	0.16		
Benzo(g,h,i)perylene	µg/g	0.05	< 0.05	0.12	< 0.05	0.06	0.68	
Benzo(k)fluoranthene	µg/g	0.05	< 0.05	0.11	< 0.05	< 0.05	0.48	
Chrysene	µg/g	0.05	< 0.05	0.24	< 0.05	0.12	2.8	
Dibenzo(a,h)anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	
Fluoranthene	µg/g	0.05	< 0.05	0.47	< 0.05	0.20	0.56	
Fluorene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	
Indeno(1,2,3,-cd)pyrene	µg/g	0.05	< 0.05	0.13	< 0.05	0.07	0.23	
Methylnaphthalene,1-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Methylnaphthalene,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Methylnaphthalene 2-(1-)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Naphthalene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	
Phenanthrene	µg/g	0.05	< 0.05	0.33	< 0.05	0.09	0.69	
Pyrene	µg/g	0.05	< 0.05	0.42	< 0.05	0.18	1	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-15957 (ii)

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 30-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		7-1	8-1	9-2	6-1	O. Reg. 153	
	Sample I.D.		B22-15957-9	B22-15957-10	B22-15957-11	B22-15957-12	Tbl. 1 - All	
	Date Collected		26-May-22	26-May-22	24-May-22	26-May-22		
Parameter	**Units**	**R.L.**						
Acenaphthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.072	
Acenaphthylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.093	
Anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.16	
Benzo(a)anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.36	
Benzo(a)pyrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.3	
Benzo(b)fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.47	
Benzo(b+k)fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05		
Benzo(g,h,i)perylene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.68	
Benzo(k)fluoranthene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.48	
Chrysene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	2.8	
Dibenzo(a,h)anthracene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	
Fluoranthene	µg/g	0.05	< 0.05	0.06	< 0.05	< 0.05	0.56	
Fluorene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	
Indeno(1,2,3,-cd)pyrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.23	
Methylnaphthalene,1-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Methylnaphthalene,2-	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Methylnaphthalene 2-(1-)	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.59	
Naphthalene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	
Phenanthrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.69	
Pyrene	µg/g	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-15957 (ii)

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 30-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		11-1	Dup61			O. Reg. 153	
	Sample I.D.		B22-15957-13	B22-15957-14			Tbl. 1 - All	
	Date Collected		26-May-22	26-May-22				
Parameter	**Units**	**R.L.**						
Acenaphthene	µg/g	0.05	< 0.05	< 0.05			0.072	
Acenaphthylene	µg/g	0.05	< 0.05	< 0.05			0.093	
Anthracene	µg/g	0.05	< 0.05	< 0.05			0.16	
Benzo(a)anthracene	µg/g	0.05	< 0.05	< 0.05			0.36	
Benzo(a)pyrene	µg/g	0.05	< 0.05	< 0.05			0.3	
Benzo(b)fluoranthene	µg/g	0.05	< 0.05	< 0.05			0.47	
Benzo(b+k)fluoranthene	µg/g	0.05	< 0.05	< 0.05				
Benzo(g,h,i)perylene	µg/g	0.05	< 0.05	< 0.05			0.68	
Benzo(k)fluoranthene	µg/g	0.05	< 0.05	< 0.05			0.48	
Chrysene	µg/g	0.05	< 0.05	< 0.05			2.8	
Dibenzo(a,h)anthracene	µg/g	0.05	< 0.05	< 0.05			0.1	
Fluoranthene	µg/g	0.05	< 0.05	< 0.05			0.56	
Fluorene	µg/g	0.05	< 0.05	< 0.05			0.12	
Indeno(1,2,3,-cd)pyrene	µg/g	0.05	< 0.05	< 0.05			0.23	
Methylnaphthalene,1-	µg/g	0.05	< 0.05	< 0.05			0.59	
Methylnaphthalene,2-	µg/g	0.05	< 0.05	< 0.05			0.59	
Methylnaphthalene 2-(1-)	µg/g	0.05	< 0.05	< 0.05			0.59	
Naphthalene	µg/g	0.05	< 0.05	< 0.05			0.09	
Phenanthrene	µg/g	0.05	< 0.05	< 0.05			0.69	
Pyrene	µg/g	0.05	< 0.05	< 0.05			1	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-15957 (ii)

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 30-May-22
DATE REPORTED: 03-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 1 - All - Table 1 - Res/Park/Institutional/Indus/Com/Commun

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site: _____
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: _____ — [ ] Other: _____

REPORT NUMBER (Lab Use): B22-15957

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [ ] Richmond Hill [ ] Windsor [x] Barrie [ ] London

Organization: GEI Consultants	Address and Invoicing Address (if different): 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7
Contact: Fernando Contento	
Tel: 647 966 6894	
Fax: -	Quote No.: 2021_EPD
Email: fcontento@geiconsultants.com	P.O. No.: 2202029
	Project Name: 1225 Dundas
	Additional Info: -

ANALYSES REQUESTED (Print Test in Boxes): Full metals; Inorganics Suite 2; PHC F1-F4; PAHs; OC Pesticides; BTEX; VOCs; PCBs; Mercury; Suspected Highly Contaminated

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date: _____

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Full metals	Inorganics Suite 2	PHC F1-F4	PAHs	OC Pesticides	BTEX	VOCs	PCBs	Mercury				✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
~~—~~	~~1-3~~	-	S	~~22-05-24~~	PM			✓				✓							-	-	~~3~~	-
~~—~~	~~2-2~~	-	S	~~22-05-25~~	PM			✓				✓							-	-	~~3~~	-
~~—~~	~~3-3~~	-	S	~~22-05-25~~	PM			✓				✓							-	-	~~3~~	-
~~—~~	~~Dup33~~	-	S	~~22-05-25~~	PM			✓				✓							-	-	~~3~~	-
1	1-2	-	S	22-05-24	PM	✓	✓		✓					✓					-	-	2	-
2	2-1	-	S	22-05-24	PM	✓	✓		✓					✓					-	-	2	-
3	3-1	-	S	22-05-24	PM	✓	✓		✓					✓					-	-	2	-
4	Dup31	-	S	22-05-24	PM	✓	✓		✓					✓					-	-	2	-
		-	S		PM														-	-		-
	Jar → 7k	-	S		PM														-	-		-
	Jar → 10	-	S		PM														-	-		-
	Pair → RH	2	S		PM														-	-		-

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-05-27	22-05-27
	Date (yy-mm-dd)/Time: 4:30pm	Date (yy-mm-dd)/Time: 4:30pm

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice: [ ]

# of Pieces: 20

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): Alie — Signature: [signature]

Date Received (yy-mm-dd): 22-05-27 — Time Received: 16:35

Laboratory Prepared Bottles: [x] Yes [ ] No

Sample Temperature °C: 7.4

Labeled by: G

Comments:

Page 1 of 1

G

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TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site: _____
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: _____ — [ ] Other: _____

REPORT NUMBER (Lab Use): B22-15957

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [ ] Richmond Hill [ ] Windsor [x] Barrie [ ] London

Organization: GEI Consultants	**Address and Invoicing Address (if different):** 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7
Contact: Fernando Contento	
Tel: 647 966 6894	
Fax: -	**Quote No.:** 2021_EPD
Email: fcontento@geiconsultants.com	**P.O. No.:** 2202029
	Project Name: 1225 Dundas
	Additional Info: -

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date: _____

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Full Metals	Inorganics Suite 2	PHC F1-F4	PAHs	OC Pesticides	BTEX	VOCs	PCBs	Mercury				Suspected Highly Contaminated	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
	~~5-3~~	-	S	~~22-05-25~~	PM			✓				✓								-	-	~~3~~	-
	~~4-3~~	-	S	~~22-05-25~~	PM			✓				✓								-	-	~~3~~	-
	~~10-2~~	-	S	~~22-05-24~~	PM			✓				✓								-	-	~~3~~	-
	~~12-4~~	-	S	~~22-05-25~~	PM			✓				✓								-	-	~~3~~	-
	~~7-1~~	-	S	~~22-05-26~~	PM			✓				✓								-	-	3	-
	~~7-2 (on hold)~~	-	S	~~22-05-26~~	PM			✓				✓								-	-	~~3~~	-
	~~Dup7-2~~	-	S	~~22-05-26~~	PM			✓				✓								-	-	~~3~~	-
5	4-1	-	S	22-05-25	PM	✓	✓		✓					✓						-	-	2	-
6	5-2	-	S	22-05-25	PM	✓	✓		✓					✓						-	-	2	-
7	10-3	-	S	22-05-04	PM	✓	✓		✓					✓						-	-	2	-
8	12-2	-	S	22-05-25	PM	✓	✓		✓					✓						-	-	2	-
9	7-1	-	S	22-05-26	PM	✓	✓		✓					✓						-	-	2	-

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-05-27	22-05-27
	Date (yy-mm-dd)/Time: 4:50pm	Date (yy-mm-dd)/Time: 4:50pm

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice: [ ]

# of Pieces: 41

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): Ellie — Signature: ES

Date Received (yy-mm-dd): 22-05-27 — Time Received: 16:55

Laboratory Prepared Bottles: [x] Yes [ ] No

Sample Temperature °C: 2.4 — Labeled by: GS

Comments: PHCs and VOCs preserved on date of drilling

G

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TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site: _____
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: _____ — [ ] Other: _____

REPORT NUMBER (Lab Use): B22-15957

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [ ] Richmond Hill [ ] Windsor [x] Barrie [ ] London

Organization: GEI Consultants	Address and Invoicing Address (if different): 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7
Contact: Fernando Contento	
Tel: 647 966 6894	
Fax: -	Quote No.: 2021_EPD — Project Name: 1225 Dundas
Email: fcontento@geiconsultants.com;	P.O. No.: 2202029 — Additional Info: -

ANALYSES REQUESTED (Print Test in Boxes)

Full Metals; Inorganics Suite 2; PHC F1-F4; PAHs; OC Pesticides; BTEX; VOCs; PCBs; Mercury; Suspected Highly Contaminated

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date: _____

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Indicate Test For Each Sample By Using A Check Mark In The Box Provided	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
10	8-1	-	S	22-05-26	PM	✓ ✓ ✓		-	-	2	-
11	9-2	-	S	22-05-24	PM	✓ ✓ ✓		-	-	2	-
12	6-1	-	S	22-05-26	PM	✓ ✓ ✓		-	-	2	-
13	11-1	-	S	22-05-26	PM	✓ ✓ ✓		-	-	2	-
14	Dup61	-	S	22-05-26	PM	✓ ✓ ✓		-	-	2	-
			S		PM			-	-		-
			S		PM			-	-		-
			S		PM			-	-		-
			S		PM			-	-		-
			S		PM			-	-		-
			S		PM			-	-		-

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-05-27	22-05-27
	Date (yy-mm-dd)/Time: 4:50pm	Date (yy-mm-dd)/Time: 4:50 pm

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice: [ ]

# of Pieces: 41

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): Alie — Signature: ES

Date Received (yy-mm-dd): 22-05-27 — Time Received: 16:55

Laboratory Prepared Bottles: [x] Yes [ ] No

Sample Temperature °C: 2.4 — Labeled by: GS

Comments:

G

CADUCEON™ ENVIRONMENTAL LABORATORIES
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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: --- **REPORT No. B22-18776**

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 17-Jun-22
DATE REPORTED: 24-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
Metals - ICP-OES	1	Holly Lane	NHG	23-Jun-22	D-ICP-02 (o)	EPA 6010

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-18776

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Fernando Contento

Caduceon Environmental Laboratories
112 Commerce Park Drive
Barrie ON L4N 8W8
Tel: 705-252-5743
Fax: 705-252-5746

DATE RECEIVED: 17-Jun-22
DATE REPORTED: 24-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		1-4	5-4	12-3		O. Reg. 153	
	Sample I.D.		B22-18776-1	B22-18776-2	B22-18776-3		Tbl. 3 - RPI Soil	
	Date Collected		24-May-22	25-May-22	25-May-22			
Parameter	**Units**	**R.L.**						
Lead	µg/g	5		8	< 5		120	
Zinc	µg/g	3	72				340	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

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DATE RECEIVED: 17-Jun-22
DATE REPORTED: 24-Jun-22
SAMPLE MATRIX: Soil

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - RPI Soil - Table 3 - Res./Parkland/Institutional Soil Std

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Christine Burke
Lab Manager

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TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site: _____
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: _____ — [ ] Other: _____

REPORT NUMBER (Lab Use): B22-18776

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [ ] Richmond Hill [ ] Windsor [x] Barrie [ ] London

Organization: GEI Consultants	**Address and Invoicing Address (if different):** 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7
Contact: Fernando Contento	
Tel: 647 966 6894	
Fax: -	**Quote No.:** 2021_EPD — **Project Name:** 1225 Dundas
Email: fcontento@geiconsultants.com;	**P.O. No.:** 2202029 — **Additional Info:** -

ANALYSES REQUESTED (Print Test in Boxes)

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date: _____

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Single Element (Zinc)	Single Element (Lead)	PHC F1-F4	PAHs	OC Pesticides	BTEX	VOCs	PCBs	Mercury			Suspected Highly Contaminated	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
1	1-4	-	S	22-05-24	PM	✓													-	-	1	-
2	5-4	-	S	22-05-25	PM		✓												-	-	1	-
3	12-3	-	S	22-05-25	PM		✓												-	-	1	-
			S		PM														-	-		-
			S		PM														-	-		-
			S		PM														-	-		-
			S		PM														-	-		-
			S		PM														-	-		-
			S		PM														-	-		-
			S		PM														-	-		-
	SW-70		S		PM														-	-		-
			S		PM														-	-		-

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-05-27	22-06-17
	Date (yy-mm-dd)/Time: 12:45PM	Date (yy-mm-dd)/Time: 12:40PM

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice: [ ]

# of Pieces: 3

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): Ellie — Signature: ES

Date Received (yy-mm-dd): 22-06-17 — Time Received: 12:40

Laboratory Prepared Bottles: [x] Yes [ ] No

Sample Temperature °C: 15.0 — Labeled by: ES

Comments: Please CC SLi@geiconsultants.com
SLove@geiconsultants.com

CADUCEON ENVIRONMENTAL LABORATORIES
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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: --- **REPORT No. B22-16857 (i)**

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Shirley Li

Caduceon Environmental Laboratories
110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
Cyanide	7	Kingston	kwe	07-Jun-22	A-CN-001 (k)	SM 4500CN
Conductivity	7	Holly Lane	SYL	08-Jun-22	A-COND-02 (o)	SM 2510B
pH	7	Holly Lane	SYL	08-Jun-22	A-PH-01 (o)	SM 4500H
Chromium (VI)	7	Holly Lane	ST	10-Jun-22	D-CRVI-01 (o)	MOE E3056
Mercury	7	Holly Lane	PBK	10-Jun-22	D-HG-02 (o)	SM 3112 B
Metals - ICP-OES	7	Holly Lane	AHM	09-Jun-22	D-ICP-01 (o)	SM 3120
Metals - ICP-MS	7	Holly Lane	TPR	10-Jun-22	D-ICPMS-01 (o)	EPA 200.8

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
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nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

R.L. = Reporting Limit
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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	MW4	MW6	O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-4		
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.53	7.57	7.69	7.48		
Conductivity @25°C	mS/cm	0.001	9.46	8.52	13.3	10.1		
Cyanide (Free)	µg/L	5	< 5	< 5	< 5	< 5	66	
Sodium	µg/L	200	1810000	906000	**2570000**	1640000	2300000	
Antimony	µg/L	0.1	< 2	< 2	< 2	< 2	20000	
Arsenic	µg/L	0.1	< 2	< 2	11.6	< 2	1900	
Barium	µg/L	1	282	404	214	303	29000	
Beryllium	µg/L	0.1	< 2	< 2	< 2	< 2	67	
Boron	µg/L	5	240	332	141	163	45000	
Cadmium	µg/L	0.015	< 0.28	< 0.28	< 0.28	< 0.28	2.7	
Chromium	µg/L	2	< 2	< 2	3	< 2	810	
Chromium (VI)	µg/L	10	< 10 [1]	< 10 [1]	< 10 [1]	< 10 [1]	140	
Cobalt	µg/L	0.1	< 2	3.3	< 2	3.4	66	
Copper	µg/L	2	18	< 2	29	8	87	
Lead	µg/L	0.02	< 0.4	< 0.4	< 0.4	< 0.4	25	
Mercury	µg/L	0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.29	
Molybdenum	µg/L	0.1	< 2	2.2	< 2	< 2	9200	
Nickel	µg/L	0.2	< 4	< 4	5.1	4.6	490	
Selenium	µg/L	1	< 20	< 20	< 20	< 20	63	
Silver	µg/L	0.1	< 0.4	< 0.4	< 0.4	1.3	1.5	
Thallium	µg/L	0.05	< 1	< 1	< 1	< 1	510	
Uranium	µg/L	0.05	3.91	7.42	2.16	8.41	420	
Vanadium	µg/L	0.1	< 2	< 2	17.6	< 2	250	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	MW4	MW6	O. Reg. 153	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-4	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Zinc	µg/L	5	15	9	9	25	1100	

1 . Chromium (VI) result is based on total Chromium

2 . Elevated RL due to salt content

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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Lab Manager

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DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW9	MW12	Dup 2		O. Reg. 153	
	Sample I.D.		B22-16857-6	B22-16857-8	B22-16857-11		Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22			
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.72	7.50	7.58			
Conductivity @25°C	mS/cm	0.001	4.58	5.65	9.47			
Cyanide (Free)	µg/L	5	< 5	< 5	< 5		66	
Sodium	µg/L	200	568000	558000	1870000		2300000	
Antimony	µg/L	0.1	< 1	< 1	< 2		20000	
Arsenic	µg/L	0.1	< 1	< 1	< 2		1900	
Barium	µg/L	1	191	511	307		29000	
Beryllium	µg/L	0.1	< 1	< 1	< 2		67	
Boron	µg/L	5	254	535	240		45000	
Cadmium	µg/L	0.015	< 0.14	< 0.14	< 0.28		2.7	
Chromium	µg/L	2	< 2	< 2	< 2		810	
Chromium (VI)	µg/L	10	< 10 [1]	< 10 [1]	< 10 [1]		140	
Cobalt	µg/L	0.1	< 1	1.5	< 2		66	
Copper	µg/L	2	< 2	5	18		87	
Lead	µg/L	0.02	< 0.2	< 0.2	0.74		25	
Mercury	µg/L	0.02	< 0.02	< 0.02	< 0.02		0.29	
Molybdenum	µg/L	0.1	7.9	16.4	< 2		9200	
Nickel	µg/L	0.2	< 2	3.3	< 4		490	
Selenium	µg/L	1	< 10	< 10	< 20		63	
Silver	µg/L	0.1	0.7	0.8	1.0		1.5	
Thallium	µg/L	0.05	< 0.5	< 0.5	< 1		510	
Uranium	µg/L	0.05	0.77	< 0.5	4.01		420	
Vanadium	µg/L	0.1	< 1	< 1	< 2		250	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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DATE RECEIVED: 03-Jun-22
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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW9	MW12	Dup 2		O. Reg. 153	
	Sample I.D.		B22-16857-6	B22-16857-8	B22-16857-11		Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22			
Parameter	**Units**	**R.L.**						
Zinc	µg/L	5	17	28	17		1100	

1 . Chromium (VI) result is based on total Chromium
2 . Elevated RL due to salt content

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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Lab Manager

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DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

Table 3 - Non-Potable Ground Water (µg/L)

MW4	Found Value	Limit
Sodium (µg/L)	2570000	2300000

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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Final Report

C.O.C.: --- **REPORT No. B22-16857 (ii)**

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DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
PHC(F2-F4)	9	Kingston	KPR	07-Jun-22	C-PHC-W-001 (k)	MOE E3421
VOC's	9	Richmond Hill	FAL	07-Jun-22	C-VOC-02 (rh)	EPA 8260
PHC(F1)	9	Richmond Hill	FAL	07-Jun-22	C-VPHW-01 (rh)	MOE E3421

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
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C50 response factors within 70% of nC10+nC16+nC34 average:
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Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	MW4	MW7	O. Reg. 153	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-5	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Acetone	µg/L	30	< 30	< 30	< 30	< 30	130000	
Benzene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	44	
Bromodichloromethane	µg/L	2	< 2	< 2	< 2	< 2	85000	
Bromoform	µg/L	5	< 5	< 5	< 5	< 5	380	
Bromomethane	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.6	
Carbon Tetrachloride	µg/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.79	
Monochlorobenzene (Chlorobenzene)	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	630	
Chloroform	µg/L	1	< 1	< 1	< 1	< 1	2.4	
Dibromochloromethane	µg/L	2	< 2	< 2	< 2	< 2	82000	
Dichlorobenzene,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	4600	
Dichlorobenzene,1,3-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	9600	
Dichlorobenzene,1,4-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	8	
Dichlorodifluoromethane	µg/L	2	< 2	< 2	< 2	< 2	4400	
Dichloroethane,1,1-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	320	
Dichloroethane,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloroethylene,1,1-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloroethene, cis-1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloroethene, trans-1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloropropane,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	
Dichloropropene, cis-1,3-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Dichloropropene, trans-1,3-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-16857 (ii)

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Shirley Li

Caduceon Environmental Laboratories
110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	MW4	MW7	O. Reg. 153	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-5	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Dichloropropene 1,3-cis+trans	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.2	
Ethylbenzene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	2300	
Dibromoethane,1,2-(Ethylene Dibromide)	µg/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.25	
Hexane	µg/L	5	< 5	< 5	< 5	< 5	51	
Methyl Ethyl Ketone	µg/L	20	< 20	< 20	< 20	< 20	470000	
Methyl Isobutyl Ketone	µg/L	20	< 20	< 20	< 20	< 20	140000	
Methyl-t-butyl Ether	µg/L	2	< 2	< 2	< 2	< 2	190	
Dichloromethane (Methylene Chloride)	µg/L	5	< 5	< 5	< 5	< 5	610	
Styrene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1300	
Tetrachloroethane,1,1,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.3	
Tetrachloroethane,1,1,2,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.2	
Tetrachloroethylene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Toluene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	18000	
Trichloroethane,1,1,1-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	640	
Trichloroethane,1,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.7	
Trichloroethylene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Trichlorofluoromethane	µg/L	5	< 5	< 5	< 5	< 5	2500	
Vinyl Chloride	µg/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.5	
Xylene, m,p-	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	MW4	MW7	O. Reg. 153	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-5	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Xylene, o-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Xylene, m,p,o-	µg/L	1.1	< 1.1	< 1.1	< 1.1	< 1.1	4200	
PHC F1 (C6-C10)	µg/L	25	< 25	< 25	< 25	< 25	750	
PHC F2 (>C10-C16)	µg/L	50	< 50	< 50	< 50	< 50	150	
PHC F3 (>C16-C34)	µg/L	400	< 400	< 400	< 400	< 400	500	
PHC F4 (>C34-C50)	µg/L	400	< 400	< 400	< 400	< 400	500	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW9	MW10	MW12	Trip Blank	O. Reg. 153	
	Sample I.D.		B22-16857-6	B22-16857-7	B22-16857-8	B22-16857-9	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Acetone	µg/L	30	< 30	< 30	< 30	< 30	130000	
Benzene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	44	
Bromodichloromethane	µg/L	2	< 2	< 2	< 2	< 2	85000	
Bromoform	µg/L	5	< 5	< 5	< 5	< 5	380	
Bromomethane	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.6	
Carbon Tetrachloride	µg/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.79	
Monochlorobenzene (Chlorobenzene)	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	630	
Chloroform	µg/L	1	< 1	< 1	< 1	< 1	2.4	
Dibromochloromethane	µg/L	2	< 2	< 2	< 2	< 2	82000	
Dichlorobenzene,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	4600	
Dichlorobenzene,1,3-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	9600	
Dichlorobenzene,1,4-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	8	
Dichlorodifluoromethane	µg/L	2	< 2	< 2	< 2	< 2	4400	
Dichloroethane,1,1-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	320	
Dichloroethane,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloroethylene,1,1-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloroethene, cis-1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloroethene, trans-1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Dichloropropane,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	16	
Dichloropropene, cis-1,3-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Dichloropropene, trans-1,3-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW9	MW10	MW12	Trip Blank	O. Reg. 153	
	Sample I.D.		B22-16857-6	B22-16857-7	B22-16857-8	B22-16857-9	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Dichloropropene 1,3-cis+trans	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.2	
Ethylbenzene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	2300	
Dibromoethane,1,2-(Ethylene Dibromide)	µg/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.25	
Hexane	µg/L	5	< 5	< 5	< 5	< 5	51	
Methyl Ethyl Ketone	µg/L	20	< 20	< 20	< 20	< 20	470000	
Methyl Isobutyl Ketone	µg/L	20	< 20	< 20	< 20	< 20	140000	
Methyl-t-butyl Ether	µg/L	2	< 2	< 2	< 2	< 2	190	
Dichloromethane (Methylene Chloride)	µg/L	5	< 5	< 5	< 5	< 5	610	
Styrene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1300	
Tetrachloroethane,1,1,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.3	
Tetrachloroethane,1,1,2,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.2	
Tetrachloroethylene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Toluene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	18000	
Trichloroethane,1,1,1-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	640	
Trichloroethane,1,1,2-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.7	
Trichloroethylene	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.6	
Trichlorofluoromethane	µg/L	5	< 5	< 5	< 5	< 5	2500	
Vinyl Chloride	µg/L	0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.5	
Xylene, m,p-	µg/L	1.0	< 1.0	< 1.0	< 1.0	< 1.0		

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
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WATERWORKS NO.

	Client I.D.		MW9	MW10	MW12	Trip Blank	O. Reg. 153	
	Sample I.D.		B22-16857-6	B22-16857-7	B22-16857-8	B22-16857-9	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Xylene, o-	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5		
Xylene, m,p,o-	µg/L	1.1	< 1.1	< 1.1	< 1.1	< 1.1	4200	
PHC F1 (C6-C10)	µg/L	25	< 25	< 25	< 25	< 25	750	
PHC F2 (>C10-C16)	µg/L	50	< 50	< 50	< 50	< 50	150	
PHC F3 (>C16-C34)	µg/L	400	< 400	< 400	< 400	< 400	500	
PHC F4 (>C34-C50)	µg/L	400	< 400	< 400	< 400	< 400	500	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D. / Sample I.D. / Date Collected		Dup 1 B22-16857-10 03-Jun-22				O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
Parameter	**Units**	**R.L.**						
Acetone	µg/L	30	< 30				130000	
Benzene	µg/L	0.5	< 0.5				44	
Bromodichloromethane	µg/L	2	< 2				85000	
Bromoform	µg/L	5	< 5				380	
Bromomethane	µg/L	0.5	< 0.5				5.6	
Carbon Tetrachloride	µg/L	0.2	< 0.2				0.79	
Monochlorobenzene (Chlorobenzene)	µg/L	0.5	< 0.5				630	
Chloroform	µg/L	1	< 1				2.4	
Dibromochloromethane	µg/L	2	< 2				82000	
Dichlorobenzene,1,2-	µg/L	0.5	< 0.5				4600	
Dichlorobenzene,1,3-	µg/L	0.5	< 0.5				9600	
Dichlorobenzene,1,4-	µg/L	0.5	< 0.5				8	
Dichlorodifluoromethane	µg/L	2	< 2				4400	
Dichloroethane,1,1-	µg/L	0.5	< 0.5				320	
Dichloroethane,1,2-	µg/L	0.5	< 0.5				1.6	
Dichloroethylene,1,1-	µg/L	0.5	< 0.5				1.6	
Dichloroethene, cis-1,2-	µg/L	0.5	< 0.5				1.6	
Dichloroethene, trans-1,2-	µg/L	0.5	< 0.5				1.6	
Dichloropropane,1,2-	µg/L	0.5	< 0.5				16	
Dichloropropene, cis-1,3-	µg/L	0.5	< 0.5					
Dichloropropene, trans-1,3-	µg/L	0.5	< 0.5					

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.	Dup 1				O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
	Sample I.D.	B22-16857-10					
	Date Collected	03-Jun-22					
Parameter	**Units**	**R.L.**					
Dichloropropene 1,3-cis+trans	µg/L	0.5	< 0.5			5.2	
Ethylbenzene	µg/L	0.5	< 0.5			2300	
Dibromoethane,1,2-(Ethylene Dibromide)	µg/L	0.2	< 0.2			0.25	
Hexane	µg/L	5	< 5			51	
Methyl Ethyl Ketone	µg/L	20	< 20			470000	
Methyl Isobutyl Ketone	µg/L	20	< 20			140000	
Methyl-t-butyl Ether	µg/L	2	< 2			190	
Dichloromethane (Methylene Chloride)	µg/L	5	< 5			610	
Styrene	µg/L	0.5	< 0.5			1300	
Tetrachloroethane,1,1,1,2-	µg/L	0.5	< 0.5			3.3	
Tetrachloroethane,1,1,2,2-	µg/L	0.5	< 0.5			3.2	
Tetrachloroethylene	µg/L	0.5	< 0.5			1.6	
Toluene	µg/L	0.5	< 0.5			18000	
Trichloroethane,1,1,1-	µg/L	0.5	< 0.5			640	
Trichloroethane,1,1,2-	µg/L	0.5	< 0.5			4.7	
Trichloroethylene	µg/L	0.5	< 0.5			1.6	
Trichlorofluoromethane	µg/L	5	< 5			2500	
Vinyl Chloride	µg/L	0.2	< 0.2			0.5	
Xylene, m,p-	µg/L	1.0	< 1.0				

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	Client I.D. / Sample I.D. / Date Collected		Dup 1 B22-16857-10 03-Jun-22				O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
Parameter	**Units**	**R.L.**						
Xylene, o-	µg/L	0.5	< 0.5					
Xylene, m,p,o-	µg/L	1.1	< 1.1				4200	
PHC F1 (C6-C10)	µg/L	25	< 25				750	
PHC F2 (>C10-C16)	µg/L	50	< 50				150	
PHC F3 (>C16-C34)	µg/L	400	< 400				500	
PHC F4 (>C34-C50)	µg/L	400	< 400				500	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: --- **REPORT No. B22-16857 (ii)**

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Shirley Li

Caduceon Environmental Laboratories
110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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Christine Burke
Lab Manager

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DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
SVOC	7	Kingston	esi	08-Jun-22	C-NAB-W-001 (k)	EPA 8270

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	MW4	MW6	O. Reg. 153	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-3	B22-16857-4	Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22	03-Jun-22		
Parameter	**Units**	**R.L.**						
Acenaphthene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	600	
Acenaphthylene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1.8	
Anthracene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	2.4	
Benzo(a)anthracene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	4.7	
Benzo(a)pyrene	µg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.81	
Benzo(b)fluoranthene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.75	
Benzo(b+k)fluoranthene	µg/L	0.1	< 0.1	< 0.1	< 0.1	< 0.1		
Benzo(g,h,i)perylene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2	
Benzo(k)fluoranthene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.4	
Chrysene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1	
Dibenzo(a,h)anthracene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.52	
Fluoranthene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	130	
Fluorene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	400	
Indeno(1,2,3,-cd)pyrene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.2	
Methylnaphthalene,1-	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1800	
Methylnaphthalene,2-	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1800	
Methylnaphthalene 2-(1-)	µg/L	1	< 1	< 1	< 1	< 1	1800	
Naphthalene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	1400	
Phenanthrene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	580	
Pyrene	µg/L	0.05	< 0.05	< 0.05	< 0.05	< 0.05	68	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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Final Report

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Attention: Shirley Li

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Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 03-Jun-22
DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW9	MW12	Dup 2		O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
	Sample I.D.		B22-16857-6	B22-16857-8	B22-16857-11			
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22			
Parameter	**Units**	**R.L.**						
Acenaphthene	µg/L	0.05	0.07	< 0.05	< 0.05		600	
Acenaphthylene	µg/L	0.05	< 0.05	< 0.05	< 0.05		1.8	
Anthracene	µg/L	0.05	< 0.05	< 0.05	< 0.05		2.4	
Benzo(a)anthracene	µg/L	0.05	< 0.05	< 0.05	< 0.05		4.7	
Benzo(a)pyrene	µg/L	0.01	< 0.01	< 0.01	< 0.01		0.81	
Benzo(b)fluoranthene	µg/L	0.05	< 0.05	< 0.05	< 0.05		0.75	
Benzo(b+k)fluoranthene	µg/L	0.1	< 0.1	< 0.1	< 0.1			
Benzo(g,h,i)perylene	µg/L	0.05	< 0.05	< 0.05	< 0.05		0.2	
Benzo(k)fluoranthene	µg/L	0.05	< 0.05	< 0.05	< 0.05		0.4	
Chrysene	µg/L	0.05	< 0.05	< 0.05	< 0.05		1	
Dibenzo(a,h)anthracene	µg/L	0.05	< 0.05	< 0.05	< 0.05		0.52	
Fluoranthene	µg/L	0.05	< 0.05	< 0.05	< 0.05		130	
Fluorene	µg/L	0.05	< 0.05	< 0.05	< 0.05		400	
Indeno(1,2,3,-cd)pyrene	µg/L	0.05	< 0.05	< 0.05	< 0.05		0.2	
Methylnaphthalene,1-	µg/L	0.05	< 0.05	< 0.05	< 0.05		1800	
Methylnaphthalene,2-	µg/L	0.05	< 0.05	< 0.05	< 0.05		1800	
Methylnaphthalene 2-(1-)	µg/L	1	< 1	< 1	< 1		1800	
Naphthalene	µg/L	0.05	0.08	< 0.05	< 0.05		1400	
Phenanthrene	µg/L	0.05	< 0.05	< 0.05	< 0.05		580	
Pyrene	µg/L	0.05	< 0.05	< 0.05	< 0.05		68	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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DATE RECEIVED: 03-Jun-22
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SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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Christine Burke
Lab Manager

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DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
OC Pesticides	3	Kingston	CS	09-Jun-22	C-PESTCL-01 K	EPA 8080

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW1	MW3	Dup 2		O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
	Sample I.D.		B22-16857-1	B22-16857-2	B22-16857-11			
	Date Collected		03-Jun-22	03-Jun-22	03-Jun-22			
Parameter	**Units**	**R.L.**						
Aldrin	µg/L	0.01	< 0.01	< 0.01	< 0.01		8.5	
Chlordane (alpha)	µg/L	0.05	< 0.05	< 0.05	< 0.05			
Chlordane (Gamma)	µg/L	0.05	< 0.05	< 0.05	< 0.05			
Chlordane Total (alpha+gamma)	µg/L	0.05	< 0.05	< 0.05	< 0.05		28	
DDD, 2,4-	µg/L	0.05	< 0.05	< 0.05	< 0.05			
DDD, 4,4-	µg/L	0.05	< 0.05	< 0.05	< 0.05			
DDD Total Water	µg/L	0.05	< 0.05	< 0.05	< 0.05		45	
DDE, 2,4-	µg/L	0.01	< 0.01	< 0.01	< 0.01			
DDE, 4,4-	µg/L	0.01	< 0.01	< 0.01	< 0.01			
DDE Total water	µg/L	0.01	< 0.01	< 0.01	< 0.01		20	
DDT, 2,4-	µg/L	0.05	< 0.05	< 0.05	< 0.05			
DDT, 4,4-	µg/L	0.05	< 0.05	< 0.05	< 0.05			
DDT Total water	µg/L	0.05	< 0.05	< 0.05	< 0.05		2.8	
Dieldrin	µg/L	0.01	< 0.01	< 0.01	< 0.01		0.75	
Lindane (Hexachlorocyclohexane, Gamma)	µg/L	0.01	< 0.01	< 0.01	< 0.01		1.2	
Endosulfan I	µg/L	0.05	< 0.05	< 0.05	< 0.05			
Endosulfan II	µg/L	0.05	< 0.05	< 0.05	< 0.05			
Endosulfan I/II	µg/L	0.05	< 0.05	< 0.05	< 0.05			
Endrin	µg/L	0.05	< 0.05	< 0.05	< 0.05		0.48	
Heptachlor	µg/L	0.004	< 0.004	< 0.004	< 0.004		2.5	
Heptachlor Epoxide	µg/L	0.006	< 0.006	< 0.006	< 0.006		0.048	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

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DATE REPORTED: 10-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D. / Sample I.D. / Date Collected		MW1 B22-16857-1 03-Jun-22	MW3 B22-16857-2 03-Jun-22	Dup 2 B22-16857-11 03-Jun-22		O. Reg. 153 Tbl. 3 - NPGW (µg/L)	
Parameter	**Units**	**R.L.**						
Hexachlorobenzene	µg/L	0.01	< 0.01	< 0.01	< 0.01		3.1	
Hexachlorobutadiene	µg/L	0.01	< 0.01	< 0.01	< 0.01		0.44	
Hexachloroethane	µg/L	0.01	< 0.01	< 0.01	< 0.01		94	
Methoxychlor	µg/L	0.009	< 0.009	< 0.009	< 0.009		6.5	

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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SAMPLE MATRIX: Groundwater	WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

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TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site: _____
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: _____ — [ ] Other: _____

REPORT NUMBER (Lab Use): B22-16857

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [x] Richmond Hill [ ] Windsor [ ] Barrie [ ] London

Organization: GEI Consultants	Address and Invoicing Address (if different): 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7	
Contact: Shirley Li		
Tel: 6479620307		
Fax: -	Quote No.: 2021_EPD	Project Name: 1225 Dundas Street East, Miss.
Email: sli@geiconsultants.com	P.O. No.: 2202029	Additional Info: -

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date: _____

ANALYSES REQUESTED (Print Test in Boxes)

Metal Suite 2 | Inorganics Suite 2 | PHC F1-F4 + VOCs | PAHs | OC Pesticides | Suspected Highly Contaminated

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Indicate Test For Each Sample By Using A Check Mark In The Box Provided	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
1	MW1	-	GW	22-06-03	AM	✓✓✓✓✓		-	-	10	Y
	~~MW2~~	-	GW	22-06-03		✓		-	-	6	
2	MW3	-	GW	22-06-03		✓✓✓✓✓		-	-	10	Y
3	MW4		GW	22-06-03		✓✓✓✓		-	-	9	Y
4	MW6		GW	22-06-03	PM	✓✓ ✓		-	-	6	Y
5	MW7		GW	22-06-03		✓		-	-	3	
6	MW9		GW	22-06-03		✓✓✓✓		-	-	9	Y
7	MW10		GW	22-06-03		✓		-	-	3	
8	MW12		GW	22-06-03		✓✓✓✓		-	-	9	Y
9	Trip Blank		GW	22-06-03		✓		-	-	3	
10	DUP1		GW	22-06-03		✓		-	-	3	
11	DUP2		GW	22-06-03		✓✓ ✓✓		-	-	7	Y

K → 1 Amber
→ 500 ml ambers
→ CN
O → genchem
→ metals
→ mercury
→ CrVI
RH → VOC VIALS

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	Shannon Love	Shannon Love
Sign:		
	22-06-03 Date (yy-mm-dd)/Time:	22-06-03 Date (yy-mm-dd)/Time:

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice: [ ]

# of Pieces:

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): C-Brew — Signature:
Date Received (yy-mm-dd): 22-06-03 — Time Received: 16:45
Laboratory Prepared Bottles: [ ] Yes [ ] No
Sample Temperature °C: 15
Labeled by:

Comments: 3 coolers in total — 0787 door to the right

Page 1 of 1

G

CADUCEON ENVIRONMENTAL LABORATORIES
Client committed. Quality assured.

CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: ---

REPORT No. B22-16929

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
Barrie ON L4N 0B7 Canada
Attention: Shirley Li

Caduceon Environmental Laboratories
110 West Beaver Creek Rd Unit 14
Richmond Hill ON L4B 1J9
Tel: 289-475-5442
Fax: 289-562-1963

DATE RECEIVED: 06-Jun-22
DATE REPORTED: 13-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
Cyanide	1	Kingston	kwe	07-Jun-22	A-CN-001 (k)	SM 4500CN
Conductivity	1	Holly Lane	SYL	08-Jun-22	A-COND-02 (o)	SM 2510B
pH	1	Holly Lane	SYL	08-Jun-22	A-PH-01 (o)	SM 4500H
Chromium (VI)	1	Holly Lane	ST	10-Jun-22	D-CRVI-01 (o)	MOE E3056
Mercury	1	Holly Lane	PBK	13-Jun-22	D-HG-02 (o)	SM 3112 B
Metals - ICP-OES	1	Holly Lane	AHM	09-Jun-22	D-ICP-01 (o)	SM 3120
Metals - ICP-MS	1	Holly Lane	TPR	10-Jun-22	D-ICPMS-01 (o)	EPA 200.8

µg/g = micrograms per gram (parts per million) and is equal to mg/Kg
F1 C6-C10 hydrocarbons in µg/g, (F1-btex if requested)
F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)
F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)
F4 C34-C50 hydrocarbons in µg/g
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
Any deviations from the method are noted and reported for any particular sample.
nC6 and nC10 response factor is within 30% of response factor for toluene:
nC10,nC16 and nC34 response factors within 10% of each other:
C50 response factors within 70% of nC10+nC16+nC34 average:
Linearity is within 15%:
All results expressed on a dry weight basis.
Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met.
If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC
QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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DATE RECEIVED: 06-Jun-22
DATE REPORTED: 13-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

	Client I.D.		MW5				O. Reg. 153	
	Sample I.D.		B22-16929-1				Tbl. 3 - NPGW (µg/L)	
	Date Collected		03-Jun-22					
Parameter	**Units**	**R.L.**						
pH @25°C	pH Units		7.48					
Conductivity @25°C	mS/cm	0.001	15.3					
Cyanide (Free)	µg/L	5	< 5				66	
Sodium	µg/L	200	**2700000**				2300000	
Antimony	µg/L	0.1	< 2				20000	
Arsenic	µg/L	0.1	< 2				1900	
Barium	µg/L	1	689				29000	
Beryllium	µg/L	0.1	< 2				67	
Boron	µg/L	5	157				45000	
Cadmium	µg/L	0.015	< 0.28				2.7	
Chromium	µg/L	2	< 2				810	
Chromium (VI)	µg/L	10	< 10 [1]				140	
Cobalt	µg/L	0.1	4.4				66	
Copper	µg/L	2	17				87	
Lead	µg/L	0.02	< 0.4				25	
Mercury	µg/L	0.02	0.05				0.29	
Molybdenum	µg/L	0.1	< 2				9200	
Nickel	µg/L	0.2	8.1				490	
Selenium	µg/L	1	< 20				63	
Silver	µg/L	0.1	0.4				1.5	
Thallium	µg/L	0.05	< 1				510	
Uranium	µg/L	0.05	7.31				420	
Vanadium	µg/L	0.1	< 2				250	
Zinc	µg/L	5	9				1100	

1 . Chromium (VI) result is based on total Chromium

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

CADUCEON ENVIRONMENTAL LABORATORIES
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CERTIFICATE OF ANALYSIS

Final Report

C.O.C.: --- **REPORT No. B22-16929**

Report To:

GEI Consultants
647 Welham Rd, Unit 14,
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Tel: 289-475-5442
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DATE RECEIVED: 06-Jun-22
DATE REPORTED: 13-Jun-22
SAMPLE MATRIX: Groundwater

JOB/PROJECT NO.: 1225 Dundas
P.O. NUMBER: 2202029
WATERWORKS NO.

Summary of Exceedances

Table 3 - Non-Potable Ground Water (µg/L)

MW5	Found Value	Limit
Sodium (µg/L)	2700000	2300000

O. Reg. 153 - Soil, Ground Water and Sediment Standards
Tbl. 3 - NPGW (µg/L) - Table 3 - Non-Potable Ground Water (µg/L)

Christine Burke
Lab Manager

R.L. = Reporting Limit
Test methods may be modified from specified reference method unless indicated by an *
Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

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TESTING REQUIREMENTS

- [x] O.Reg 153 — Table 3 — [ ] Medium/Fine — [x] Coarse — [ ] MISA Guidelines
- [x] RPI — [ ] ICC — [ ] Agricultural (O.Reg 153) — [ ] O.Reg 558 Leachate Analysis
- [x] Yes — [ ] No — Record of Site Condition (O.Reg 153) — Disposal Site: _____
- [ ] Provincial Water Quality Objectives — [ ] Landfill Monitoring
- [ ] Sewer Use By-Law: _____ — [ ] Other: _____

REPORT NUMBER (Lab Use): B22-16929

Are any samples to be submitted intended for Human Consumption under any Drinking Water Regulations? [ ] Yes [x] No (If yes, submit all Drinking Water Samples on a Drinking Water Chain of Custody)

Indicate Laboratory Samples are submitted to: [ ] Kingston [ ] Ottawa [x] Richmond Hill [ ] Windsor [x] Barrie [ ] London

Organization: GEI Consultants	Address and Invoicing Address (if different): 647 Welham Road, Unit 14, Barrie, Ontario, L4N 0B7
Contact: Shirley Li	
Tel: 6479620307	
Fax: -	Quote No.: 2021_EPD
Email: sli@geiconsultants.com	P.O. No.: 2202029
	Project Name: 1225 Dundas Street East, Miss[illegible]
	Additional Info: -

ANALYSES REQUESTED (Print Test in Boxes)

Metals Suite 2 | Inorganics Suite 2 | PHC F1-F4 + VOCs | PAHs | OC Pesticides | Suspected Highly Contaminated

TURNAROUND SERVICE REQUESTED (see back page)

- [ ] Platinum — 200% Surcharge
- [ ] Gold — 100% Surcharge
- [ ] Silver — 50% Surcharge
- [ ] Bronze — 25% Surcharge
- [x] Standard — 5-7 days
- [ ] Specific Date: _____

* Sample Matrix Legend: WW=Waste Water, SW=Surface Water, GW=Groundwater, LS=Liquid Sludge, SS=Solid Sludge, S=Soil, Sed=Sediment, PC=Paint Chips, F=Filter, Oil = Oil

Lab No:	Sample Identification	S.P.L.	Sample Matrix *	Date Collected (yy-mm-dd)	Time Collected	Indicate Test For Each Sample By Using A Check Mark In The Box Provided	✓	Field pH	Field Temp.	# Bottles/ Sample	Field Filtered(Y/N)
1	MW #5	-	GW	22-06-03	AM	✓ ✓		-	-	5	Y
		-	GW	22-06-03				-	-		
		-	GW	22-06-03				-	-		
			GW	22-06-03				-	-		
			GW	22-06-03				-	-		
			GW	22-06-03				-	-		
			GW	22-06-03				-	-		
	K -> CN		GW	22-06-03				-	-		
	O -> gen chem, metals, ~~22-06-03~~ mercury, ER VI		GW	~~22-06-03~~				-	-		
			GW	22-06-03				-	-		
			GW	22-06-03				-	-		
			GW	22-06-03				-	-		

SAMPLE SUBMISSION INFORMATION

	Sampled by:	Submitted by:
Print:	SL	Shirley Li
Sign:		
	22/06/06 Date (yy-mm-dd)/Time:	22/06/06 Date (yy-mm-dd)/Time:

SHIPPING INFORMATION

- [ ] Client's Courier
- [ ] Caduceon's Courier
- [x] Drop Off
- [ ] Caduceon (Pick-up)

Invoice [ ] — # of Pieces

REPORTING / INVOICING

- [ ] Report by Fax
- [x] Report by Email
- [x] Invoice by Email
- [ ] Invoice by Mail

SAMPLE RECEIVING INFORMATION (LABORATORY USE ONLY)

Received By (print): SHERI — Signature: [signature]
Date Received (yy-mm-dd): 22-06-06 — Time Received: 1145
Laboratory Prepared Bottles: [x] Yes [ ] No
Sample Temperature °C: 12 — Labeled by: [signature]

Comments:

Page 1 of 1

G

Appendix G

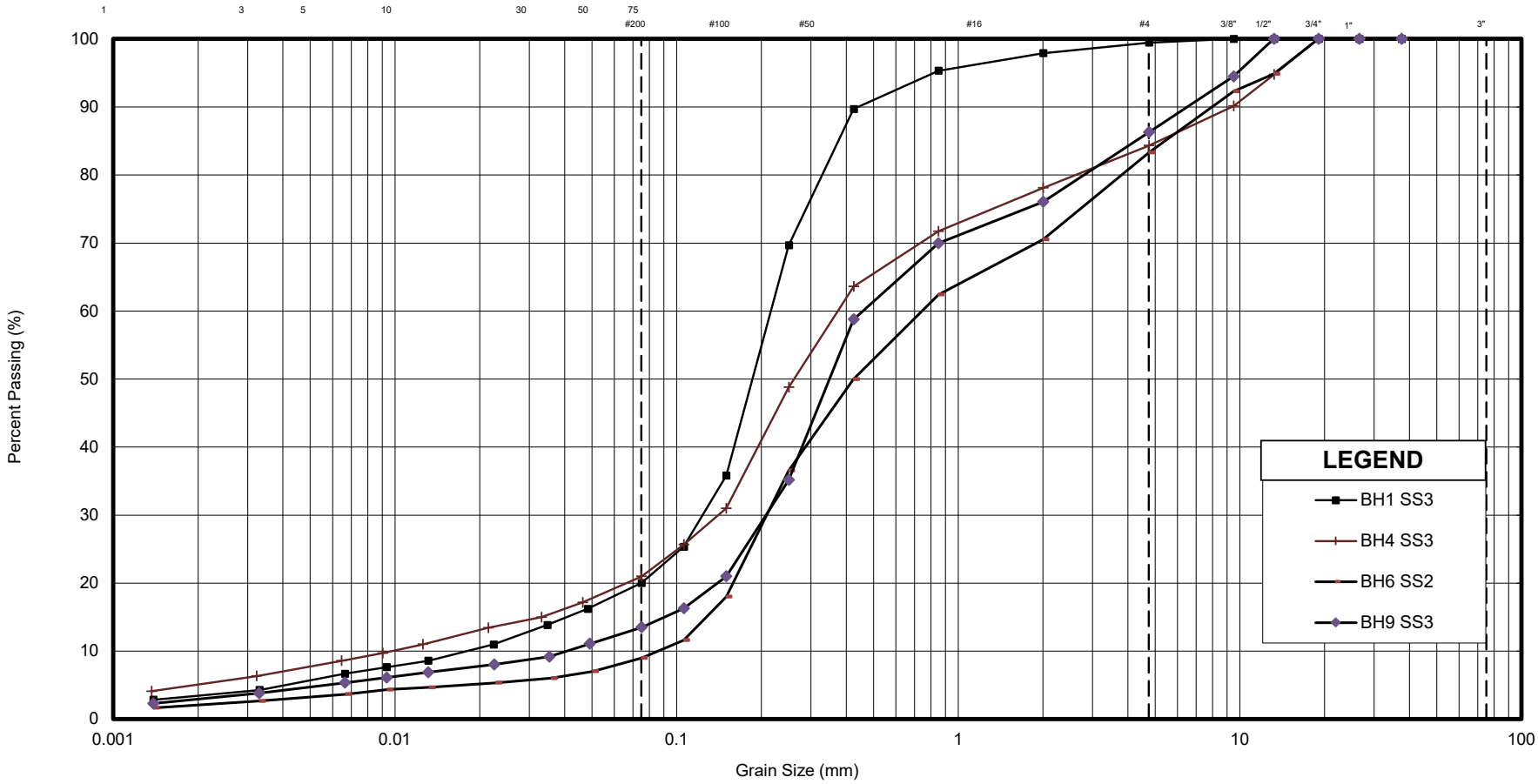
Grain Size Analysis

UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY AND SILT	SAND			GRAVEL	
	Fine	Medium	Coarse	Fine	Coarse

GRAIN SIZE IN MICROMETERS

SIEVE DESIGNATION (IMPERIAL)



Sample	Description	Gr.	Sa.	Si.	Cl.	D_{10}	D_{30}	D_{60}	C_u	C_c
BH1 SS3	SAND, Some Silt, Trace Clay, Trace Gravel	1	79	17	3	0.018	0.12	0.22	12	3.9
BH4 SS3	SAND, Some Silt, Some Gravel, Trace Clay	16	63	16	5	0.010	0.14	0.37	38	5.4
BH6 SS2	SAND, Some Gravel, Trace Silt, Trace Clay	17	74	7	2	0.086	0.21	0.74	8.7	0.68
BH9 SS3	SAND, Some Gravel, Some Silt, Trace Clay	14	72	11	3	0.041	0.21	0.46	11	2.3

GEI Consultants

GRAIN SIZE DISTRIBUTION - 1225 Dundas Street East - Dundix Realty Holdings

SAND

FIGURE No. B1

REF. No. 2202029

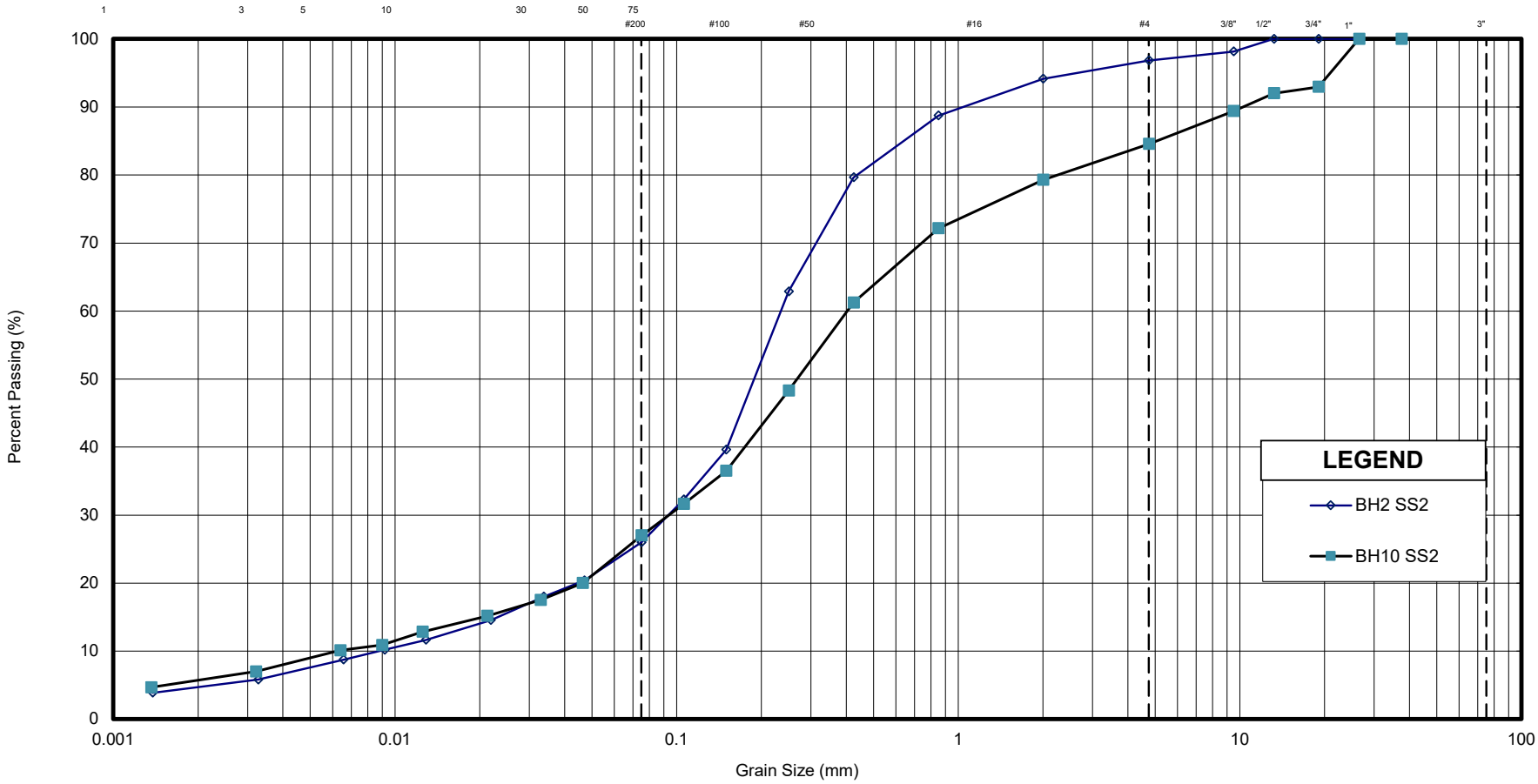
DATE July 2022

UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY AND SILT	SAND			GRAVEL	
	Fine	Medium	Coarse	Fine	Coarse

GRAIN SIZE IN MICROMETERS

SIEVE DESIGNATION (IMPERIAL)



Sample	Description	Gr.	Sa.	Si.	Cl.	D_{10}	D_{30}	D_{60}	C_u	C_c
BH2 SS2	SILTY SAND, Trace Clay, Trace Gravel	3	71	21	5	0.009	0.09	0.23	27	4.2
BH10 SS2	SILTY SAND, Some Gravel, Trace Clay	15	58	21	6	0.006	0.09	0.40	65	3.5

GEI Consultants

GRAIN SIZE DISTRIBUTION - 1225 Dundas Street East - Dundix Realty Holdings

SILTY SAND

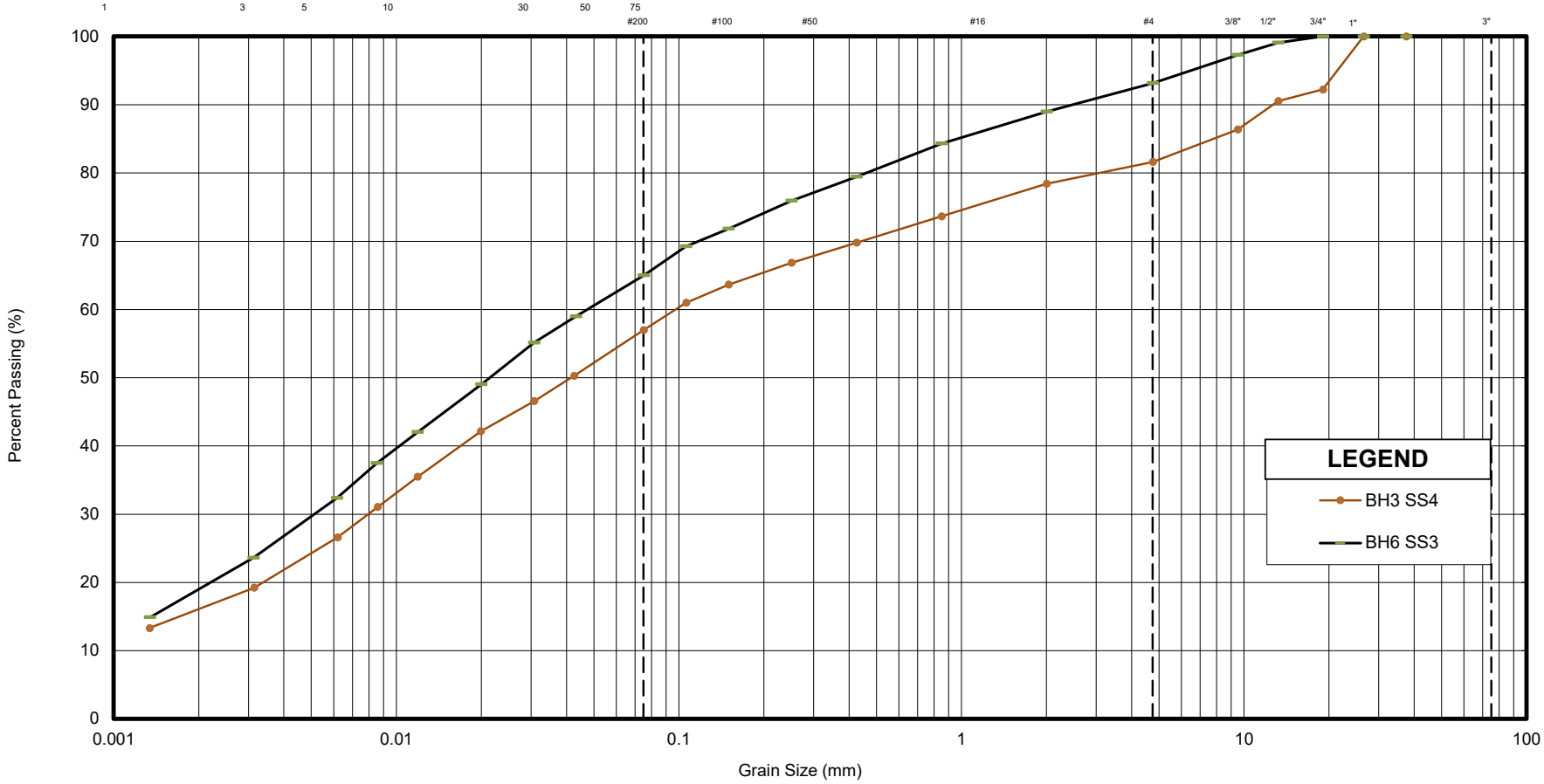
FIGURE No.	B2
REF. No.	2202029
DATE	July 2022

UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY AND SILT	SAND			GRAVEL	
	Fine	Medium	Coarse	Fine	Coarse

GRAIN SIZE IN MICROMETERS

SIEVE DESIGNATION (IMPERIAL)



Sample	Description	Gr.	Sa.	Si.	Cl.	D_{10}	D_{30}	D_{60}	C_u	C_c
BH3 SS4	SANDY SILT, Some Gravel, Some Clay	18	25	41	16	-	0.008	0.097	-	-
BH6 SS3	SANDY SILT, Some Clay, Trace Gravel	7	28	46	19	-	0.005	0.047	-	-

GEI Consultants

GRAIN SIZE DISTRIBUTION - 1225 Dundas Street East - Dundix Realty Holdings

SANDY SILT GLACIAL TILL

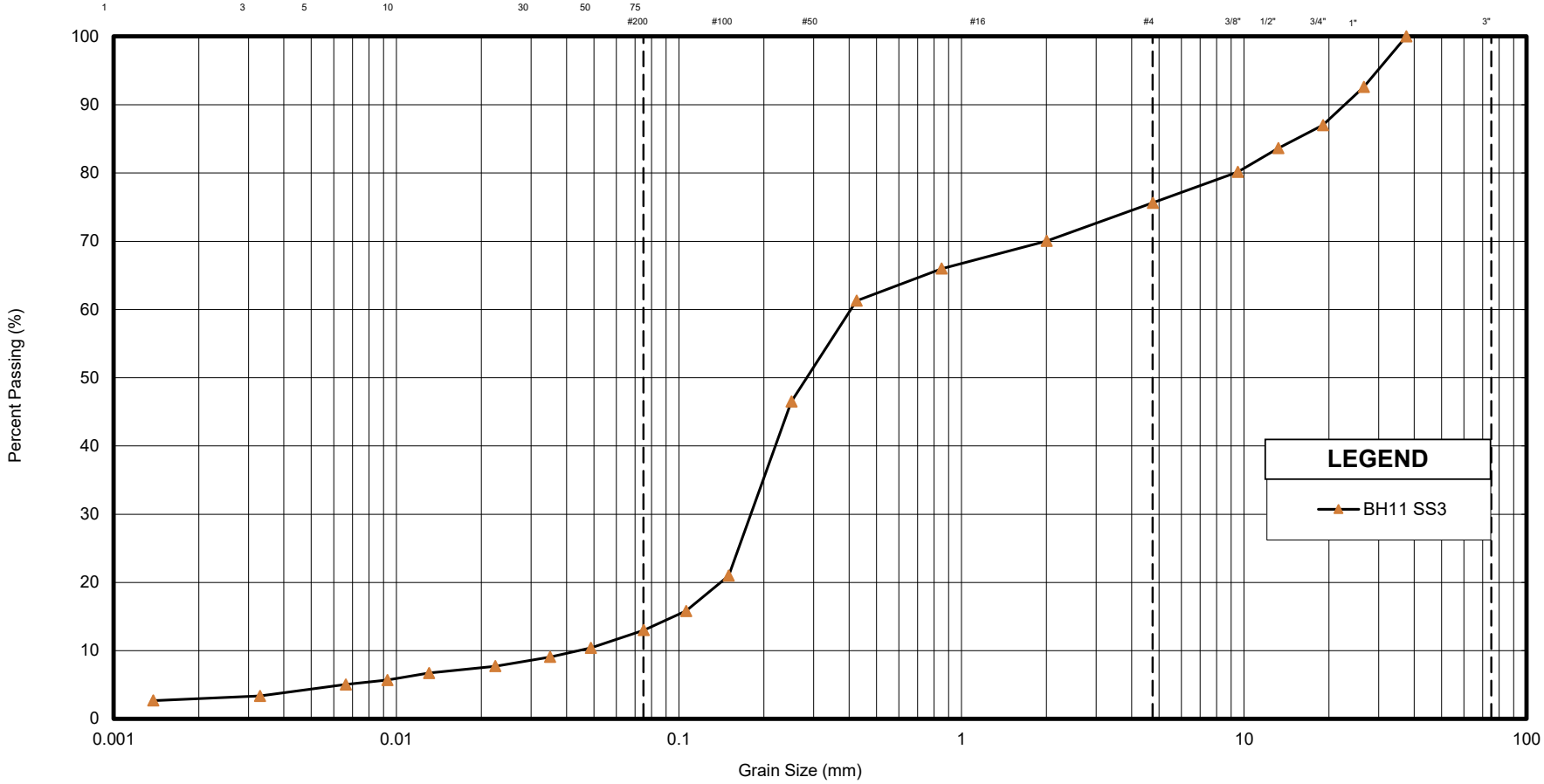
FIGURE No.	B3
REF. No.	2202029
DATE	July 2022

UNIFIED SOIL CLASSIFICATION SYSTEM

CLAY AND SILT	SAND			GRAVEL	
	Fine	Medium	Coarse	Fine	Coarse

GRAIN SIZE IN MICROMETERS

SIEVE DESIGNATION (IMPERIAL)



Sample	Description	Gr.	Sa.	Si.	Cl.	D_{10}	D_{30}	D_{60}	C_u	C_c
BH11 SS3	GRAVELLY SAND, Some Silt, Trace Clay	24	63	10	3	0.044	0.18	0.41	9.2	1.8

GEI Consultants

GRAIN SIZE DISTRIBUTION - 1225 Dundas Street East - Dundix Realty Holdings

GRAVELLY SAND

FIGURE No.	B4
REF. No.	2202029
DATE	July 2022

GRAIN SIZE DISTRIBUTION REPORT
GRANULAR 'B' TYPE I

GEI Consultants

Project Name:	1225 Dundas Street East	**Date Sampled:**	-
Project No.:	2202029	**Date Tested:**	June 13, 2022
Sample Loc.:	BH 1, 2, 3, 4, 5 and 12 (Composite)	**Lab #:**	4132
Client:	Dundix Realty Holdings	**Technician:**	F. Contento
Supplier:	-		

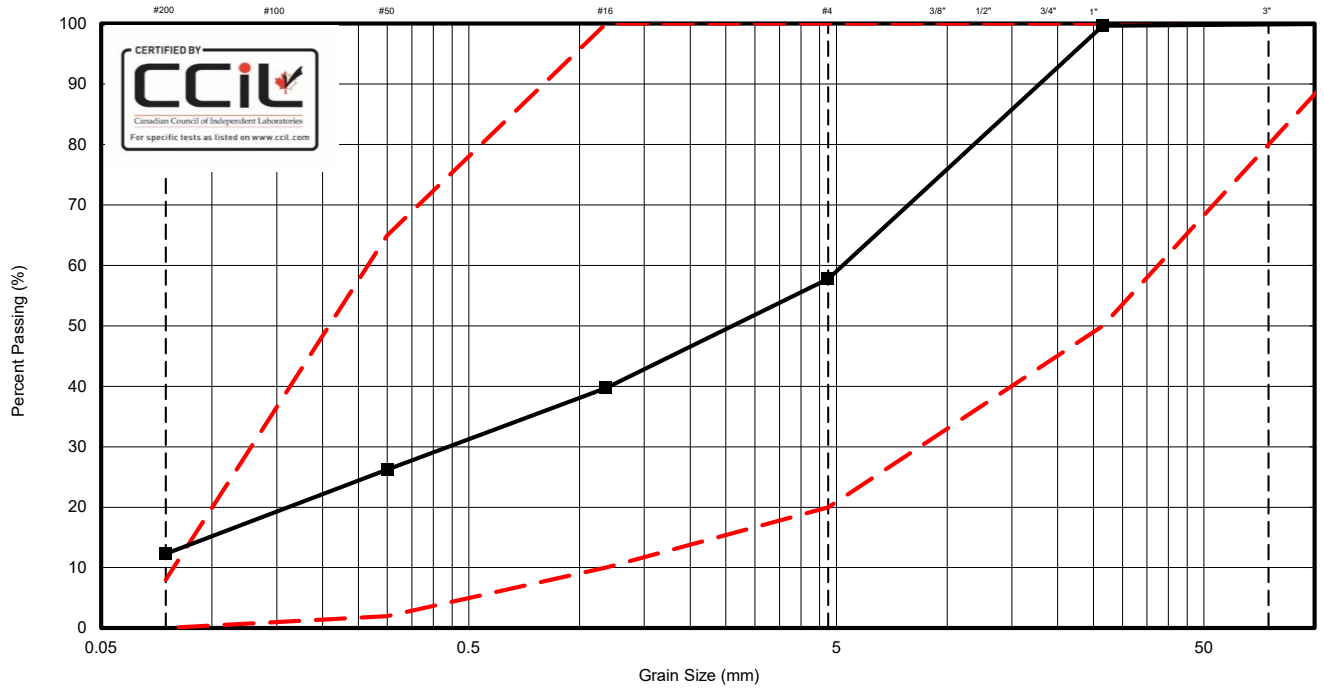
SAMPLE DATA

Total Mass of Sample (g):	7021.8	% Passing 75um by washing:	12.02
Total Mass retained on the 4.75mm sieve (g):	2966.1	Total Losses (%): (Maximum 0.3%)	0.00
Total Mass passing the 4.75 mm sieve (g):	4055.7	Percent Crushed: (Min. 60% - Gran A)	N/A
Percent Coarse Aggregate:	42.24	Not Applicable - Gran. "B" Type 1	
Percent Fine Aggregate:	57.76	Asphalt Coated Particles (%) (Max. 30%)	0%

TOTAL SAMPLE PERCENTAGES					COARSE AND FINE PORTION PERCENTAGES		
Sieve Size (mm)	Percent Passing	Min Spec. (%)	Max Spec. (%)	Pass?	Sieve Size	Percent Retained *	Percent Retained **
150	100.0	100	100	Y	150	0.0	-
26.5	99.7	50	100	Y	26.5	0.8	-
19.0	-	-	-	-	19.00	-	-
13.2	-	-	-	-	13.2	-	-
9.5	-	-	-	-	9.5	-	-
4.75	57.8	20	100	Y	4.75	100.0	-
1.18	39.7	10	100	Y	1.18	-	31.2
0.30	26.2	2	65	Y	0.30	-	54.6
0.15	-	-	-	-	0.15	-	-
0.075	12.3	0	8	N	0.075	-	78.7

* Based on Coarse Portion only ** Based on Fine Portion only

Material Does Not Meet OPSS.MUNI 1010 Specifications for Granular 'B' Type I



GRAIN SIZE DISTRIBUTION REPORT
GRANULAR 'A'

GEI Consultants

Project Name:	1225 Dundas Street East	**Date Sampled:**	-
Project No.:	2202029	**Date Tested:**	June 13, 2022
Sample Loc.:	BH 1, 2, 3, 4, 5 and 12 (Composite)	**Lab #:**	4132
Client:	Dundix Realty Holdings	**Technician:**	F. Contento
Supplier:	-		

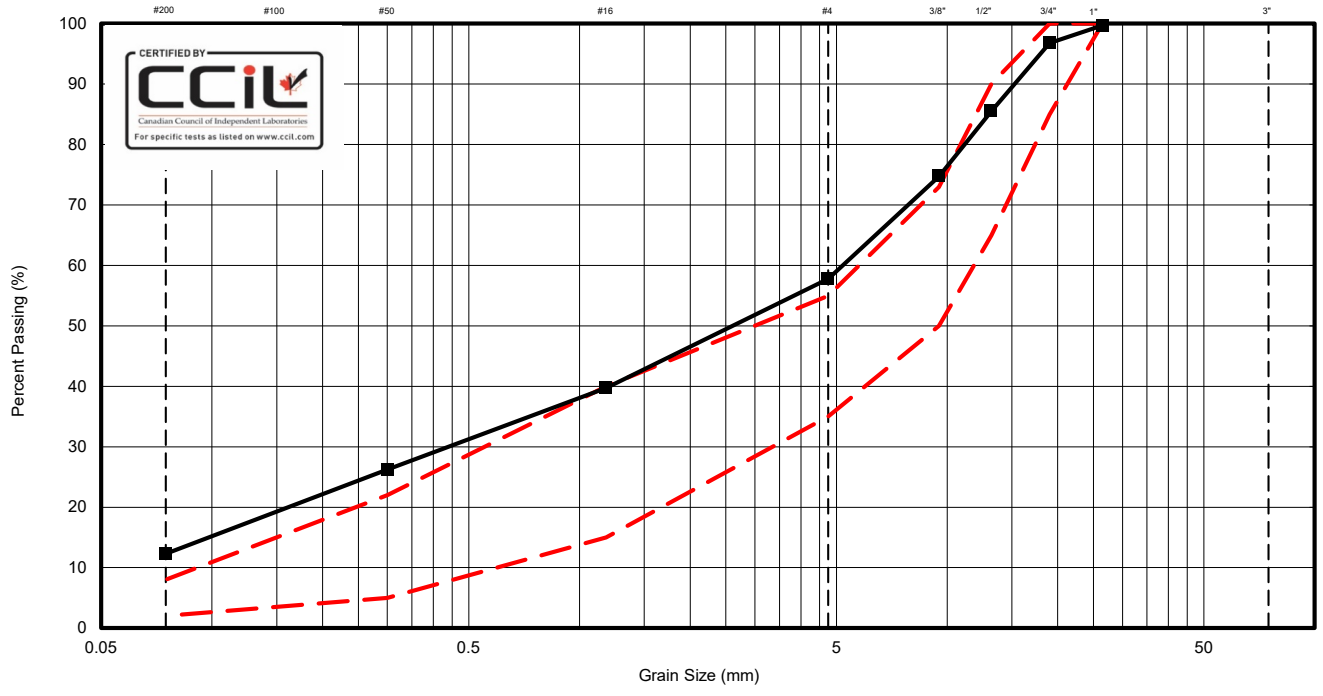
SAMPLE DATA

Total Mass of Sample (g):	7021.8	% Passing 75um by washing:	12.02
Total Mass retained on the 4.75mm sieve (g):	2966.1	Total Losses (%): (Maximum 0.3%)	0.00
Total Mass passing the 4.75 mm sieve (g):	4055.7	Percent Crushed: (Min. 60% - Gran A)	-
Percent Coarse Aggregate:	42.24	Not Applicable - Gran. "B" Type 1	
Percent Fine Aggregate:	57.76	Asphalt Coated Particles (%) (Max. 30%)	0%

TOTAL SAMPLE PERCENTAGES					COARSE AND FINE PORTION PERCENTAGES		
Sieve Size (mm)	Percent Passing	Min Spec. (%)	Max Spec. (%)	Pass?	Sieve Size	Percent Retained *	Percent Retained **
150	-	-	-	-	150	-	-
26.5	99.7	100	100	N	26.5	0.8	-
19.0	96.8	85	100	Y	19.00	7.6	-
13.2	85.5	65	90	Y	13.2	34.3	-
9.5	74.7	50	73	N	9.5	59.8	-
4.75	57.8	35	55	N	4.75	100.0	-
1.18	39.7	15	40	Y	1.18	-	31.2
0.30	26.2	5	22	N	0.30	-	54.6
0.15	-	-	-	-	0.15	-	-
0.075	12.3	2	8	N	0.075	-	78.7

* Based on Coarse Portion only ** Based on Fine Portion only

Material Does Not Meet OPSS.MUNI 1010 Specifications for Granular 'A'



647 Welham Road, Unit 14
Barrie, Ontario

GRAIN SIZE DISTRIBUTION REPORT
GRANULAR 'B' TYPE I

GEI Consultants

Project Name:	1225 Dundas Street East	**Date Sampled:**	-
Project No.:	2202029	**Date Tested:**	June 13, 2022
Sample Loc.:	BH 6, 7, 8 and 11 (Composite)	**Lab #:**	4133
Client:	Dundix Realty Holdings	**Technician:**	F. Contento
Supplier:	-		

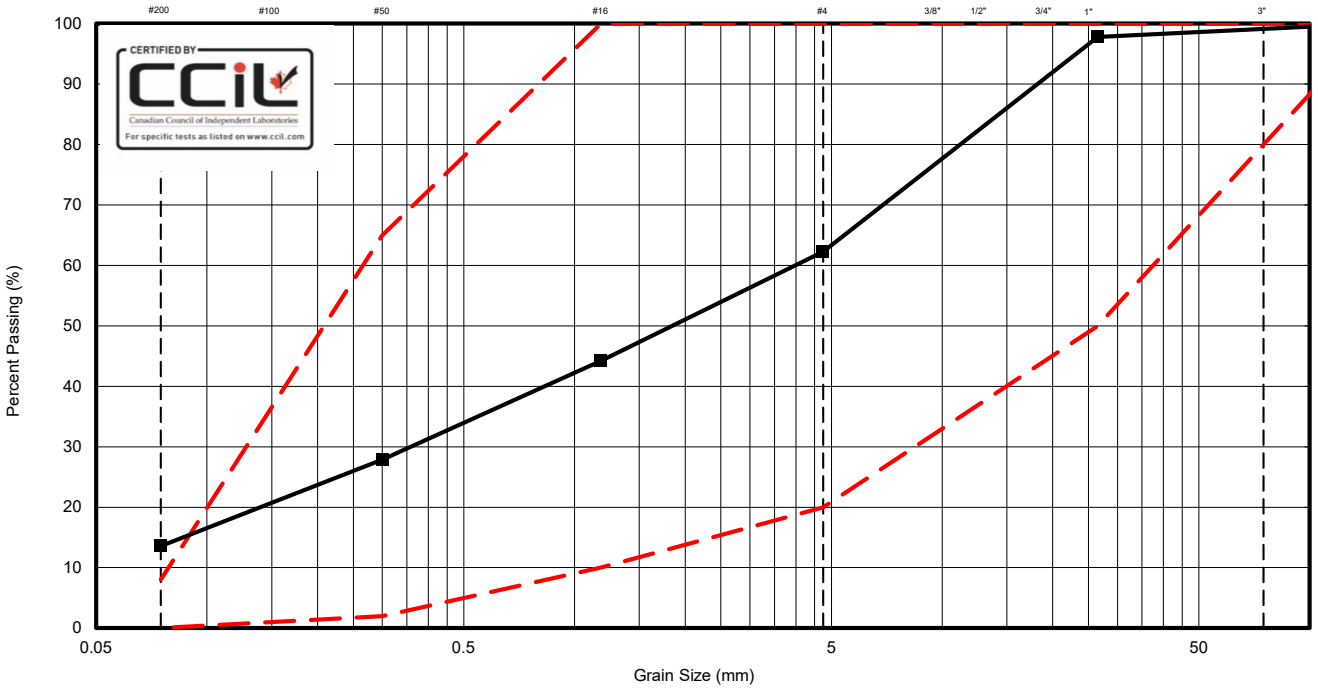
SAMPLE DATA

Total Mass of Sample (g):	2050.9	% Passing 75um by washing:	13.30
Total Mass retained on the 4.75mm sieve (g):	773.1	Total Losses (%): (Maximum 0.3%)	0.00
Total Mass passing the 4.75 mm sieve (g):	1277.8	Percent Crushed: (Min. 60% - Gran A)	N/A
Percent Coarse Aggregate:	37.70	Not Applicable - Gran. "B" Type 1	
Percent Fine Aggregate:	62.30	Asphalt Coated Particles (%) (Max. 30%)	0%

TOTAL SAMPLE PERCENTAGES					COARSE AND FINE PORTION PERCENTAGES		
Sieve Size (mm)	Percent Passing	Min Spec. (%)	Max Spec. (%)	Pass?	Sieve Size	Percent Retained *	Percent Retained **
150	100.0	100	100	Y	150	0.0	-
26.5	97.8	50	100	Y	26.5	5.9	-
19.0	-	-	-	-	19.00	-	-
13.2	-	-	-	-	13.2	-	-
9.5	-	-	-	-	9.5	-	-
4.75	62.3	20	100	Y	4.75	100.0	-
1.18	44.2	10	100	Y	1.18	-	29.0
0.30	27.9	2	65	Y	0.30	-	55.2
0.15	-	-	-	-	0.15	-	-
0.075	13.5	0	8	N	0.075	-	78.3

* Based on Coarse Portion only ** Based on Fine Portion only

Material Does Not Meet OPSS.MUNI 1010 Specifications for Granular 'B' Type I



647 Welham Road, Unit 14
Barrie, Ontario

GRAIN SIZE DISTRIBUTION REPORT
GRANULAR 'A'

GEI Consultants

Project Name:	1225 Dundas Street East	**Date Sampled:**	-
Project No.:	2202029	**Date Tested:**	June 13, 2022
Sample Loc.:	BH 6, 7, 8 and 11 (Composite)	**Lab #:**	4133
Client:	Dundix Realty Holdings	**Technician:**	F. Contento
Supplier:	-		

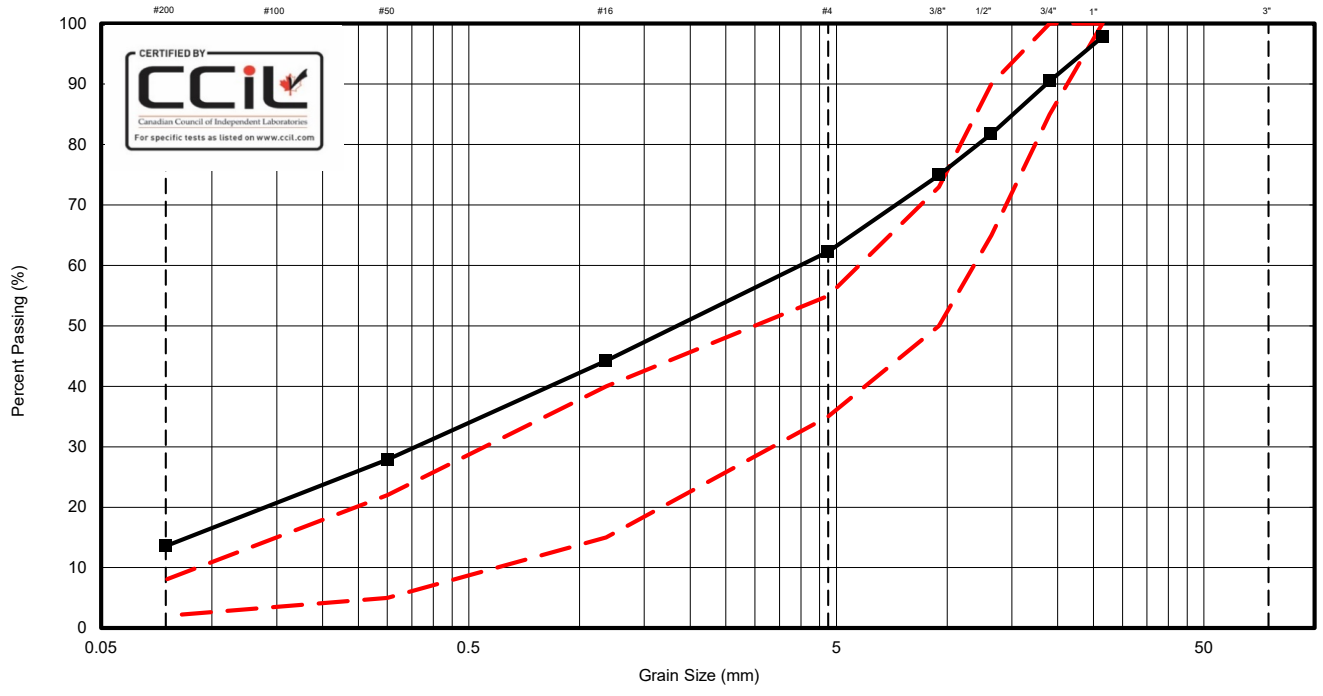
SAMPLE DATA

Total Mass of Sample (g):	2050.9	% Passing 75um by washing:	13.30
Total Mass retained on the 4.75mm sieve (g):	773.1	Total Losses (%): (Maximum 0.3%)	0.00
Total Mass passing the 4.75 mm sieve (g):	1277.8	Percent Crushed: (Min. 60% - Gran A)	-
Percent Coarse Aggregate:	37.70	Not Applicable - Gran. "B" Type 1	
Percent Fine Aggregate:	62.30	Asphalt Coated Particles (%) (Max. 30%)	0%

TOTAL SAMPLE PERCENTAGES					COARSE AND FINE PORTION PERCENTAGES		
Sieve Size (mm)	Percent Passing	Min Spec. (%)	Max Spec. (%)	Pass?	Sieve Size	Percent Retained *	Percent Retained **
150	-	-	-	-	150	-	-
26.5	97.8	100	100	N	26.5	5.9	-
19.0	90.5	85	100	Y	19.00	25.2	-
13.2	81.8	65	90	Y	13.2	48.4	-
9.5	74.9	50	73	N	9.5	66.5	-
4.75	62.3	35	55	N	4.75	100.0	-
1.18	44.2	15	40	N	1.18	-	29.0
0.30	27.9	5	22	N	0.30	-	55.2
0.15	-	-	-	-	0.15	-	-
0.075	13.5	2	8	N	0.075	-	78.3

* Based on Coarse Portion only ** Based on Fine Portion only

Material Does Not Meet OPSS.MUNI 1010 Specifications for Granular 'A'



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