

REPORT ON
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
4375 MILLCROFT PARK DRIVE
BURLINGTON, ONTARIO

REPORT NO.: 5607-21-EB
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PREPARED FOR
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1.0 EXECUTIVE SUMMARY

Toronto Inspection Ltd. was retained by Salotto Group Inc. (the 'Client') to conduct a Phase One Environmental Site Assessment (Phase One ESA) for a property located at 4357 Millcroft Park Drive in Burlington, Ontario (hereinafter referred to as the 'Site' or the 'Phase One Property'). The Phase One ESA was conducted in general accordance with Ontario Regulation 153/04, Records of Site Condition – Part XV.1 of the Environmental Protection Act, (O. Reg. 153/04 as amended). It is understood that this Phase One ESA was conducted for due diligence purposes for submission to the municipality of Halton Region.

The objective of the Phase One ESA was to determine if there is evidence of actual or potential contamination as a result of the current and/or historical activities on Site or the surrounding properties that may potentially result in an adverse environmental impact on the Phase One Property.

The Phase One Property is a near rectangular-shaped property located on the southwest quadrant of Dundas Street (Regional Route 5) and Appleby Line in Burlington, Ontario. The specific location is approximately 350 m east of the intersection of Dundas Street and Millcroft Park Drive. The Phase One Property, which consists of vacant land, has an approximate area of 2,43 ha. Based on the review of the 1878 Historical County Map of Halton and the historical aerial photographs, the Phase One Property was considered to have been first developed prior 1878 for agricultural purposes.

Based on the local topography, the local groundwater flow direction is inferred to flow southeast parallel to Sheldon Creek, which is the closest water body located approximately 295 m from the Site boundary. Sheldon Creek flows southeast and eventually drains into Lake Ontario. The surficial geology in the area generally consisted of clay to silt-textured till (derived from glaciolacustrine deposits or shale). The bedrock geology under the Phase One Property consists of shale, limestone, dolostone, siltstone of the Georgian Bay Formation; Blue Mountain Formation; Billings Formation; Collinwood Member, Eastview member. The depth to bedrock is unknown.

Four (4) Potentially Contaminating Activities (PCAs) were identified within the Phase One Study Area - One undefined PCA associated with a spill of 220 liters of mineral oil; PCA#8 – Chemical Manufacturing, Processing and Bulk Storage; PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Application and PCA#52 Storage, maintenance, fuelling and repair of equipment, vehicle, and material used to maintain transportation system. However, based on distance, gradient orientation, and soil composition within the Phase One Study Area, the PCAs identified on this Phase One ESA investigation are anticipated not to create an Area of Potential Environmental Concern (APEC) at the Phase One Property.

In summary, the historical and current activities from on-Site and off-Site properties, as identified at the time of this Phase One ESA, do not represent significant potential environmental concern which may adversely impact the subsurface conditions of the Phase One Property.

It is *Toronto Inspection Ltd.`s* opinion that at the time of writing this Phase One ESA report, based on a review of the available documents and information that no further investigation is recommended for the Phase One Property.

2.0 INTRODUCTION

Toronto Inspection Ltd. was retained by Salotto Building Group Inc. (the 'Client') to conduct a Phase One Environmental Site Assessment (Phase One ESA) for a property located at 4357 Millcroft Park Drive in Burlington, Ontario (hereinafter referred to as the 'Site' or the 'Phase One Property'). The Phase One ESA was conducted in general accordance with Ontario Regulation 153/04, Records of Site Condition – Part XV.1 of the Environmental Protection Act, (O. Reg. 153/04 as amended). It is understood that this Phase One ESA was conducted for due diligence purposes for submission to the municipality of Halton Region.

2.1. Objective

The Phase One ESA was conducted to determine if there is evidence of actual or potential contamination at the Site and if the activities of surrounding properties pose an environmental concern to the Site, for the purpose of satisfying the Phase One ESA general objectives as listed in O.Reg. 153/04:

- To develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the phase one property.
- To determine the need for a Phase Two ESA.
- To provide a basis for carrying out any Phase Two ESA if required.
- To provide adequate preliminary information about environmental conditions in the land or water on, in or under the Phase One Property for the conduct of a risk assessment following completion of a Phase Two environmental site assessment.

2.2. Phase One Property Information

Site Description: The Phase One Property is a quasi-rectangular shaped property located on the southwest quadrant of Dundas Street (Regional Route 5) and Appleby Line in Burlington, Ontario. The specific location is approximately 350 m east of the intersection of Dundas Street and Millcroft Park Drive. The Phase One Property, which consists of vacant land, is described as follows:

Table 2.2-1: Summary of Phase One Property Information

General Information	Description
Municipal Address	4375 Millcroft Park Drive, Burlington, Ontario
Property Identification Number (PIN)	07182-1652 (LT)
Legal description	BLOCK 133, Plan 20M811, Burlington. T/W EASE 149995 Over PT 8, 20R6131. T/W EASE 153572 Over PTS 9 & 10, 20R6131
Current land use	Agricultural
Current occupant	Vacant
Ownership	Salotto Building Group Inc.
Current zoning	R3.2 (Residential)
Proposed land use	Residential – single-family dwellings
Property coordinates (approximate centroid)	Zone 17T 596340.58m E 4805763.13m N
Approximate area of Site	2,43 ha

The layout of the Phase One Property is shown on Image 1, below.



Image showing the Phase One Property at 4375 Millcroft Park Drive, Burlington, Ontario
Source: City of Burlington Interactive Map (2019)

Site Contact Information: Ms. Lisa La Civita, the Development Manager, provided authorization for *Toronto Inspection Ltd*. to conduct this Phase One ESA. The client`s contact information is provided below:

Contact: Lisa La Civita
Tel: 905-660-3765
Email: llacivita@armlandgroup.com

3.0 SCOPE OF INVESTIGATION

3.1. Scope of Work

The scope of work of this Phase One ESA consisted of:

- A review of reasonably accessible records pertaining to the current and/or past uses of the Site and properties within the Phase One Study Area.
- An inspection of the Site and accessible areas surrounding the Site to identify evidence of potential environmental concerns at the Site and within the Phase One Study Area.
- Interview(s) with person(s) having knowledge of on-Site activities and operations.
- Preparation of this report to document the findings of the Phase One ESA report.

3.2. Methodology and Limitations

Methodology

This Phase One ESA was conducted in general accordance with O.Reg. 153/04 as amended.

Based on the general land use, topographical and hydrogeological conditions of the Site and surrounding areas, a search distance of 250 m from the Site was determined to be sufficient as the Phase One Study Area. For details refer to Section 4.1.1. *Phase One Study Area Determination*.

Information from various sources were searched and reviewed as part of the Phase One ESA work program. The source information was searched in accordance with Schedule D of O. Reg. 153/04 as amended. A detailed list of records reviewed is included in Section 9 – References. Copies of select sources of documents are included in the Appendices as references.

The Phase One Property is not defined as an Enhanced Investigation Property. Therefore, site operating records that are applicable or specific for an industrial property, a commercial garage, a bulk liquid dispensing facility, or a dry-cleaning equipment operator were not included in this Phase One ESA.

The Phase One ESA site visit was conducted by Mr. Albert Lee-Wah, BES of *Toronto Inspection Ltd.* on March 31, 2021. The site visit included a walkthrough of the Phase One Property in all accessible areas to document site observations and photograph details pertinent to the Phase One ESA requirements.

Limiting Conditions of Phase One ESA

All accessible areas of the Phase One Property were inspected for evidence of potential environmental concern. The inspection of the adjacent properties was conducted from vantage points at the Phase One Property and other publicly accessible areas.

It should be noted that a response from the Ministry of the Environment, Conservation and Parks (MECP) Freedom of Information (FOI) office has yet to be received at the time this report was prepared.

4.0 RECORDS REVIEW

A records search was conducted to determine if area(s) of actual and potential environmental concern exist on the Phase One Property and within the Phase One Study Area. Details of the findings are provided in the following sections.

4.1. General

4.1.1. Phase One Study Area Determination

As indicated from the records review, there were no large historical or recent industrial facilities within 1 km of the Phase One Property, which include: active or closed waste disposal sites, historical coal gasification plant waste sites, or historical industrial sites which produced or used coal tar and related tars. In addition, the Phase One Property was in an area consisting mainly of residential land usage.

Based on the general land use indicated above, as well as the topographical and hydrogeological conditions of the Phase One Property and surrounding areas, the Phase One ESA Study Area was established to comprise the Phase One Property as well as properties located, in whole or in part, within 250 m of the site boundaries. The regional topography and the Site location are shown on Figure No. 1, Appendix A.

4.1.2. First Developed Use Determination

According to a review of the Historical County Map of Halton (1878), the Phase One Property was part of a Lot owned by Neil J. Campbell and it was part of agricultural fields. The 1954 aerial photograph shows that the Phase One Property and the Study Area remained as agricultural. Based on the review of the 1878 Historical County Map and the 1954 historical aerial photograph, the Phase One Property was considered to have been first developed prior 1878 for agricultural purposes.

4.1.3. Fire Insurance Plans

A search for fire insurance plans (FIPs) for the Phase One Property and Study Area was conducted at Toronto Reference Library; however, no FIPs were available for the Phase One Property and the Study Area.

4.1.4. Chain of Title

A chronological chain of title for the Site is summarized in the table below. A copy of the Chain of Title, Parcel Register, and the Property Index Map, provided by a private researcher retained by *Toronto Inspection Ltd*. is attached in Appendix B.

Table 4.1.4-1: Ownership of Site from 1808-2021

Municipal Address	4357 Millcroft Park Drive, Burlington	
Legal Description	BLOCK 133, Plan 20M811, Burlington. T/W EASE 149995 Over PT 8, 20R6131. T/W EASE 153572 Over PTS 9 & 10, 20R6131	
PIN#	07182-1652 (LT)	
Registered Date / Doc. Type	Ownership	
	Party From	Party To
12/02/1808	Crown	Samuel VAN EVERY
16/03/1809 / Deed	Samuel Van Every	John KEAGEY
10/09/1833 / Deed	John Keagey	Magdalene HINES
30/10/1837 / Deed	Magdalene Hines	John HINES
30/10/1837 / Deed	John Hines	William B. HINES
31/01/1867 / Deed	William B. Hines	Neil CAMPBELL
17/06/1890 / Mortgage	Neil Campbell	The Guelph & Ontario Loans & Savings (Mortgagee)
08/01/1896 / Deed	The Guelph & Ontario Loans & Savings (Neil Campbell Defaulted in Mtg 4672)	William Anderson IRVING
16/11/1946 / Deed	William Anderson Irving	Erwin GUNBY
08/12/1969 / Deed	Erwin Gunby	229823 Investments Limited
04/08/1972 / Deed	229823 Investments Limited	Valjim Construction Limited
12/03/1973 / Deed	Valjim Construction Limited	Far North Investors Corporation Limited
14/06/1973 / Deed	Far North Investors Corporation Limited	Monarch Construction Limited
19/04/2002 / Deed	Monarch Construction Limited	The Roman Catholic Episcopal Corporation of the Diocese of Hamilton in Ontario
13/07/2021 / Deed **(Present owner)**	The Roman Catholic Episcopal Corporation of the Diocese of Hamilton in Ontario	**Salotto Building Group (BT) Inc.**

4.1.5. City Directory

Selected volumes from Vernon`s Burlington City Directory from Metro Toronto Reference Library for the years 2005 to 2013 were available for review at the Toronto Reference Library. Based on the directory searches, no listings were available for the Phase One Property and the first listing within the Study Area appeared in 2005. A review of the city directory listings indicated predominant residential land usage within the Phase One Study Area during the years searched and no issues of potential environmental concern associated with the listings were identified.

4.1.6. Environmental Reports and Other Reports

The following reports were made available to *Toronto Inspection Ltd*. for review.

- "*Phase I Environmental Site Assessment – 4357 Millcroft Park Drive, Burlington, Ontario",* dated April 13, 2021, prepared by *Toronto Inspection Ltd*. for Armland Management Inc.

- "*Preliminary Geotechnical Investigation – 4357 Millcroft Park Drive, Burlington, Ontario*", dated April 9, 2021, prepared by *Toronto Inspection Ltd*. for Armland Management Inc.

- "*Soil Sampling and Analytical Program Letter for 4375 Millcroft Park Drive, Burlington, Ontario*", dated April 21, 2021, prepared by *Toronto Inspection Ltd*. for Armland Management Inc.

Table 4.1.6-1: Summary of Environmental Reports and Other Reports

Report Reviewed	Relevant Information / Recommendation
Toronto Inspection Ltd. 2021 Phase I Environmental Site Assessment – 4375 Millcroft Park Drive, Burlington, Ontario	• Relevant information noted by *Toronto Inspection Ltd.* in 2021 is summarized below: o The Site consisted of a vacant land and based on the historical county map; the Site was part of a farmland. o The surrounding areas of the Site were developed into residential subdivisions. o Based on the records review, no issued of potential environmental concern were identified at the Site. o ERIS reported seven (7) plottable records and thirteen (13) unplottable records for the Study Area. For the plottable concerns, only one would have a potential impact. The listing was associated to a 2009 electrical transformer fire and spill of 220 liters of mineral oil due to a transport accident. Based on the distance, and limited quantity of mineral oil, a potential impact to the Site was considered unlikely. o A school south of the Site was registered as a waste generator. The waste generator records were considered of low concern due to the limited volume of waste generated by the school and the school`s downstream location to the Site. o At the time of the site reconnaissance on March 30, 2021, a small pile of mixed material with crushed and block concrete was observed at the southwest portion of the Site. o Based on the records review, site reconnaissance and interview conducted during the Phase I ESA, there was low risk associated with the Site. Therefore, no further investigation was recommended for the Site.
Toronto Inspection Ltd. 2021 Preliminary Geotechnical Investigation – 4375 Millcroft Park Drive, Burlington, Ontario	• Relevant information noted by *Toronto Inspection Ltd.* in 2021 is summarized below: o As the time of the investigation, the Site was vacant, and the Site grade was slightly dipping from northwest to southeast. The surrounding properties were occupied by residential subdivisions to the north, south and west and a park to the east. o Five sampled boreholes, 20BH-1 to 20BH-5, were drilled on April 5, 2021. o The boreholes revealed that the subsoil, below the 75 mm to 200 mm thick surficial topsoil, consisted of a layer of fill, overlaying a native sandy silt till deposit, followed by weathered shale. o A layer of fill material was encountered below the topsoil at the borehole locations. The fill was composed generally of clayey to sandy silt with traces of gravel and organics. Seams of gravelly sand, and soil with a slight organic odour were encountered in some of the boreholes. The fill at the borehole locations extended to depths of between 0.9 m and 2.2 m from grade.
Toronto Inspection Ltd. 2021 Soil Sampling and Analytical Program Letter - 4375 Millcroft Park Drive, Burlington, Ontario	• Relevant information noted by *Toronto Inspection Ltd.* is summarized below: o Two (2) soil samples, 21BH-1 SS1 and 21BH-3 SS1 were collected and submitted to SGS Laboratories, a CALA certified laboratory, for analyses of the following parameters: Metal and Inorganics (M&I) and Organochlorine Pesticides (OCPs). o Based on the laboratory results, the OCP and M&I parameters at the tested locations met the MECP Table 1SCS for Residential/Parkland/Institutional/Industrial/Commercial/Community property use on the date of sampling.

4.2. Environmental Source Information

4.2.1. Ministry of the Environment and Climate Change (MECP) Inventory Records

The following documents were reviewed:

- MOE Inventory of Coal Gasification Plant Waste Sites in Ontario, April 1987
- MOE Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario, November 1998
- MOE Waste Disposal Site Inventory, June 1991
- MOE Inventory of PCB Storage Sites, January 1992

A review of the above-listed documents indicated that no active or closed waste disposal sites, historical coal gasification plant waste sites, or historical industrial sites which produced or used coal tar and related tars, were located within 1 km of the Site.

4.2.2. Environmental Risk Information Service (ERIS)

Toronto Inspection Ltd. ordered a report from ERIS Ltd. for the Site and Phase One Study Area. The ERIS Report includes the search results of federal, provincial, and private source databases that are listed in paragraph 7 of subsection 3 (2) in Schedule D of O. Reg. 153/04 as amended. The ERIS report identified one (1) record for the Phase One Property and twenty-six (26) plottable and twelve (12) unplottable records for the Study Area.

Of the plottable listings, the records which represent potential environmental concern and/or PCAs that may be contributing to an APEC are summarized in table 4.2.2-1:

Table 4.2.2-1: Summary of Potential Environmental Concerns Identified in the ERIS Report

Address / Orientation	Listing Information	Environmental Source Information Database	Potential Contaminating Activity
4255 Taywood Drive *Approximately 50 m north of Site*	- A spill incident was reported to the MOE (MECP) on February 15, 2009, due to an electrical fire and spill of 220 L of mineral oil as a result of a transport accident to a transformer.	SPL	Undefined PCA
4313 Clubview Drive. *Approximately 150 m southeast of Site*	- Halton District School Board was registered as a waste generator of aliphatic solvents (2015) and waste oils and sludges (2018-2021)	GEN	PCA#8 – Chemical Manufacturing, Processing and Bulk Storage
4252 Dundas Street West Approximately 195 m west of Site	- Millcroft Golf Club was registered as a waste generator of petroleum distillates and waste oils and lubricants (1992-2021) and aliphatic solvents (1999-2021)	GEN	PCA#52 - Storage, maintenance, fuelling and repair of equipment, vehicle, and material used to maintain transportation system

The remaining records, including the 12 unplottable ones, were not found to represent a

potential environmental concern to the Phase One Property. A copy of the ERIS Report is included as Appendix C.

4.2.3. Government and Regulatory Agency Records

MECP FOI

A request enclosed in Appendix D was submitted on April 14, 2021, to the Ministry of the Environment, Conservation and Parks (MECP) Freedom of Information (FOI) and Privacy Office by *Toronto Inspection Ltd.* for records pertaining to the Site.
A response has not yet been received from the MECP at the time of writing of this report. Upon receipt of MECP's response, *Toronto Inspection Ltd*. will review the information and forward to the client any environmentally significant information (if found) under a separate cover. The conclusions of this report may be amended based on the information provided by MECP.

TSSA

Technical Standards & Safety Authority (TSSA) was contacted and requested to check their records for any fuel storage tanks that may have been present at the Phase One Property and the adjacent properties. An email correspondence (attached in Appendix E) from a TSSA representative, has identified no fuel storage tanks records for the Phase One Property or adjacent properties within the Study Area.

MNRF

Based on information provided on the Ministry of Natural Resources and Forestry (MNRF) on-line application "Make A Map: Natural Heritage Areas", the Phase One Property is not located within or adjacent to an area of natural and scientific interest (ANSI), Oak Ridges Moraine, a woodland, or a provincially significant wetland.

CITY OF BURLINGTON

According to the City of Burlington Interactive Map, the Phase One Property is located within a residential subdivision and adjacent to the east to Taywood Park. No area of natural and scientific interest (ANSI), a woodland or a provincially significant wetland are located adjacent or within the Phase One Property. The land usage within the Study Area is shown on Figures No. 2 Appendix A.

4.2.4. Client File Information

The Client provided *Toronto Inspection Ltd*. with the following documents:

- Topographic Plan of Survey of Block 133 Registered Plan 20M-811 City of Burlington Regional Municipality of Halton, prepared by Shaeffer Dzaldov Bennet Ltd., dated July 30, 2021.

- Proposed Residential Development for 4357 Millcroft Park Drive – Block 133, Registered Plan 20M-811.

The client`s file information is included in Appendix F.

4.3. Physical Setting Sources

4.3.1. Aerial Photographs

The aerial photographs for the Phase One Property and Study Area were available on the University of Toronto Libraries and City of Burlington Interactive Map. The available aerial photographs were reviewed to provide a chronological timeline of developmental changes at the Site and within the Study Area. The aerial photographs are enclosed in Appendix G.

Table 4.3.1-1 Summary of Review of Aerial Photographs

Year	Notable Changes or Environmental Issues
1954	- The Study Area was mainly agricultural fields with a few farmhouses. - No evidence of development was observed on the Phase One Property.
1998	- The Study Area was mainly composed by agricultural fields. A farmhouse with associated barns and sheds was observed approximately 145 m south of the Phase One Property. - The Phase One Property was a vacant land.
2002	- Progressive development was observed within the Study Area, areas to the north, east and southeast of the Phase One Property were developed into a residential subdivision. Millcroft Park Drive was in the early stages of construction. - The Phase One Property appeared to be temporarily occupied by at least 5 trailers/containers possibly used as stations to give support to the construction activities in the surrounding areas. Parked cars were located at the northeast section of the property and soil disturbance was observed at the northwest portion of the Site.
2008	- Progressive development continued within the Study Area. Properties to the south, southwest and west of the Site were developed into residential subdivisions. Further to the southeast, approximately 190 m of the Site Charles R. Beaudoin Public School was developed. - The Phase One Property was vacant, and no evidence of the former trailers/containers was observed.
2011	- No significant changes were observed for the Study Area or for the Phase One Property.
2015	- No significant changes were observed for the Study Area or for the Phase One Property.
2019	- No significant changes were observed for the Study Area or for the Phase One Property.

4.3.2. Topography, Hydrology, and Geology

Topography and Regional Drainage

Based on the topographic map, Natural Resources of Canada – The Atlas of Canada – Toporama, local groundwater flow direction is inferred to flow southeast parallel to Sheldon Creek, which is the closest water body located approximately 295 m from the Site boundary. Sheldon Creek flows southeast and eventually drains into Lake Ontario.

As indicated on the topographic map, the average elevation of the Phase One Property is approximately 150 m above mean sea level. The mapped contours for the Phase One Property indicated a downward slope in a southeast direction.

It should be noted that local groundwater flow direction can only be determined through on-going monitoring of groundwater levels, and that groundwater flow at the Phase One Property

may be influenced by underground utility corridors or structures.

Physiography and Geology of the Phase One Study Area

According to the Ontario Geophysical Survey "OGS Earth" application, the Phase One Study Area is situated within the physiographic region of Peel Plain, which generally consists of beveled till plains. The surficial geology in the area generally consisted of clay to silt-textured till (derived from glaciolacustrine deposits or shale). The bedrock geology under the Phase One Property consists of shale, limestone, dolostone, siltstone of the Georgian Bay Formation; Blue Mountain Formation; Billings Formation; Collinwood Member, Eastview member.

The depth to bedrock is unknown. Additional ERIS Mapping are included in Appendix H.

4.3.3. Fill Materials

A preliminary Geotechnical Investigation was conducted on the Phase One Property by *Toronto Inspection Ltd*. on April 5, 2021. Five boreholes were drilled on the property and revealed that the subsoil, below the 75 mm to 200 mm thick surficial topsoil, consisted of a layer of fill, overlaying a native sandy silt till deposit, followed by weathered shale. A layer of fill material was encountered below the topsoil at the borehole locations. The fill was composed generally of clayey to sandy silt with traces of gravel and organics. Seams of gravelly sand, and soil with a slight organic odour were encountered in some of the boreholes. The fill at the borehole locations extended to depths of between 0.9 m and 2.2 m from grade.

Two (2) soil samples, 21BH-1 SS1 and 21BH-3 SS1 were collected and submitted to SGS Laboratories, a CALA certified laboratory, for analyses of the following parameters: Metal and Inorganics (M&I) and Organochlorine Pesticides (OCPs). Based on the laboratory results, the OCP and M&I parameters at the tested locations met the MECP Table 1SCS for Residential/Parkland/Institutional/Industrial/Commercial/Community property use on the date of sampling.

A copy of the soil sampling and analytical program letter is included in Appendix I.

4.3.4. Water Bodies, Areas of Natural Significance & Ground Water Information

The closest water body to the Phase One Property is Sheldon Creek located approximately 295 m from the Phase One Property. Sheldon Creek flows southeast, and it drains into Lake Ontario.

Based on information provided on the Ministry of Natural Resources and Forestry (MNRF) on-line application "Make A Map: Natural Heritage Areas", the Phase One Property is not located within or adjacent to an area of natural and scientific interest (ANSI), Oak Ridges Moraine, a woodland, or a provincially significant wetland.

Based on the Source Protection Information Atlas mapping website, the Phase One Property is not located within a wellhead protection area, a significant groundwater recharge area or a highly vulnerable aquifer. According to the Water Well Information System (WWIS) by ERIS, no water wells were identified within the Phase One Property; however, two (2) water supply wells were identified within the Study Area. Drinking water within the Study Area is provided by Halton

Region with water derived from Lake Ontario.

4.3.5. Well Records

Based on a search of the Water Well Information System by ERIS, there was no wells on the Phase One Property. However, one (1) well record was identified within the Study Area. The hydrogeological and geological characteristics of the Study Area, as identified from the Water Well Information System (WWIS) database (available through the ERIS report), are summarized as follows:

Table 4.3.5-1: Summary of Well Records

Well ID (Tag) and Date of Construction	Well Type	Location	Soil Stratigraphy (Depths, Description)	Water Table (ft or m below ground surface)
2800199 25/11/1959	Water Supply	Halton Burlington City 596395.5m E 4805995m N	0-12 ft Topsoil 12-40 ft Shale (Red)	15 ft
2810071 16/09/2004	Abandoned-Other	Dundas Street E and Millcroft 596143.0m E 4805491.0m N	Not provided	Not provided
7160952 (A095270) 09/11/2010	Water Supply	929 Deer Ridge Court 596636.0m E 4805917.0m N	0.0-3.0 ft Fill, Stones (Brown) 3.0-9.0 ft Clay, Stones (Brown) 9.0-42.0 ft Clay, Stones (Grey) 42.0-56.0 ft Gravel, Stones (Grey)	56.0 ft
7327891 (A241868) 27/02/2018	Test Hole	Dundas Street, Halton 596116.0m E 4806094.0m N	0.0-4.59 m Silt, Clay (Red)	Not provided

4.4. Site Operating Records

The Site is not defined as an Enhanced Investigation Property. Therefore, Site Operating Records that are applicable or specific for an industrial property, a commercial garage, a bulk liquid dispensing facility, or a dry-cleaning equipment operator were not included in this Phase One ESA.

5.0 INTERVIEWS

A questionnaire interview was sent on August 11, 2021, to Ms. Lisa La Civita, the representative of the owner. Relevant information obtained from the questionnaire interview is summarized below:

Table 5.0-1: Summary of Information Obtained from Interview

Name and Position	Date of Interview	Method of Interview	Relevant Information
Ms. Lisa La Civita Owner representative	August 11, 2021	Questionnaire	• Ms. La Civita informed that the current owner of the property is Salotto Building Group Inc. • Ms. La Civita mentioned that the Site is a vacant land and that there are no structures on the property. • Ms. La Civita reported that the Site will be developed into a new residential subdivision. • Ms. La Civita informed that there are no wells on the property and that there are no existing or former ASTs or USTs associated with the Site. • Ms. La Civita mentioned that no hazardous waste is generated on the Site.

6.0 SITE RECONNAISSANCE

6.1. General Requirements

The Site visit was conducted by Albert Lee-Wah, BES of *Toronto Inspection Ltd*. The Phase One Property and neighbouring properties were visited on March 30, 2021. General information pertaining to the Site visit is presented below:

Table 6.1-1: Site Reconnaissance General Notes

Date, Time, and Length of Time of Investigation	Weather Conditions	Is Facility in Operation at Time of Investigation (applicable to Enhanced Investigation Property)	Names and Qualifications of Persons Conducting the Investigation
March 30, 2021 11:15 am – 12:15 pm	Clear Temperature: 15°C	Not applicable	Albert Lee-Wah, B.E.S.

Photographs taken during the Site visit are included in Appendix J.

6.2. Specific Observations at Phase One Property

6.2.1. General Site Layout and Operations

Topographic, Geologic, and Hydrogeologic Conditions

At the time of the site reconnaissance, the Phase One Property consisted of a vacant piece of land. Subsoil features at the Site could not be inferred due to the presence of vegetation coverage. The Phase One Property was observed to be relatively flat and at the same elevation in relation to neighbouring areas. Surface drainage is anticipated to follow towards catch basins located along Millcroft Park Drive and precipitation from runoff is expected to partially infiltrate into the ground.

The topographic features and surface gradient are expected to influence shallow groundwater flow at the Phase One Property and within adjacent/neighbouring lands. Also, groundwater flow at the Site may be influenced by underground utility corridors or structures.

General Description of Structures

At the time of the site reconnaissance the Phase One Property was vacant. The property was fenced along the Site boundaries.

Property Use

At the time of the site reconnaissance, the Phase One Property was vacant.

Products Manufactured

No manufacturing of products was observed on the Phase One Property at the time of the site reconnaissance.

Vehicle and Equipment Maintenance Areas

No vehicle and equipment maintenance areas were observed on the Phase One Property at the time of the site reconnaissance.

6.2.2. Utilities Services

There were no aboveground utilities services on the Phase One Property at the time of the site reconnaissance. However, the Study Area was municipally serviced with portable water, sewage systems, natural gas, and electricity.

6.2.3. Potable Water Supply

At the time of the site reconnaissance, the Phase One Property was municipally serviced by the City of Burlington, with drinking water that was derived from Lake Ontario.

6.2.4. Wells

Water Wells

At the time of the site reconnaissance, no water wells were observed on the Phase One Property.

Monitoring or Observation Wells

At the time of the site reconnaissance, no monitoring or observation wells were observed on the Phase One Property.

6.2.5. Waste Generation and Management

Solid and Liquid Waste Management

The Phase One Property was vacant, and no waste generation was observed at the time of the site reconnaissance.

Sewage Disposal

There was no generation of sewage on the Phase One Property at the time of the site reconnaissance.

Wastewater

No industrial wastewater was generated on the Phase One Property at the time of the site reconnaissance.

Liquid Discharge Points

No liquid discharge points were observed on the Phase One Property at the time of the site reconnaissance.

By-Products and Wastes

No by-products or wastes were observed on the Phase One Property at the time of the site reconnaissance.

6.2.6. Materials Handling and Storage

Hazardous Materials

No hazardous materials were observed on the Phase One Property at the time of the site reconnaissance.

Unidentified Substances

No unidentified substances were observed on the Phase One Property at the time of the site reconnaissance.

Raw Materials Handling and Storage

No raw material handling or storage was observed on the Phase One Property at the time of the site reconnaissance.

Storage Containers

No storage containers were observed on the Phase One Property at the time of the site reconnaissance.

6.2.7. Storage Tanks

Aboveground Storage Tanks (ASTs)

No ASTs were observed on the Phase One Property at the time of the site reconnaissance.

Underground Storage Tanks (USTs)

No vents or pipes indicating the presence of a UST were found in visible areas of the Phase One Property at the time of the site reconnaissance.

It should be noted that the presence of USTs cannot be confirmed or refuted based on visual inspections or review of historical documents available to *Toronto Inspection Ltd.* at the time of this Phase One ESA.

6.2.8. Odours and Air Emissions

No offensive odour or detectable sources of air emissions that may impact the ambient air quality on the Phase One Property were observed during the site reconnaissance.

6.2.9. Spills, Stains and Stained Materials

No evidence of spills, staining or stained material was observed on the Phase One Property at the time of the site reconnaissance.

6.2.10. Below-ground Structures

Oil and Water Separators

No oil and water separators were observed on the Phase One Property at the time of the site reconnaissance.

6.2.11. Interior Observations

The Phase One Property was vacant at the time of the site reconnaissance.

6.2.12. Exterior Observations

Pits and Lagoons

No natural pit or lagoon was observed on the Phase One Property at the time of the site reconnaissance.

Stressed Vegetation

No stressed vegetation was observed on the Phase One Property at the time of the site reconnaissance.

Fill and Debris

At the time of the site reconnaissance, no fill material was observed on the Phase One Property. A small pile of mixed material with crushed and block concrete was observed at the southeast section of the Phase One Property.

Watercourses, Ditches, or Standing Water

No watercourses, ditches or standing water were observed on the Phase One Property at the time of the site reconnaissance.

Roads, Parking Facilities, and Rights-of-Way

The Phase One Property was accessible via Millcroft Park Drive to the north. No parking facilities were available on the Phase One Property at the time of the site reconnaissance.

Railway Lines or Spurs

At the time of the site reconnaissance, no railway lines or spurs were observed on the Phase One Property.

6.2.13. Potentially Contaminating Activities Observed on Phase One Property

No potentially contaminating activities associated with the current and/or historical use of the Site were identified during the site reconnaissance.

6.2.14. Special Attention Items

Polychlorinated Biphenyls (PCBs)

Polychlorinated Biphenyls (PCBs) were first commercially used as an insulation/cooling fluid in 1929 in North America. Polychlorinated Biphenyls are generally found in transformers, light ballasts, and other electrical equipment that contain insulating fluids that were manufactured between 1929 and 1977. The use of PCBs in electrical equipment was banned in 1977.

No evidence of PCBs was observed on the Phase One Property at the time of the site reconnaissance.

Asbestos-Containing Materials (ACMs)

Asbestos had been used in building construction as fire retardant and insulation materials. Although the use of asbestos in building material was halted in the late-1970s, asbestos can still be found in a variety of construction materials such as: pipe and pipe elbow insulation; vinyl floor tiles; suspended ceiling tiles; insulation around boilers; stucco ceiling materials; drywall compound.

No evidence of ACMs was observed on the Phase One Property at the time of the site reconnaissance.

Lead

Old paints are known to contain lead, which is defined as one of the Designated Substances under the Ontario Occupational Health and Safety Act - Section 30. Lead was used in oil-based paints as a drying agent and pigmentation. The use of lead-based paints was phased out in 1976. The potential for exposure to lead-based paints and the dust associated with the deterioration or removal of lead-based paint can pose a health risk to humans, especially to children.

No evidence of painted surfaces suspected to contain lead-based paints or lead-containing construction materials were observed on the Phase One Property at the time of the site reconnaissance.

Ozone-Depleting Materials (ODM)

No evidence of ODMs were observed on the Phase One Property at the time of the site reconnaissance.

Urea Foam Formaldehyde Insulation (UFFI)

No evidence of UFFI was observed on the Phase One Property at the time of the site reconnaissance.

Noise and Vibration

The Phase One Property is located in a residential subdivision in Burlington; therefore, noise and moderate vibrations generated by vehicles are to be expected.

Electric and Magnetic Field

No high voltage transmission towers or substations generating electric or magnetic fields were suspected on the Phase One Property or on the adjacent properties.

6.3. Adjacent and Neighbouring Properties Observations

Occupants and/or land usage of the adjacent and neighbouring properties at the time of the site reconnaissance include the following:

Adjacent Properties

The adjacent property uses (excluding municipal rights-of-way) observed at the time of the site reconnaissance are summarized in Table 6.3-1.

Table 6.3-1: Observations of Areas Adjacent to Phase One Property

Address / Orientation	Owner / Occupant	Observations
North of the Site *4251 Taywood Drive and 4370-4380 Millcroft Park Drive*	Private residential	Across Millcroft Park Road, the properties to the north were occupied by residential dwellings. No evidence of potential environmental concern was observed.
East of the Site *4357 Millcroft Park Drive*	Taywood Park	The property adjacent to the east was occupied by Taywood Park. No evidence of potential environmental concern was observed
South of the Site *4257-4260 Player Court*	Private residential	The property adjacent to the south was occupied by residential dwellings. No evidence of potential environmental concern was observed
West of the Site *4280-4304 Sarazan Drive (even numbers)*	Private residential	The property adjacent to the west was occupied by residential dwellings. No evidence of potential environmental concern was observed

Neighbouring Properties

The neighbouring property uses (excluding rights-of-way) observed at the time of the site reconnaissance are summarized in Table 6.3-2.

Table 6.3-2: Observations of Neighbouring Properties

Location	Land Use	Observations
North	Residential and Parkland	- Neighboring properties to the north and consisted of a residential subdivision and further north a parkland area crossed by Sheldon Creek.
East	Residential	- Neighboring properties to the east consisted of a residential subdivision.
South	Residential and Institutional	- Neighboring properties to the south consisted of a residential subdivision and a public school to the southeast.
West	Residential and Parkland	- Neighboring properties to the west consisted of a residential subdivision and further west a parkland area.

6.3.1. Potentially Contaminating Activities Observed in Study Area

No PCAs associated with the current and/or historical use of the properties within the Study Area were identified during the site visit.

6.3.2. Enhanced Investigation Property

The Phase One Property is not currently being used or has ever been used for industrial purposes, or as a garage, a bulk liquid dispensing facility including a gasoline outlet, or a facility where dry cleaning equipment operated; therefore, the Phase One Property is not considered an enhanced investigation property.

6.4. Written Description of Investigation

Investigations of the Phase One Property and Phase One Study Area were carried out in accordance with Schedule D of O. Reg. 153/04 as amended. Written description detailing each investigation is provided in Section 6.2 *Specific Observations at Phase One Property* and Section 6.3 *Adjacent and Neighbouring Properties Observations*. Findings that are relevant to identified PCAs on the Site and within the Study Area are provided in Sections 6.2.13 and 6.3.1.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1. Current and Past Uses

A summary description of the current and past uses of the Phase One Property all the way back to its first developed use is provided in Table 7.1-1, below.

Table 7.1-1: Current and Past Uses of the Phase One Property

Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photographs, Fire Insurance Plans Etc.
Prior to 1808	Crown	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
12/02/1808 to 16/03/1809	Samuel Van Every	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
16/03/1809 to 10/09/1833	John Keagey	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
10/09/1833 to 30/10/1837	Magdalene Hines	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
30/10/1837 to 30/10/1837	John Hines	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
30/10/1837 to 31/01/1867	William B. Hines	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
31/01/1867 to 17/06/1890	Neil Campbell	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
17/06/1890 to 08/01/1896	The Guelph & Ontario Loans & Savings (Mortgagee)	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
08/01/1896 to 16/11/1946	William Anderson Irving	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
16/11/1946 to 08/12/1969	Erwin Gunby	Vacant/undeveloped or agricultural	Agricultural or other use	Based on the 1954 aerial photograph the Phase One Property was a vacant land.
08/12/1969 to 04/08/1972	229823 Investments Limited	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
04/08/1972 to 12/03/1973	Valjim Construction Limited	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
12/03/1973 to 14/06/1973	Far North Investors Corporation Limited	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
14/06/1973 to 19/04/2002	Monarch Construction Limited	Vacant/undeveloped or agricultural	Agricultural or other use	From Chain of Title
19/04/2002 to 13/07/2021	The Roman Catholic Episcopal Corporation of the Diocese of Hamilton in Ontario	Vacant/undeveloped or agricultural	Agricultural or other use	Based on the 2002 aerial photograph, the Phase One Property appeared to be temporarily occupied by at least 5 trailers/containers possibly used as stations to give support to the construction activities in the surrounding areas. Parked cars were located at the northeast section of the property and soil disturbance was observed at the northwest portion of the Site.

Year	Name of Owner	Description of Property Use	Property Use	Other Observations from Aerial Photographs, Fire Insurance Plans Etc.
				On the 2008 aerial photograph, the Phase One Property was vacant, and no evidence of the former trailers/containers was observed.
13/07/2021 to present	Salotto Building Group (BT) Inc.	Vacant/undeveloped or agricultural	Agricultural or other use	The Phase One Property remains as a vacant land based on the site reconnaissance, aerial photographs, and interview.

7.2. Potentially Contaminating Activities

Based on the findings from records review, site reconnaissance and interviews, the Phase One ESA has revealed the following PCAs within the Phase One Study Area:

Table 7.2-1: Potentially Contaminating Activities Within the Phase One Study Area

Location	Potential Environmental Concerns	Potentially Contaminating Activity (Table 2, Schedule D of O.Reg. 153/04)	Potential to Impact Site
4255 Taywood Drive *Approximately 50 m north of Site*	A spill incident was reported to the MOE (MECP) on February 15, 2009, due to an electrical fire and spill of 220 L of mineral oil as a result of a transport accident to a transformer.	Undefined PCA	***Anticipated to be low,*** due to separable distance and limited volume of mineral oil spilled.
4313 Clubview Drive. *Approximately 150 m southeast of Site*	Halton District School Board was registered as a waste generator of aliphatic solvents (2015) and waste oils and sludges (2018-2021)	PCA#8 – Chemical Manufacturing, Processing and Bulk Storage	***Anticipated to be low,*** due to separable distance and downgradient orientation of the property.
4252 Dundas Street West *Approximately 195 m west of Site*	Millcroft Golf Club was registered as a waste generator of petroleum distillates and waste oils and lubricants (1992-2021) and aliphatic solvents (1999-2021). There is a potential for the usage of pesticides on golf curses.	PCA#52 - Storage, maintenance, fueling and repair of equipment, vehicle, and material used to maintain transportation system PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	***Anticipated to be low,*** due to separable distance and the dense soil condition, generally present in the Study Area (i.e., mainly clay and silt). Therefore, the potential for contaminants of concern to migrate and adversely impact the subsurface condition of the Site is anticipated to be low.

The PCAs identified above are presented as Figure No. 2, Appendix A.

7.3. Areas of Potential Environmental Concern

No APECs were identified within the Phase One Property based on the findings of this Phase One ESA as shown on Figure No. 3, Appendix A.

7.4. Phase One Conceptual Site Model

A Conceptual Site Model (CSM) was developed as part of this Phase One ESA. The CSM consists of figures of the Phase One Study Area which include the inferred ground water flow, land usage within the surrounding areas, locations of the PCAs and APECs.

7.4.1. Site Overview

The Phase One Property is a near rectangular-shaped property located on the southwest quadrant of Dundas Street (Regional Route 5) and Appleby Line in Burlington, Ontario. The specific location is approximately 350 m east of the intersection of Dundas Street and Millcroft Park Drive. The Phase One Property, which consists of vacant land has an approximate area of 2,43 ha.

7.4.2. Physical Setting of Phase One Property

Regional Geological and Hydrogeological Information

Based on the topographic map, Natural Resources of Canada – The Atlas of Canada – Toporama, local groundwater flow direction is inferred to flow southeast parallel to Sheldon Creek, which is the closest water body located approximately 295 m from the Site boundary. Sheldon Creek flows southeast and eventually drains into Lake Ontario.

As indicated on the topographic map, the average elevation of the Phase One Property is approximately 150 m above mean sea level. The mapped contours for the Phase One Property indicated a downward slope in a southeast direction.

The Phase One Study Area is situated within the physiographic region of Peel Plain, which generally consists of beveled till plains. The surficial geology in the area generally consisted of clay to silt-textured till (derived from glaciolacustrine deposits or shale). The bedrock geology under the Phase One Property consists of shale, limestone, dolostone, siltstone of the Georgian Bay Formation; Blue Mountain Formation; Billings Formation; Collinwood Member, Eastview member. The depth to bedrock is unknown.

Water Bodies and Areas of Natural Significance in Phase One Study Area

The closest water body to the Phase One Property is Sheldon Creek located approximately 295 m from the Phase One Property. Sheldon Creek flows southeast, and it drains into Lake Ontario.

Based on information provided on the Ministry of Natural Resources and Forestry (MNRF) on-line application “Make A Map: Natural Heritage Areas”, the Phase One Property is not located within or adjacent to an area of natural and scientific interest (ANSI), Oak Ridges Moraine, a woodland, or a provincially significant wetland.

Phase One Property Topographic, Geologic, and Hydrogeologic Conditions

At the time of the site reconnaissance, the Phase One Property consisted of a vacant piece of land. Subsoil features at the Site could not be inferred due to the presence of vegetation coverage. The Phase One Property was observed to be relatively flat and at the same elevation

in relation to neighbouring areas. Surface drainage is anticipated to flow towards catch basins located along Millcroft Park Drive and rainwater/meltwater runoff is expected to partially infiltrate into the ground.

The topographic features and surface gradient are expected to influence shallow groundwater flow at the Phase One Property and within adjacent/neighbouring lands. Groundwater flow at the Site may also be influenced by underground utility corridors or structures.

Fill Materials

A preliminary Geotechnical Investigation was conducted on the Phase One Property by *Toronto Inspection Ltd*. on April 5, 2021. Five boreholes were drilled on the property and revealed that the subsoil, below the 75 mm to 200 mm thick surficial topsoil, consisted of a layer of fill, overlaying a native sandy silt till deposit, followed by weathered shale. A layer of fill material was encountered below the topsoil at the borehole locations. The fill was composed generally of clayey to sandy silt with traces of gravel and organics. Seams of gravelly sand, and soil with a slight organic odour were encountered in some of the boreholes. The fill at the borehole locations extended to depths of between 0.9 m and 2.2 m from grade.

Chemical analyses for soils were conducted by SGS in April 2021, and the parameters tested were M&Is and OCs. The chemical results indicated no exceedances in soil and that the results met Table 2 Site Condition Standard. Therefore, based on SGS`s April 2021 chemical analysis, no issue of potential environmental concern associated with fill material is anticipated.

Drinking Water Wells at the Phase One Property

At the time of the site reconnaissance, no drinking water wells were observed on the Phase One Property.

Proposed Property Use at the Phase One Property

The proposed land use for the Phase One Property is residential, single-family dwellings.

7.4.3. Sources of Contamination

Potentially Contaminating Activities

Four (4) PCAs were identified within the Phase One Study Area - One undefined PCA associated with a spill of 220 liters of mineral oil; PCA#8 – Chemical Manufacturing, Processing and Bulk Storage; PCA#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Application and PCA#52 Storage, maintenance, fuelling and repair of equipment, vehicle, and material used to maintain transportation system. However, based on distance, gradient orientation, and soil composition within the Phase One Study Area, the PCAs identified on this Phase One ESA investigation are anticipated not to create an APEC at the Phase One Property.

Areas of Potential Environmental Concern

No APECs were identified within the Phase One Property.

7.4.4. Uncertainty or Absence of Information

There is no known data gap identified that significantly affects the findings of this Phase One ESA.

8.0 CONCLUSIONS

In summary, the historical and current activities from on-Site and off-Site properties, as identified at the time of this Phase One ESA, do not represent significant potential environmental concern which may adversely impact the subsurface conditions of the Phase One Property.

It is *Toronto Inspection Ltd.`s* opinion that at the time of writing this Phase One ESA report no further investigation is recommended for the Phase One Property.

9.0 REFERENCES

Aerial Photographs

- University of Toronto Libraries for the year 1954.
- City of Burlington Interactive Map for the years 1998, 2002, 2008, 2011, 2015 and 2019.

City Directories

- Vernon`s Burlington City Directory from Metro Toronto Reference Library for the years 2005 to 2013, Toronto Reference Library.

Client Information

- Topographic Plan of Survey of Block 133 Registered Plan 20M-811 City of Burlington Regional Municipality of Halton, prepared by Shaeffer Dzaldov Bennet Ltd., dated July 30, 2021.

- Proposed Residential Development for 4357 Millcroft Park Drive – Block 133, Registered Plan 20M-811.

Federal and Provincial and Additional Private Database Records

- Environmental Risk Information Service (ERIS) Ltd. database, for locations within 250 m of the Site

Fire Insurance Plans

- No Fire insurance plans were available for the Phase One Property and Study Area.

Geological Maps

- *Quaternary Geology of Ontario*, Ontario Geophysical Survey (OGS)Earth website (https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth), Ministry of Northern Development and Mines
- *Bedrock Geology of Ontario*, (OGS) Earth website, (https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth), Ministry of Northern Development and Mines
- *The Physiography of Southern Ontario*, (OGS)Earth website, (https://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth), Ministry of Northern Development and Mines

Government Inventory and Database Records

- *Inventory of Coal Gasification Plant Waste Sites in Ontario*, Ministry of the Environment (MOE) Waste Management Branch, July 1987, records search within approximately 1 km of the Site
- *Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario*,

MOE, November 1988, records search within approximately 1 km of the Site.
- *Waste Disposal Site Inventory*, MOE Waste Management Branch, June 1991, active and closed facilities within approximately 1 km of the Site

Historical County Atlas

- Illustrated Historical County Map of Halton County (1878).

Interview

- A questionnaire interview was sent on August 11, 2021, to Ms. Lisa La Civita, the owner`s representative.

Natural Heritage and Areas of Natural Significance

- Ministry of Natural Resources and Forestry (MNRF), Natural Heritage Areas Interactive map website (http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US)

Requests for File Information

- MECP Freedom of Information Office regarding environmental concerns, violations, complaints, etc.
- Technical Standards and Safety Authority (TSSA) for information pertaining to fuel storage tanks.

Source Water Protection

- Regional Municipality of Halton (https://www.lioapplications.lrc.gov.on.ca/SourceWaterProtection/index.html?viewer=SourceWaterProtection.SWPViewer&locale=en-CA)

Topographic Maps

- Topographic map: The Atlas of Canada – Toporama website (http://atlas.gc.ca/toporama/en/index.html), Natural Resources Canada
- Environmental Risk Information Service (ERIS) Ltd. database

10.0 GENERAL STATEMENT OF LIMITATION

This Phase One Environmental Site Assessment was conducted in general compliance with currently acceptable practices for environmental site investigations, and specific client requests, as applicable to this property. It is based on documents and oral information supplied to *Toronto Inspection Ltd.* There is no warranty expressed or implied or representations by *Toronto Inspection Ltd.* that this investigation uncovered all potential environmental risks or liabilities associated with the subject site.

This report was prepared by *Toronto Inspection Ltd.* for the account of Salotto Building Group Inc. Management Inc., the material in this report reflects *Toronto Inspection Ltd.*'s judgement in light of the information available to them at the time of preparation. Any use which a Third Party makes of this report, or any reliance on decisions to be made based on it, is the responsibility of these Third Parties. *Toronto Inspection Ltd.* accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.

Toronto Inspection Ltd. did not provide any service to investigate or detect the presence of moisture, mould or other biological contaminates in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Mould is ubiquitous to the environment with mould amplification occurring when building materials are impacted by moisture. Site conditions are outside of *Toronto Inspection Ltd.*'s control, and mould amplification will likely occur, or continue to occur, in the presence of moisture. As such, *Toronto Inspection Ltd.* cannot and shall not be held responsible for the occurrence or recurrence of mould amplification.

Any legal actions arising directly or indirectly from this work and/or *Toronto Inspection Ltd.*'s performance of the services shall be filed no longer than two years from the date of *Toronto Inspection Ltd.*'s substantial completion of the services. *Toronto Inspection Ltd.* shall not be responsible to the client for lost revenues, loss of profits, cost of content, claims of customers, or other special indirect, consequential, or punitive damages.

To the fullest extent permitted by law, the client's maximum aggregate recovery against *Toronto Inspection Ltd.*, its directors, employees, sub-contractors, and representatives, for any and all claims by the client for all causes including, but not limited to, claims of breach of contract, breach of warranty and/or negligence, shall be limited to the amount of professional fees paid by the client.

Yours sincerely,
Toronto Inspection Ltd.



Itala Abreu, BSc, EPt
Environmental Scientist

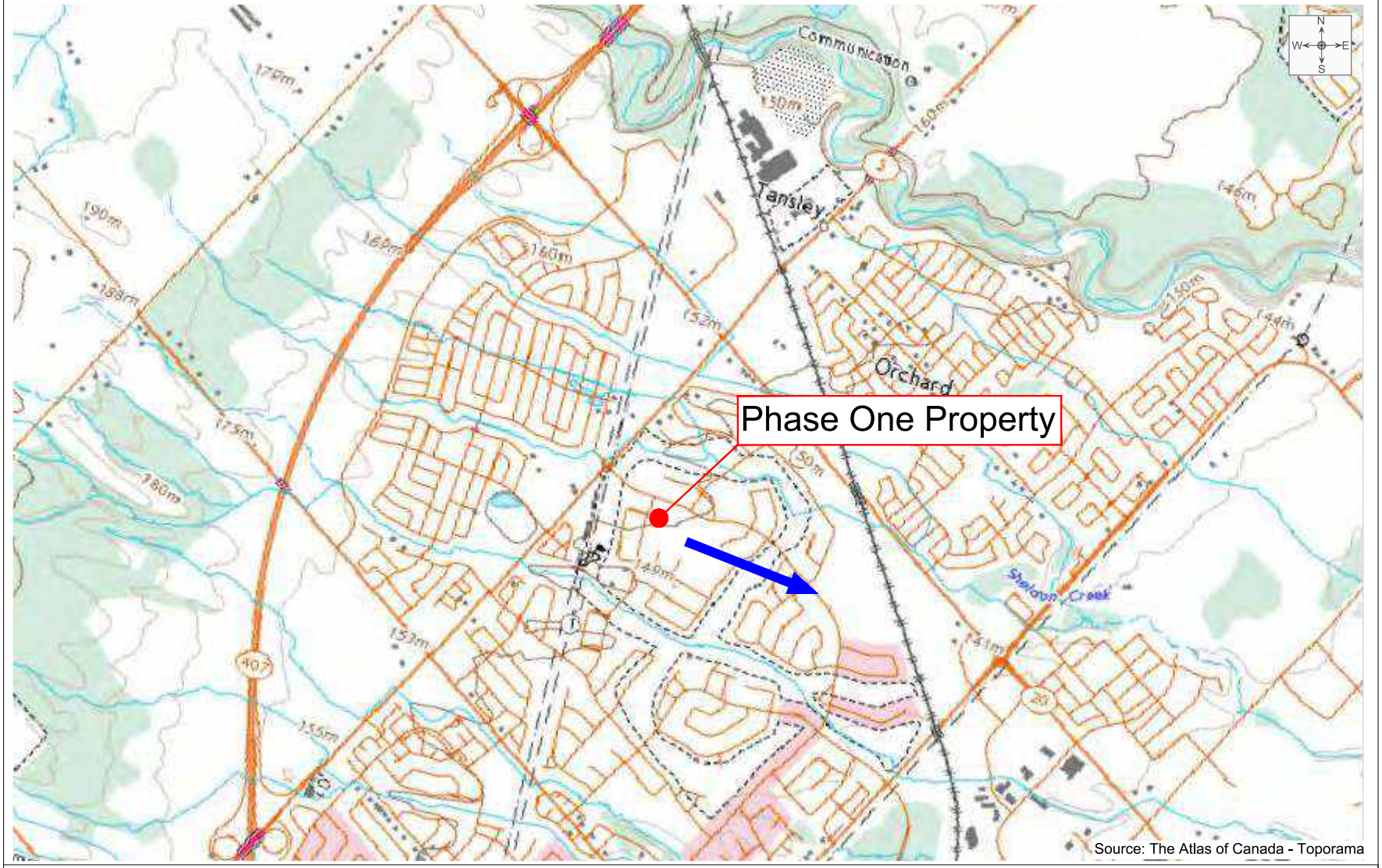




Sajjad Din, PGeo, CET, QP$_{ESA}$
Senior Geoscientist
Certified Engineering Technologist

Appendix A

Figure No. 1: RegionallTopographyyandnSite Locationn
Figure No. 2: Phase One Conceptual Site Model - PCA Locations
Figure No. 3: Phase One Conceptual Site Model - APEC Locations



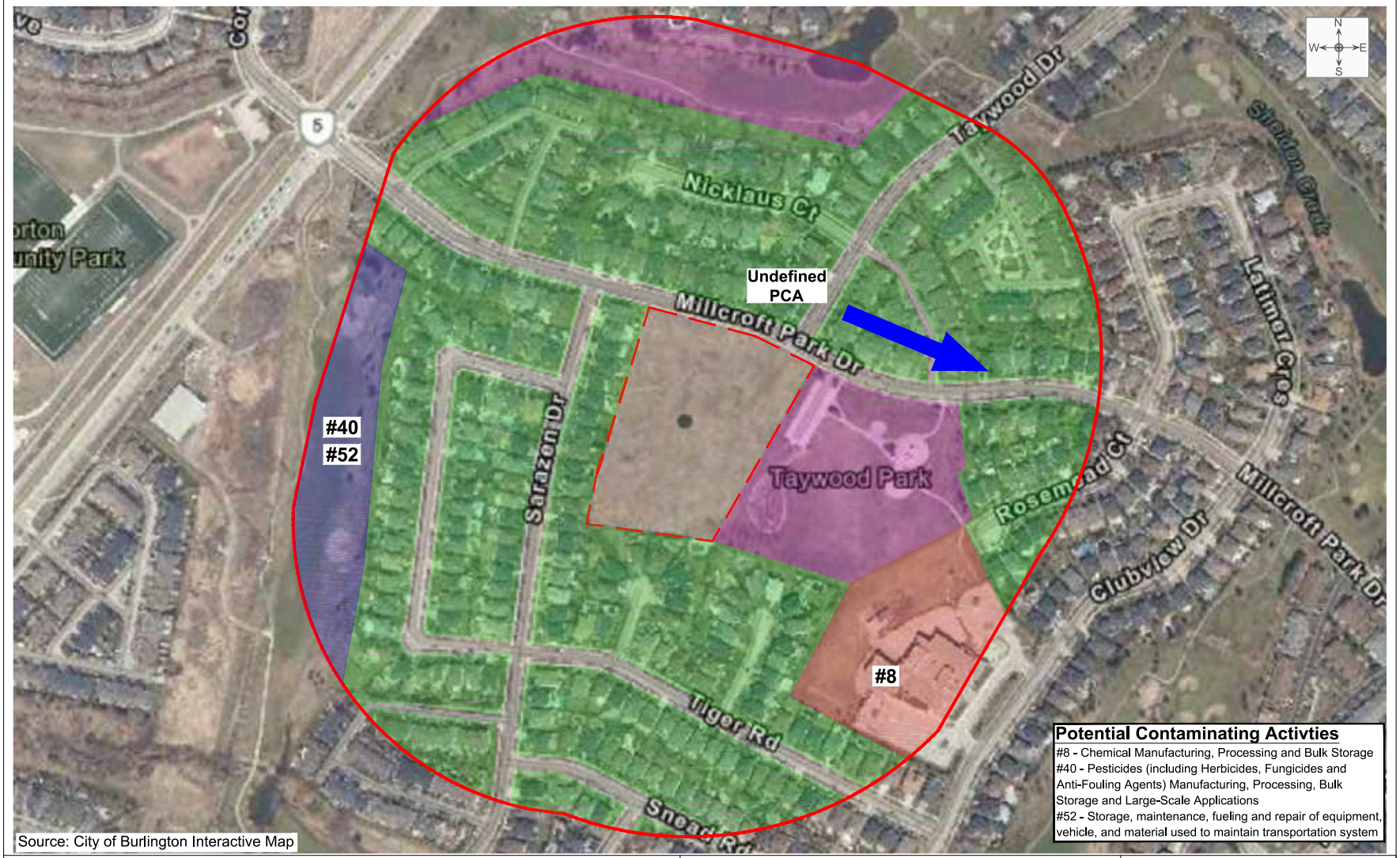
LEGEND

Inferred Groundwater Flow Direction

Scale
0 1km

TorontoInspection
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16
Markham, Ontario
L3R 9X2
Tel: 905-940 8509 Fax: 905-940 8192 Email : TIL@torontoinspection.com

TITLE:	Regional Topography and Site Location
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario
PROJECT NO. 5607-21-EB	DATE : August 2021
FIGURE NO. 1	



LEGEND:

- Site Boundary
- Study Area (250m)
- Inferred Groundwater Flow Direction

LAND USE:

- Residential
- Parkland
- Commercial
- Institutional

Scale (m): 0 — 100 — 200

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TITLE:	PCA Locations and Land Use
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario
PROJECT NO.	5607-21-EB
DATE :	August 2021
FIGURE NO.	2



LEGEND:

Site Boundary

Scale (m)

0 100 200

TorontoInspection GEO-ENVIRONMENTAL CONSULTANTS

110 Konrad Crescent, Unit 16
Markham, Ontario
L3R 9X2

Tel: 905-940 8509 Fax: 905-940 8192 Email : TIL@torontoinspection.com

TITLE:	APEC Locations		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO.	5607-21-EB	DATE : August 2021	FIGURE NO. 3

Appendix B Ownership

CHAIN OF TITLE REPORT

Project #: 5607
Address: 4375 Millcroft Park Drive, Burlington
Legal Description: Block 133 Plan 20M811

Searched at: Milton
LRO #: 20

PIN #: 07182-1652 (LT)

INSTR #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent (200 Acres)	12 02 1808	Crown	**Samuel VAN EVERY**
1280	Deed	16 03 1809	Samuel Van Every	John KEAGEY
138	Deed	10 09 1833	John Keagey	Magdalene HINES
874	Deed	30 10 1837	Magdalene Hines	John HINES
875	Deed	30 10 1837	John Hines	William B. HINES
325	Deed	31 01 1867	William B. Hines	Neil CAMPBELL
4672	Mortgage	17 06 1890	Neil Campbell	The Guelph & Ontario Loans & Savings (Mortgagee)
5706	Deed	08 01 1896	The Guelph & Ontario Loans & Savings (Neil Campbell Defaulted in Mtg 4672)	William Anderson IRVING
30171	Deed	16 11 1946	William Anderson Irving	Erwin GUNBY

Cont'd on Page 2

CHAIN OF TITLE REPORT

Project #: 5607
Address: 4375 Millcroft Park Drive, Burlington
Legal Description: Block 133 Plan 20M811

Searched at: Milton
LRO #: 20

PIN #: 07182-1652 (LT)

INSTR #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
285701	Deed	08 12 1969	Erwin Gunby	229823 Investments Limited
343014	Deed	04 08 1972	229823 Investments Limited	Valjim Construction Limited
356921	Deed	12 03 1973	Valjim Construction Limited	Far North Investors Corporation Limited
364334	Deed	14 06 1973	Far North Investors Corporation Limited	Monarch Construction Limited
HR112803	Deed	19 04 2002	Monarch Construction Limited	The Roman Catholic Episcopal Corporation of The Diocese of Hamilton in Ontario
HR1808774	Deed (Present Owner)	13 07 2021	The Roman Catholic Episcopal Corporation of The Diocese of Hamilton in Ontario	Salotto Building Group (BT) Inc.

PROPERTY DESCRIPTION: BLOCK 133, PLAN 20M811, BURLINGTON. T/W EASE 149995 OVER PT 8, 20R6131. T/W EASE 153572 OVER PTS 9 & 10, 20R6131.

PROPERTY REMARKS:

ESTATE/QUALIFIER:
FEE SIMPLE
ABSOLUTE

RECENTLY:
SUBDIVISION FROM 07182-1518

PIN CREATION DATE:
2001/12/21

OWNERS' NAMES
THE ROMAN CATHOLIC EPISCOPAL CORPORATION OF THE DIOCESE OF HAMILTON IN ONTARIO

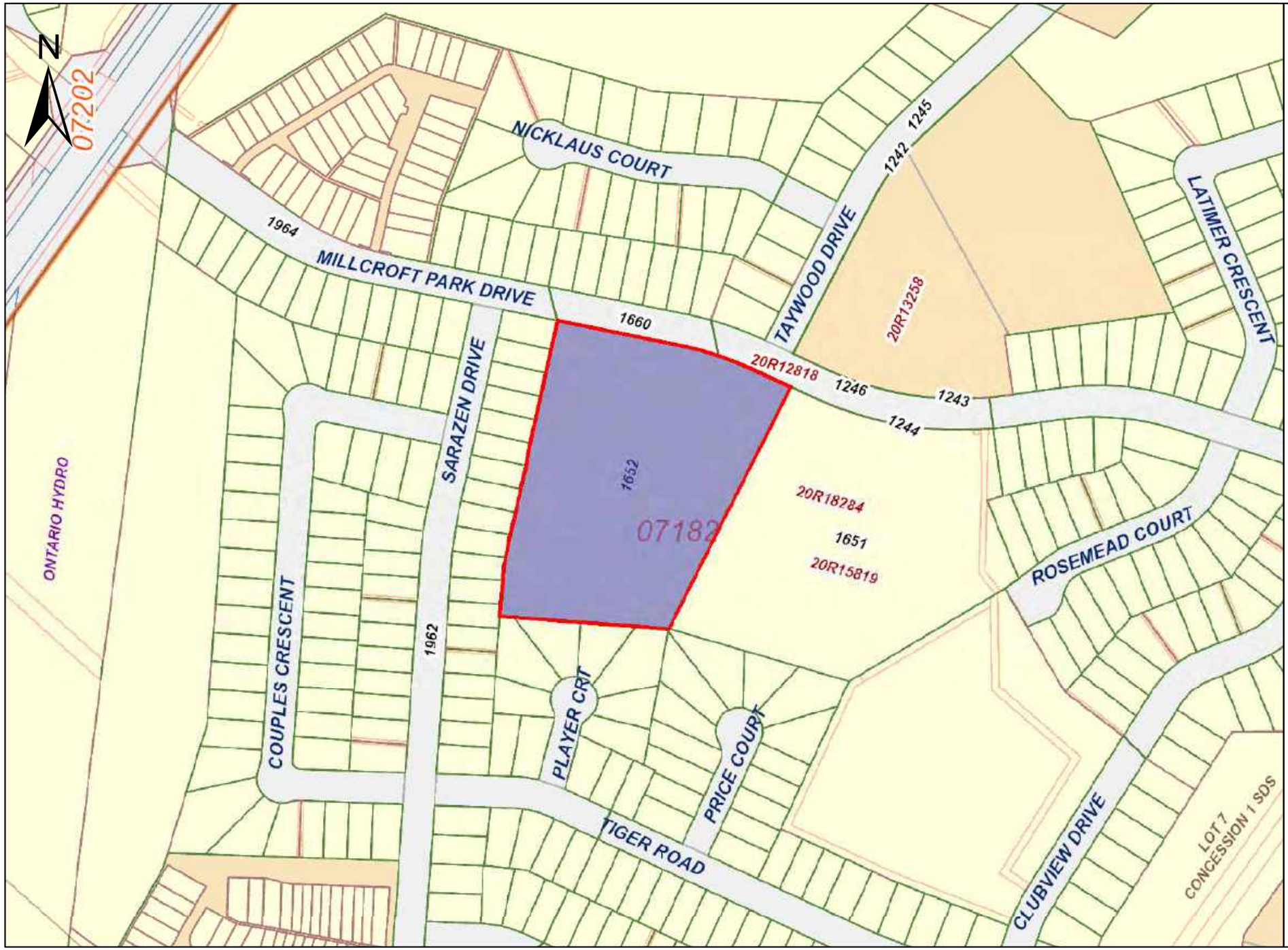
CAPACITY SHARE
BENO

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
*** PRINTOUT INCLUDES ALL DOCUMENT TYPES AND DELETED INSTRUMENTS SINCE 2001/12/21 ***						
D12942082	1983/04/15	APL (GENERAL)		*** DELETED AGAINST THIS PROPERTY ***	MONARCH CONSTRUCTION LIMITED	
H291037	1986/11/06	NOTICE			THE REGIONAL MUNICIPALITY OF HALTON	C
	REMARKS: AGREEMENT					
H302428	1987/02/19	NOTICE			THE CORPORATION OF THE CITY OF BURLINGTON	C
	REMARKS: AGREEMENT					
H302472	1987/02/19	TRANSFER EASEMENT		*** DELETED AGAINST THIS PROPERTY ***	THE CORPORATION OF THE CITY OF BURLINGTON	
H302805	1987/02/24	NOTICE			THE REGIONAL MUNICIPALITY OF HALTON	C
	REMARKS: AGREEMENT					
H339458	1987/11/26	NOTICE			THE CORPORATION OF THE CITY OF BURLINGTON	C
	REMARKS: AGREEMENT					
H454978	1990/08/22	NOTICE			THE CORPORATION OF THE CITY OF BURLINGTON	C
	CORRECTIONS: 'THIS INSTRUMENT' WAS DELETED FROM PROPERTY 07182-0391 IN ERROR AND WAS RE-INSTATED ON 2001/10/25 BY ANGELA TIMBERS.					
20M811	2001/12/20	PLAN SUBDIVISION				C
HR91796	2001/12/20	APL INH ORDER-LAND		*** DELETED AGAINST THIS PROPERTY *** THE CORPORATION OF THE CITY OF BURLINGTON THE REGIONAL MUNICIPALITY OF HALTON		
HR93318	2002/01/04	NOTICE AGREEMENT		MONARCH CONSTRUCTION LIMITED	THE CORPORATION OF THE CITY OF BURLINGTON	C
HR112803	2002/04/19	TRANSFER	$53,721	MONARCH CONSTRUCTION LIMITED	THE ROMAN CATHOLIC EPISCOPAL CORPORATION OF THE DIOCESE OF HAMILTON IN ONTARIO	C

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
HR113803	2002/04/24	TRANSFER REL&ABAND		*** COMPLETELY DELETED *** THE CORPORATION OF THE CITY OF BURLINGTON	MONARCH CONSTRUCTION LIMITED	
HR117794	2002/05/15	NO SUB AGREEMENT		THE REGIONAL MUNICIPALITY OF HALTON	MONARCH CONSTRUCTION LIMITED	C
HR117804	2002/05/15	APL DEL INH ORDER		*** COMPLETELY DELETED ***	THE CORPORATION OF THE CITY OF BURLINGTON THE REGIONAL MUNICIPALITY OF HALTON	
	REMARKS: RE: HR91796					
HR1674023	2019/12/20	CHARGE		*** DELETED AGAINST THIS PROPERTY *** THE ROMAN CATHOLIC EPISCOPAL CORPORATION OF THE DIOCESE OF HAMILTON IN ONTARIO	ROYAL BANK OF CANADA	
HR1674024	2019/12/20	NO ASSGN RENT GEN		*** DELETED AGAINST THIS PROPERTY *** THE ROMAN CATHOLIC EPISCOPAL CORPORATION OF THE DIOCESE OF HAMILTON IN ONTARIO	ROYAL BANK OF CANADA	
	REMARKS: HR1674023					
HR1808272	2021/07/09	DISCH OF CHARGE		*** COMPLETELY DELETED *** ROYAL BANK OF CANADA		
	REMARKS: HR1674023.					
HR1808419	2021/07/12	APL (GENERAL)		THE ROMAN CATHOLIC EPISCOPAL CORPORATION OF THE DIOCESE OF HAMILTON IN ONTARIO		
HR1808774	2021/07/13	TRANSFER	$23,000,000	THE ROMAN CATHOLIC EPISCOPAL CORPORATION OF THE DIOCESE OF HAMILTON IN ONTARIO	SALOTTO BUILDING GROUP (BT) INC.	
	REMARKS: PLANNING ACT STATEMENTS.					
HR1808775	2021/07/13	CHARGE	$25,000,000	SALOTTO BUILDING GROUP (BT) INC.	CANADIAN IMPERIAL BANK OF COMMERCE	

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
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SCALE

0 30 60 90 120 meters

PROPERTY INDEX MAP

HALTON(No. 20)

LEGEND

FREEHOLD PROPERTY	
LEASEHOLD PROPERTY	
LIMITED INTEREST PROPERTY	
CONDOMINIUM PROPERTY	
RETIRED PIN (MAP UPDATE PENDING)	
PROPERTY NUMBER	0449
BLOCK NUMBER	08050
GEOGRAPHIC FABRIC	
EASEMENT	

THIS IS NOT A PLAN OF SURVEY

NOTES

REVIEW THE TITLE RECORDS FOR COMPLETE PROPERTY INFORMATION AS THIS MAP MAY NOT REFLECT RECENT REGISTRATIONS

THIS MAP WAS COMPILED FROM PLANS AND DOCUMENTS RECORDED IN THE LAND REGISTRATION SYSTEM AND HAS BEEN PREPARED FOR PROPERTY INDEXING PURPOSES ONLY

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED

Ontario

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Appendix C ERIS Report

ERIS

DATABASE REPORT

Project Property:	*4375 Millcroft Park Drive, Burlington, ON* *4375 Millcroft Park Drive* *Burlington ON L7M 4Y7*
Project No:	*5607*
Report Type:	*RSC Report (Urban)*
Order No:	*21081200149*
Requested by:	*Toronto Inspection Ltd.*
Date Completed:	*August 17, 2021*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

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Executive Summary

Property Information:

Project Property:	*4375 Millcroft Park Drive, Burlington, ON* *4375 Millcroft Park Drive Burlington ON L7M 4Y7*
Project No:	*5607*

Order Information:

Order No:	*21081200149*
Date Requested:	*August 12, 2021*
Requested by:	*Toronto Inspection Ltd.*
Report Type:	*RSC Report (Urban)*

Historical/Products:

Topographic Map	*RSC Maps*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AST	Aboveground Storage Tanks	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	0	0
CA	Certificates of Approval	Y	0	0	0
CDRY	Dry Cleaning Facilities	Y	0	0	0
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Manufacturers and Distributors	Y	0	0	0
CHM	Chemical Register	Y	0	0	0
CNG	Compressed Natural Gas Stations	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
DTNK	Delisted Fuel Tanks	Y	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Y	0	0	0
ECA	Environmental Compliance Approval	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	1	0	1
EIIS	Environmental Issues Inventory System	Y	0	0	0
EMHE	Emergency Management Historical Event	Y	0	0	0
EPAR	Environmental Penalty Annual Report	Y	0	0	0
EXP	List of Expired Fuels Safety Facilities	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Y	0	0	0
FST	Fuel Storage Tank	Y	0	0	0
FSTH	Fuel Storage Tank - Historic	Y	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	19	19
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	0	1	1

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	Fuel Oil Spills and Leaks	Y	0	1	1
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	1	1
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	4	4
	Total:		1	26	27

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	EHS		4375 Millcroft Park Drive Burlington ON L7M 4Y7	NW/0.0	-0.36	17

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
2	SPL	Burlington Hydro Inc.	4255 taywood dr Burlington ON L7M 4V1	NE/50.8	-0.67	17
3	INC		4272 Sarazen Drive, Burlington ON	SW/64.9	0.30	17
4	WWIS		lot 7 con 1 ON ***Well ID:*** 2800199	NNE/154.4	0.34	18
5	GEN	HALTON DISTRICT SCHOOL BOARD	4313 Clubview Dr. BURLINGTON ON L7M 5A1	SE/166.7	-3.48	20
5	GEN	HALTON DISTRICT SCHOOL BOARD	4313 CLUBVIEW DR BURLINGTON ON L7M5A1	SE/166.7	-3.48	21
5	GEN	HALTON DISTRICT SCHOOL BOARD	4313 CLUBVIEW DR BURLINGTON ON L7M5A1	SE/166.7	-3.48	21
6	GEN	HALTON DISTRICT SCHOOL BOARD	4313 CLUBVIEW DR BURLINGTON ON L7M5A1	SE/209.2	-3.67	21
7	WWIS		DUNDAS ST E MILLCROFT lot 8 con 1 BURLINGTON ON ***Well ID:*** 2810071	SW/212.7	-1.10	21
8	WWIS		929 DEER RIDGE COURT Waterloo ON ***Well ID:*** 7160952	ENE/220.3	-1.67	23
9	HINC		REAR OF PROPERTY AT 4400 MILLCROFT PARK DRIVE, UNIT 9 BURLINGTON ON	WNW/240.6	2.34	30
10	WWIS		DUNDUS STREET BURLINGTON ON ***Well ID:*** 7327891	NW/295.2	1.95	31
11	GEN	MILLCROFT GOLF CLUB	MAINTENANCE FACILITY 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	W/299.8	2.34	33

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
11	GEN	MILLCROFT GOLF CLUB	4252 DUNDAS STREET WEST MAINTENANCE FACILITY BURLINGTON ON L7R 3X4	W/299.8	2.34	33
11	GEN	MILLCROFT GOLF CLUB 26-499	MAINTENANCE FACILITY 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	W/299.8	2.34	34
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	34
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	W/299.8	2.34	34
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	W/299.8	2.34	35
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	W/299.8	2.34	35
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	W/299.8	2.34	35
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON	W/299.8	2.34	36
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	36
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	37
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	37
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	37

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	38
11	GEN	MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	W/299.8	2.34	38

Executive Summary: Summary By Data Source

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Jun 30, 2021 has found that there are 1 EHS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	4375 Millcroft Park Drive Burlington ON L7M 4Y7	0.0	1

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Apr 30, 2021 has found that there are 19 GEN site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
HALTON DISTRICT SCHOOL BOARD	4313 Clubview Dr. BURLINGTON ON L7M 5A1	166.7	5
HALTON DISTRICT SCHOOL BOARD	4313 CLUBVIEW DR BURLINGTON ON L7M5A1	166.7	5
HALTON DISTRICT SCHOOL BOARD	4313 CLUBVIEW DR BURLINGTON ON L7M5A1	166.7	5
HALTON DISTRICT SCHOOL BOARD	4313 CLUBVIEW DR BURLINGTON ON L7M5A1	209.2	6
MILLCROFT GOLF CLUB	4252 DUNDAS STREET WEST MAINTENANCE FACILITY BURLINGTON ON L7R 3X4	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11

Site	Address	Distance (m)	Map Key
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON	299.8	11
MILLCROFT GOLF CLUB	MAINTENANCE FACILITY 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11
MILLCROFT GOLF CLUB 26-499	MAINTENANCE FACILITY 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	299.8	11
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	299.8	11

Site	Address	Distance (m)	Map Key
MILLCROFT GOLF & COUNTY CLUB	4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	299.8	11

HINC - TSSA Historic Incidents

A search of the HINC database, dated 2006-June 2009* has found that there are 1 HINC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	REAR OF PROPERTY AT 4400 MILLCROFT PARK DRIVE, UNIT 9 BURLINGTON ON	240.6	9

INC - Fuel Oil Spills and Leaks

A search of the INC database, dated May 31, 2021 has found that there are 1 INC site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	4272 Sarazen Drive, Burlington ON	64.9	3

SPL - Ontario Spills

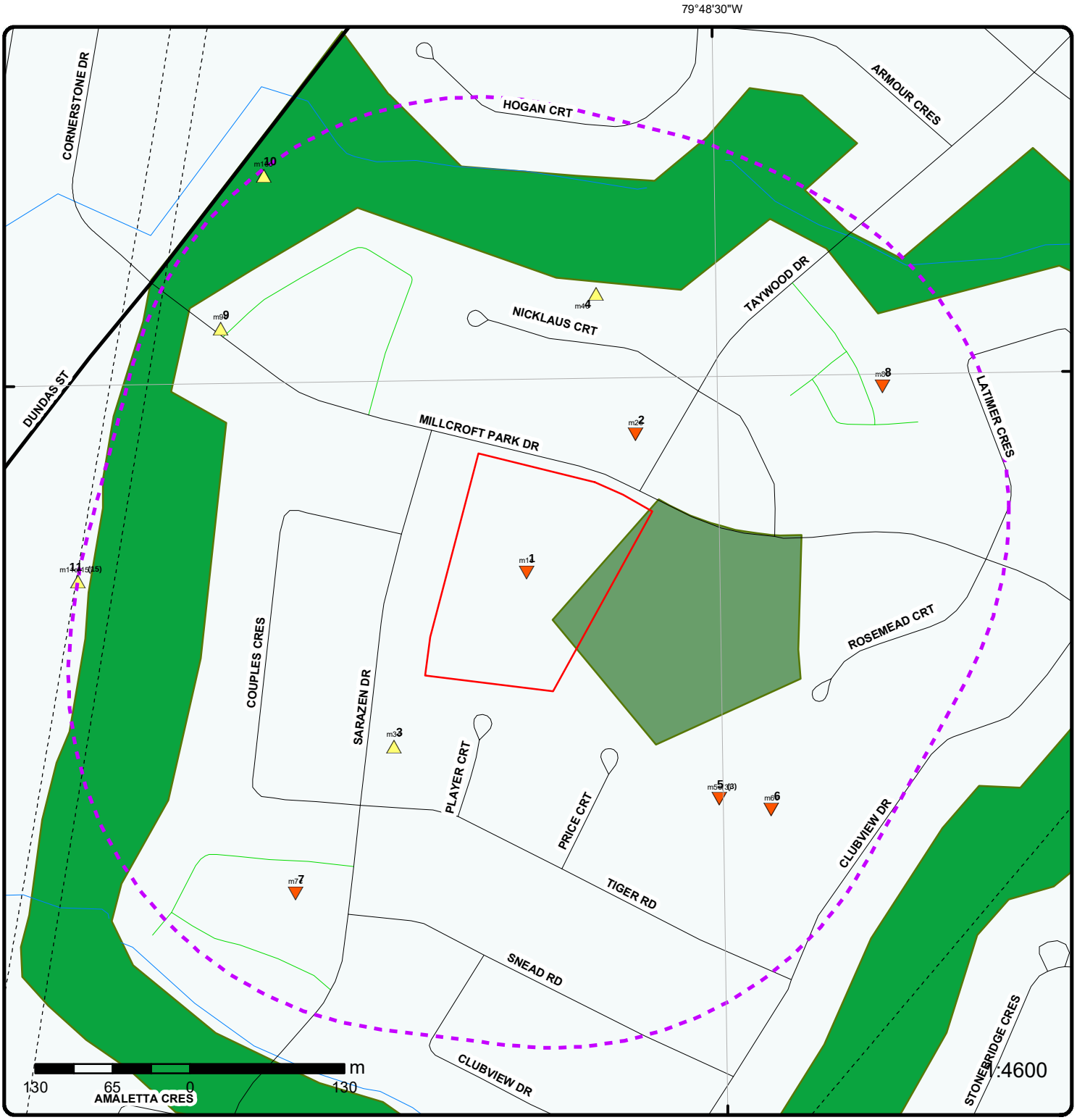
A search of the SPL database, dated 1988-Aug 2020 has found that there are 1 SPL site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Burlington Hydro Inc.	4255 taywood dr Burlington ON L7M 4V1	50.8	2

WWIS - Water Well Information System

A search of the WWIS database, dated Apr 30, 2021 has found that there are 4 WWIS site(s) within approximately 0.30 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	lot 7 con 1 ON ***Well ID:*** 2800199	154.4	4
	DUNDAS ST E MILLCROFT lot 8 con 1 BURLINGTON ON ***Well ID:*** 2810071	212.7	7
	929 DEER RIDGE COURT Waterloo ON ***Well ID:*** 7160952	220.3	8
	DUNDUS STREET BURLINGTON ON ***Well ID:*** 7327891	295.2	10



Map: 0.3 Kilometer Radius

Order Number: 21081200149

Address: 4375 Millcroft Park Drive, Burlington, ON

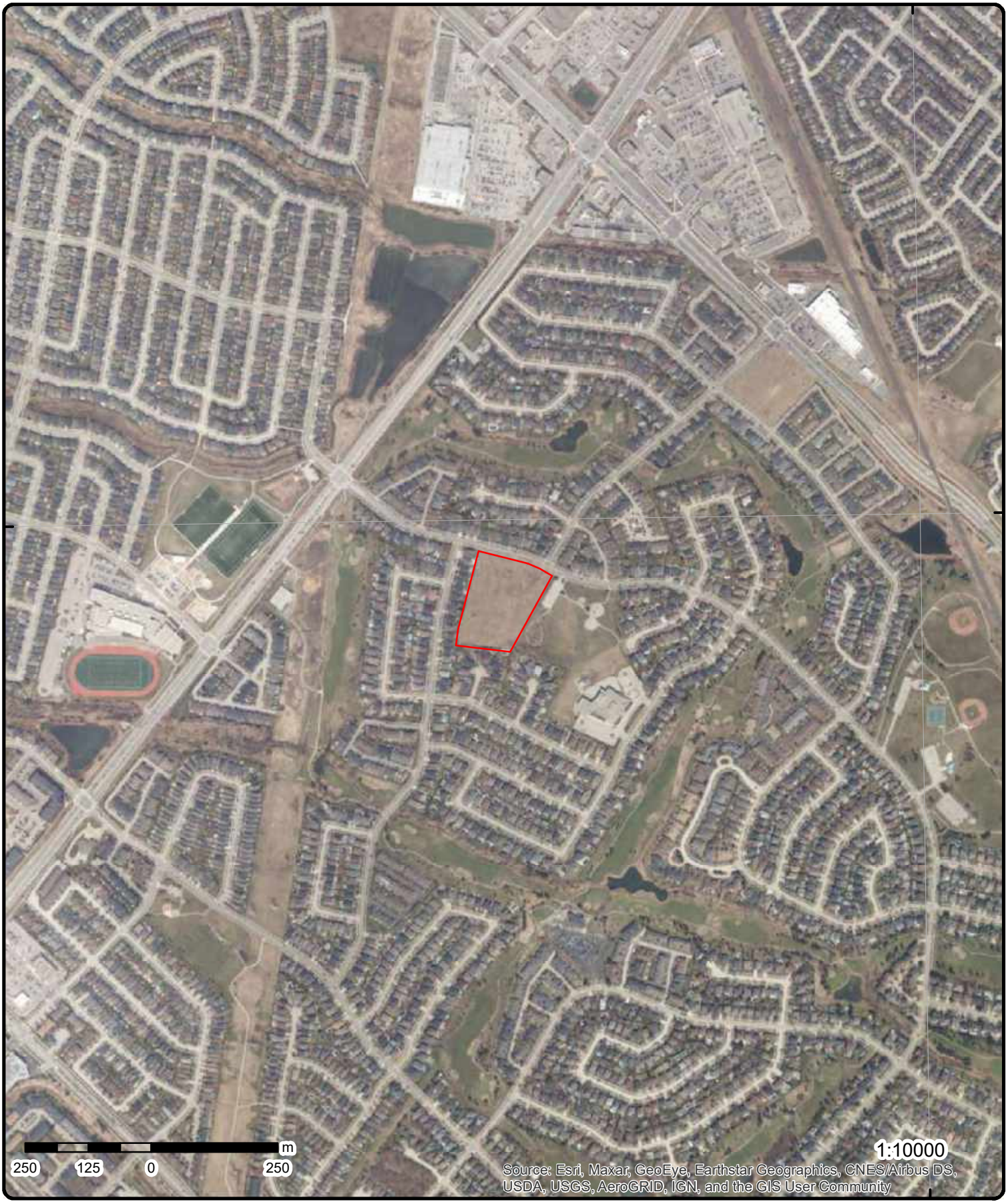
- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Expressway
- Principal Highway
- Secondary Highway
- Major Road
- Local road
- Trail
- Proposed Road
- Ferry Route/Ice Road
- Industrial and Resource - Regions
- Main Line
- Sidetrack
- Transit Line
- Abandoned Line
- National Park
- Provincial or Territorial Park
- Other Park
- Golf Course or Driving Range
- Park or Sports Field
- Other Recreation Area

Source: © 2015 DMTI Spatial Inc.

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79°48'W

43°24'N



43°24'N

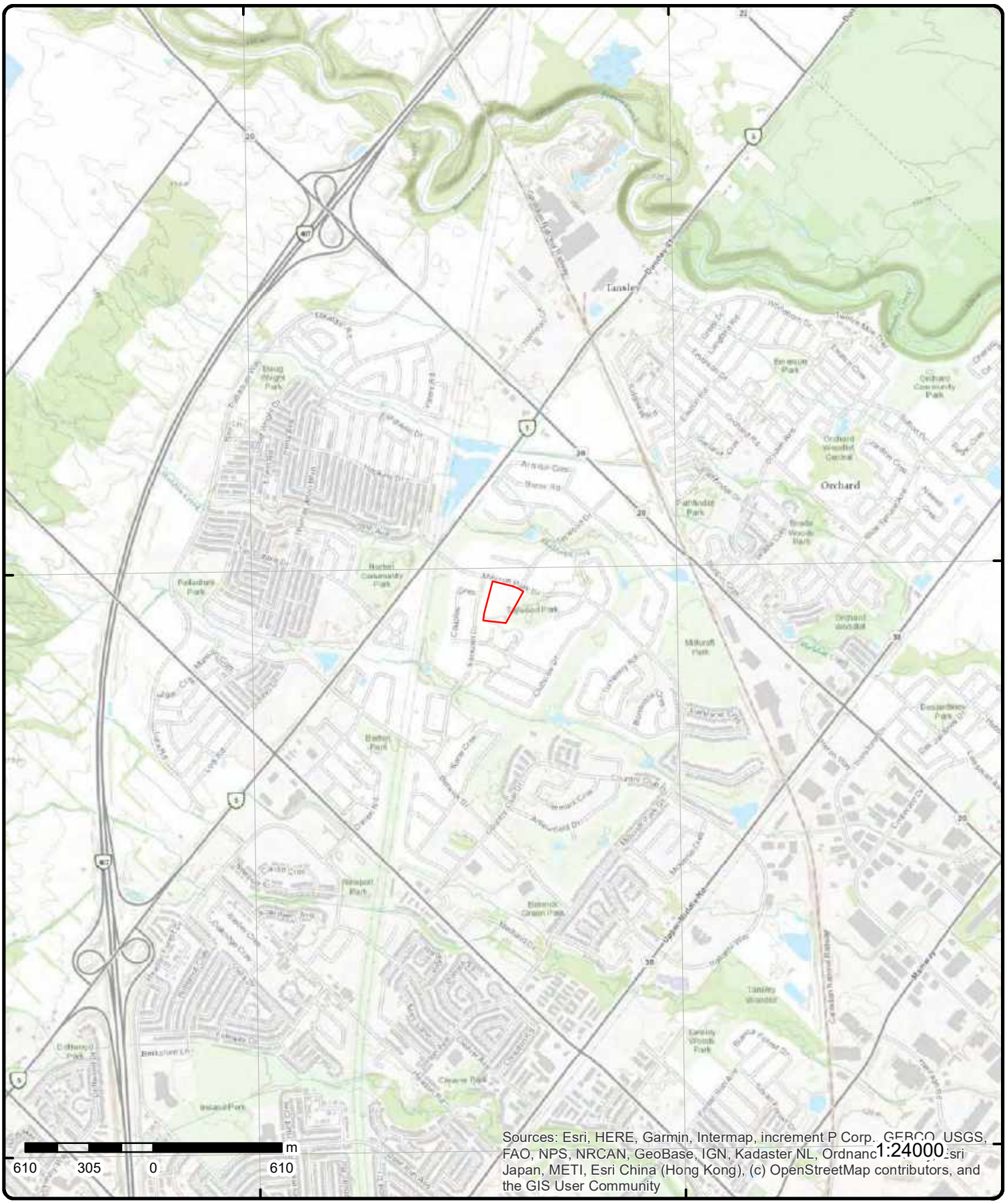
Aerial **Year: 2019**

Order Number: 21081200149

Address: 4375 Millcroft Park Drive, Burlington, ON

Source: ESRI World Imagery

© ERIS Information Limited Partnership



Topographic Map

Order Number: 21081200149

Address: 4375 Millcroft Park Drive, ON

Source: ESRI World Topographic Map

© ERIS Information Limited Partnership

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 1	NW/0.0	152.2 / -0.36	4375 Millcroft Park Drive Burlington ON L7M 4Y7	EHS

Order No:	21032600448	**Nearest Intersection:**	
Status:	C	**Municipality:**	
Report Type:	Standard Report	**Client Prov/State:**	ON
Report Date:	31-MAR-21	**Search Radius (km):**	.25
Date Received:	26-MAR-21	**X:**	-79.8103601
Previous Site Name:		**Y:**	43.3985379
Lot/Building Size:			
Additional Info Ordered:			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
2	1 of 1	NE/50.8	151.8 / -0.67	Burlington Hydro Inc. 4255 taywood dr Burlington ON L7M 4V1	SPL

Ref No:	8060-7PB7UA	**Discharger Report:**	
Site No:		**Material Group:**	
Incident Dt:		**Health/Env Conseq:**	
Year:		**Client Type:**	
Incident Cause:	Other Transport Accident	**Sector Type:**	Transformer
Incident Event:		**Agency Involved:**	
Contaminant Code:		**Nearest Watercourse:**	
Contaminant Name:	MINERAL OIL	**Site Address:**	
Contaminant Limit 1:		**Site District Office:**	
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:		**Site Region:**	
Environment Impact:	Confirmed	**Site Municipality:**	Burlington
Nature of Impact:	Air Pollution; Human Health/Safety; Soil Contamination; Vegetation Damage	**Site Lot:**	
Receiving Medium:		**Site Conc:**	
Receiving Env:		**Northing:**	
MOE Response:	No Field Response	**Easting:**	
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2/15/2009	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	Primary Assessment of Incident
Incident Reason:	Other - Reason not otherwise defined	**Source Type:**	
Site Name:	pad mount transformer<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	burlington hydro: mv struck pad mt xfrmr; fire, spill		
Contaminant Qty:	220 L		

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
3	1 of 1	SW/64.9	152.8 / 0.30	4272 Sarazen Drive, Burlington ON	INC

Incident No:	798942	**Any Health Impact:**	Unknown
Incident ID:		**Any Enviro Impact:**	Unknown
Instance No:		**Service Interrupted:**	Unknown
Status Code:		**Was Prop Damaged:**	Unknown
Attribute Category:	FS-Perform L1 Incident Insp	**Reside App. Type:**	
Context:		**Commer App. Type:**	
Date of Occurrence:	2004/04/12 00:00:00	**Indus App. Type:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Time of Occurrence:	13:00:00	**Institut App. Type:**	
Incident Created On:		**Venting Type:**	
Instance Creation Dt:		**Vent Conn Mater:**	
Instance Install Dt:		**Vent Chimney Mater:**	
Occur Insp Start Date:	2012/04/25 00:00:00	**Pipeline Type:**	
Approx Quant Rel:		**Pipeline Involved:**	
Tank Capacity:		**Pipe Material:**	
Fuels Occur Type:	Vapour Release	**Depth Ground Cover:**	
Fuel Type Involved:	Natural Gas	**Regulator Location:**	
Enforcement Policy:	NULL	**Regulator Type:**	
Prc Escalation Req:	NULL	**Operation Pressure:**	
Tank Material Type:		**Liquid Prop Make:**	
Tank Storage Type:		**Liquid Prop Model:**	
Tank Location Type:		**Liquid Prop Serial No:**	
Pump Flow Rate Cap:		**Liquid Prop Notes:**	
Task No:	3811461	**Equipment Type:**	
Notes:		**Equipment Model:**	
Drainage System:		**Serial No:**	
Sub Surface Contam.:		**Cylinder Capacity:**	
Aff Prop Use Water:		**Cylinder Cap Units:**	
Contam. Migrated:		**Cylinder Mat Type:**	
Contact Natural Env:		**Near Body of Water:**	

Incident Location: 4272 Sarazen Drive, Burlington - Vapour Release
Occurence Narrative: unable to substanciate damage
Operation Type Involved: Private Dwelling
Item:
Item Description:
Device Installed Location:

---

4 | ***1 of 1*** | ***NNE/154.4*** | ***152.8 / 0.34*** | ***lot 7 con 1 ON*** | ***WWIS***

Well ID:	2800199	**Data Entry Status:**	
Construction Date:		**Data Src:**	1
Primary Water Use:	Domestic	**Date Received:**	12/1/1959
Sec. Water Use:	0	**Selected Flag:**	True
Final Well Status:	Water Supply	**Abandonment Rec:**	
Water Type:		**Contractor:**	1307
Casing Material:		**Form Version:**	1
Audit No:		**Owner:**	
Tag:		**Street Name:**	
Construction Method:		**County:**	HALTON
Elevation (m):		**Municipality:**	BURLINGTON CITY
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	007
Well Depth:		**Concession:**	01
Overburden/Bedrock:		**Concession Name:**	DS S
Pump Rate:		**Easting NAD83:**	
Static Water Level:		**Northing NAD83:**	
Flowing (Y/N):		**Zone:**	
Flow Rate:		**UTM Reliability:**	
Clear/Cloudy:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/280\2800199.pdf

Additional Detail(s) (Map)

Well Completed Date:	1959/11/25
Year Completed:	1959
Depth (m):	12.192
Latitude:	43.4006413977979
Longitude:	-79.8095957132241
Path:	280\2800199.pdf

Bore Hole Information

Bore Hole ID:	10146756	***Elevation:***	152.692413
DP2BR:	12.00	***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:	r	***East83:***	596395.50
Code OB Desc:	Bedrock	***North83:***	4805995.00
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	5
Date Completed:	25-Nov-1959 00:00:00	***UTMRC Desc:***	margin of error : 100 m - 300 m
Remarks:		***Location Method:***	p5
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931421387
Layer:	1
Color:	7
General Color:	RED
Mat1:	02
Most Common Material:	TOPSOIL
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	12.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931421388
Layer:	2
Color:	7
General Color:	RED
Mat1:	17
Most Common Material:	SHALE
Mat2:	
Mat2 Desc:	
Mat3:	
Mat3 Desc:	
Formation Top Depth:	12.0
Formation End Depth:	40.0
Formation End Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	962800199
Method Construction Code:	6
Method Construction:	Boring
Other Method Construction:	

Pipe Information

Pipe ID: 10695326
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930249694
Layer: 1
Material: 3
Open Hole or Material: CONCRETE
Depth From:
Depth To: 40
Casing Diameter: 30
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 992800199
Pump Set At:
Static Level: 15.0
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate: 0.0
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR:
Pumping Duration MIN:
Flowing: No

Water Details

Water ID: 933601420
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 15.0
Water Found Depth UOM: ft

---

5 ***1 of 3*** ***SE/166.7*** ***149.0 / -3.48*** ***HALTON DISTRICT SCHOOL BOARD***
4313 Clubview Dr.
BURLINGTON ON L7M 5A1
GEN

Generator No: ON6594662
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 611110
SIC Description: ELEMENTARY AND SECONDARY SCHOOLS

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
5	2 of 3	SE/166.7	149.0 / -3.48	HALTON DISTRICT SCHOOL BOARD 4313 CLUBVIEW DR BURLINGTON ON L7M5A1	GEN

Generator No: ON7357626
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
5	3 of 3	SE/166.7	149.0 / -3.48	HALTON DISTRICT SCHOOL BOARD 4313 CLUBVIEW DR BURLINGTON ON L7M5A1	GEN

Generator No: ON7357626
Status: Registered
Approval Years: As of Jul 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
6	1 of 1	SE/209.2	148.8 / -3.67	HALTON DISTRICT SCHOOL BOARD 4313 CLUBVIEW DR BURLINGTON ON L7M5A1	GEN

Generator No: ON7357626
Status: Registered
Approval Years: As of Apr 2021
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
7	1 of 1	SW/212.7	151.4 / -1.10	DUNDAS ST E MILLCROFT lot 8 con 1 BURLINGTON ON	WWIS

Well ID: 2810071
Construction Date:
Primary Water Use:
Sec. Water Use:
Final Well Status: Abandoned-Other

Data Entry Status:
Data Src: 1
Date Received: 10/14/2004
Selected Flag: True
Abandonment Rec: Yes

Water Type:		**Contractor:**	6875
Casing Material:		**Form Version:**	3
Audit No:	Z16921	**Owner:**	
Tag:		**Street Name:**	DUNDAS ST E MILLCROFT
Construction Method:		**County:**	HALTON
Elevation (m):		**Municipality:**	BURLINGTON CITY
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	008
Well Depth:		**Concession:**	01
Overburden/Bedrock:		**Concession Name:**	DS S
Pump Rate:		**Easting NAD83:**	
Static Water Level:		**Northing NAD83:**	
Flowing (Y/N):		**Zone:**	
Flow Rate:		**UTM Reliability:**	
Clear/Cloudy:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/281\2810071.pdf

Additional Detail(s) (Map)

Well Completed Date:	2004/09/16
Year Completed:	2004
Depth (m):	
Latitude:	43.3961365376269
Longitude:	-79.8128018207177
Path:	281\2810071.pdf

Bore Hole Information

Bore Hole ID:	11174688	**Elevation:**	151.728240
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:	_	**East83:**	596143.00
Code OB Desc:	No formation data	**North83:**	4805491.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	3
Date Completed:	16-Sep-2004 00:00:00	**UTMRC Desc:**	margin of error : 10 - 30 m
Remarks:		**Location Method:**	wwr
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	933255942
Layer:	1
Plug From:	0
Plug To:	4.09999990463257
Plug Depth UOM:	m

Method of Construction & Well Use

Method Construction ID:	962810071
Method Construction Code:	
Method Construction:	
Other Method Construction:	

Pipe Information

Pipe ID:	11183207
Casing No:	1
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	930845993
Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	
Depth To:	
Casing Diameter:	15
Casing Diameter UOM:	cm
Casing Depth UOM:	m

Hole Diameter

Hole ID:	11308288
Diameter:	15.0
Depth From:	0.0
Depth To:	4.099999904632568
Hole Depth UOM:	m
Hole Diameter UOM:	cm

---

8 ***1 of 1*** ***ENE/220.3*** ***150.8 / -1.67*** ***929 DEER RIDGE COURT Waterloo ON*** ***WWIS***

Well ID:	7160952	***Data Entry Status:***	
Construction Date:		***Data Src:***	
Primary Water Use:	Domestic	***Date Received:***	3/29/2011
Sec. Water Use:		***Selected Flag:***	True
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1737
Casing Material:		***Form Version:***	7
Audit No:	Z109988	***Owner:***	
Tag:	A095270	***Street Name:***	929 DEER RIDGE COURT
Construction Method:		***County:***	HALTON
Elevation (m):		***Municipality:***	BURLINGTON CITY
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	
Well Depth:		***Concession:***	
Overburden/Bedrock:		***Concession Name:***	
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	
Flowing (Y/N):		***Zone:***	
Flow Rate:		***UTM Reliability:***	
Clear/Cloudy:			

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe_mapping/downloads/2Water/Wells_pdfs/716\7160952.pdf

Additional Detail(s) (Map)

Well Completed Date:	2010/11/09
Year Completed:	2010
Depth (m):	17.0688
Latitude:	43.3999082518898
Longitude:	-79.8066401541005
Path:	716\7160952.pdf

Bore Hole Information

Bore Hole ID:	1003491558	***Elevation:***	151.574829
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	596636.00
Code OB Desc:		***North83:***	4805917.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	3
Date Completed:	09-Nov-2010 00:00:00	***UTMRC Desc:***	margin of error : 10 - 30 m
Remarks:		***Location Method:***	wwr
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1003858730
Layer:	3
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Mat2 Desc:	STONES
Mat3:	73
Mat3 Desc:	HARD
Formation Top Depth:	9.0
Formation End Depth:	42.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003858728
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	01
Most Common Material:	FILL
Mat2:	12
Mat2 Desc:	STONES
Mat3:	
Mat3 Desc:	
Formation Top Depth:	0.0
Formation End Depth:	3.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003858731
Layer:	4
Color:	2
General Color:	GREY
Mat1:	11
Most Common Material:	GRAVEL

Mat2:	12
Mat2 Desc:	STONES
Mat3:	05
Mat3 Desc:	CLAY
Formation Top Depth:	42.0
Formation End Depth:	56.0
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	1003858729
Layer:	2
Color:	6
General Color:	BROWN
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Mat2 Desc:	STONES
Mat3:	73
Mat3 Desc:	HARD
Formation Top Depth:	3.0
Formation End Depth:	9.0
Formation End Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003858765
Layer:	1
Plug From:	56
Plug To:	20
Plug Depth UOM:	ft

Annular Space/Abandonment Sealing Record

Plug ID:	1003858766
Layer:	2
Plug From:	20
Plug To:	0
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	1003858764
Method Construction Code:	2
Method Construction:	Rotary (Convent.)
Other Method Construction:	

Pipe Information

Pipe ID:	1003858726
Casing No:	0
Comment:	
Alt Name:	

Construction Record - Casing

Casing ID:	1003858735

Layer:	1
Material:	1
Open Hole or Material:	STEEL
Depth From:	-3
Depth To:	53
Casing Diameter:	6
Casing Diameter UOM:	inch
Casing Depth UOM:	ft

Construction Record - Screen

Screen ID:	1003858736
Layer:	1
Slot:	35
Screen Top Depth:	56
Screen End Depth:	53
Screen Material:	1
Screen Depth UOM:	ft
Screen Diameter UOM:	inch
Screen Diameter:	6

Results of Well Yield Testing

Pump Test ID:	1003858727
Pump Set At:	46.0
Static Level:	26.0
Final Level After Pumping:	32.41699981689453
Recommended Pump Depth:	46.0
Pumping Rate:	12.0
Flowing Rate:	
Recommended Pump Rate:	12.0
Levels UOM:	ft
Rate UOM:	GPM
Water State After Test Code:	1
Water State After Test:	CLEAR
Pumping Test Method:	0
Pumping Duration HR:	1
Pumping Duration MIN:	
Flowing:	

Draw Down & Recovery

Pump Test Detail ID:	1003858755
Test Type:	Draw Down
Test Duration:	30
Test Level:	32.41699981689453
Test Level UOM:	ft

Draw Down & Recovery

Pump Test Detail ID:	1003858757
Test Type:	Draw Down
Test Duration:	40
Test Level:	32.41699981689453
Test Level UOM:	ft

Draw Down & Recovery

Pump Test Detail ID:	1003858760
Test Type:	Recovery
Test Duration:	50
Test Level:	26.0

Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858737
Test Type: Draw Down
Test Duration: 1
Test Level: 30.66699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858746
Test Type: Recovery
Test Duration: 5
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858748
Test Type: Recovery
Test Duration: 10
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858750
Test Type: Recovery
Test Duration: 15
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858761
Test Type: Draw Down
Test Duration: 60
Test Level: 32.41699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858762
Test Type: Recovery
Test Duration: 60
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858744
Test Type: Recovery
Test Duration: 4
Test Level: 26.16699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858739
Test Type: Draw Down
Test Duration: 2
Test Level: 31.66699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858745
Test Type: Draw Down
Test Duration: 5
Test Level: 32.41699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858740
Test Type: Recovery
Test Duration: 2
Test Level: 26.66699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858752
Test Type: Recovery
Test Duration: 20
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858756
Test Type: Recovery
Test Duration: 30
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858754
Test Type: Recovery
Test Duration: 25
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858758
Test Type: Recovery
Test Duration: 40
Test Level: 26.0
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858742
Test Type: Recovery
Test Duration: 3

Test Level: 26.33300018310547
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858738
Test Type: Recovery
Test Duration: 1
Test Level: 27.33300018310547
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858741
Test Type: Draw Down
Test Duration: 3
Test Level: 32.25
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858743
Test Type: Draw Down
Test Duration: 4
Test Level: 32.33300018310547
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858747
Test Type: Draw Down
Test Duration: 10
Test Level: 32.41699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858749
Test Type: Draw Down
Test Duration: 15
Test Level: 32.41699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858751
Test Type: Draw Down
Test Duration: 20
Test Level: 32.41699981689453
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 1003858753
Test Type: Draw Down
Test Duration: 25
Test Level: 32.41699981689453
Test Level UOM: ft

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Draw Down & Recovery

Pump Test Detail ID: 1003858759
Test Type: Draw Down
Test Duration: 50
Test Level: 32.41699981689453
Test Level UOM: ft

Water Details

Water ID: 1003858734
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 56.0
Water Found Depth UOM: ft

Hole Diameter

Hole ID: 1003858732
Diameter: 8.75
Depth From: 0.0
Depth To: 56.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

Hole Diameter

Hole ID: 1003858733
Diameter: 6.0
Depth From: 0.0
Depth To: 56.0
Hole Depth UOM: ft
Hole Diameter UOM: inch

9	1 of 1	WNW/240.6	154.8 / 2.34	REAR OF PROPERTY AT 4400 MILLCROFT PARK DRIVE, UNIT 9 BURLINGTON ON	HINC

External File Num: FS INC 0609-02667
Fuel Occurrence Type: Pipeline Strike
Date of Occurrence: 9/12/2006
Fuel Type Involved: Natural Gas
Status Desc: Completed - Causal Analysis(End)
Job Type Desc: Incident/Near-Miss Occurrence (FS)
Oper. Type Involved: Construction Site (pipeline strike)
Service Interruptions: Yes
Property Damage: No
Fuel Life Cycle Stage: Transmission, Distribution and Transportation
Root Cause: Root Cause: Equipment/Material/Component:No Procedures:Yes Maintenance:No Design:No Training: Yes Management:Yes Human Factors:Yes
Reported Details:
Fuel Category: Gaseous Fuel
Occurrence Type: Incident
Affiliation: Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)
County Name: Halton
Approx. Quant. Rel:
Nearby body of water:
Enter Drainage Syst.:
Approx. Quant. Unit:
Environmental Impact:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
10	1 of 1	NW/295.2	154.5 / 1.95	DUNDUS STREET BURLINGTON ON	WWIS

Well ID:	7327891	**Data Entry Status:**	
Construction Date:		**Data Src:**	
Primary Water Use:	Test Hole	**Date Received:**	1/15/2019
Sec. Water Use:		**Selected Flag:**	True
Final Well Status:	Test Hole	**Abandonment Rec:**	
Water Type:		**Contractor:**	6988
Casing Material:		**Form Version:**	7
Audit No:	Z279767	**Owner:**	
Tag:	A241868	**Street Name:**	DUNDUS STREET
Construction Method:		**County:**	HALTON
Elevation (m):		**Municipality:**	BURLINGTON CITY
Elevation Reliability:		**Site Info:**	
Depth to Bedrock:		**Lot:**	
Well Depth:		**Concession:**	
Overburden/Bedrock:		**Concession Name:**	
Pump Rate:		**Easting NAD83:**	
Static Water Level:		**Northing NAD83:**	
Flowing (Y/N):		**Zone:**	
Flow Rate:		**UTM Reliability:**	
Clear/Cloudy:			

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date:	2018/02/27
Year Completed:	2018
Depth (m):	4.6
Latitude:	43.4015685203819
Longitude:	-79.8130291756791
Path:	

Bore Hole Information

Bore Hole ID:	1007364680	**Elevation:**	
DP2BR:		**Elevrc:**	
Spatial Status:		**Zone:**	17
Code OB:		**East83:**	596116.00
Code OB Desc:		**North83:**	4806094.00
Open Hole:		**Org CS:**	UTM83
Cluster Kind:		**UTMRC:**	4
Date Completed:	27-Feb-2018 00:00:00	**UTMRC Desc:**	margin of error : 30 m - 100 m
Remarks:		**Location Method:**	wwr
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	1007636412
Layer:	1
Color:	7
General Color:	RED
Mat1:	06
Most Common Material:	SILT

Mat2: 05
Mat2 Desc: CLAY
Mat3:
Mat3 Desc:
Formation Top Depth: 0.0
Formation End Depth: 4.599999904632568
Formation End Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1007636419
Layer: 1
Plug From:
Plug To:
Plug Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1007636420
Layer: 1
Plug From: 0.300000011920929
Plug To: 2.70000004768372
Plug Depth UOM: m

Annular Space/Abandonment Sealing Record

Plug ID: 1007636421
Layer: 2
Plug From: 2.70000004768372
Plug To: 4.59999990463257
Plug Depth UOM: m

Method of Construction & Well Use

Method Construction ID: 1007636418
Method Construction Code: 6
Method Construction: Boring
Other Method Construction:

Pipe Information

Pipe ID: 1007636411
Casing No: 0
Comment:
Alt Name:

Construction Record - Screen

Screen ID: 1007636416
Layer: 1
Slot: 10
Screen Top Depth: 3
Screen End Depth: 4.59999990463257
Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm
Screen Diameter: 6

Water Details

Water ID:	1007636414
Layer:	
Kind Code:	
Kind:	
Water Found Depth:	
Water Found Depth UOM:	m

Hole Diameter

Hole ID:	1007636413
Diameter:	10.199999809265137
Depth From:	0.0
Depth To:	4.599999904632568
Hole Depth UOM:	m
Hole Diameter UOM:	cm

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11 ***1 of 15*** ***W/299.8*** ***154.8 / 2.34*** ***MILLCROFT GOLF CLUB MAINTENANCE FACILITY 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4*** ***GEN***

Generator No:	ON1403000	***PO Box No:***	
Status:		***Country:***	
Approval Years:	90	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No Admin:***	
SIC Code:	9651		
SIC Description:	GOLF COURSES		

Detail(s)

Waste Class:	213
Waste Class Desc:	PETROLEUM DISTILLATES
Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS

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11 ***2 of 15*** ***W/299.8*** ***154.8 / 2.34*** ***MILLCROFT GOLF CLUB 4252 DUNDAS STREET WEST MAINTENANCE FACILITY BURLINGTON ON L7R 3X4*** ***GEN***

Generator No:	ON1403000	***PO Box No:***	
Status:		***Country:***	
Approval Years:	92,93,97,98	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No Admin:***	
SIC Code:	9651		
SIC Description:	GOLF COURSES		

Detail(s)

Waste Class:	213
Waste Class Desc:	PETROLEUM DISTILLATES
Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	3 of 15	W/299.8	154.8 / 2.34	MILLCROFT GOLF CLUB 26-499 MAINTENANCE FACILITY 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	GEN

Generator No: ON1403000
Status:
Approval Years: 94,95,96
Contam. Facility:
MHSW Facility:
SIC Code: 9651
SIC Description: GOLF COURSES

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	4 of 15	W/299.8	154.8 / 2.34	MILLCROFT GOLF & COUNTY CLUB 4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	GEN

Generator No: ON1403000
Status:
Approval Years: 99,00,01,03,04,05,06,07,08
Contam. Facility:
MHSW Facility:
SIC Code: 9651
SIC Description: GOLF COURSES

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 282
Waste Class Desc: NON-HALOGENATED LEAN ORGANICS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	5 of 15	W/299.8	154.8 / 2.34	MILLCROFT GOLF & COUNTY CLUB 4252 DUNDAS STREET WEST BURLINGTON ON L7R 3X4	GEN

Generator No: ON1403000
Status:
Approval Years: 2009
Contam. Facility:
MHSW Facility:
SIC Code: 713910
SIC Description: Golf Courses and Country Clubs

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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11 | **6 of 15** | **W/299.8** | **154.8 / 2.34** | **MILLCROFT GOLF & COUNTY CLUB**
4252 DUNDAS STREET WEST
BURLINGTON ON L7R 3X4 | **GEN**

Generator No: ON1403000
Status:
Approval Years: 2010
Contam. Facility:
MHSW Facility:
SIC Code: 713910
SIC Description: Golf Courses and Country Clubs

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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11 | **7 of 15** | **W/299.8** | **154.8 / 2.34** | **MILLCROFT GOLF & COUNTY CLUB**
4252 DUNDAS STREET WEST
BURLINGTON ON L7R 3X4 | **GEN**

Generator No: ON1403000
Status:
Approval Years: 2011
Contam. Facility:
MHSW Facility:
SIC Code: 713910
SIC Description: Golf Courses and Country Clubs

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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11 | **8 of 15** | **W/299.8** | **154.8 / 2.34** | **MILLCROFT GOLF & COUNTY CLUB**
4252 DUNDAS STREET WEST
BURLINGTON ON L7R 3X4 | **GEN**

Generator No: ON1403000
Status:
Approval Years: 2012

PO Box No:
Country:
Choice of Contact:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code: 713910
SIC Description: Golf Courses and Country Clubs

Detail(s)

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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11 | ***9 of 15*** | ***W/299.8*** | ***154.8 / 2.34*** | ***MILLCROFT GOLF & COUNTY CLUB***
4252 DUNDAS STREET WEST
BURLINGTON ON | ***GEN***

Generator No: ON1403000 ***PO Box No:***
Status: ***Country:***
Approval Years: 2013 ***Choice of Contact:***
Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code: 713910
SIC Description: GOLF COURSES AND COUNTRY CLUBS

Detail(s)

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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11 | ***10 of 15*** | ***W/299.8*** | ***154.8 / 2.34*** | ***MILLCROFT GOLF & COUNTY CLUB***
4252 DUNDAS STREET WEST
BURLINGTON ON L7M 4A8 | ***GEN***

Generator No: ON1403000 ***PO Box No:***
Status: ***Country:*** Canada
Approval Years: 2016 ***Choice of Contact:*** CO_OFFICIAL
Contam. Facility: No ***Co Admin:***
MHSW Facility: No ***Phone No Admin:***
SIC Code: 713910
SIC Description: GOLF COURSES AND COUNTRY CLUBS

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	11 of 15	W/299.8	154.8 / 2.34	MILLCROFT GOLF & COUNTY CLUB 4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	GEN

Generator No: ON1403000
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 713910
SIC Description: GOLF COURSES AND COUNTRY CLUBS

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	12 of 15	W/299.8	154.8 / 2.34	MILLCROFT GOLF & COUNTY CLUB 4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	GEN

Generator No: ON1403000
Status:
Approval Years: 2014
Contam. Facility: No
MHSW Facility: No
SIC Code: 713910
SIC Description: GOLF COURSES AND COUNTRY CLUBS

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
11	13 of 15	W/299.8	154.8 / 2.34	MILLCROFT GOLF & COUNTY CLUB 4252 DUNDAS STREET WEST BURLINGTON ON L7M 4A8	GEN

Generator No: ON1403000
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 213 L

Waste Class Desc: Petroleum distillates

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

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11 ***14 of 15*** ***W/299.8*** ***154.8 / 2.34*** ***MILLCROFT GOLF & COUNTY CLUB***
4252 DUNDAS STREET WEST
BURLINGTON ON L7M 4A8 ***GEN***

Generator No: ON1403000
Status: Registered
Approval Years: As of Jul 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 213 L
Waste Class Desc: Petroleum distillates

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

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11 ***15 of 15*** ***W/299.8*** ***154.8 / 2.34*** ***MILLCROFT GOLF & COUNTY CLUB***
4252 DUNDAS STREET WEST
BURLINGTON ON L7M 4A8 ***GEN***

Generator No: ON1403000
Status: Registered
Approval Years: As of Apr 2021
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 213 L
Waste Class Desc: Petroleum distillates

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Unplottable Summary

Total: 12 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	MONARCH CONSTRUCTION LIMITED	MILLCROFT P.2E/MILLCROFT PK.DR	BURLINGTON CITY ON	
CA	MONARCH CONSTRUCTION LIMITED	MILLCROFT P.2E/MILLCROFT PK.DR	BURLINGTON CITY ON	
CA	MONARCH CONSTRUCTION LIMITED	MILLCROFT PK.DR./TAYWOOD DR.	BURLINGTON ON	
CA	BURLINGTON CITY - WALKER'S LINE	MILLCROFT PARK DRIVE	BURLINGTON CITY ON	
CA	MONARCH CONSTRUCTION LIMITED	MILLCROFT PARK DR.	BURLINGTON CITY ON	
CA	MONARCH CONSTRUCTION LIMITED	MILLCROFT PARK DR.	BURLINGTON CITY ON	
CA	BURLINGTON CITY - WALKER'S LINE	MILLCROFT PARK DRIVE	BURLINGTON CITY ON	
EBR	Greenflow Environmental Services Inc.	Lot 7, Plan M-192 CITY OF BURLINGTON	ON	
EBR	Greenflow Environmental Services Inc.	Lot 7, Plan M-192 City of Burlington CITY OF BURLINGTON	ON	
ECA	Marble Creek Developments Inc.	Part of Lot 8, Concession 1	Burlington ON	L7L 0A2
WWIS		lot 7 con 1	ON	
WWIS		lot 7 con 1	ON	

Unplottable Report

Site: ***MONARCH CONSTRUCTION LIMITED***
MILLCROFT P.2E/MILLCROFT PK.DR BURLINGTON CITY ON

Database: ***CA***

Certificate #:	3-1642-97-
Application Year:	97
Issue Date:	11/21/1997
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***MONARCH CONSTRUCTION LIMITED***
MILLCROFT P.2E/MILLCROFT PK.DR BURLINGTON CITY ON

Database: ***CA***

Certificate #:	7-1196-97-
Application Year:	97
Issue Date:	11/21/1997
Approval Type:	Municipal water
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***MONARCH CONSTRUCTION LIMITED***
MILLCROFT PK.DR./TAYWOOD DR. BURLINGTON ON

Database: ***CA***

Certificate #:	3-1204-98-
Application Year:	98
Issue Date:	8/20/1998
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***BURLINGTON CITY - WALKER'S LINE***
MILLCROFT PARK DRIVE BURLINGTON CITY ON

Database: ***CA***

Certificate #:	3-1523-91-

Application Year: 91
Issue Date: 10/4/1991
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MONARCH CONSTRUCTION LIMITED***
MILLCROFT PARK DR. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-0559-88-
Application Year: 88
Issue Date: 4/26/1988
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MONARCH CONSTRUCTION LIMITED***
MILLCROFT PARK DR. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0496-88-
Application Year: 88
Issue Date: 4/26/1988
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BURLINGTON CITY - WALKER'S LINE***
MILLCROFT PARK DRIVE BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-1218-91-
Application Year: 91
Issue Date: 10/4/1991
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Greenflow Environmental Services Inc.***
Lot 7, Plan M-192 CITY OF BURLINGTON ON

Database: ***EBR***

EBR Registry No:	IA8E0344	***Decision Posted:***	
Ministry Ref No:	A680198	***Exception Posted:***	
Notice Type:	Instrument Decision	***Section:***	
Notice Stage:		***Act 1:***	
Notice Date:	February 21, 2000	***Act 2:***	
Proposal Date:	March 16, 1998	***Site Location Map:***	
Year:	1998		
Instrument Type:	(EPA s. 27) - Approval for a waste disposal site.		
Off Instrument Name:			
Posted By:			
Company Name:	Greenflow Environmental Services Inc.		
Site Address:			
Location Other:			
Proponent Name:			
Proponent Address:	Unit 2 and 3, 4151 Morris Drive,, Burlington Ontario, L7L 5L5		
Comment Period:			
URL:			

Site Location Details:

Lot 7, Plan M-192 CITY OF BURLINGTON

Site: ***Greenflow Environmental Services Inc.***
Lot 7, Plan M-192 City of Burlington CITY OF BURLINGTON ON

Database: ***EBR***

EBR Registry No:	IA7E1718	***Decision Posted:***	
Ministry Ref No:	B680198	***Exception Posted:***	
Notice Type:	Instrument Decision	***Section:***	
Notice Stage:		***Act 1:***	
Notice Date:	February 18, 2000	***Act 2:***	
Proposal Date:	November 24, 1997	***Site Location Map:***	
Year:	1997		
Instrument Type:	(EPA s. 27) - Approval for a waste disposal site.		
Off Instrument Name:			
Posted By:			
Company Name:	Greenflow Environmental Services Inc.		
Site Address:			
Location Other:			
Proponent Name:			
Proponent Address:	4151 Morris Drive, Unit 4, Burlington Ontario, L7L 5L5		
Comment Period:			
URL:			

Site Location Details:

Lot 7, Plan M-192 City of Burlington CITY OF BURLINGTON

Site: ***Marble Creek Developments Inc.***
Part of Lot 8, Concession 1 Burlington ON L7L 0A2

Database: ***ECA***

Approval No:	3261-9CKQZY	***MOE District:***	
Approval Date:	2013-10-30	***City:***	
Status:	Approved	***Longitude:***	
Record Type:	ECA	***Latitude:***	
Link Source:	IDS	***Geometry X:***	
SWP Area Name:		***Geometry Y:***	
Approval Type:	ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS		
Project Type:	MUNICIPAL AND PRIVATE SEWAGE WORKS		
Business Name:	Marble Creek Developments Inc.		

Address:	Part of Lot 8, Concession 1
Full Address:	
Full PDF Link:	https://www.accessenvironment.ene.gov.on.ca/instruments/9709-9CHSHJ-14.pdf

Site:
lot 7 con 1 ON

Database: ***WWIS***

Well ID:	7365985	***Data Entry Status:***	Yes
Construction Date:		***Data Src:***	
Primary Water Use:		***Date Received:***	8/24/2020
Sec. Water Use:		***Selected Flag:***	True
Final Well Status:		***Abandonment Rec:***	
Water Type:		***Contractor:***	7464
Casing Material:		***Form Version:***	7
Audit No:	Z334946	***Owner:***	
Tag:	A258692	***Street Name:***	
Construction Method:		***County:***	HALTON
Elevation (m):		***Municipality:***	BURLINGTON CITY
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	007
Well Depth:		***Concession:***	01
Overburden/Bedrock:		***Concession Name:***	FEF
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	
Flowing (Y/N):		***Zone:***	
Flow Rate:		***UTM Reliability:***	
Clear/Cloudy:			

Bore Hole Information

Bore Hole ID:	1008452858	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	591609.00
Code OB Desc:		***North83:***	4796558.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	22-Jul-2020 00:00:00	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	gis
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Site:
lot 7 con 1 ON

Database: ***WWIS***

Well ID:	7365984	***Data Entry Status:***	Yes
Construction Date:		***Data Src:***	
Primary Water Use:		***Date Received:***	8/24/2020
Sec. Water Use:		***Selected Flag:***	True
Final Well Status:		***Abandonment Rec:***	
Water Type:		***Contractor:***	7464
Casing Material:		***Form Version:***	7
Audit No:	Z334947	***Owner:***	
Tag:	A238705	***Street Name:***	
Construction Method:		***County:***	HALTON
Elevation (m):		***Municipality:***	BURLINGTON CITY
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	007
Well Depth:		***Concession:***	01
Overburden/Bedrock:		***Concession Name:***	FEF
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	

Flowing (Y/N):
Flow Rate:
Clear/Cloudy:

Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID:	1008452855	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	17
Code OB:		***East83:***	591646.00
Code OB Desc:		***North83:***	4796589.00
Open Hole:		***Org CS:***	UTM83
Cluster Kind:		***UTMRC:***	4
Date Completed:	23-Jul-2020 00:00:00	***UTMRC Desc:***	margin of error : 30 m - 100 m
Remarks:		***Location Method:***	gis
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory: Provincial AAGR

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.*

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Sep 2020

Abandoned Mine Information System: Provincial AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Oct 2018

Anderson's Waste Disposal Sites: Private ANDR

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

Aboveground Storage Tanks: Provincial AST

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

Automobile Wrecking & Supplies: Private AUWR

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 1999-Dec 31, 2020

Borehole: Provincial BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

Certificates of Approval: Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Government Publication Date: 1985-Oct 30, 2011*

Dry Cleaning Facilities: Federal CDRY

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

Government Publication Date: Jan 2004-Dec 2018

Commercial Fuel Oil Tanks: Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.
Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: May 31, 2021

Chemical Manufacturers and Distributors: Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

Chemical Register: Private CHM

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

Government Publication Date: 1999-Dec 31, 2020

Compressed Natural Gas Stations: Private CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 2012 -Apr 2021

Inventory of Coal Gasification Plants and Coal Tar Sites: Provincial COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions: Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Nov 2020

Certificates of Property Use: Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994- Jun 30, 2021

Drill Hole Database: Provincial DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886 - Sep 2020

Delisted Fuel Tanks: Provincial DTNK

List of fuel storage tank sites that were once found in - and have since been removed from - the list of fuel storage tanks made available by the regulatory agency under Access to Public Information.

Government Publication Date: May 31, 2021

Environmental Activity and Sector Registry: Provincial EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Government Publication Date: Oct 2011- Jun 30, 2021

Environmental Registry: Provincial EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994- Jun 30, 2021

Environmental Compliance Approval: Provincial ECA

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011- Jun 30, 2021

Environmental Effects Monitoring: Federal EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007*

ERIS Historical Searches: Private EHS

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Jun 30, 2021

Environmental Issues Inventory System: Federal EIIS

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001*

Emergency Management Historical Event: Provincial EMHE

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Dec 31, 2016

Environmental Penalty Annual Report: Provincial EPAR

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2020

List of Expired Fuels Safety Facilities: Provincial EXP

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Federal Convictions: Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal FCS

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Apr 2021

Fisheries & Oceans Fuel Tanks: Federal FOFT

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Government Publication Date: 1964-Sep 2019

Federal Identification Registry for Storage Tank Systems (FIRSTS): Federal FRST

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

Fuel Storage Tank: Provincial FST

List of registered private and retail fuel storage tanks. This is not a comprehensive or complete inventory of private and retail fuel storage tanks in the province; this listing is a copy of registered private and retail fuel storage tanks, obtained under Access to Public Information.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Jul 31, 2020

Fuel Storage Tank - Historic: Provincial FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Apr 30, 2021

Greenhouse Gas Emissions from Large Facilities: Federal GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

Government Publication Date: 2013-Dec 2019

TSSA Historic Incidents: Provincial HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Fuel Oil Spills and Leaks: Provincial INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing in a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.

Government Publication Date: May 31, 2021

Landfill Inventory Management Ontario: Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the Ministry of the Environment, Conservation and Parks compiles new and updated information. Includes small and large landfills currently operating as well as those which are closed and historic. Operators of larger landfills provide landfill information for the previous operating year to the ministry for LIMO including: estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Feb 28, 2019

Canadian Mine Locations: Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Dec 2020

National Analysis of Trends in Emergencies System (NATES): Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2019

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents: Federal NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Mar 31, 2021

National Energy Board Wells: Federal NEBP

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES): Federal NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Government Publication Date: 1993-May 2017

Oil and Gas Wells: Private OGWE

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-Feb 28, 2021

Ontario Oil and Gas Wells: Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Jun 2020

Inventory of PCB Storage Sites: Provincial OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013

Orders: Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994-Apr 30, 2021

Canadian Pulp and Paper: Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014

Parks Canada Fuel Storage Tanks: Federal PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

Government Publication Date: Oct 2011- Jun 30, 2021

Pipeline Incidents: Provincial PINC

List of pipeline incidents (strikes, leaks, spills). This is not a comprehensive or complete inventory of pipeline incidents in the province; this listing in an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.

Government Publication Date: May 31, 2021

Private and Retail Fuel Storage Tanks: Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994- Jun 30, 2021

Ontario Regulation 347 Waste Receivers Summary: Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-1990, 1992-2018

Record of Site Condition: Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.
RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-Jun 2021

Retail Fuel Storage Tanks: Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-Dec 31, 2020

Scott's Manufacturing Directory: Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011*

Ontario Spills: Provincial SPL

List of spills and incidents made available the Ministry of the Environment, Conservation and Parks. This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Government Publication Date: 1988-Aug 2020

Wastewater Discharger Registration Database: Provincial SRDS

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Government Publication Date: 1990-Dec 31, 2018

Anderson's Storage Tanks: Private TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks: Federal TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970 - Dec 2020

Variances for Abandonment of Underground Storage Tanks: Provincial VAR

Listing of variances granted for storage tank abandonment. This is not a comprehensive or complete inventory of tank abandonment variances in the province; this listing is a copy of tank abandonment variance records previously obtained under Access to Public Information. In Ontario, registered underground storage tanks must be removed within two years of disuse; if removal of a tank is not feasible, an application may be sought for a variance from this code requirement.
Records are not verified for accuracy or completeness.

Government Publication Date: May 31, 2021

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011- Jun 30, 2021

Waste Disposal Sites - MOE 1991 Historical Approval Inventory: Provincial WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Apr 30, 2021

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Appendix D Freedom of Information

Ministry of the Environment
Freedom of Information and Protection of Privacy Office
40 St. Clair Avenue West, 12th Floor
Toronto, ON M4V 1M2
Tel: 416-314-4075
Fax: 416-314-4285

Ontario

Use this form to request records that are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on the completion and use of this form. Our fax no. is 416- 314-4285.

Requester Data			**For Ministry Use Only**	
Name, Title, Company Name and Mailing Address of Requester Natalle Chan, Project Coordinator Toronto Inspection Limited 110 Konrad Crescent, Unit 16, Markham, ON L3R 9X2 Email Address: natalle@torontoinspection.com			FOI Request No.	Date Request Received
			Fee Paid ☐ CHQ ☐ VISA/MC/AMEX ☐ CASH/MONEY ORDER	
Tel: 905-940-8509 Fax: 905-940-8192	Your Project/ Reference No. 5607-21-EA	Signature of Requester Natalle	☐ CNR ☐ ER ☐ NOR ☐ SWR ☐ WCR ☐ IEB ☐EAA ☐ EMR ☐ SCB ☐ SDW	

Request Parameters

Municipal Address/Lot, Concession, Geographic Township **(Municipal address mandatory for cities, towns or regions)**

4375 Millcroft Park Drive, Burlington

Present Property Owner(s) and Date(s) of Ownership

Previous Property Owner(s) and Date(s) of Ownership

Present/Previous Tenant(s) (if applicable)

Search Parameters Files older than 2 years may require $60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.	**Specify Year(s) Requested**
Environmental concerns (General correspondence, occurrence reports, abatement)	All Years
Orders	All Years
Spills	All Years
Investigations/prosecutions ▸ ***Owner and tenant information must be provided***	All Years
Waste Generator number/classes	All Years

Certificates of Approval ▸ Proponent information must be provided and Certificates of Approval number(s) (if known). 1985 and prior records are searched manually. **Search fees in excess of $300.00** may be incurred, depending on the types and years of records to be searched. **If supporting documents are also required, mark SD box**.

		SD	**Specify Year(s) Requested**
Air - *emissions*			All Years
Renewable Energy			All Years
Water - *mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)*			All Years
Sewage - *sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations*			All Years
Wastewater - *industrial discharge*			All Years
Waste sites - *disposal, landfill sites, transfer stations, processing sites, incinerator sites*			All Years
Waste systems	*- haulers: sewage, non-hazardous & hazardous waste, mobile waste processing units, PCB destruction*		All Years

Appendix E TSSA Correspondence

gus@torontoinspection.com

From: Public Information Services <publicinformationservices@tssa.org>
Sent: April 15, 2021 9:00 AM
To: gus@torontoinspection.com
Subject: RE: Public Information Request for 4375 Millcroft Park Dr, Burlington

Please refrain from sending documents to head office and only submit your requests electronically via email along with credit card payment. We are all working remotely and mailing in applications with cheques will lengthen the overall processing time.

NO RECORD FOUND

Hello Gus,

Thank you for your request for confirmation of public information.

- We confirm that there are no records in our database of any fuel storage tanks at the subject addresses:

For a further search in our archives please complete our release of public information form found at https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?_mid_=392 and email the completed form to publicinformationservices@tssa.org along with a fee of $56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard).

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Kind regards,

Saara

Public Information Agent
Facilities and Business Services
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-6222 | Fax: +1-416-734-3568 | E-Mail: publicinformationservices@tssa.org
www.tssa.org

From: gus@torontoinspection.com <gus@torontoinspection.com>
Sent: April 14, 2021 2:18 PM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: Public Information Request for 4375 Millcroft Park Dr, Burlington

[CAUTION]: This email originated outside the organisation.
Please do not click links or open attachments unless you recognise the source of this email and know the content is safe.

Good Afternoon,

Please inform if you have any on-file information including historical and current presence of fuel tanks or facilities at this location and surrounding properties, as well as any environmental investigation and/or remediation pertaining to this location or surrounding properties:

Burlington, Ontario

1) 4375 Millcroft Park Drive
2) 4357 Millcroft Park Drive
3) 4360 Millcroft Park Drive
4) 4374 Millcroft Park Drive
5) 4382 Millcroft Park Drive
6) 4304 Sarazen Drive
7) 4294 Sarazen Drive
8) 4280 Sarazen Drive
9) 4259 Player Court
10) 4260 Player Court

Your help in the matter is appreciated,
Gus

Augustine (Gus) Cheng HBSc, EP

CONFIDENTIALITY NOTICE - This e-mail transmission, and any documents, files or previous e-mail messages attached to it may contain information that is confidential or legally privileged. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that you must not read this transmission and that any disclosure, copying, printing, distribution or use of any of the information contained in or attached to this transmission is STRICTLY PROHIBITED. If you have received this transmission in error, please immediately notify the sender by telephone or return e-mail and delete the original transmission and its attachments without reading or saving in any manner. Toronto Inspection Ltd. confirms its compliance with Canadian Anti-Spam Legislation (CASL). Should you wish to be removed from our mailing list, please alert the sender. Thank you.

This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.

Appendix F Client`s File Documents

LOT 51 | LOT 50 | LOT 130 | LOT 129 | LOT 128 REGISTERED | LOT 127 PLAN | EXISTING RESIDENTIAL | LOT 126 | LOT 125 20M–811 | LOT 124 | LOT 1 REGISTERED PLAN 20M–727

TAYWOOD DRIVE (DEDICATED BY REGISTERED PLAN 20M–727)

BLOCK 13 (0.30 RESERVE)

BLOCK 14 (0.30 RESERVE)

BLOCK 136 (0.30 RESERVE) PIN 07182–1655

MILLCROFT PARK DRIVE

(DEDICATED BY REGISTERED PLAN 20M–811) PIN 07182–1660

BLOCK 15 (0.30 RESERVE) PIN 07182–1244 (DEDICATED AS A PUBLIC HIGHWAY BY BY–LAW No. 29–2003, INST. No. HR185621)

PIN 07182–1964

PIN 07182–1246

N76°30'15"W 78.792

C=47.905 R=200.000 N69°24'05"W A=48.020

N62°32'05"W 28.196

LOT 49 PIN 07182–1879

LOT 48 PIN 07182–1878

LOT 47 PIN 07182–1877

LOT 46 PIN 07182–1876

20M–868

160.550

LOT 45 PIN 07182–1875

LOT 44 PIN 07182–1874

EXISTING RESIDENTIAL PLAN

LOT 43 PIN 07182–1873

LOT 42 PIN 07182–1872

N14°45'15"E

LOT 41 PIN 07182–1871

REGISTERED

LOT 40 PIN 07182–1870

LOT 39 PIN 07182–1869

N06°24'30"E 31.923

LOT 38 PIN 07182–1868

LOT 37 PIN 07182–1867

LOT 36

LOT 35

SARAZEN DRIVE (DEDICATED BY REGISTERED PLAN 20M–868)

18.0

L=349±m.

STREET

BLOCK 133, REGISTERED PLAN 20M–811

1 18.3 32.5

2 15.45 32.5

3 15.45 32.5

4 15.45 32.5

5 15.45 32.5

6 15.45 32.5

7 15.45 32.8

8 15.45 34.7

9 15.45 33.5

10 15.45

11

12 15.45

13 15.45

14 15.45

15 15.49

24 18.95 34.1

23 15.45 33.6

22 15.45 33.1

21 15.45 32.5

20 15.45 32.0

19 15.6 31.4

18 19.0

17 15.9 32.1

16 19.0 33.7

PIN 07182–1652

31.6 30.8

25 18.3 39.2

26 15.3 38.2

27 15.3 38.8

28 15.3 37.8

29 15.3 34.7

30 15.3 31.4

R=119.0m.

R=101.0m.

R=5.0m.

R=12.0m.

R=16.0m.

90.0°

105.0°

18.0

R=101.0m.

R=119.0m.

PARK BL–31 A=0.035±Ha.

172.705

R=101.0m.

R=119.0m.

N29°02'40"E

BLOCK 132, REGISTERED PLAN 20M–811 PIN 07182–1651

EXISTING TAYWOOD PARK

32.1 32.0

52.0

107.780

N83°28'20"W

LOT 27 PIN 07182–1857 REGISTERED PLAN

LOT 26 PIN 07182–1856

LOT 25 PIN 07182–1855

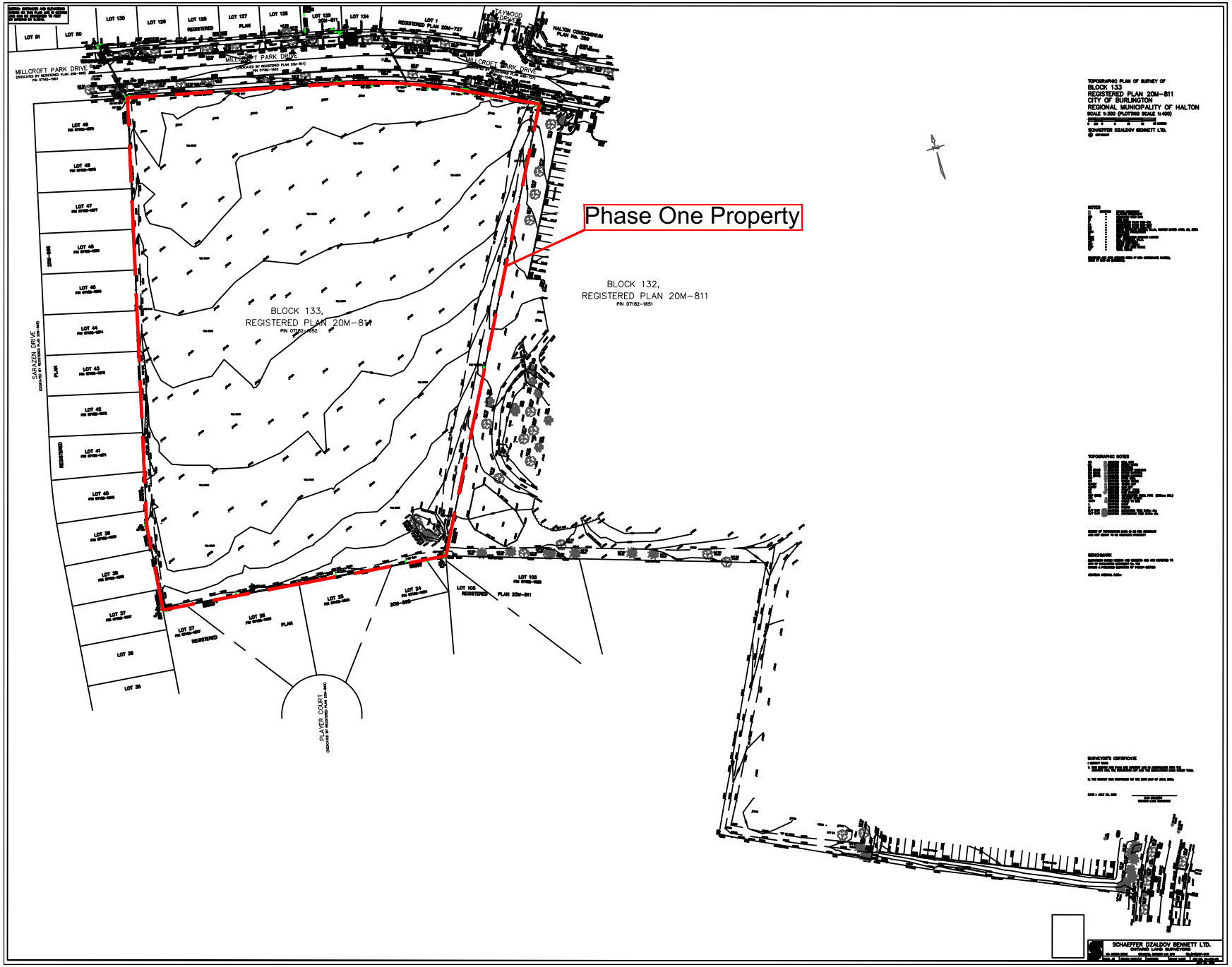
LOT 24 PIN 07182–1854 20M–868

LOT 105 REGISTERED PLAN 20M–811

LOT 106 PIN 07182–1625

EXISTING RESIDENTIAL

PLAYER COURT (DEDICATED BY REGISTERED PLAN 20M–868)


Phase One Property
BLOCK 133,
REGISTERED PLAN 20M-811
PIN 07182-1652
BLOCK 132,
REGISTERED PLAN 20M-811
PIN 07182-1651
MILLCROFT PARK DRIVE
SARAZEN DRIVE
PLAYER COURT
TOPOGRAPHIC PLAN OF SURVEY OF
BLOCK 133
REGISTERED PLAN 20M-811
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON
SCALE 1:300 (PLOTTING SCALE 1:400)
SCHAEFFER DZALDOV BENNETT LTD.
NOTES
TOPOGRAPHIC NOTES
BENCHMARK
SURVEYOR'S CERTIFICATE
SCHAEFFER DZALDOV BENNETT LTD.

Appendix G Aerial Photographs



TorontoInspection
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent,
Unit 16
Markham, Ontario
L3R 9X2
Tel: 905-940 8509 Fax: 905-940 8192 Email : TIL@torontoinspection.com

TITLE:	1954 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO.	5607-21-EB	DATE : August 2021	APPENDIX: G



TorontoInspection
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent,
Unit 16
Markham, Ontario
L3R 9X2
Fax: 905-940 8192
Email : TIL@torontoinspection.com

TITLE:	1998 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO.	5607-21-EB	DATE : August 2021	APPENDIX: G



TorontoInspection
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent,
Unit 16
Markham, Ontario
L3R 9X2
Fax: 905-940 8192
Email : TIL@torontoinspection.com

TITLE:	2002 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO.	5607-21-EB	DATE : August 2021	APPENDIX: G



TorontoInspection Inc
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16
Markham, Ontario
L3R 9X2
Fax: 905-940 8192
Email : TIL@torontoinspection.com

TITLE:	2008 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO.	5607-21-EB	DATE : August 2021	APPENDIX: G



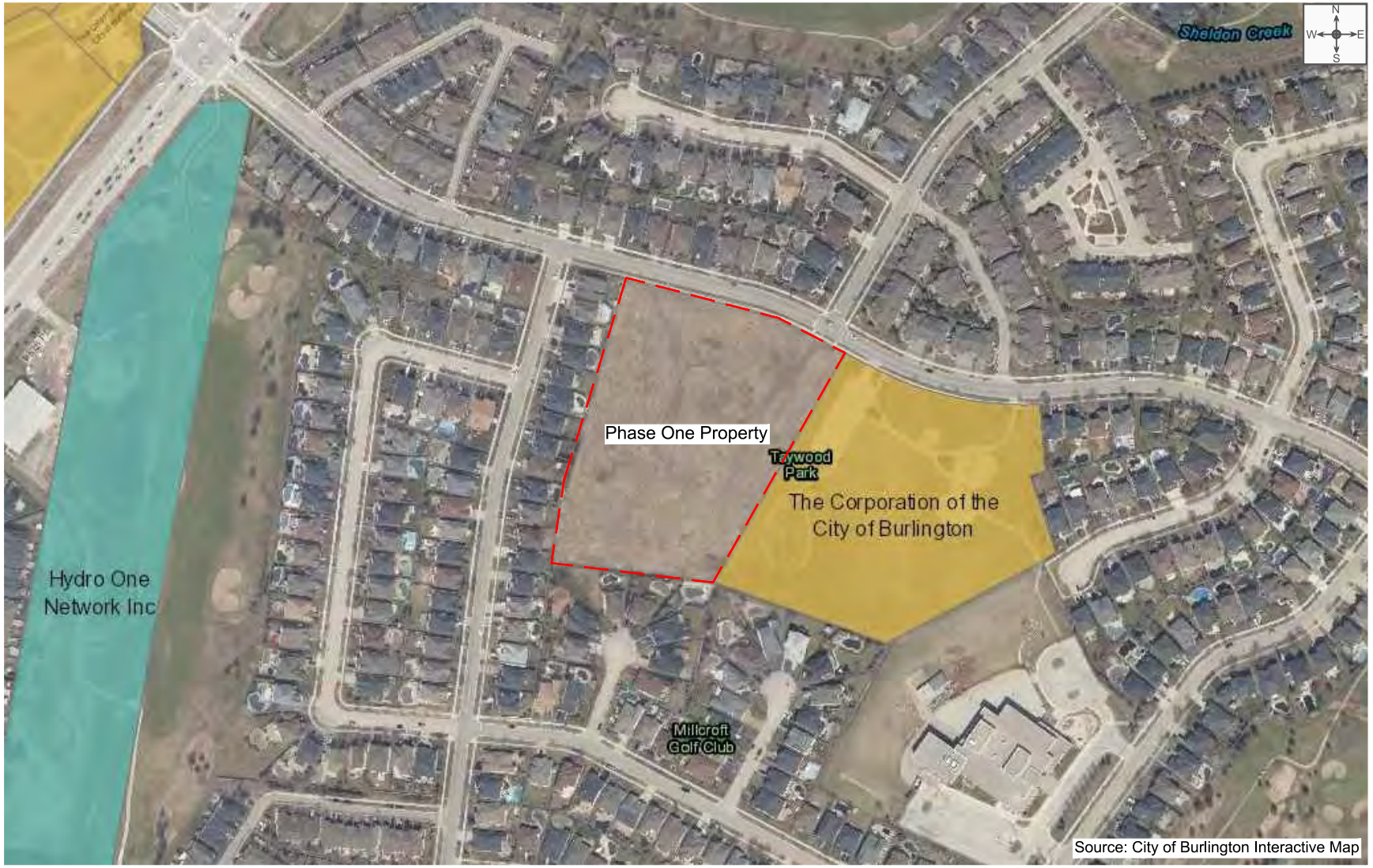
TorontoInspection
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent,
Unit 16
Markham, Ontario
L3R 9X2
Fax: 905-940 8192
Email : TIL@torontoinspection.com

TITLE:	2011 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO. 5607-21-EB	DATE : August 2021	APPENDIX: G	



TorontoInspection Inc.
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent,
Unit 16
Markham, Ontario
L3R 9X2
Fax: 905-940 8192
Email : TIL@torontoinspection.com

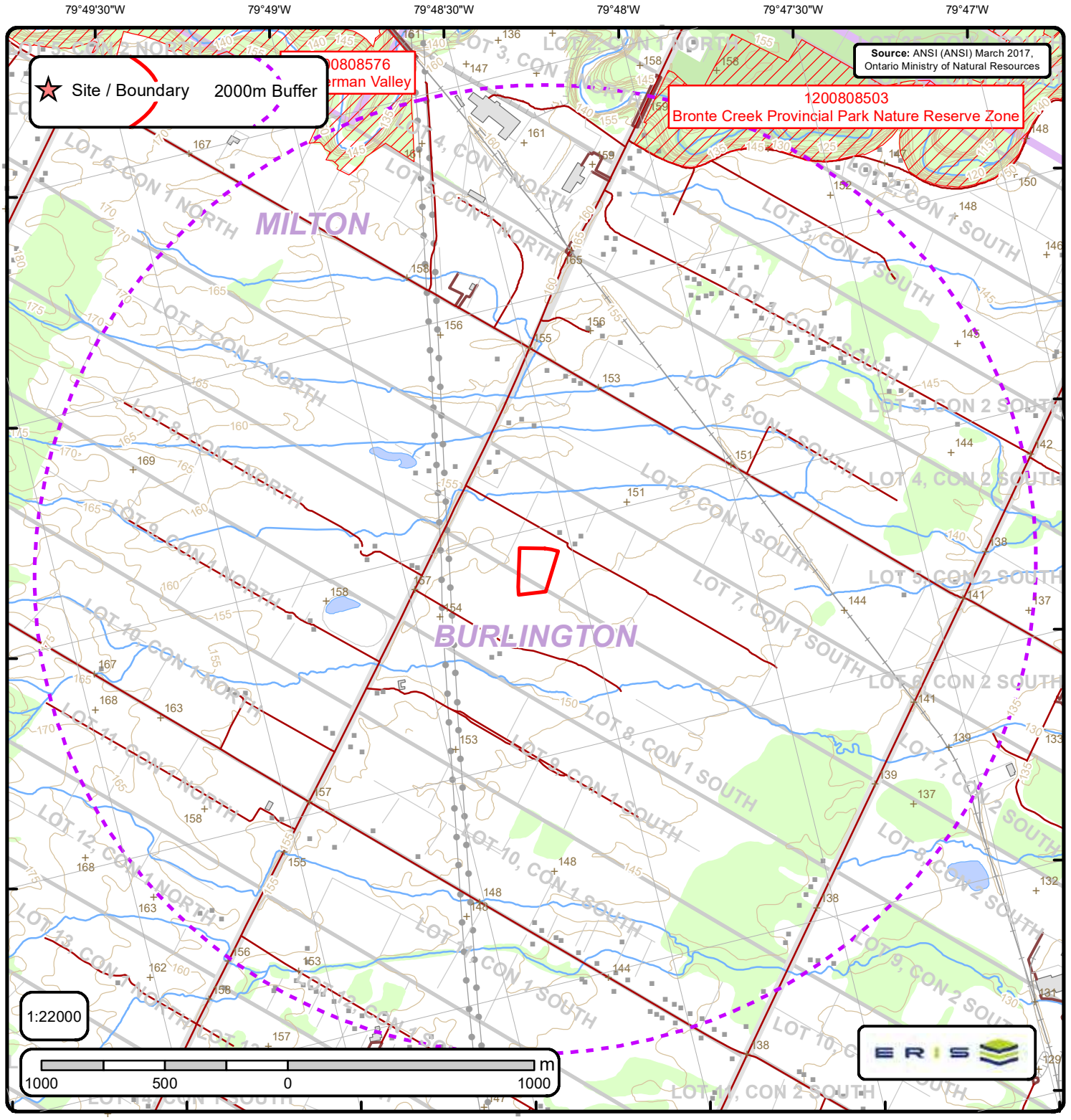
TITLE:	2015 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO.	5607-21-EB	DATE : August 2021	APPENDIX: G



TorontoInspection Inc
GEO-ENVIRONMENTAL CONSULTANTS
110 Konrad Crescent, Unit 16
Markham, Ontario
L3R 9X2
Fax: 905-940 8192
Email : TIL@torontoinspection.com

TITLE:	2019 Aerial Photograph		
LOCATION:	4375 Millcroft Park Drive, Burlington, Ontario		
PROJECT NO. 5607-21-EB	DATE : August 2021	APPENDIX: G	

Appendix H Additional ERIS Mapping



Area of Natural & Scientific Interest (ANSI) Order No. 21081200149

- Spot Height
- Building Point
- Towers
- Utility Site Point
- Misc. Line
- Railroads
- Roads
- Trail
- Transportation Structure
- Utility Line
- Water Structure
- Drainage Line Feature
- River or Stream
- Airports
- Tanks
- Building to Scale
- Contour Line
- Pit or Quarry
- Waterbody
- Wetlands
- Concession
- Lots
- Municipalitiy
- Land Ownership
- Wooded Area
- Conservation Authority
- Conservation Area
- Municipal Park
- Provincial Park
- National Park
- Nature Reserve
- ANSI Area

ANSI Report

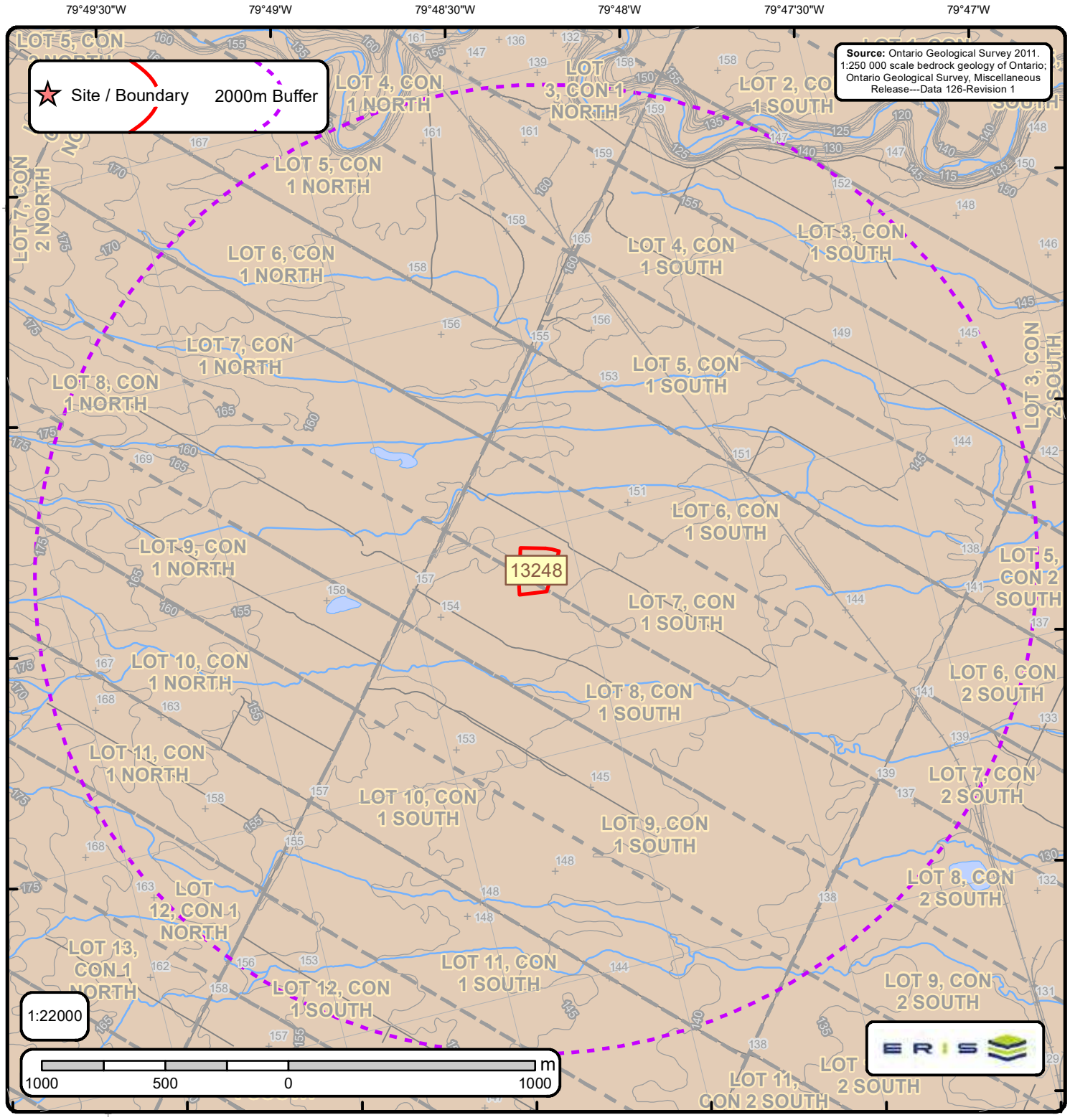
ANSI Units Found within 2000 m of
4375 Millcroft Park Drive

Order No.
21081200149



ANSI Name: Zimmerman Valley
ID: 1200808576 | **Type:** ANSI, Life Science | **Significance:** Regional | **Management Plan:** Yes | **Area (sqm):** 623184.816 | **Comments:** This mapping represents external boundries only. Reference should be made to the individual ANSI file for the ANSI inventory (planning section MNR Aurora). Less accurate mapping is available on 1:50,000 white prints?.followed by NHIC'S ANSI 'description'

ANSI Name: Bronte Creek Provincial Park Nature Reserve Zone
ID: 1200808503 | **Type:** ANSI, Life Science | **Significance:** Provincial | **Management Plan:** Yes | **Area (sqm):** 1949492.534 | **Comments:** This mapping represents external boundries only. Reference should be made to the individual ANSI file for the ANSI inventory (planning section MNR Aurora). Less accurate mapping is available on 1:50,000 white prints?.followed by NHIC'S ANSI 'description'



Bedrock Geology of Ontario

Order No. 21081200149

Spot Height
Roads
Contour Lines
Streams
Railroads
Lots
Pit or Quarry
Airports
Waterbody
Wetlands

Bedrock Geology Lines

- CONTACT, GEOPHYSICAL, TREND, INTERPRETED
- CONTACT, SHARP, TREND, INTERPRETED
- CONTACT, SHARP, TREND, OBSERVED
- FAULT, DEXTRAL HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, PROJECTED FAULT, INTERPRETED, UNKNOWN GENERATION
- FAULT, SINISTRAL HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, SINISTRAL HORIZONTAL COMPONENT, TREND, OBSERVED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, INCLINED-REVERSE, INTERPRETED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, INCLINED-REVERSE, OBSERVED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, TREND, INTERPRETED, UNKNOWN GENERATION
- FAULT, UNKNOWN HORIZONTAL COMPONENT, TREND, OBSERVED, UNKNOWN GENERATION
- NEATLINE
- ONTARIO BORDER
- Marble, chert, iron formation, minor metavolcanic rocks

Dikes

- Abitibi mafic dike
- Biscotasing mafic dike
- Empey Lake mafic dike
- Felsic to intermediate intrusive rocks
- Fort Frances mafic dike
- Frontenac mafic dike
- Grenville mafic dike
- Logan and Nipigon mafic sills
- Mackenzie mafic dike
- Mafic dikes of uncertain age
- Mafic sills and dikes
- Marathon mafic dike
- Marathon, Kapuskasing or Biscotasing mafic dike
- Matachewan mafic dike
- Mine Centre mafic dike
- Molson mafic dike
- North Channel mafic dike
- Pickle Crow mafic dike (Molson swarm) normal
- Pickle Crow mafic dike (Molson swarm) reverse
- Rideau mafic dike
- Sudbury mafic dike
- Ultramafic, gabbroic and granophyric intrusions
- Unsubdivided mafic dike
- Unsubdivided mafic dike (Keweenawan age)
- unknown

C Lines

- FOLD, ANTICLINE, INTERPRETED, UNKNOWN GENERATION
- FOLD, ANTICLINE, OBSERVED, UNKNOWN GENERATION
- FOLD, ANTICLINE, SYNFORMAL, INTERPRETED, SECOND GENERATION
- FOLD, ANTIFORM, INTERPRETED, UNKNOWN GENERATION
- FOLD, SYNCLINE, INTERPRETED, UNKNOWN GENERATION
- FOLD, SYNCLINE, OBSERVED, UNKNOWN GENERATION
- FOLD, SYNFORM, INTERPRETED, UNKNOWN GENERATION

Kimberlite

Bedrock Geology Report

Bedrock Geology units found within 2000 m of

4375 Millcroft Park Drive

Order No. 21081200149



ID: 13248 | **Unit Name:** |

Type (All): 55a | **Type (Primary):** 55a | **Type (Secondary):** | **Type (Tertiary):** | **Rock Type (Primary):** Shale, limestone, dolostone, siltstone | **Strata (Primary):** Queenston Formation | **Super Eon (Primary):** | **Eon (Primary):** PHANEROZOIC (Present to 542.0 Ma) | **Era (Primary):** PALEOZOIC (251.0 Ma to 542.0 Ma) | **Period (Primary):** ORDOVICIAN (443.7 Ma to 488.3 Ma) | **Epoch (Primary):** UPPER ORDOVICIAN | **Province (Primary):**

Bedrock Geology Report Metadata

Ontario Geological Survey 2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release-Data 126 Revision1

ONTARIO MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY



ID - Unit ID **Unit Name** - Generalized geological unit classification

Type (All) - The geological unit number(s) or code(s) for all rock types present in an individual polygon.

Type (Primary) - The primary geological unit number or code for the primary rock type in an individual polygon

Type (Secondary) - The secondary geological unit number or code for the secondary rock type, if present, in an individual polygon

Type (Tertiary) - The tertiary geological unit number or code for the tertiary rock type, if present, in an individual polygon

Rock Type (Primary) - Rock type or sub-unit description

Status (Primary) - The Stratigraphic unit. Divided into:

```
Supergroup (two or more groups and lone formations)
Group (two or more formations)
Formation (primary unit of lithostratigraphy)
Member (named lithologic subdivision of a formation)
Bed (named distinctive layer in a member or formation)
```

Super Eon (Primary) - A name given to the largest defined unit of geological time, divided into Eons. Unique values which this field may contain (Domains) are:

```
PRECAMBRIAN (0.542 Ga to <3.85 Ga)
```

Eon (Primary) - A name given to a defined unit of geological time, divided into Eras. Unique values which this field may contain (Domains) are:

```
ARCHEAN (2.5 Ga to <3.85 Ga)
PROTEROZOIC (0.542 Ga to 2.50 Ga)
PHANEROZOIC (Present to 542.0 Ma)
```

Era (Primary) - A name given to a defined unit of geological time, divided into Periods. Each era on the scale is separated from the next by a major event or change. Unique values which this field may contain (Domains) are:

```
MESOARCHEAN (2.8 Ga to 3.2 Ga)                MESOPROTEROZOIC (1.0 Ga to 1.6 Ga)
NEO-TO MESOARCHEAN (2.5 Ga to 3.2 Ga)         EARLY PALEOZOIC TO NEOPROTEROZOIC (443.7 Ma to 1.0 Ga)
NEOARCHEAN (2.5 Ga to 2.8 Ga)                 NEO-TO MESOPROTEROZOIC (0.542 Ga to 1.6 Ga)
PALEOPROTEROZOIC (1.6 Ga to 2.5 Ga)           PALEOZOIC (251.0 Ma to 542.0 Ma)
MESO-TO PALEOPROTEROZOIC (1.0 Ga to 2.5 Ga)   MESOZOIC (65.5 Ma to 251.0 Ma)
```

Period (Primary) - A name given to a defined unit of geological time, divided into Epochs. Unique values which this field may contain (Domains) are:

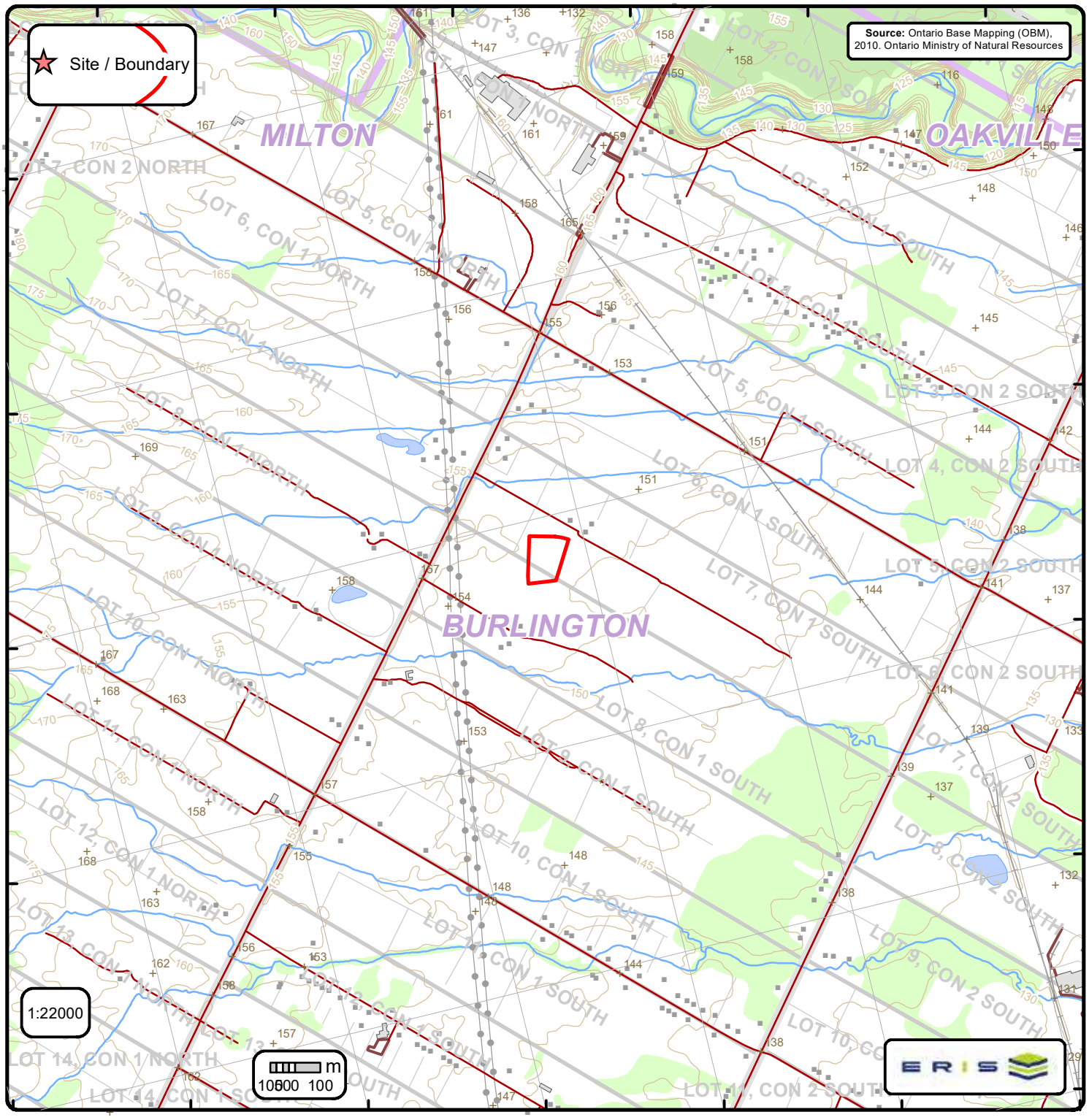
```
CAMBRIAN (488.3 Ma to 542.0 Ma)
ORDOVICIAN (443.7 Ma to 488.3 Ma)
SILURIAN (416.0 Ma to 443.7 Ma)
DEVONIAN (359.2 Ma to 416.0 Ma)
MISSISSIPPIAN TO DEVONIAN (318.1 Ma to 416.0 Ma)
JURASSIC (145.5 Ma to 199.6 Ma)
CRETACEOUS AND JURASSIC (65.5 Ma to 199.6 Ma)
```

Epoch (Primary) - A name given to a defined unit of geological time. Unique values which this field may contain (Domains) are:

```
LOWER ORDOVICIAN                    UPPER SILURIAN
MIDDLE ORDOVICIAN                   LOWER DEVONIAN
UPPER ORDOVICIAN                    MIDDLE DEVONIAN
MIDDLE AND LOWER SILURIAN           UPPER DEVONIAN
UPPER SILURIAN TO LOWER DEVONIAN    LOWER CRETACEOUS AND MIDDLE JURASSIC
```

Province (Primary) - The Geological Province the geological unit is in. Unique values which this field may contain (Domains) are:

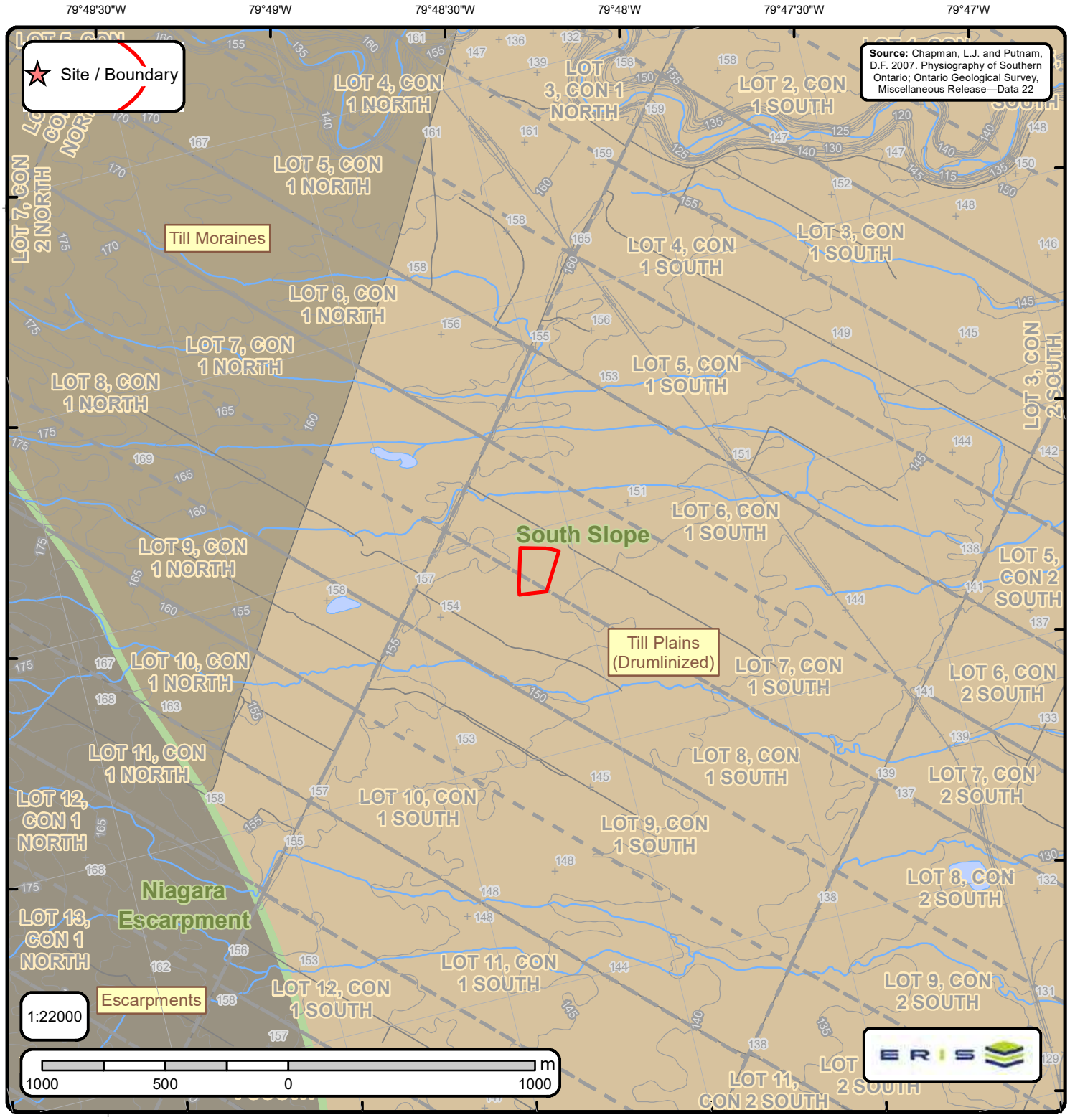
```
SUPERIOR
SOUTHERN
SUPERIOR
GRENVILLE
```



Ontario Base Mapping (OBM) Data

Order No. 21081200149

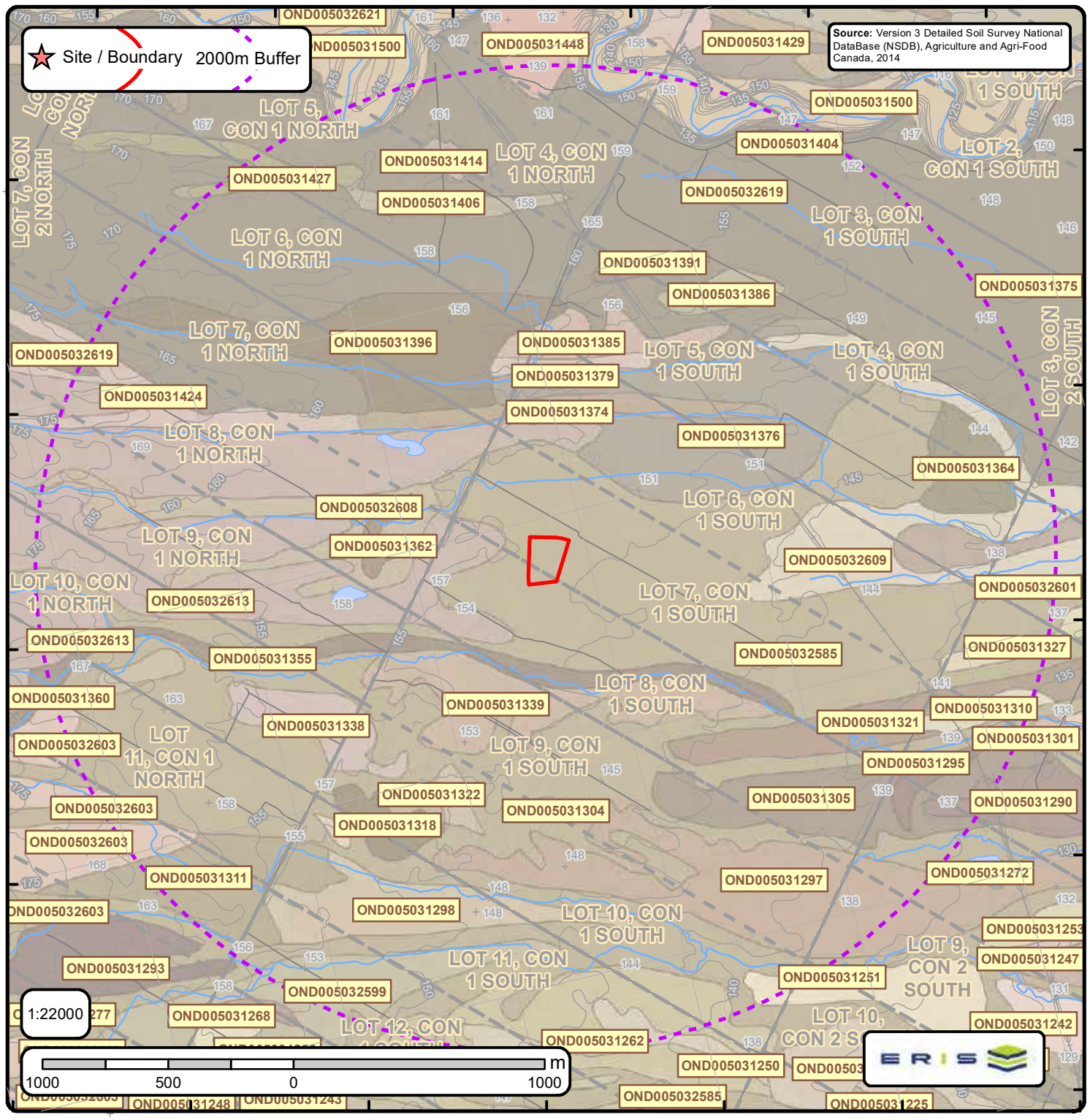
- Spot Height (metre)
- Building Point
- Towers
- Utility Site Point
- Misc. Line
- Railroads
- Roads
- Trail
- Transportation Structure
- Utility Line
- Water Structure
- Drainage Line Feature
- River or Stream
- Airports
- Tanks
- Building to Scale
- Contour Line
- Pit or Quarry
- Waterbody
- Wetlands
- Concession
- Lots
- Municipalitiy
- Land Ownership
- Wooded Area
- Conservation Authority
- Conservation Area
- Municipal Park
- Provincial Park
- National Park
- Nature Reserve



Physiography of Southern Ontario

Order No. 21081200149

- Spot Height
- Roads
- Railroads
- Contour Lines
- Streams
- Lots
- Pit or Quarry
- Airports
- Wetlands
- Waterbody
- Boulder Pavement
- Dissected Terrain
- Mud Flow Scars
- Sand Dunes
- escarpment
- shorecliff
- shorecliff (weakly developed)
- Physiography Regions
- Bare Rock Ridges And Shallow Till
- Beaches
- Bevelled Till Plains
- Clay Plains
- Drumlins
- Escarpments
- Eskers
- Kame Moraines
- Limestone Plains
- Peat And Muck
- Sand Plains
- Shale Plains
- Shallow Till And Rock Ridges
- Spillways
- Till Moraines
- Till Plains (Drumlinized)
- Till Plains (Undrumlinized)



Detailed Soil Survey (ON Soils)

Order No. 21081200149

- Spot Height
- Railroads
- Roads
- Contour Lines
- Streams
- Lots
- Pit or Quarry
- Airports
- Wetlands
- Waterbody

Soils Report

Soil Map Units Found within 2000 m of
4375 Millcroft Park Drive

Order No.
21081200149



Soil ID: OND005032585
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031304
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031396
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031298
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031391
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031290
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031297
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031295
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031406
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : medium - moderately fine loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005032608
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031404
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031405
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031318
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032601
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032603
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : medium - moderately fine loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of adverse Topography | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031424
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Moderately stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031310
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031311
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
4375 Millcroft Park Drive



Soil ID: OND005031379
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031374
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031339
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031448
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031251
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031250
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soils Report

Soil Map Units Found within 2000 m of
4375 Millcroft Park Drive



Soil ID: OND005032609
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031355
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031338
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031385
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031386
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031376
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031309
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031414
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : medium - moderately fine loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032619
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031305
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032613
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 7.0 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Presence of adverse Topography | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031500
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONZUN~~~~~N | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : None | **Slop Length(m)** : -9 | **Drainage** : Not Applicable | **Hydrological Soil Groups** : None | **Soil Texture of A Horizon** : None | **Field Crops Capability** : No capability for agriculture. | **First CLI Limitation Subclass** : Subject to occasional flooding (Inundation) from adjacent streams or waterbodies | **Second CLI Limitation Subclass** : None | **Soil Name** : UNCLASSIFIED | **Water Table Charateristics** : Unspecified period | **Soil Drainage Class** : Not applicable | **Kind of Surface Material** : Unclassified | **Layer that Restricts Root Growth** : No root restricting layer | **Type of Root Restricting Layer** : n/a | **Parent Material 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Mode of Deposition 1|2|3** : Not Applicable; Not Applicable; Not Applicable | **Parent Material Chemical Property 1|2|3** : Not Applicable; Not Applicable; Not Applicable |



Soil ID: OND005031322
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031321
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031346
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031327
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 0.2 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031342
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031262
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |



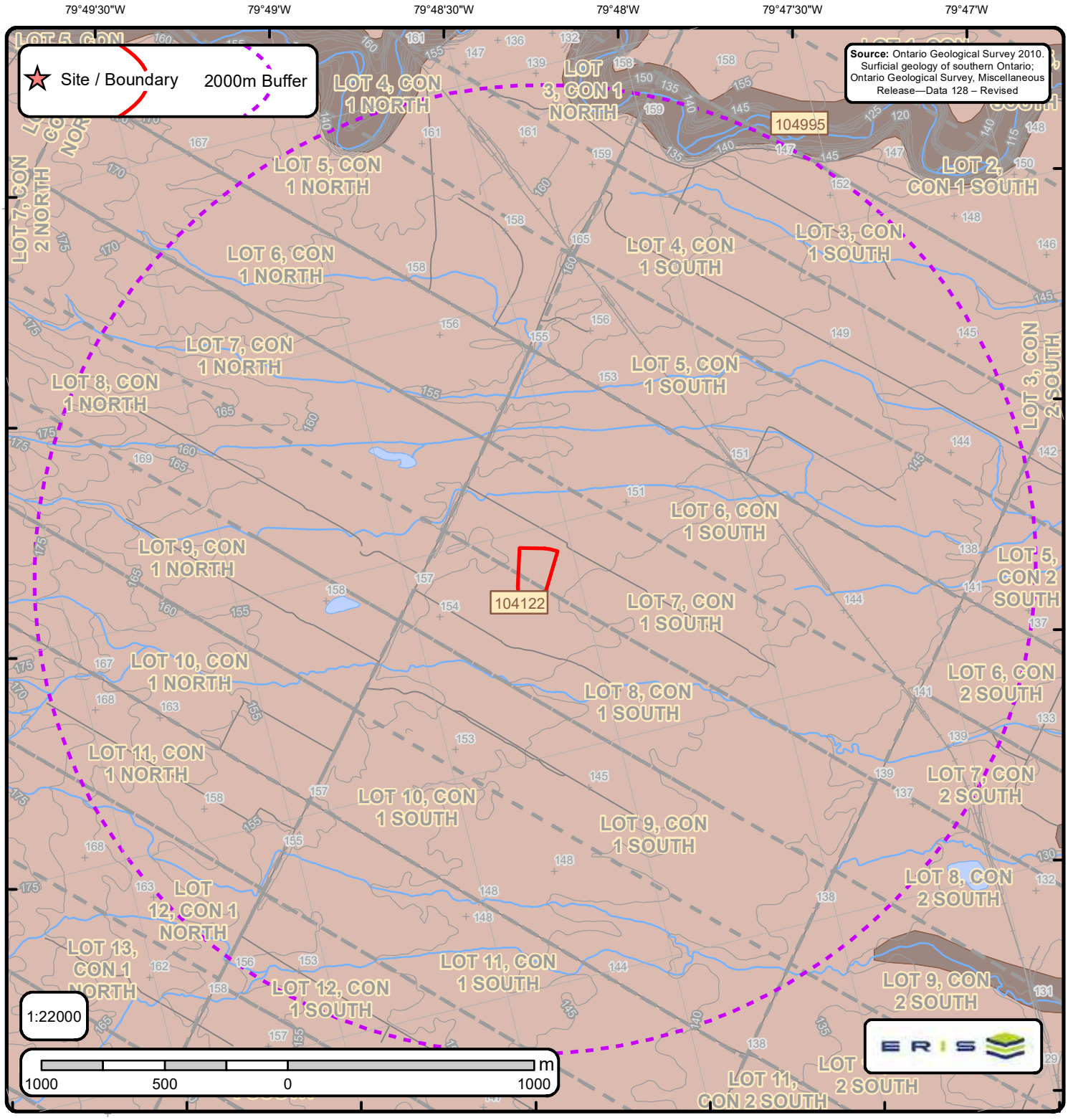
Soil ID: OND005031364
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONOID~~~~~A | **Surface Stoniness Class** : Nonstony | **Slop Steepness(%)** : 3.5 | **Slop Length(m)** : -9 | **Drainage** : Well | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-8 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 39 | **Total Silt(%)** : 34 | **Total Clay(%)** : 27 | **Organic Carbon(%)** : 2.7 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.609 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 8-15 | **Horizon** : Ae | **Layer No** : 2 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 44 | **Total Clay(%)** : 26 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.348 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 15-23 | **Horizon** : Ae | **Layer No** : 3 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 30 | **Total Silt(%)** : 42 | **Total Clay(%)** : 28 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.336 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 23-38 | **Horizon** : Bt | **Layer No** : 4 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 22 | **Total Silt(%)** : 32 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.2 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.221 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 38-68 | **Horizon** : Bt | **Layer No** : 5 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 20 | **Total Silt(%)** : 32 | **Total Clay(%)** : 48 | **Organic Carbon(%)** : 0.4 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.216 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 68-100 | **Horizon** : Ck | **Layer No** : 6 | **Very Fine Sand(%)** : 0 | **Total Sand(%)** : 21 | **Total Silt(%)** : 39 | **Total Clay(%)** : 40 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 5.0 | **Saturated Hydraulic Conductivity(cm/h)** : 0.215 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005032599
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONCGU~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Imperfectly | **Hydrological Soil Groups** : Soils with slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : No significant limitations in use for Crops | **First CLI Limitation Subclass** : None | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-27 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 11 | **Total Sand(%)** : 21 | **Total Silt(%)** : 50 | **Total Clay(%)** : 29 | **Organic Carbon(%)** : 1.9 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.368 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 27-40 | **Horizon** : Btgj | **Layer No** : 2 | **Very Fine Sand(%)** : 8 | **Total Sand(%)** : 21 | **Total Silt(%)** : 43 | **Total Clay(%)** : 36 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 7.2 | **Saturated Hydraulic Conductivity(cm/h)** : 0.228 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 40-100 | **Horizon** : Ckgj | **Layer No** : 3 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 20 | **Total Silt(%)** : 49 | **Total Clay(%)** : 31 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.7 | **Saturated Hydraulic Conductivity(cm/h)** : 0.159 | **Electrical Conductivity(dS/m)** : 0 |

Soil ID: OND005031362
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |



Soil ID: OND005031427
Component No : 1 | **Components(%)** : 100 | **Soil Name ID** : ONJDD~~~~~A | **Surface Stoniness Class** : Slightly stony | **Slop Steepness(%)** : 1.2 | **Slop Length(m)** : -9 | **Drainage** : Poorly | **Hydrological Soil Groups** : Soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material. | **Soil Texture of A Horizon** : clay loam | **Field Crops Capability** : moderately severe limitations on use for crops. | **First CLI Limitation Subclass** : Adverse soil structure (i.e. Depth of rooting zone is restricted) | **Second CLI Limitation Subclass** : None | **Depth(cm)** : 0-13 | **Horizon** : Ap | **Layer No** : 1 | **Very Fine Sand(%)** : 7 | **Total Sand(%)** : 17 | **Total Silt(%)** : 49 | **Total Clay(%)** : 34 | **Organic Carbon(%)** : 2.6 | **pH in Calc Chloride** : 7.1 | **Saturated Hydraulic Conductivity(cm/h)** : 0.385 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 13-24 | **Horizon** : Bg | **Layer No** : 2 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 42 | **Total Clay(%)** : 46 | **Organic Carbon(%)** : 0.5 | **pH in Calc Chloride** : 6.3 | **Saturated Hydraulic Conductivity(cm/h)** : 0.207 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 24-49 | **Horizon** : Bg | **Layer No** : 3 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 12 | **Total Silt(%)** : 43 | **Total Clay(%)** : 45 | **Organic Carbon(%)** : 0.3 | **pH in Calc Chloride** : 6.4 | **Saturated Hydraulic Conductivity(cm/h)** : 0.209 | **Electrical Conductivity(dS/m)** : 0] | **Depth(cm)** : 49-100 | **Horizon** : Ckg | **Layer No** : 4 | **Very Fine Sand(%)** : 4 | **Total Sand(%)** : 11 | **Total Silt(%)** : 50 | **Total Clay(%)** : 39 | **Organic Carbon(%)** : 0.0 | **pH in Calc Chloride** : 7.6 | **Saturated Hydraulic Conductivity(cm/h)** : 0.141 | **Electrical Conductivity(dS/m)** : 0 |



The Surficial Geology of Southern Ontario

Order No. 21081200149

Spot Height	Streams	Dune	Beach	Esker	karst	pitsg
Waterbody	Contour Lines	Lake	Bluff	Esker ND	linfeat	popup
Wetlands	Roads	Rib	Crevasse	Fluvial DL	megarip	ribl
Airports	Railroads	Scab	Crest	fluvndl	mfluvdl	slidel
Pit or Quarry	Morains	Slide	End	iceberg	mfluvndl	slumpb
Lots		NOF Dune	Escarpment	icslope	moraine	terrace

Surface Geology Report

Surface Geology units found within 2000 m of
4375 Millcroft Park Drive

Order No.
21081200149



ID: 104122 | **Unit Name:** Halton Till |
Deposit Type Code: 10 | **Deposit Age:** Late Wisconsinan | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** diamicton | **Primary Material Modifier:** silty clay to clayey silt | **Secondary Material:** | **Primary General:** glacial | **Primary General Modifier:** | **Veneer:** | **Episode:** Wisconsin | **Sub Episode:** Michigan | **Phase:** Port Huron | **Stratus Modifier:** Surface | **Provenance:** Erie-Ontario | **Carbon Content:** medium | **Formation:** Halton Till | **Permeability:** Low | **Material Description:** Clay or silt till

ID: 104995 | **Unit Name:** Bedrock |
Deposit Type Code: 1 | **Deposit Age:** Ordovician and Silurian | **Map Number:** m2509 | **Map Name:** Hamilton | **Source Map Scale:** 1:50 000 | **Primary Material:** Paleozoic Bedrock | **Primary Material Modifier:** | **Secondary Material:** | **Primary General:** | **Primary General Modifier:** | **Veneer:** clay, silt, sand, gravel, diamicton | **Episode:** | **Sub Episode:** | **Phase:** | **Stratus Modifier:** Surface | **Provenance:** | **Carbon Content:** | **Formation:** | **Permeability:** Variable | **Material Description:** Shale and dolomite

Surface Geology Report Metadata

Ontario Geological Survey 2010. Surficial geology of southern Ontario; Ontario Geological Survey, Miscellaneous Release - Data 128 - Revised.

ONTARIO MINISTRY OF NORTHERN DEVELOPMENT, MINES AND FORESTRY



ID - ID applied to the Unit

Unit Name - Name of deposit

Deposit Type Code - The geological unit number taken from the original map legend.

Deposit Age - to show the age when the sediments were deposited, e.g., Wisconsinan, postglacial or recent.

Map Number - Original map series number, eg., 'M2402' or 'P1973'. Each sgu_point feature is tagged to its original map.

Map Name - Usually NTS area where mapping was completed, e.g., 'Golden Lake'

Source Map Scale - The scale at which the original map was captured, e.g., '1:50 000'

Primary Material - This attribute provides the user with information regarding the most prevalent material present within a given area.

Primary Material Modifier- This attribute provides the user with a more refined description of the lithological classification of the primary material.

Secondary Material - This attribute provides the user with information regarding subordinate materials present within a given area.

Primary General - This attribute provides the user with an interpretation of the depositional environment within which the primary material was deposited.

Primary General Modifier - This attribute provides the user with a refined interpretation of the primary genetic modifier.

Veneer - This attribute provides the user with information regarding the type of material that forms a thin, discontinuous veneer over the primary material.

Sub Episode - A diachronic stratigraphic unit in a lower order than Episode and the proposed sequence-stratigraphic classification, consists in descending order of Michigan, Elgin and Ontario in the eastern and northern Great Lakes area in the Wisconsin Episode (Johnson et al. 1997; Karrow et al. 2000).

Sub Episode - A diachronic stratigraphic unit in a lower order than Episode and the proposed sequence-stratigraphic classification, consists in descending order of Michigan, Elgin and Ontario in the eastern and northern Great Lakes area in the Wisconsin Episode (Johnson et al. 1997; Karrow et al. 2000).

Phase - A diachronic stratigraphic unit in a lower order than Subepisode, and the proposed sequence-stratigraphic classification is listed in the following table in the eastern and northern Great Lakes area (Karrow et al. 2000)

Stratus Modifier - This attribute provides the user information regarding the stratigraphic position of the mapped unit (i.e., whether the unit occurs primarily on the surface or in the subsurface).

Provenance - This attribute provides the user with information regarding the provenance of a particular till unit (i.e. direction or lobe from which the till is derived).

Carbon Content - This attribute provides the user with information regarding the carbonate content of till.

Formation - This attribute provides the user with information regarding the formation to which a given primary material belongs (e.g., Tavistock Till, Port Stanley Till, Scarborough Formation). This attribute is seamless and allows the user to create a map based on formation.

Permeability - This attribute provides the user with basic information about permeability of the sediments in a ranking of high, medium and low.

Material Description - Material or sediment description, e.g., 'sand and silty fine sand', 'silty sand and gravel' and 'silty till with low stone content'.

Toronto Inspection Ltd

Appendix I Soil Sampling and Analytical Program Letter

Toronto Inspection LTD.
GEO-ENVIRONMENTAL CONSULTANTS

110 KONRAD CRES.
UNIT 16
MARKHAM, ON
L3R 9X2
TEL.: 905-940-8509
FAX : 905-940-8192

April 21, 2021

Project No.: 5607-21-EA

Armland Management Inc.
8700 Dufferin Street
Concord, Ontario
L4K 4S6

Attention: Ms. Lisa La Civita

Re : Soil Sampling and Analytical Program
4375 Millcroft Park Drive, Burlington, Ontario

On April 5, 2021, a representative from *Toronto Inspection Ltd.* visited the property of 4375 Millcroft Park Drive in Burlington (the ”Site”) to collect soil samples from boreholes drilled on that day. Borehole 1 and 3 were selected at random. For the purposes of this report, the soil analytical program was to evaluate the environmental quality of the topsoil for general environmental characteristics and disposal offsite.

Two (2) soil samples, 21BH-1 SS1 and 21BH-3 SS1, were collected from the samples and they consisted of a reddish-brown topsoil with some rootlets and was generally moist. There was no obvious sign of staining or chemical odour from the samples.

The soil samples were submitted to SGS Laboratories, a CALA certified laboratory located in Lakefield, Ontario, for analyses of the following parameter groups: Metal and Inorganic Parameters (M&I) and Organochlorine Pesticides (OCPs). These were selected as they do not usually demonstrate visual or odorous indications of being present.

Table A: Summary of Soil Analyses

Sample ID	Approximate Sample Depth [m bg]	Analyzed Parameter Group	
		M&I	OCP
21BH-1 SS1	0.5	X	X
21BH-3 SS1	0.5	X	X

The analytical laboratory results of the soil sample were compared to following Site Condition Standards listed in the Ministry of the Environment, Conservation and Parks (MECP) “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act” document, dated April 15, 2011:

MECP Table 1 – Full Depth Background Site Condition Standards (SCS) for Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use (MECP Table 1 SCS).

Based on the laboratory results, the OCP and M&I parameters at the tested locations met the MECP Table 1SCS for Residential/Parkland/Institutional/ Industrial/Commercial/Community property use on the date of sampling. Should you have any questions, please feel free to contact us.

A copy of the laboratory certificate of analysis is provided as an attachment.

General Limitations

The comments presented in this letter are based on the soil sampling conducted at the sampled location. There is no warranty expressed or implied or representations made by *Toronto Inspection Ltd.* that this program has discovered all potential environmental risks or liabilities associated with the site.

Any legal actions arising directly or indirectly from this work and/or *Toronto Inspection Ltd.'s* performance of the services shall be filed no longer than two years from the date of *Toronto Inspection Ltd.'s* substantial completion of the services. *Toronto Inspection Ltd.* shall not be responsible to the client for lost revenues, lost of profits, cost of content, claims of customers, or other special indirect, consequential or punitive damages.

To the fullest extent permitted by law, the client's maximum aggregate recovery against *Toronto Inspection Ltd.*, its directors, employees, sub-contractors and representatives, for any and all claims by Armland Management Inc. for all causes including, but not limited to, claims of breach of contract, breach of warranty and/or negligence, shall be limited to the amount of fees paid.

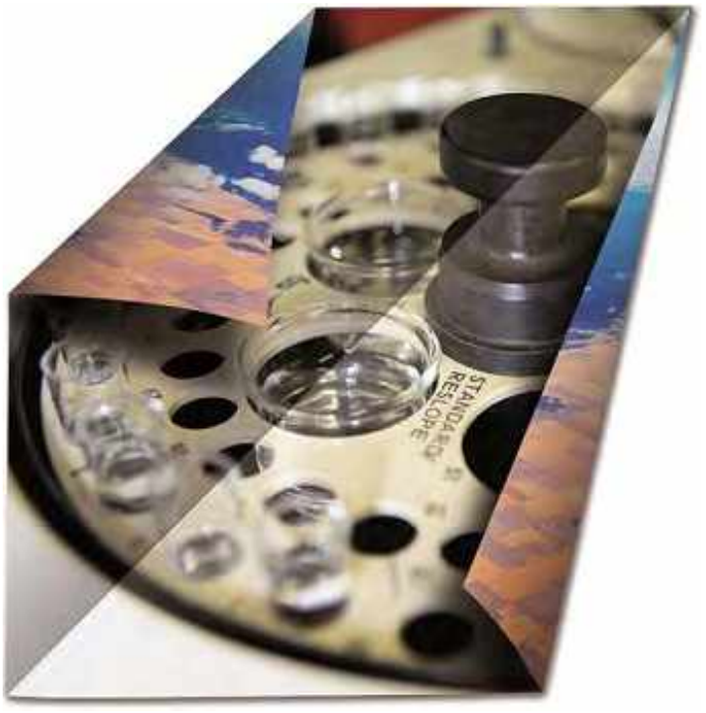
Any use and/or interpretation of the data presented in this report, and any decisions made on it by the third party are responsibility of the third party. *Toronto Inspection Ltd.* accepts no responsibility for loss of time and damages, if any, suffered by the third party as a result of decisions or actions based on this report.

Yours sincerely,
TORONTO INSPECTION LTD.



Augustine (Gus) Cheng, HBSc, EP
Senior Manager
Projects and Business Development

Attachments: Certificates of Analysis





FINAL REPORT

CA14920-APR21 R1

5607

Prepared for

Toronto Inspection Ltd.

FINAL REPORT

CA14920-APR21 R1

First Page

CLIENT DETAILS

Client	Toronto Inspection Ltd.
Address	110 Konrad Crescent, Unit 16 Markham, ON L3R 9X2, Canada
Contact	Gus Cheng
Telephone	905-940-8509
Facsimile	905-940-8192
Email	lab@torontoinspection.com
Project	5607
Order Number	
Samples	Soil (2)

LABORATORY DETAILS

Project Specialist	Brad Moore Hon. B.Sc
Laboratory	SGS Canada Inc.
Address	185 Concession St., Lakefield ON, K0L 2H0
Telephone	705-652-2143
Facsimile	705-652-6365
Email	brad.moore@sgs.com
SGS Reference	CA14920-APR21
Received	04/14/2021
Approved	04/16/2021
Report Number	CA14920-APR21 R1
Date Reported	04/16/2021

COMMENTS

CCME Method Compliance: Analyses were conducted using analytical procedures that comply with the Reference Method for the CWS for Petroleum Hydrocarbons in Soil and have been validated for use at the SGS laboratory, Lakefield, ON site.

Quality Compliance: Instrument performance / calibration quality criteria were met and extraction and analysis limits for holding times were met.

nC6 and nC10 response factors within 30% of response factor for toluene: YES

nC10, nC16 and nC34 response factors within 10% of the average response for the three compounds: YES

C50 response factors within 70% of nC10 + nC16 + nC34 average: YES

Linearity is within 15%: YES

F4G - gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
The results for F4 and F4G are both reported and the greater of the two values is to be used in application to the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

Benzo(b)fluoranthene results for comparison to the standard are reported as benzo(b+j)fluoranthene. Benzo(b)fluoranthene and benzo(j)fluoranthene co-elute and cannot be reported individually by the analytical method used.

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

Chain of Custody Number:019210

CR6 Dup RPD is out of range but is within RL and therefore acceptable

SIGNATORIES

Brad Moore Hon. B.Sc



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Client: Toronto Inspection Ltd.
Project: 5607
Project Manager: Gus Cheng
Samplers: Ankit

PACKAGE: **REG153 - Hydrides** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

			Sample Number	9	10
			Sample Name	21BH-1 SS1	21BH-3 SS1
			Sample Matrix	Soil	Soil
			Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**	**Result**	**Result**
Hydrides					
Antimony	µg/g	0.8	7.5	< 0.8	< 0.8
Arsenic	µg/g	0.5	18	4.9	4.8
Selenium	µg/g	0.7	2.4	< 0.7	< 0.7

PACKAGE: **REG153 - Metals and Inorganics** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

			Sample Number	9	10
			Sample Name	21BH-1 SS1	21BH-3 SS1
			Sample Matrix	Soil	Soil
			Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**	**Result**	**Result**
Metals and Inorganics					
Moisture Content	%	-		21.8	12.6
Barium	µg/g	0.1	390	98	96
Beryllium	µg/g	0.02	4	0.67	0.66
Boron	µg/g	1	120	13	11
Cadmium	µg/g	0.02	1.2	0.19	0.15
Chromium	µg/g	0.5	160	20	20
Cobalt	µg/g	0.01	22	10	11
Copper	µg/g	0.1	140	24	25
Lead	µg/g	0.1	120	19	15
Molybdenum	µg/g	0.1	6.9	0.7	0.5
Nickel	µg/g	0.5	100	21	23
Silver	µg/g	0.05	20	0.05	< 0.05

Client: Toronto Inspection Ltd.
Project: 5607
Project Manager: Gus Cheng
Samplers: Ankit

PACKAGE: **REG153 - Metals and Inorganics** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

				Sample Number	9	10
				Sample Name	21BH-1 SS1	21BH-3 SS1
				Sample Matrix	Soil	Soil
				Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**		**Result**	**Result**
Metals and Inorganics (continued)						
Thallium	µg/g	0.02	1		0.17	0.16
Uranium	µg/g	0.002	23		0.85	0.72
Vanadium	µg/g	3	86		26	26
Zinc	µg/g	0.7	340		80	68
Water Soluble Boron	µg/g	0.5	1.5		< 0.5	< 0.5

PACKAGE: **REG153 - Organochlorine Pests (OCs)** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

				Sample Number	9	10
				Sample Name	21BH-1 SS1	21BH-3 SS1
				Sample Matrix	Soil	Soil
				Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**		**Result**	**Result**
Organochlorine Pests (OCs)						
Aldrin	µg/g	0.05	0.05		< 0.05	< 0.05
alpha-Chlordane	µg/g	0.02			< 0.02	< 0.02
gamma-Chlordane	µg/g	0.02			< 0.02	< 0.02
Chlordane (total)	µg/g	0.05	0.05		< 0.05	< 0.05
o,p-DDD	µg/g	0.02			< 0.02	< 0.02
pp-DDD	µg/g	0.02			< 0.02	< 0.02
DDD (total)	µg/g	0.05	3.3		< 0.05	< 0.05
o,p-DDE	µg/g	0.02			< 0.02	< 0.02
pp-DDE	µg/g	0.02			< 0.02	< 0.02

Client: Toronto Inspection Ltd.
Project: 5607
Project Manager: Gus Cheng
Samplers: Ankit

PACKAGE: **REG153 - Organochlorine Pests (OCs)** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

			Sample Number	9	10
			Sample Name	21BH-1 SS1	21BH-3 SS1
			Sample Matrix	Soil	Soil
			Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**	**Result**	**Result**
Organochlorine Pests (OCs) (continued)					
DDE (total)	µg/g	0.05	0.26	< 0.05	< 0.05
op-DDT	µg/g	0.02		< 0.02	< 0.02
pp-DDT	µg/g	0.02		< 0.02	< 0.02
DDT (total)	µg/g	0.05	1.4	< 0.05	< 0.05
Dieldrin	µg/g	0.05	0.05	< 0.05	< 0.05
gamma-BHC	µg/g	0.01	0.056	< 0.01	< 0.01
Endosulfan I	µg/g	0.02		< 0.02	< 0.02
Endosulfan II	µg/g	0.02		< 0.02	< 0.02
Endosulfan (total)	µg/g	0.04	0.04	< 0.04	< 0.04
Endrin	µg/g	0.04	0.04	< 0.04	< 0.04
Heptachlor	µg/g	0.01	0.15	< 0.01	< 0.01
Heptachlor epoxide	µg/g	0.01	0.05	< 0.01	< 0.01
Hexachlorobenzene	µg/g	0.01	0.52	< 0.01	< 0.01
Hexachlorobutadiene	µg/g	0.01	0.012	< 0.01	< 0.01
Hexachloroethane	µg/g	0.01	0.089	< 0.01	< 0.01
Methoxychlor	µg/g	0.05	0.13	< 0.05	< 0.05

Client: Toronto Inspection Ltd.
Project: 5607
Project Manager: Gus Cheng
Samplers: Ankit

PACKAGE: **REG153 - Other (ORP)** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

Sample Number	9	10
Sample Name	21BH-1 SS1	21BH-3 SS1
Sample Matrix	Soil	Soil
Sample Date	05/04/2021	05/04/2021

Parameter	Units	RL	L1	Result	Result
Other (ORP)					
Mercury	ug/g	0.05	0.27	< 0.05	< 0.05
Sodium Adsorption Ratio	No unit	0.2	5	0.6	0.2
SAR Calcium	mg/L	0.09		64.5	25.4
SAR Magnesium	mg/L	0.02		12.4	4.3
SAR Sodium	mg/L	0.15		20.6	4.7
Conductivity	mS/cm	0.002	0.7	0.54	0.20
pH	pH Units	0.05		7.54	7.50
Chromium VI	µg/g	0.2	8	< 0.2	< 0.2
Free Cyanide	µg/g	0.05	0.051	< 0.05	< 0.05

Client: Toronto Inspection Ltd.
Project: 5607
Project Manager: Gus Cheng
Samplers: Ankit

PACKAGE: **REG153 - Pesticides Surrogate** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

				Sample Number	9	10
				Sample Name	21BH-1 SS1	21BH-3 SS1
				Sample Matrix	Soil	Soil
				Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**		**Result**	**Result**
Pesticides Surrogate						
Surr Decachlorobiphenyl	Surr Rec %	-			99	109

PACKAGE: **REG153 - VOC Surrogates** (SOIL)

L1 = REG153 / SOIL / COARSE - TABLE 2 - Residential/Parkland - UNDEFINED

				Sample Number	9	10
				Sample Name	21BH-1 SS1	21BH-3 SS1
				Sample Matrix	Soil	Soil
				Sample Date	05/04/2021	05/04/2021
Parameter	**Units**	**RL**	**L1**		**Result**	**Result**
VOC Surrogates						
Surr TCMX	Surr Rec %	-			88	83

EXCEEDANCE SUMMARY

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

QC SUMMARY

Conductivity

Method: EPA 6010/SM 2510 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-006

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Conductivity	EWL0264-APR21	mS/cm	0.002	<0.002	0	10	100	90	110	NA		

Cyanide by SFA

Method: SM 4500 | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Free Cyanide	SKA5047-APR21	µg/g	0.05	<0.05	ND	20	99	80	120	97	75	125

Hexavalent Chromium by SFA

Method: EPA218.6/EPA3060A | Internal ref.: ME-CA-[ENV]SKA-LAK-AN-012

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Chromium VI	SKA5046-APR21	ug/g	0.2	<0.2	35	20	90	80	120	82	75	125

QC SUMMARY

Mercury by CVAAS

Method: EPA 7471A/EPA 245 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-004

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Mercury	EMS0063-APR21	ug/g	0.05	<0.05	ND	20	98	80	120	98	70	130

Metals in aqueous samples - ICP-OES

Method: MOE 4696e01/EPA 6010 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
SAR Calcium	ESG0041-APR21	mg/L	0.09	<0.09	3	20	96	80	120	90	70	130
SAR Magnesium	ESG0041-APR21	mg/L	0.02	<0.02	3	20	94	80	120	93	70	130
SAR Sodium	ESG0041-APR21	mg/L	0.15	<0.15	1	20	95	80	120	87	70	130

QC SUMMARY

Metals in Soil - Aqua-regia/ICP-MS

Method: EPA 3050/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-005

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Silver	EMS0063-APR21	ug/g	0.05	<0.05	ND	20	95	70	130	98	70	130
Arsenic	EMS0063-APR21	µg/g	0.5	<0.5	3	20	102	70	130	93	70	130
Barium	EMS0063-APR21	ug/g	0.1	<0.1	0	20	101	70	130	91	70	130
Beryllium	EMS0063-APR21	µg/g	0.02	<0.02	11	20	97	70	130	96	70	130
Boron	EMS0063-APR21	µg/g	1	<1	ND	20	101	70	130	97	70	130
Cadmium	EMS0063-APR21	µg/g	0.02	<0.02	1	20	101	70	130	101	70	130
Cobalt	EMS0063-APR21	µg/g	0.01	<0.01	4	20	101	70	130	102	70	130
Chromium	EMS0063-APR21	µg/g	0.5	<0.5	5	20	100	70	130	99	70	130
Copper	EMS0063-APR21	µg/g	0.1	<0.1	1	20	97	70	130	100	70	130
Molybdenum	EMS0063-APR21	µg/g	0.1	<0.1	ND	20	96	70	130	96	70	130
Nickel	EMS0063-APR21	ug/g	0.5	<0.5	4	20	96	70	130	98	70	130
Lead	EMS0063-APR21	ug/g	0.1	<0.1	2	20	98	70	130	101	70	130
Antimony	EMS0063-APR21	µg/g	0.8	<0.8	ND	20	97	70	130	90	70	130
Selenium	EMS0063-APR21	µg/g	0.7	<0.7	ND	20	98	70	130	97	70	130
Thallium	EMS0063-APR21	µg/g	0.02	<0.02	20	20	101	70	130	98	70	130
Uranium	EMS0063-APR21	µg/g	0.002	<0.002	3	20	95	70	130	110	70	130
Vanadium	EMS0063-APR21	µg/g	3	<3	3	20	99	70	130	98	70	130
Zinc	EMS0063-APR21	µg/g	0.7	<0.7	3	20	97	70	130	98	70	130

QC SUMMARY

Pesticides

Method: EPA 3541/8270D | Internal ref.: ME-CA-[ENV]GC-LAK-AN-018

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Aldrin	GCM0200-APR21	µg/g	0.05	< 0.05	ND	40	86	50	140	85	50	140
alpha-Chlordane	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	85	50	140	85	50	140
Dieldrin	GCM0200-APR21	µg/g	0.05	< 0.05	ND	40	88	50	140	88	50	140
Endosulfan I	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	86	50	140	84	50	140
Endosulfan II	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	86	50	140	94	50	140
Endrin	GCM0200-APR21	µg/g	0.04	< 0.04	ND	40	86	50	140	90	50	140
gamma-BHC	GCM0200-APR21	µg/g	0.01	< 0.01	ND	40	90	50	140	86	50	140
gamma-Chlordane	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	85	50	140	85	50	140
Heptachlor epoxide	GCM0200-APR21	µg/g	0.01	< 0.01	ND	40	85	50	140	84	50	140
Heptachlor	GCM0200-APR21	µg/g	0.01	< 0.01	ND	40	87	50	140	82	50	140
Hexachlorobenzene	GCM0200-APR21	µg/g	0.01	< 0.01	ND	40	88	50	140	80	50	140
Hexachlorobutadiene	GCM0200-APR21	µg/g	0.01	< 0.01	ND	40	89	50	140	77	50	140
Hexachloroethane	GCM0200-APR21	µg/g	0.01	< 0.01	ND	40	89	50	140	75	50	140
Methoxychlor	GCM0200-APR21	µg/g	0.05	< 0.05	ND	40	84	50	140	82	50	140
o,p-DDD	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	84	50	140	91	50	140
o,p-DDE	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	87	50	140	87	50	140
op-DDT	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	81	50	140	74	50	140
pp-DDD	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	81	50	140	100	50	140
pp-DDE	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	86	50	140	93	50	140
pp-DDT	GCM0200-APR21	µg/g	0.02	< 0.02	ND	40	78	50	140	68	50	140

QC SUMMARY

pH

Method: SM 4500 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-001

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
pH	ARD0048-APR21	pH Units	0.05		0	20	100	80	120			

Water Soluble Boron

Method: O.Reg. 15 3/04 | Internal ref.: ME-CA-[ENV] SPE-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LCS/Spike Blank			Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery (%)	Material Recovery Limits (%)	
								Low	High		Low	High
Water Soluble Boron	ESG0038-APR21	µg/g	0.5	<0.5	ND	20	97	80	120	104	70	130

QC SUMMARY

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

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

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

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

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

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

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

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

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

LEGEND

FOOTNOTES

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

Samples analysed as received. Solid samples expressed on a dry weight basis. “Temperature Upon Receipt” is representative of the whole shipment and may not reflect the temperature of individual samples.

Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act” published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated. This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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-- End of Analytical Report --

Appendix J Site Photographs

Phase One Environmental Site Assessment - Site Photographs
4375 Millcroft Park Drive, Burlington, Ontario


P1 - Partial view of the Phase One Property, facing south


P2 - Pile of crusehed and block concrete at the southeast section of the Phase One Property


P3 - Phase One Property and adjacent properties to the west


P4 - Neighboring properties to the north


P5 - Adjacent property to the east


P6 - Adjacent property to the south