Phase One Environmental Site Assessment
1154, 1176, 1180, and 1208 Old Montreal Road, Ottawa, Ontario

Client:
DCR Phoenix Group of Companies

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Phase One Environmental Site Assessment

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Executive Summary

EXP Services Inc. (EXP) was retained by DCR Phoenix Group of Companies to complete a Phase One Environmental Site Assessment (ESA) of the property located at 1154, 1176, 1180, and 1208 Old Montreal Road, Ottawa, Ontario hereinafter referred to as the 'Phase One property'. At the time of the investigation, the Phase One property was consisted of rural residential properties.

A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices.

The purpose of this Phase One ESA is to determine if past or present site activities have resulted in actual or potential contamination at the Phase One property. It is understood that the report will be used to support a site plan application. EXP understands that the most recent use of the Phase One property is residential and that the proposed future use is also residential.

The Phase One property consists of the municipal addresses 1154, 1176, 1180, and 1208 Old Montreal Road in Ottawa, Ontario. The Phase One property is located within a residential/agricultural area on the south side of Old Montreal Road. The Phase One property has an area of approximately 5.6 hectares.

The Phase One property has the property identification numbers (PIN): 145260023, 145260025, 145260026, 145260028, and 145262280.

The legal description of the Phase One property is:

- 1154 Old Montreal Road – PT LT 28 CON 1OS CUMBERLAND AS IN RR138993; OTTAWA
- 1176 Old Montreal Road – PT LT 27 CON 1OS CUMBERLAND AS IN N752036 T/W RR133367; OTTAWA
- 1180 Old Montreal Road – PT LT 27 CON 1OS CUMBERLAND PARTS 1,2 & 3, 50R6772 S/T RR133366; OTTAWA
- 1208 Old Montreal Road – FIRSTLY: PART LOT 27, CONCESSION 1OS CUMBERLAND AS IN N759565; SECONDLY: PART LOT 27, CONCESSION 1OS CUMBERLAND, PART 1, PLAN 4R31597; T/W RR133367 CITY OF OTTAWA

The approximate Universal Transverse Mercator (UTM) coordinates for the Phase One property centroid are Zone 18, 463549 m E and 5038049 m N. The UTM coordinates are based on measurements from Google Earth Pro, published by the Google Limited Liability Company (LLC). The accuracy of the centroid is estimated to be less than 10 m.

Based on a review of historical aerial photographs, and other records review, it appears the subject site was first developed as a farm in 1951 under the 1208 Old Montreal Road civic address. In the 1970s a portion of the property was severed, and three residences were developed at 1172, 1176, and 1180 Old Montreal Road. The residence at 1172 Old Montreal Road wis not part of the Phase One property. The residence at 1154 Old Montreal Road was built in the 1960s.

There are records for 25 potable water wells within the Phase One study area. The well records date between 1954 to 2004. All of the records were for domestic wells, some of which are still in use. The proposed development will be on municipal services.

There are no water bodies on the subject site. The nearest surface water body to the subject site is a tributary to Cardinal Creek, located approximately 60 m south of the Phase One property. The tributary discharges to the Cardinal Creek 0.5 kilometres downstream to the southwest.

There are no areas of natural or scientific interest (ANSI) within the Phase One study area.

The APEC and PCA are described below:

Table EX.1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
APEC #1	Area near dispensing area for former fuel AST on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #2	Area around furnace oil AST on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #3	Area around former furnace oil AST on 1176 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #4	Area around furnace oil AST on 1180 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #5	Fill material present at 1208 Old Montreal Road	PCA #30 – Importation of fill of unknown quality	On-Site	PHC and BTEX, metals	Soil
APEC #6	Area around generator AST at the communications tower on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater

The Qualified Person can confirm that the Phase One Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices.

The Qualified Person who oversaw this work, Mark McCalla, M.Sc., P.Geo., recommends that a Phase Two ESA be conducted to address the PCA that may have adversely affected the APEC on the Phase One property. A Phase Two ESA is recommended for the property to assess the identified APECS.

This executive summary is a brief synopsis of the report and should not be read in lieu of reading the report in its entirety.

1.0 Introduction

EXP Services Inc. (EXP) was retained by DCR Phoenix Group of Companies to complete a Phase One Environmental Site Assessment (ESA) of the property located at 1154, 1176, 1180, and 1208 Old Montreal Road, Ottawa, Ontario hereinafter referred to as the 'Phase One property'. At the time of the investigation, the Phase One property was consisted of rural residential properties.
A Phase One ESA is a systematic qualitative process to assess the environmental condition of a site based on its historical and current uses. This Phase One ESA was conducted in accordance with the Phase One ESA standard as defined by Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third-party reliance are outlined in Section 9 of this report.

Please note that general environmental management and housekeeping practices were reviewed as part of this assessment insofar as they could impact the environmental condition of the property, however, a detailed review of regulatory compliance issues was beyond the scope of our investigation. This Phase One ESA does not constitute an audit of environmental management practices, indicate geotechnical conditions or identify geologic hazards.

1.1 Objective

The purpose of this Phase One ESA is to determine if past or present site activities have resulted in actual or potential contamination at the Phase One property. It is understood that the report will be used to support a site plan application.

EXP understands that the most recent use of the Phase One property is residential and that the proposed future use is residential. Consequently, since the proposed future use of the property is the same as its previous use a Record of Site Condition (RSC) is not required.

EXP personnel who conducted assessment work for this project included Mark McCalla, M.Sc., P.Geo., and Leah Wells, P.Eng. An outline of their qualifications is provided in Appendix A.

1.2 Phase One Property Information

The Phase One property consists of the municipal addresses 1154, 1176, 1180, and 1208 Old Montreal Road in Ottawa, Ontario. The Phase One property is located within a residential/agricultural area on the south side of Old Montreal Road. The Phase One property has an area of approximately 5.6 hectares.

A Site Location Plan is provided as Figure 1 and a Site Plan is provided as Figure 2 in Appendix C.

The Phase One property has the property identification numbers (PIN): 145260023, 145260025, 145260026, 145260028, and 145262280.

The legal description of the Phase One property is:

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The approximate Universal Transverse Mercator (UTM) coordinates for the Phase One property centroid are Zone 18, 463549 m E and 5038049 m N. The UTM coordinates are based on measurements from Google Earth Pro, published by the Google Limited Liability Company (LLC). The accuracy of the centroid is estimated to be less than 10 m.

The property owner of all of the civic addresses is Phoenix Harbour Old Montreal Road Inc. Authorization to proceed with this investigation was provided by Michael Boucher, Manager of Planning, Phoenix Homes. Contact information for Mr. Boucher is 18 Bentley Avenue, Ottawa, Ontario, K2E 6T8.

2.0 Scope of Investigation

The scope of work for the Phase One ESA consisted of the following activities:

- Reviewing the historical occupancy of the Phase One property through the use of available archived and relevant municipal and business directories, fire insurance plans (FIPs), topographical maps, and aerial photographs;
- Reviewing municipal and provincial records to determine whether activities that have occurred within the Phase One study area pose a potential environmental concern to the Phase One property;
- Obtaining an EcoLog Environmental Risk Information Services Ltd. (ERIS) report for the Phase One property and surrounding properties within a 250-metre radius of the Phase One property;
- Reviewing available geological maps, well records and utility maps for the vicinity of the Phase One property;
- Obtaining a search of land title and assessment rolls for the Phase One property;
- Conducting at least one reconnaissance of the Phase One property and surrounding properties within a 250-metre radius of the Phase One property in order to identify the presence of actual and/or potential environmental contaminants or concerns of significance;
- Conducting interviews with designated representative(s) as a resource for current and historical information;
- Reviewing the current use of the Phase One property and any land use practices that may have impacted its environmental condition;
- Reviewing the current use of the surrounding properties and any land use practices that may have impacted the environmental condition of the Phase One property; and,
- Preparing a report to document the findings.

In completing the scope of work, EXP did not conduct any intrusive investigations, including sampling, analyses, or monitoring. EXP has confirmed neither the completeness nor the accuracy of any of the records that were obtained or of any of the statements made by others.

3.0 Records Review

3.1 Phase One ESA Study Area Determination

The Phase One study area comprises the Phase One property and surrounding properties wholly or partly within 250 metres of the property boundaries. The 250-metre radius was used to gain an understanding of the current and past uses of surrounding properties to determine whether such uses may have contributed to subsurface environmental impacts at the Phase One property. At the time of the site reconnaissance, land usage within 250 metres of the Site was residential to the north and west, and agricultural to the east and south.

The properties at 1154, 1176, and 1180 Old Montreal Road are zoned RR, rural residential zones. The property at 1208 Old Montreal Road is zoned RU, rural countryside. The surrounding properties in the Phase One study area are also zoned primarily for residential use. The property south adjacent to the Phase One property, long the creek embankment is zoned open space.

The Phase One study area is shown on Figure 3 in Appendix C.

3.2 First Developed Use Determination

Based on a review of historical aerial photographs, and other records review, it appears the subject site was first developed as a farm in 1951 under the 1208 Old Montreal Road civic address. In the 1970s a portion of the property was severed, and three residences were developed at 1172, 1176, and 1180 Old Montreal Road. The residence at 1172 Old Montreal Road wis not part of the Phase One property. The residence at 1154 Old Montreal Road was built in the 1960s.

3.3 Fire Insurance Plans

EXP reviewed the Catalogue of Canadian Fire Insurance Plans 1875 – 1975. No fire insurance plans depicting the Phase One study area were available for review.

3.4 Chain of Title

A chain of title was requested from Read Abstracts Limited for the Phase One property. A chain of title search provides a list of property owners and the dates when they owned them. To date chain of title information has not been received.

3.5 City Directories

On February 2, 2021, records pertaining to the site were requested from the EcoLog Environmental Risk Information Services (or EcoLog ERIS) for the municipal street directories in the Phase One study area. EcoLog ERIS is an environmental database and information service provider.

As a result of the COVID-19 pandemic, the government has closed various institutions which severely limits EXP's ability to access government libraries and archives and prepare a detailed historical search of the Site and surrounding areas, as such the city directories were unavailable for review.

Based on the findings of the previous ESA and current observations of the surrounding properties (section 5.25) EXP does not anticipate any PCAs on nearby properties.

3.6 Environmental Reports

The following reports were reviewed for the Phase One property as part of the Phase One ESA:

1. EXP Services Inc., *Phase I Environmental Site Assessment, 1154, 1172, 1176, 1180, and 1208 Old Montreal Road, Ottawa, Ontario*, August 2016.

The Phase I ESA report identified four aboveground fuel tanks (ASTs) at the Phase One property. Two were located at 1208 Old Montreal Road; one in the loft of the aluminum barn for farm vehicle refuelling and one in the basement of the farmhouse for heating. ATS s used for heating were also located in 1176 and 1180 Old Montreal Road.

The report identified the AST in the barn as a potentially contaminating activity (PCA). Potential impact to soil and groundwater near the former fuel above ground storage tank (AST) location was identified as an area of potential environmental concern (APEC).

2. EXP Services Inc., *Phase II Environmental Site Assessment, 1208 Old Montreal Road, Ottawa, Ontario*, September 2016.

The 2016 Phase II ESA investigation was completed to address concerns identified in the Phase I ESA. The potential environmental concern identified was the presence of a former fuel AST and dispensing equipment near the farmhouse at 1208 Montreal Road. The investigation consisted of the advancement of ten boreholes in the vicinity of the former AST, eight of which were completed as monitoring wells. Soil and groundwater samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) and petroleum hydrocarbons (PHCs). Field observations during the drilling program indicated impacted soil and groundwater at BH7. Three boreholes were drilled approximately 5 m to the north, south, and west of BH7 to delineate soil and groundwater impact. The impact could not be further delineated to the east due to the location of the barn. Impacted soil was observed in three of the boreholes and impacted groundwater was found in one monitoring well. An additional six boreholes were drilled further from the observed soil and groundwater impacts. No impact was observed in any of the six additional boreholes. The depth to groundwater was observed to be 1.2 to 5.8 m bgs.

Based on the analytical results, petroleum impacted soil and groundwater were found at the location of the former tractor refuelling area of the site. The likely area of impacted soil has been estimated to be 600 m^2. Assuming an estimated thickness of impact of 1.5 m, the resulting volume of impacted soil in this zone is 900 m^3. The worst-case area of impacted soil has been estimated to be 1,050 m^2. Assuming an estimated thickness of impact of 1.5 m, the resulting volume of impacted soil in the worst-case zone is 1,575 m^3.

The previously identified area of impacted soil and groundwater is an area of potential environmental concern (APEC 1).

Review of the reports identified the area of the impacted soil and groundwater in the vicinity of the fuel AST in the barn as a PCA (**PCA 1**). The fuel oil ASTs located in the basements of 1208 and 1180 Old Montreal Road, and the former fuel oil AST located in the basement of 1176 Old Montreal Road constitute **PCA 2**, **3**, and **4,** respectively.

3. EXP Services Inc., Geotechnical Investigation, 1154 - 1208 Old Montreal Road, Ottawa, Ontario, March 27, 2018.

The geotechnical investigation consisted of drilling 12 boreholes to 7 m to 23.3 m depth. The boreholes revealed that the surficial topsoil and/or fill/silty sand is underlain by silty clay crust, which extends to 3 m to 5.6 m depth. The grey silty clay in Boreholes 1, 3 and 7 is underlain by silty sand till, which extends to the entire depth investigated in these boreholes, i.e. 13.6 m to 23.3 m. Refusal to dynamic cone penetration test or to augering was met in Boreholes 3, 5, and 7 at 13.6 m to 23.3 m depth. The bedrock in the area is likely to be shale of the Rockcliffe Formation. The perched groundwater table at the site was established at 0.7 m to 1.5 m depth below the existing ground surface. The groundwater table at the site is estimated to be at a depth of 3 m to 5.5 m below the existing ground surface.

3.7 Environmental Source Information

Information pertaining to the Phase One property was obtained by reviewing documents that are available to the public through municipal and provincial sources. EXP did not identify the need to contact any federal agencies.

Written responses from regulatory agencies and copies of documents obtained via searches are provided in Appendix D.

3.7.1 Ontario Ministry of the Environment, Conservation and Parks Records

On January 28, 2021, records pertaining to the Phase One property were requested from the Ministry of the Environment, Conservation and Parks (MECP) through the *Freedom of Information and Protection of Privacy Act* (FOI). To date, no response has been received. If environmentally significant information is obtained from the MECP search, it will be provided as an addendum to this report.

A response from the Ministry was received September 12, 2016 as part of the Phase I ESA conducted in 2016. No records were found.

3.7.2 Historical Land Use Inventory

An HLUI request was made to the City of Ottawa February 9, 2021. No response has yet been received. A copy of the request is provided in Appendix C.

3.7.3 Environmental Registry

On January 28, 2021, the MECP Environmental Registry website was searched for postings in the vicinity of the Phase One property, no records were found.

3.7.4 Environmental Access

On January 28, 2021 the MECP Environmental Access website was searched for postings within the Phase One study area.

- 1123 Old Montreal Road (50 m north) – A Certificate of Approval for municipal and private sewage works was issued to World Life Church for the construction of a stormwater management system (storm sewers and wet pond). Certificate 5012-66KQTM issued November 2004.
- Cardinal Creek Development (50 m north) – environmental Compliance Approval for municipal and private sewage works issued to Tamarack Corporation for the construction of storm sewers in the Cardinal Creek development. Certificate 4185-9LVSK2 issued July 2014, Certificate 7792-ASJR4M issued October 2017.

None of the records reviewed posed an environmental concern to the Phase One property.

3.7.5 Hazardous Waste Information Network

On January 28, 2021, the MECP Hazardous Waste Information Network (HWIN) website was searched for registered waste generators within the Phase One study area, no records were found.

3.7.6 Records of Site Condition

On January 28, 2021, the MECP Brownfields Registry website was searched for postings of Records of Site Condition within the Phase One study area. No records were found.

3.7.7 Coal Gasification Plants

Documents entitled *Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario* prepared by the MECP and *Inventory of Coal Gasification Plant Waste Sites in Ontario* prepared by Intera Technologies Ltd. were reviewed. There were no coal gasification plants identified within the Phase One study area.

3.7.8 PCB Storage Sites

Documents entitled *National Inventory of PCBs in Use and PCB Wastes in Storage in Canada*, *2003 Annual Report* prepared by Environment Canada and *Ontario Inventory of PCB Storage Sites* prepared by the MECP were reviewed. No records pertaining to PCB storage sites were identified within the Phase One study area.

3.7.9 Waste Disposal Sites

Documents entitled *Old Landfill Management Strategy, Phase 1, Identification of Sites, City of Ottawa, Ontario* prepared by Golder Associates Ltd. and *Waste Disposal Site Inventory* prepared by the MECP were reviewed. No former landfills or waste disposal sites were identified within the Phase One study area.

3.7.10 Former Industrial Sites

The document entitled *Mapping and Assessment of Former Industrial Sites; City of Ottawa* prepared by Intera Inc. was reviewed. No former industrial sites were identified within the Phase One study area.

3.7.11 Street Directories

A search of municipal street directories for properties within the Phase One study area was conducted by EcoLog Environmental Risk Information Services (or EcoLog ERIS). EcoLog ERIS is an environmental database and information service provider. No city directories were available for the Phase One study area.

3.8 EcoLog ERIS Database Search

A search of provincial and federal databases for records pertaining to the Phase One property and properties within the Phase One study area was conducted by EcoLog ERIS. EXP has confirmed neither the completeness nor the accuracy of the records that were provided. A summary of the more significant findings is provided below. A copy of the EcoLog ERIS report is provided in Appendix E.

Entries from the EcoLog ERIS report were reviewed and summarized below:

- The Certificate of Approval identified one entry for municipal and private sewage works. The World of Life Church (1123 Old Montreal Road), was issued certificate 5012-66KQTM in 2004;
- There were 24 records found in the Water Well Information System (WWIS) database for the Phase One study area. All of the records were for domestic wells. New development in the Phase On study area is now supplied with municipal services.

None of the records pose an environmental concern to the Phase One property.

3.9 Physical Setting Sources

3.9.1 Aerial Photographs

Aerial photographs dated 1945, 1965, 1976, 1991, 1999, 2005, 2015, and 2019 were available for review on the City of Ottawa website. Aerial photographs dated prior to 1945 were not available for review. The following table summarizes the development and land use history of the Phase One property and adjacent properties as depicted on the reviewed aerial photographs. Copies of the aerial photographs are provided in Appendix F.

Aerial Photograph (year)	Details
1945	Several small buildings are present at 1208 Old Montreal Road. The remainder of the Phase One study area consists of vacant and agricultural lands. Old Montreal Road is present, as is Trim Road south of the intersection with Old Montreal Road.
1965	The farmhouse at 1208 Old Montreal Road and the residence at 1154 Old Montreal Road have been constructed. The remainder of the Phase One study area appears similarly developed to in 1945.
1976	The properties at 1172, 1176, and 1180 Old Montreal Road have been developed with single family residences. Additional rural residential development has occurred to the west along Old Montreal Road.
1991	The properties at 1154, 1176, an d1180 appears to be similarly developed to the 1976 aerial photograph. The Rogers communications tower is visible on the east part 1208 Old Montreal Road.
1999	The Phase One property and study area are similarly developed to the 1991 aerial photograph.
2005	The Phase One property and study area are similarly developed to the 1999 aerial photograph. A church has been constructed to the northwest of the Site.
2015	The Phase One property is similarly developed to the 2005 aerial photograph. A residential subdivision is under construction on the north side of Old Montreal Road.
2019	The Phase One property is similarly developed to the 2015 aerial photograph. Additional residential construction has occurred on the north side of Old Montreal Road.

Based on the review of the aerial photographs, no additional PCAs have been identified in the Phase One study area in addition to those mentioned in previous sections.

3.9.2 Topography, Hydrology, Geology

Bedrock and surficial geology were reviewed via the Google Earth applications published by the Ontario Ministry of Energy, Northern Development and Mines. The bedrock geology application is available via www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth/bedrock-geology and was last modified on March 19, 2018. The surficial geology application is available via www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearth/surficial-geology and was last modified on May 23, 2017.

Based on the surficial geology map examined, beneath any fill, the surficial geology of the subject site is characterised by fine textured glaciomarine deposits of silt and clay with minor sand and gravel. An examination of the bedrock geology map shows the subject site is underlain by limestone, dolostone and shale of the Ottawa Group.

Local well and borehole data indicate variable composition of clay, and sand, over limestone bedrock. The depth to bedrock was 15 m below grade.

The topography of the site consists of a topographic high at the northern portion of the site, with a steep slope downwards in the centre section of the site just south of 1180 Old Montreal Road, and then flat agricultural lands at the southern portion of the site. The local groundwater flow direction is anticipated to be west towards Cardinal Creek.

3.9.3 Fill Materials

A previous Phase II ESA identified a 0.1 m thick layer of crushed stone in some of the boreholes. Silty sand fil was observed to between 0.3 to 0.8 m bgs in the northeast part of 1208 Old Montreal Old. This is **PCA 5** (#30 – Imported Fill of Unknown Quality).

It is not anticipated that significant amounts of imported fill would be present on the remainder of Phase One property based on a review of the borehole logs from the geotechnical investigation.

3.9.4 Water Bodies and Areas of Natural Significance

There are no water bodies on the subject site. The nearest surface water body to the subject site is a tributary to Cardinal Creek, located approximately 60 m south of the Phase One property. The tributary discharges to the Cardinal Creek 0.5 kilometres downstream to the southwest.

There are no Area of Natural Significance (ANSI) within the Phase One study area, according to the Ministry of Natural Resources and Forestry Natural Heritage website (www.gisapplication.lrc.gov.on.ca/mamnh/Index.html).

3.9.5 Well Records

The Ontario well records website (www.ontario.ca/environment-and-energy/map-well-records water wells) was accessed. There were 25 well records for the Phase One study area. Four of the well records are for residence at the Phase One property. The well records date between 1954 to 2004. All of the records were for domestic wells, some of which are still in use. The proposed development will be on municipal services.

There are no oil, gas, or salt wells within the Phase One study area, according to the Oil, Gas & Salt Resources Library (maps.ogsrlibrary.com/wells/).

3.10 Site Operating Records

No site operating records were provided to EXP for review.

4.0 Interviews

Interviews were conducted by EXP with the individuals identified to be the most knowledgeable about both the current and historical Phase One property uses. The purpose of interviews is to obtain information to assist in identifying areas of potential environmental concern and identify details of potentially contaminating activities or potential contaminant pathways, in, on or below the Phase One property.

During the completion of the 2016 ESA, the following individuals were interviewed:

- Lois Morin – former owner of 1180 and 1208 Old Montreal Road
- John Minogue – former owner of 1176 and 1208 Old Montreal Road

The former property owners provided a summary of the site history as follows:

- The Minogue family purchased the vacant farmland in 1951 and built the house and barns (1208 Old Montreal Road);
- In the 1970s, each of the Minogue children were given land severances and constructed residences at 1172, 1176, and 1180 Old Montreal Road, respectively;
- Farming activities on the Phase One property were described as light agricultural in nature and for the last 30 years, the Site has been used to pasture horses;
- The southern portion of the 1208 Montreal Road (south of the Phase One property) is leased to a farm and is still used for agriculture;
- The communications tower on the farm, which is leased to Rogers Communications, was built in 1984. There is a contract in place such that pom lease termination, Rogers is required to remove the tower and all associated materials. Tower has since been removed the former presence of a backup generator AST is **PCA 6**;
- They were unaware of any pesticide use at the Site;
- Machinery refuelling occurred using a diesel fuel tank located in the loft of the aluminum barn;
- Fuel oil ASTs are present in the basements of 1180 and 1208 Old Montreal Road. No issues have been reported regarding the ASTs;
- A fuel oil AST was formerly located in the basement of 1176 Old Montreal Road. The heating was converted to propane in the last few years; and
- The former property owners had no knowledge of any spills on the property.

Michael Boucher, Manager of Planning for Phoenix Homes, was interviewed via email on February 10, 2021.

- The communications tower was removed from the property in October 2020;
- The barns at 1208 Old Montreal Road were demolished in early 2020; and
- There have been no other significant changes to the properties since they were acquired by Phoenix Harbour in 2017.

Responses to other questions were made during site reconnaissance and are discussed in section 5.0.

5.0 Site Reconnaissance

5.1 General Requirements

On February 9, 2021 at 1 p.m., Ms. Leah Wells, P.Eng. of EXP conducted the site visit for the Phase One property. The weather was sunny with an approximate temperature of minus 5 degrees Celsius. The Site visit lasted approximately 90 minutes.

The site visit was conducted in accordance with EXP's internal health and safety protocols and with the Ministry of Labour health and safety regulations. The purpose of the site visit was to assess the current conditions of the Phase One property.

Observations of the Phase One property and surrounding properties within the Phase One study area were conducted. Adjoining properties were observed from within the grounds of the Phase One property and from public roads and sidewalks.

Photographs were taken at the Phase One property on February 9, 2021 and pertinent photographs are included in Appendix F.

5.2 Specific Observations at the Phase One Property

5.2.1 Buildings and Structures

The site is located on the south side of Old Montreal Road, at 1154, 1176, 1180, and 1208 Old Montreal Road, as shown on Figure 1 in Appendix B. The site is rectangular in shape, covers a total area of 17 hectares (41.5 acres). Below is a description of each property:

- 1154 Old Montreal Road – A single storey residence with basement walkout located directly along Old Montreal Road. Topography of the property slopes downwards at the north end. Behind the residence is a densely wooded area. The house was heated with electric heating.
- 1176 Old Montreal Road – A single storey house with basement which is accessed from a private road off Old Montreal Road. There is a detached garage and shed. The most recent heat supply was natural gas, but the residence was formerly heated with oil.
- 1180 Old Montreal Road – A single storey house with basement which is accessed from a private road off Old Montreal Road. There is a detached garage and shed. A furnace oil AST was present in the basement.
- 1208 Old Montreal Road – The farmhouse is described as a single storey with basement walkout. A small shed and an ice fishing hut were also present on the property. A furnace oil AST was present in the basement.

All the residences have been vacant for several years. The neighbouring residence in the middle of the Phase One property, but not included in the Phase One property, was first heated by wood and then converted to electrical. There was never a heating oil tank on the property and therefore is not a PCA.

5.2.2 Site Utilities and Services

Each of the residences is serviced by a potable well and septic system. There are overhead electrical and bell lines for the properties.

There was no evidence of a railway being present on the Phase One property. A railway is present approximately 1 km south of the Phase One property.

5.3 Storage Tanks

5.3.1 Underground Storage Tanks

EXP did not observe any evidence of USTs, such as vent and fill pipes, during the site reconnaissance. Furthermore, the historical review did not identify any former USTs at the site.

5.3.2 Above Ground Storage Tanks

The following existing and former aboveground storage tanks (ASTs) were documented:

- A former diesel tank, which was used to refuel farm vehicles, was located on the loft of the aluminum barn. It dispensed fuel via gravity feed to the tractor parking over a gravel area. There is the potential for spillage in this area to have impacted the subsurface. This represents an APEC (**PCA 1**).
- A heating oil tank in the basement of 1208 Old Montreal Road. The tank was installed above a concrete floor in fair condition. There was some staining observed on the concrete floor below the tank, although the staining appeared to be contained within the building footprint. This represents an APEC (**PCA 2**).
- A heating oil tank in the basement of 1180 Old Montreal Road. The tank was installed above a concrete floor in good condition, and there was no staining in the vicinity of the tank. This represents an APEC (**PCA 3**).
- A former heating oil tank was located in the basement of 1176 Old Montreal Road, which was replaced with propane a few years ago. No staining was observed on the concrete floor in the former tank location. This represents an APEC (**PCA 4**).

5.4 Chemical Storage Handling and Floor Condition

Chemical use on the Phase One property was predominantly limited to commonly available retail sized containers of cleaners and detergents, as well as common maintenance chemicals such as paint. At the time of the Site visit, none of the properties were occupied.

All chemicals observed on the Phase One property were stored in small quantities and in their original retail packaging or approved containers. All chemical storage containers on the Phase One property were observed to be in good condition at the time of EXP's site visit. Flooring in the vicinity of any chemical storage areas was observed to be in good condition, free of damage or staining. As such, the potential environmental concern to the subsurface environmental conditions of the Phase One property from the use of chemicals is considered to be low.

5.5 Areas of Stained Soil, Pavement or Stressed Vegetation

No areas of significant staining of soil or pavement was observed on the Phase One property at the time of EXP's site visit. Further, the vegetation on the property did not appear to be stressed.

5.6 Fill and Debris

Significant quantities of fill are not anticipated to be present at the subject site.

5.7 Air Emissions

Regulatory control of air emissions in Ontario is the responsibility of the MECP. According to the Environmental Protection Act (EPA), an ECA (Air) is required for the ongoing operation of any equipment that may discharge a contaminant into the natural environment if the equipment was installed, modified or altered after June 29, 1988.

No air emissions of concerns were identified at the time of the site visit.

5.8 Odours

No strong odours were present during the site visit.

5.9 Noise

No excessive noise was heard during the site visit.

5.10 Other Observations

There were no pits and lagoons, no railways or spurs and no unidentified substances observed on the Phase One property.

5.11 Special Attention Items, Hazardous Building Materials and Designated Substances

5.11.1 Asbestos

Asbestos-containing materials (ACM) are fibrous hydrated silicates and can be found in building materials as either "unbound" or "bound" asbestos. Friable asbestos refers to materials where the asbestos fibres can be separated from the material with which it is associated. Non-Friable asbestos refers to asbestos that is associated with a binding agent (such as tar or cement). Friable asbestos is commonly found in boiler and pipe insulation. Non-Friable asbestos is typically found in roofing tars, floor and ceiling tiles, and asbestos-containing cement.

ACM in the workplace are defined as a Designated Substance under the Ontario Occupational Health and Safety Act (OHSA). Under OHSA, persons in the workplace are required to be notified of the presence of ACMs once they are suspected to be present, and if there is a potential for workers to be exposed. The use of ACM was discontinued in Canada in the late 1970s/early 1980s, although non-friable asbestos can still be found in recently constructed buildings.

Based on the age of the buildings at the Phase One property ACM may be present.

5.11.2 Ozone Depleting Substances (ODSs)

Chlorofluorocarbons (CFC), often referred to as freons, ceased production in Canada in 1993 as a result of their ozone-depleting characteristics. Importation of CFCs into Canada ceased in 1997 and a total ban on their use is proposed for 2020. The use of these materials is still permitted in existing equipment, but equipment must be serviced by a licensed contractor such that CFCs are contained and not released to the environment during servicing or operation.

Maintenance of refrigerant containing equipment should continue to be completed by a licensed refrigeration contractor. The equipment should only be repaired, removed, or serviced by an appropriately licensed contractor.

5.11.3 Lead

Lead has frequently been used in oil-based paints, roofing materials, cornices, tank linings, electrical conduits and soft solders for tinplate and plumbing. The use of lead-based paints (LBPs) was phased out *circa* 1976. Paint that was produced or used between 1976 and 1980 may contain small amounts of lead. Paint that was produced or used prior to 1950 may contain

higher levels of lead. The main concern regarding lead paint is its potential to become lead dust or chips either through deterioration and/or mechanical means (i.e., sanding, abrasion, etc.). Exposure to lead dust or chips occurs by ingestion or inhalation.

Based on the age of the buildings at the Phase One property LBPs may be present. The painted surfaces observed during EXP's site visit were observed to be in poor condition.

5.11.4 Mercury

Mercury could be found in some batteries, light bulbs, old paints, thermostats, old mirrors, etc. Based on an investigation by Consumer and Corporate Affairs Canada, and an assessment of potential health risks by Health and Welfare Canada, in 1991 the decision was made to eliminate the use of mercury compounds in indoor latex paints. The Canadian Paint and Coatings Association (CPCA) supported the withdrawal and all Canadian manufacturers and formulators of the preservative voluntarily agreed to remove "interior uses" from their product labels.

Mercury-containing equipment was not observed during the Site visit. The interior painted surfaces observed during EXP's site visit were in poor condition. No mercury-containing thermostats were observed in the building.

5.11.5 Polychlorinated Biphenyls (PCB)

The manufacture of PCB in North America was prohibited under the Toxic Substances Control Act (1977). Their use as a constituent of new products manufactured in or imported into Canada was prohibited by regulations in 1977 and 1980. As such, sites developed or significantly renovated after 1980 are unlikely to have PCB-containing equipment on the Phase One property. Potential equipment, which could contain PCB include fluorescent mercury and sodium vapour light ballasts, oil filled capacitors and transformers. Any electrical equipment containing PCB must be disposed of in accordance with Ontario Regulation 362 when it is removed from service. Ongoing operation of equipment containing PCB is permissible.

There was no evidence of PCB-containing equipment on the Phase One property.

5.11.6 Urea Formaldehyde Foam Insulation

Formaldehyde is a pungent, colourless gas commonly used in water solution as a preservative and disinfectant. It is also a basis for major plastics, including durable adhesives. It occurs naturally in the human body and in the outdoor environment. Formaldehyde is used to bond plywood, particleboard, carpets, and fabrics, and it contributes to "that new house smell."

Formaldehyde is also a by-product of combustion; it is found in tobacco smoke, vehicle exhaust and the fumes from furnaces, fireplaces and wood stoves. While small amounts of formaldehyde are harmless, it is an irritating and toxic gas in significant concentrations. Symptoms of overexposure to formaldehyde include irritation to eyes, nose, and throat; persistent cough and respiratory distress; skin irritation; nausea; headache; and dizziness.

Urea-formaldehyde foam insulation (UFFI) was developed in Europe in the 1950s as an improved means of insulating difficult-to-reach cavities in the walls. It is typically made at a construction site from a mixture of urea-formaldehyde resin, a foaming agent and compressed air. When the mixture is injected into the wall, urea and formaldehyde unite and "cure" into an insulating foam plastic.

During the 1970s, when concerns about energy efficiency led to efforts to improve building insulation in Canada, UFFI became an important insulation product for existing buildings. The further use of UFFI was banned in Canada in 1980.

No evidence of UFFI was observed during the site visit.

5.11.7 Radon

Radon is a colourless, odourless, radioactive gas that occurs naturally in the environment. It comes from the natural breakdown of uranium in soils and rocks. Exposure to high levels of radon increases the risk of developing lung cancer. This relationship has prompted concern that radon levels in some Canadian buildings may pose a health risk. Radon gas can move through small spaces in the soil and rock and seep into a building through cracks in concrete, sumps, joints, and basement drains. Concrete-block walls are particularly porous to radon and radon trapped in water from wells can be released into the air when the water is used.

Due to the potential health concerns associated with radon, Health Canada released a guideline in June 2007 for a maximum acceptable level of radon gas of 200 Becquerels per cubic metre (Bq/m^3) where radon gas is present and the annual radon concentration exceeds 200 Bq/m^3 in the normal occupancy area.

A radon gas assessment was beyond the scope of this Phase One ESA, and as such, radon gas was not assessed.

5.11.8 Mould

Mould is found in the natural environment and is required for the breakdown of plant debris such as leaves and wood. Mould spores are found in the air in both the indoor and outdoor environments. In order for mould to grow, a food source (i.e. gypsum wallboard, wallpaper, wood, etc.) and moist conditions are required. Mould can have an impact on human health depending on the species and concentration of the airborne mould spores. Health effects can include allergies and mucous membrane irritation.

Currently there are no regulations governing mould; however, there are several guidelines addressing mould assessments and abatement. At the moment, the industry standards include the Canadian Construction Association (CCA) document 82-2004 titled “mould guidelines for the Canadian construction industry” and the Environmental Abatement Council of Ontario (EACO) guidelines titled “EACO Mould Abatement Guidelines, Edition 3 (2015).”

It is important to note that the Ministry of Labour (MOL) has governed protecting workers under the Occupational Health and Safety Act, which states that employers are required to take every precaution reasonable to protect their workers. This includes protecting workers from mould within workplace buildings.

Significant black mould growth and water damage was observed during the site visit in all of the residences.

5.12 Other Substances

No other special attention substances (such as acrylonitrile or isocyanates) were suspected to be present at the Phase One property at the time of site reconnaissance.

5.13 Processing and Manufacturing Operations

No processing or manufacturing operations were observed at the Phase One property.

5.14 Hazardous Materials Use and Storage

No hazardous materials are used or stored at the Phase One property.

5.15 Vehicle and Equipment Maintenance Areas

No equipment maintenance has occurred on the Phase One property.

5.16 Oil/Water Separators

No oil/water separators were present at the Phase One property.

5.17 Sewage and Wastewater Disposal

Sewage and wastewater generated at the Phase One property was disposed of via individual septic systems. There is no waste currently generated at the Phase One property.

5.18 Solid Waste Generation, Storage & Disposal

No solid wastes are generated at the Phase One property.

5.19 Liquid Waste Generation, Storage & Disposal

No liquid waste is generated at the Phase One property.

5.20 Unidentified Substances

No unidentified substances were observed on the Phase One property at the time of the site visit. No dumping or any other deleterious materials were identified.

5.21 Hydraulic Lift Equipment

No hydraulic equipment was observed at the Phase One property.

5.22 Mechanical Equipment

No mechanical equipment of concern was present on the Phase One property.

5.23 Abandoned and Existing Wells

There are four domestic wells on the Phase One property. Eight monitoring wells were installed at 1208 Old Montreal Road as part of the Phase Two ESA conducted in 2016.

Due to snow cover, none of the wells were observed during the site visit.

5.24 Roads, Parking Facilities and Right of Ways

Vehicular access to the Phase One property is via is Montreal Road and a private driveway.

5.25 Adjacent and Surrounding Properties

A visual inspection of the adjacent properties and properties within 250 m of the Phase One property was conducted from publicly accessible areas to identify the occupants and document the uses and sources of potential environmental concerns that may impact the Phase One property. Refer to Figure 3 in Appendix C for the adjacent land uses.

The following land uses border the Phase One property:

- North: Old Montreal Road followed by residential development;
- West: Residential;

- East: Agricultural fields; and
- South: Agricultural fields.

Based on observations made from public roads and sidewalks, fill/vent pipes were observed at the residences at 1172, 1183, 1199 and 1201 Old Montreal Road. Based on the age of the majority the residences along Old Montreal Road, it is likely most of the buildings are, or have historically, been heated with oil. These represent PCA 7 to 11 (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks). However, based on the down or cross gradient direction of these properties to the Phase One property, none of them are considered APECs.

5.13 Enhanced Investigation Property

Ontario Regulation 153/04 defines an enhanced investigation property as a "property that is used, or has ever been used, in whole or in part for an industrial use or any of the following commercial uses: a garage; a bulk liquid dispensing facility, including a gasoline outlet; or, for the operation of dry-cleaning equipment."

Therefore, in accordance with Regulation 153/04, the property is not considered to be an enhanced investigation property.

5.14 Summary and Written Description of Investigation

At the time of the investigation, the Phase One property consisted of vacant residential properties.

Based on the findings of this investigation the following PCA have been identified in the Phase One study area:

- PCA #28 – Gasoline ad Associated Products Storage in Fixed Tanks
- PCA #30 – Imported Fill Material of Unknown Quality

The following areas of potential environmental concern (APEC) were identified:

- APEC #1 – 1208 Montreal Road – Area near dispensing area for former fuel AST on 1208 Old Montreal Road (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks (PCA 1)).
- APEC #2 – 1208 Old Montreal Road – Area around furnace oil AST on 1208 Old Montreal Road (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks (PCA 2)).
- APEC #3 – 1176 Old Montreal Road – Area around former furnace oil AST on 1176 Old Montreal Road (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks (PCA 3)).
- APEC #4 – 1180 Old Montreal Road – Area around furnace oil AST on 1180 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks (PCA 4)).
- APEC #5 – 1208 Old Montreal Road – Fill material present at 1208 Old Montreal Road (PCA #30 – Imported Fill Material of Unknown Quality (PCA 5)).
- APEC #6 – 1208 Old Montreal Road – Area around former generator AST at the communications tower on 1208 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks (PCA 6)).

6.0 Review and Evaluation of Information

6.1 Current and Past Uses

Based on a review of historical aerial photographs, and other records review, it appears the subject site was first developed as a farm in 1951 under the 1208 Old Montreal Road civic address. In the 1970s a portion of the property was severed, and three residences were developed at 1176, and 1180 Old Montreal Road. The residence at 1154 Old Montreal Road was built in the 1960s. All of the residences are still present on the Phase One property, none of which are currently occupied.

6.2 Potentially Contaminating Activity

Ontario Regulation (O. Reg.) 153/04 defines a Potential Contaminating Activity (PCA) as one of fifty-nine (59) industrial operations set out in Table 2 of Schedule D that occurs or has occurred in the Phase One study area. The following PCA were identified for the Phase One property and the Phase One study area:

The following PCAs were identified:

- **PCA 1** – 1208 Montreal Road – Former fuel AST on 1208 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 2** – 1208 Old Montreal Road – Furnace oil AST on 1208 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 3** – 1176 Old Montreal Road – Former furnace oil AST on 1176 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 4** – 1180 Old Montreal Road – Furnace oil AST on 1180 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 5** – 1208 Old Montreal Road – Fill material present at 1208 Old Montreal Road (PCA #30 – Imported Fill Material of Unknown Quality).
- **PCA 6** – 1208 Old Montreal Road – Former generator AST at the communications tower on 1208 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 7** – 1171 Old Montreal Road – Furnace oil AST on 1171 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 8**– 1183 Old Montreal Road – Furnace oil AST on 1183 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 9** – 1199/1201 Old Montreal Road – Furnace oil AST on 1189/1201 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).
- **PCA 10** – 1138 Old Montreal Road – Furnace oil AST on 1138 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks).

No other PCAs that took place within the vicinity of the Phase One property (approximately 250 m radius) were identified.

6.3 Areas of Potential Environmental Concern

Ontario Regulation 153/04 defines an APEC as an area on a property where one or more contaminants are potentially present. Based on this Phase One ESA, the following APEC was identified:

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
APEC #1	Area near dispensing area for former fuel AST on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #2	Area around furnace oil AST on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #3	Area around former furnace oil AST on 1176 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #4	Area around furnace oil AST on 1180 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #5	Fill material present at 1208 Old Montreal Road	PCA #30 – Importation of fill of unknown quality	On-Site	PHC and BTEX, metals	Soil
APEC #6	Area around former generator AST at the communications tower on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater

6.4 Phase One Conceptual Site Model

To develop a conceptual model for the Phase One property, the following physical characteristics and pathways were considered. A conceptual site model (CSM) showing the topography of the site, inferred groundwater flow, general site features, APEC, and PCA is shown in Figure 2.

6.4.1 Buildings and Structures

The following buildings were present at the Phase One property at the time of the Site visit:

- 1154 Old Montreal Road – A single storey residence with basement walkout located directly along Old Montreal Road. Topography of the property slopes downwards at the north end. Behind the residence is a densely wooded area. The house was heated with electric heating.
- 1176 Old Montreal Road – A single storey house with basement which is accessed from a private road off Old Montreal Road. There is a detached garage and shed. The most recent heat supply was natural gas, but the residence was formerly heated with oil.
- 1180 Old Montreal Road – A single storey house with basement which is accessed from a private road off Old Montreal Road. There is a detached garage and shed. A furnace oil AST was present in the basement.
- 1208 Old Montreal Road – The farmhouse is described as a single storey with basement walkout. A small shed and an ice fishing hut were also present on the property. A furnace oil AST was present in the basement.

All of the residences were vacant at the time of the Site visit.

6.4.2 Water Bodies and Groundwater Flow Direction

There are no water bodies on the subject site. The nearest surface water body to the subject site is a tributary to Cardinal Creek, located approximately 60 m south of the Phase One property. The tributary discharges to the Cardinal Creek 0.5 kilometres downstream to the southwest.

6.4.3 Areas of Natural Significance

There are no ANSI within the Phase One study area.

6.4.4 Water Wells

There are records for 25 potable water wells within the Phase One study area. The well records date between 1954 to 2004. All of the records were for domestic wells, some of which are still in use. The proposed development will be on municipal services.

6.4.5 Potentially Contaminating Activity

The following on-site PCA were identified:

- PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks
- PCA #30 – Imported Fill Material of Unknown Quality

The Following off-site PCA were identified:

- PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks

6.4.6 Areas of Potential Environmental Concern

The following APEC were identified:

- APEC #1 – 1208 Montreal Road – Area near dispensing area for former fuel AST on 1208 Old Montreal Road (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks (PCA 1)).
- APEC #2 – 1208 Old Montreal Road – Area around furnace oil AST on 1208 Old Montreal Road (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks (PCA 2)).
- APEC #3 – 1176 Old Montreal Road – Area around former furnace oil AST on 1176 Old Montreal Road (PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks (PCA 3)).
- APEC #4 – 1180 Old Montreal Road – Area around furnace oil AST on 1180 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks (PCA 4)).
- APEC #5 – 1208 Old Montreal Road – Fill material present at 1208 Old Montreal Road (PCA #30 – Imported Fill Material of Unknown Quality (PCA 5)).
- APEC #6 – 1208 Old Montreal Road – Area around former generator AST at the communications tower on 1208 Old Montreal Road (PCA#28 – Gasoline and associated products storage in fixed tanks (PCA 6)).

6.4.7 Subsurface Stratigraphy

Based on the surficial geology map examined, beneath any fill, the surficial geology of the subject site is characterised by fine textured glaciomarine deposits of silt and clay with minor sand and gravel. An examination of the bedrock geology map shows the subject site is underlain by limestone, dolostone and shale of the Ottawa Group.

Local well and borehole data indicate variable composition of clay, and sand, over limestone bedrock. The depth to bedrock was 15 m below grade.

6.4.8 Uncertainty Analysis

The CSM is a simplification of reality, which aims to provide a description and assessment of any areas where potentially contaminating activity that occurred within the Phase One study area may have adversely affected the Phase One property. All information collected during this investigation, including records, interviews, and site reconnaissance, has contributed to the formulation of the CSM.

Information was assessed for consistency, however EXP has confirmed neither the completeness nor the accuracy of any of the records that were obtained or of any of the statements made by others. All reasonable inquiries to obtain accessible information were made, as required by Schedule D, Table 1, Mandatory Requirements for Phase One Environmental Site Assessment Reports. The CSM reflects our best interpretation of the information that was available during this investigation.

7.0 Conclusions

EXP understands that the most recent use of the property is defined by Ontario Regulation 153/04 as commercial property use, and that the proposed use is residential.

In summary, the following areas of potential environmental concern (APEC) were identified:

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
APEC #1	Area near dispensing area for former fuel AST on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #2	Area around furnace oil AST on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #3	Area around former furnace oil AST on 1176 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #4	Area around furnace oil AST on 1180 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater
APEC #5	Fill material present at 1208 Old Montreal Road	PCA #30 – Importation of fill of unknown quality	On-Site	PHC and BTEX, metals	Soil
APEC #6	Area around generator AST at the communications tower on 1208 Old Montreal Road	PCA #28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHC and BTEX	Soil and Groundwater

The Qualified Person can confirm that the Phase One Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices.

The Qualified Person who oversaw this work, Mark McCalla, M.Sc., P.Geo., recommends that a Phase Two ESA be conducted to address the PCA that may have adversely affected the APEC on the Phase One property. A Phase Two ESA is recommended for the property to assess the identified APECS.

8.0 References

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9.0 Limitation of Liability, Scope of Report, and Third Party Reliance

Basis of Report

This report ("Report") is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the site the recommendations of EXP may require re-evaluation. Where special concerns exist, or DCR Phoenix Group of Companies ("the Client") has special considerations or requirements, these should be disclosed to EXP to allow for additional or special investigations to be undertaken not otherwise within the scope of investigation conducted for the purpose of the Report.

Reliance on Information Provided

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by the Client and others. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by the Client. EXP has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to exp. If new information about the environmental conditions at the Site is found, the information should be provided to EXP so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

Standard of Care

The Report has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

Complete Report

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by the Client, communications between EXP and the Client, other reports, proposals or documents prepared by EXP for the Client in connection with the site described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.

Use of Report

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. No other party may use or rely upon the Report in whole or in part without the written consent of EXP. Any use of the Report, or any portion of the Report, by a third party are the sole responsibility of such third party. EXP is not responsible for damages suffered by any third party resulting from unauthorised use of the Report.

Report Format

Where EXP has submitted both electronic file and a hard copy of the Report, or any document forming part of the Report, only the signed and sealed hard copy shall be the original documents for record and working purposes. In the event of a dispute or discrepancy, the hard copy shall govern. Electronic files transmitted by EXP utilize specific software and hardware systems. EXP makes no representation about the compatibility of these files with the Client's current or future software and hardware systems. Regardless of format, the documents described herein are EXP's instruments of professional service and shall not be altered without the written consent of EXP.

10.0 Signatures

We trust this report meets your current needs. If you have any questions pertaining to the investigation undertaken by EXP, please do not hesitate to contact the undersigned. The Qualified Person can confirm that the Phase One Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices. The Qualified Person who oversaw this work, Mark McCalla, M.Sc., P.Geo., recommends that a Phase Two ESA be conducted to address the PCA that may have adversely affected the APEC on the Phase One property.

Leah Wells, P.Eng.
Environmental Engineer
Earth and Environment

Mark McCalla, M.Sc., P.Geo.
Senior Project Manager
Earth and Environment

PROFESSIONAL GEOSCIENTIST
MARK G. McCALLA
PRACTISING MEMBER
0451
Feb 11/21
ONTARIO

Appendix A: Qualifications of Assessors

Qualifications of Assessors

EXP provides a full range of environmental services through a full-time Environmental Services Group. EXP's Earth and Environment Group has developed a strong working relationship with clients in both the private and public sectors and has developed a positive relationship with Ontario Ministry of the Environment, Conservation and Parks. Personnel in the numerous branch offices form part of a large network of full-time dedicated environmental professionals in the EXP organization.

Leah Wells, P.Eng., has four years of experience in the environmental consulting field. She has worked on numerous Phase I Environmental Site Assessments (ESA); Phase II ESAs, completing soil and groundwater sampling, soil vapour sampling, assisting in report preparation and data entry and analysis.

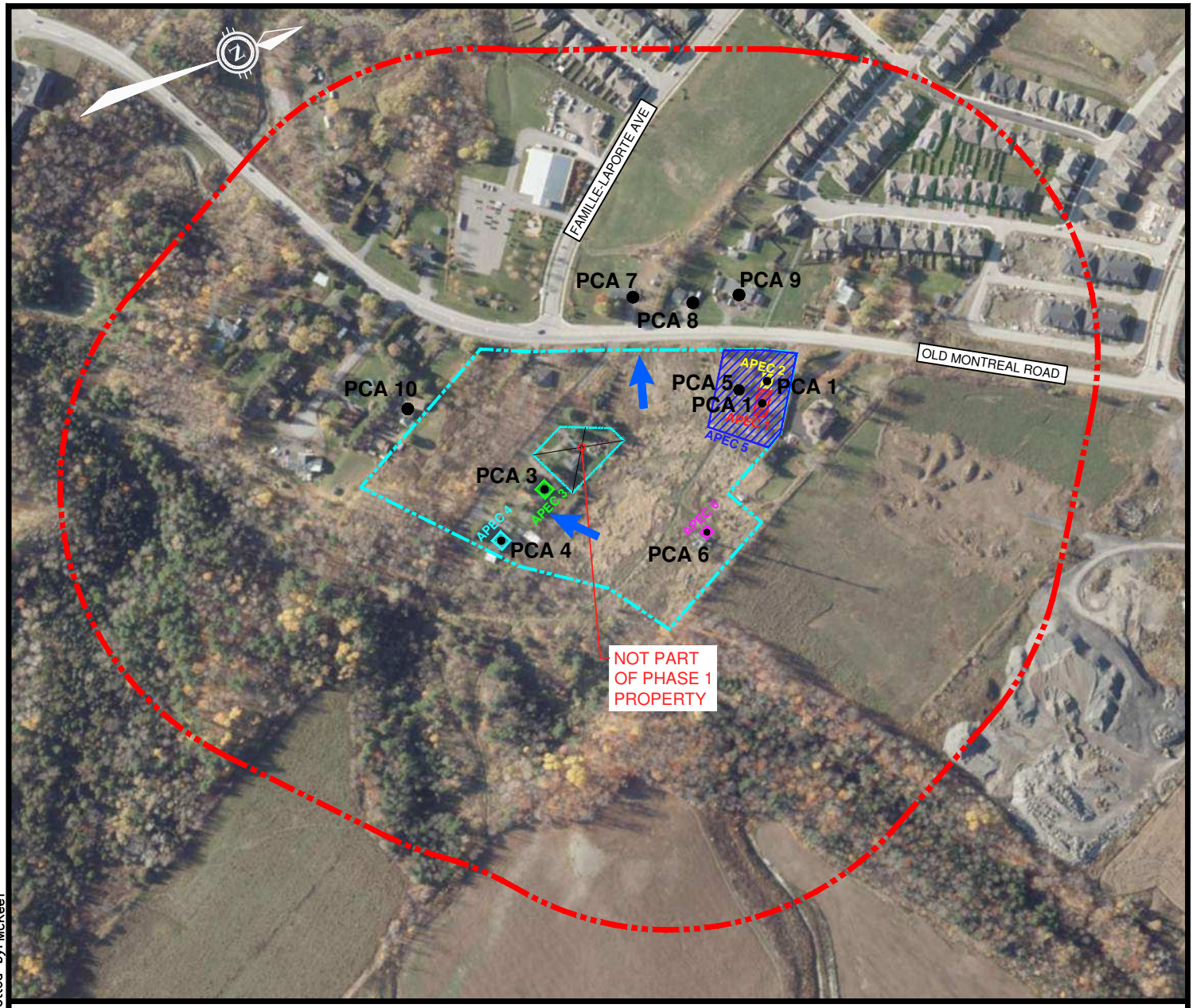
Mark McCalla, M.Sc., P.Geo., is a senior Environmental Scientist with EXP who has over 30 years of experience in the environmental consulting field. His technical undertakings have including work in the following fields: Phase I and II Environmental Site Assessments; Site Specific Risk Assessments; Petroleum and chlorinated hydrocarbon contaminated sites; Soil and groundwater remediation technologies; Hydrogeological, Terrain Analysis and Aggregate Assessments; Preparation of Ontario Ministry of Environment Certificate of Approvals and Records of Site Condition. Mr. McCalla is a Qualified Person for completing Phase I and II Environmental Site Assessments as per O.Reg. 153/04.

Appendix B: Survey Plan

Appendix C: Figures

EXP Services Inc. **www.exp.com**
t: +1.613.688.1899 | f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no. OTT-00234493-B0
DESIGN: M.M./L.W. / CHECKED: M.M.	TITLE: SITE LOCATION PLAN	scale: NTS
DRAWN BY: T.M.	1208 OLD MONTREAL ROAD, ORLEANS, ONTARIO	FIG 1



LEGEND

- PROPERTY BOUNDARY
- STUDY AREA (250m)
- INFERRED GROUNDWATER FLOW DIRECTION
- PCA IDENTIFIER

0 50m 100m 200m

HORIZONTAL 1:5,000

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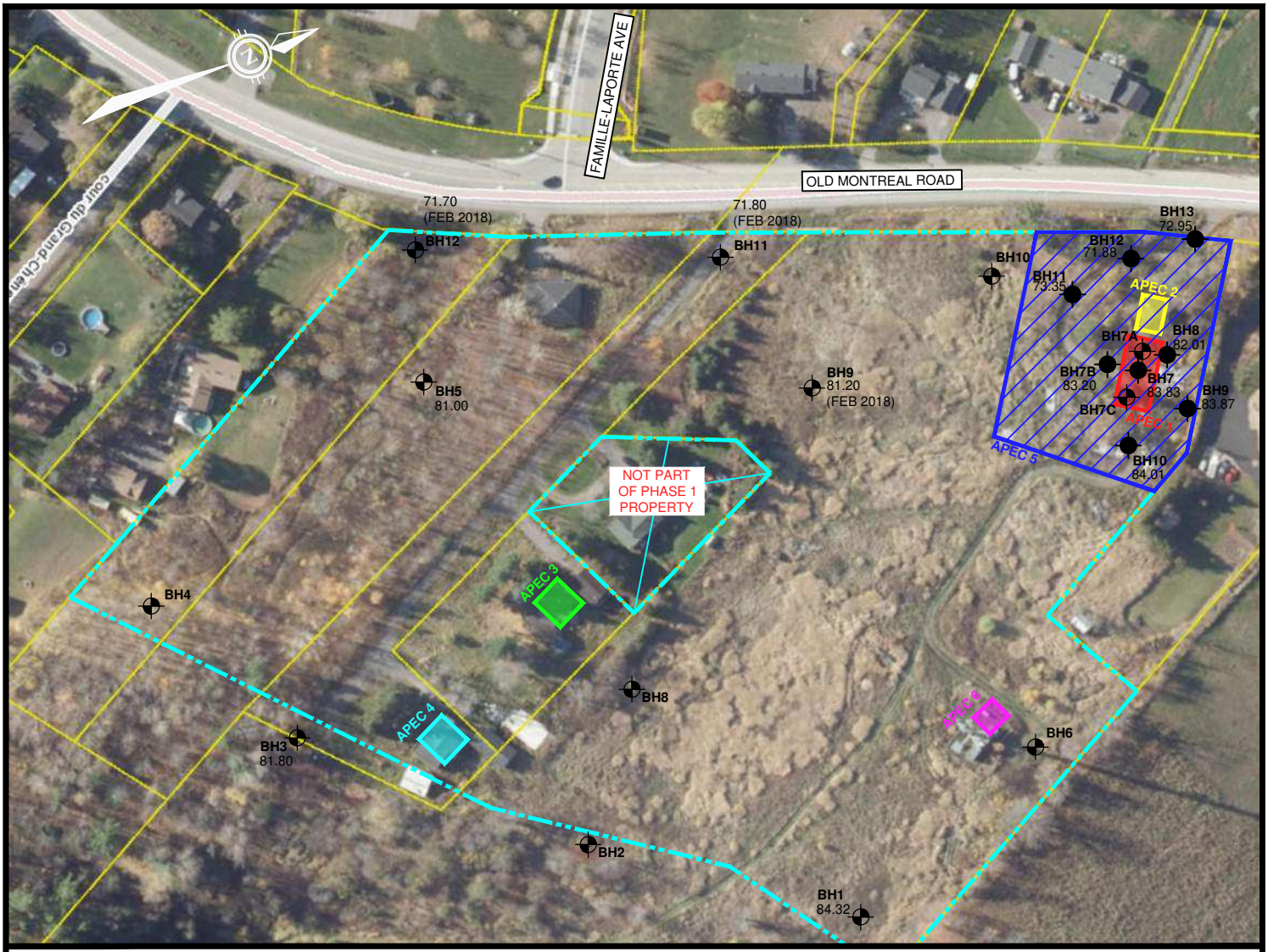
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no.: OTT-00234493-B0
DESIGN: M.M./L.W. / CHECKED: M.M.		scale: 1:5,000
DRAWN BY: T.M.	TITLE: POTENTIALLY CONTAMINATING ACTIVITY (PCA) 1208 OLD MONTREAL ROAD, ORLEANS, ONTARIO	FIG 2

Filename: P:\Projects\Environmental\230000s\230000\234000\234493-B0 PhOneESA 1208 Old Montreal Rd\Drawings\Phase Two ESA\234493-B0 Phoenix Harbour.dwg
Last Saved: Feb 9, 2021 8:43 AM Last Plotted: Feb 10, 2021 9:30 AM Plotted by: McKeeT



SYMBOL	AREA OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)	POTENTIALLY CONTAMINATING ACTIVITY
	APEC 1	#28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
	APEC 2	#28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
	APEC 3	#28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
	APEC 4	#28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
	APEC 5	#30 - IMPORTED FILL MATERIAL OF UNKNOWN QUALITY
	APEC 6	#28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS

LEGEND

PROPERTY BOUNDARY

MW101 — MONITORING WELL NAME AND LOCATION

BH12 — BOREHOLE NAME AND LOCATION

0 20m 40m 80m

HORIZONTAL 1:2000

EXP Services Inc. www.exp.com
t: +1.613.688.1899 | f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021
DESIGN: M.M./L.W.
CHECKED: M.M.
DRAWN BY: T.M.

CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION

TITLE: AREA OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)
1208 OLD MONTREAL ROAD, ORLEANS, ONTARIO

project no. OTT-00234493-B0
scale 1:2000
FIG 3

Filename: P:\Projects\Environmental\230000s\230000\234000\234493-B0 PhOneESA 1208 Old Montreal Rd\Drawings\Phase Two ESA\234493-B0 Phoenix Harbour.dwg
Last Saved: Feb 9, 2021 8:43 AM Last Plotted: Feb 10, 2021 9:28 AM Plotted by: McKeeT

Appendix D: Fire Insurance Plans, Title Search, Municipal Records & Provincial Records

Kathy Radisch

From: Prem Lal <plal@tssa.org> on behalf of Public Information Services <publicinformationservices@tssa.org>
Sent: Tuesday, July 12, 2016 7:48 AM
To: Kathy Radisch
Subject: RE: File Search - Old Montreal Road, Ottawa, Ontario

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Kathy:

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformationservices@tssa.org) or through mail along with a fee of $56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Thank you Kathy and you have a wonderful day.

Prem

Prem Lal | Public Information Coordinator
Facilities and Business Services
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-3570 | Fax: +1-416-734-3568 | E-Mail: plal@tssa.org
www.tssa.org

From: Kathy Radisch
[mailto:kathy.radisch@exp.com]
Sent: Monday, July 11, 2016 3:06 PM
To: Public Information Services
Subject: File Search - Old Montreal Road, Ottawa, Ontario

Good Afternoon,

Would you kindly search your files for the following addresses in Ottawa, Ontario (formerly Cumberland, Ontario). We are looking for any environmental concerns.

- Old Montreal Road – 1138, 1154, 1171, 1172, 1176, 1180, 1183, 1199, 1201, and 1208.

Thank you,

Kathy Radisch
Sr. Administrative Assistant
exp Services Inc.
t: +1.613.688.1891 x3296 **|** f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, Ontario K2B 8H6
CANADA

exp.com | legal disclaimer

keep it green, read from the screen

January 28, 2021

VIA FACSIMILE:
416-314-4285

FOI Manager
Freedom of Information & Protection of Privacy Office
Ministry of Environment and Climate Change
12th Floor, 40 St. Clair Avenue West
Toronto, Ontario M4V 1M2

Re: OTT-0234493-B0 **File Review Request**

To Whom it May Concern:

I am sending a Freedom of Information Request to you for 1208 Old Montreal Road, Ottawa, Ontario. We are conducting an environmental site assessment and require any environmental concerns.

If possible, we would appreciate receiving the documentation by email (kathy.radisch@exp.com) and by mail. If you have any questions, or require any further information, please do not hesitate to contact the undersigned.

Yours truly,
EXP Services Inc.

Kathy Radisch
Administrative Assistant
Earth & Environment

Enclosures: FOI Form
Credit Card Payment Form

100 - 2650 Queensview Drive, Ottawa, Ontario K2B 8H6
T: +1.613.688.1899 • F: +1.613.225.7337 • www.exp.com

Appendix E: EcoLog ERIS Report

ENVIRONMENTAL RISK INFORMATION SERVICE

DATABASE REPORT

Project Property:	*Phase I ESA* *1154-1208 Old Montreal Rd* *Ottawa ON*
Project No:	*OTT-00234493-A0*
Report Type:	*Quote - Custom-Build Your Own Report*
Order No:	*20160711137*
Requested by:	*exp Services Inc.*
Date Completed:	*July 18, 2016*

Ecolog ERIS Ltd.
Environmental Risk Information Service Ltd. (ERIS)
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:	*Phase I ESA* *1154-1208 Old Montreal Rd Ottawa ON*
Project No:	*OTT-00234493-A0*

Order Information:

Order No:	*20160711137*
Date Requested:	*July 11, 2016*
Requested by:	*exp Services Inc.*
Report Type:	*Quote - Custom-Build Your Own Report*

Additional Products:

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.25km	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
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	3	3
CA	Certificates of Approval	Y	0	1	1
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Register	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
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	0	0	0
EIIS	Environmental Issues Inventory System	Y	0	0	0
EMHE	Emergency Management Historical Event	Y	0	0	0
EXP	List of TSSA Expired 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
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	0	0
GHG	Greehouse Gas Emissions from Large Facilities	Y	0	0	0
HINC	TSSA Historic Incidents	Y	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	TSSA Incidents	Y	0	0	0
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

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
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
NEBW	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
OGW	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	TSSA 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	0	0
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	TSSA 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	4	20	24
	Total:		4	24	28

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	WWIS		lot 28 con 1 CUMBERLAND ON	-/0.0	-3.60	13
2	WWIS		lot 27 con 1 ON	-/0.0	-3.95	13
3	WWIS		lot 28 con 1 CUMBERLAND ON	-/0.0	-10.44	14
7	WWIS		lot 27 con 1 ON	-/0.0	-0.45	14

Executive Summary: Site Report Summary - Surrounding *Properties*

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
4	WWIS		lot 28 con 1 ON	W/9.0	-13.64	15
5	WWIS		lot 28 con 1 ON	WSW/6.8	-14.31	15
6	BORE		 ON	WSW/27.7	-15.48	16
6	WWIS		lot 28 con 1 ON	WSW/27.7	-15.47	17
8	BORE		 ON	NNW/46.0	-13.47	17
8	WWIS		lot 27 con 1 ON	NNW/46.0	-13.47	18
9	WWIS		lot 25 con 1 CUMBERLAND ON	WNW/99.2	-17.24	18
10	WWIS		lot 28 con 1 ON	W/105.5	-18.64	19
11	CA	Word of Life Church (Ottawa/Hull)	1123 Queen Street (Old Montreal Road) Ottawa ON	WNW/135.5	-18.73	20
11	WWIS		lot 28 con 1 ON	WNW/135.5	-18.73	20
12	WWIS		lot 27 con 1 ON	N/60.8	-10.79	21
13	WWIS		lot 28 con 1 ON	WSW/144.1	-16.87	21
13	WWIS		lot 28 con 1 ON	WSW/144.1	-16.87	22
13	WWIS		lot 28 con 1 ON	WSW/144.1	-16.87	23
14	WWIS		lot 28 con 1 ON	W/145.0	-20.00	23
15	BORE		 ON	SW/166.9	-17.50	24
15	WWIS		lot 28 con 1 ON	SW/166.9	-17.50	24
16	WWIS		lot 28 con 1 ON	WSW/166.6	-20.12	25
17	WWIS		lot 28 con 1 ON	WSW/194.0	-22.28	25
18	WWIS		lot 28 con 1 ON	SW/196.1	-15.10	26
19	WWIS		lot 28 con 1 ON	W/226.7	-21.13	26

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
20	WWIS		lot 28 con 1 ON	WSW/220.7	-24.24	27
21	WWIS		lot 28 con 1 ON	SW/223.8	-21.92	28
22	WWIS		lot 27 con 1 ON	N/232.7	-13.00	28

Executive Summary: Summary By Data Source

BORE - Borehole

A search of the BORE database, dated 1875-Jul 2014 has found that there are 3 BORE site(s) within approximately 0.25 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	ON	27.7	6
	ON	46.0	8
	ON	166.9	15

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 1 CA site(s) within approximately 0.25 kilometers of the project property.

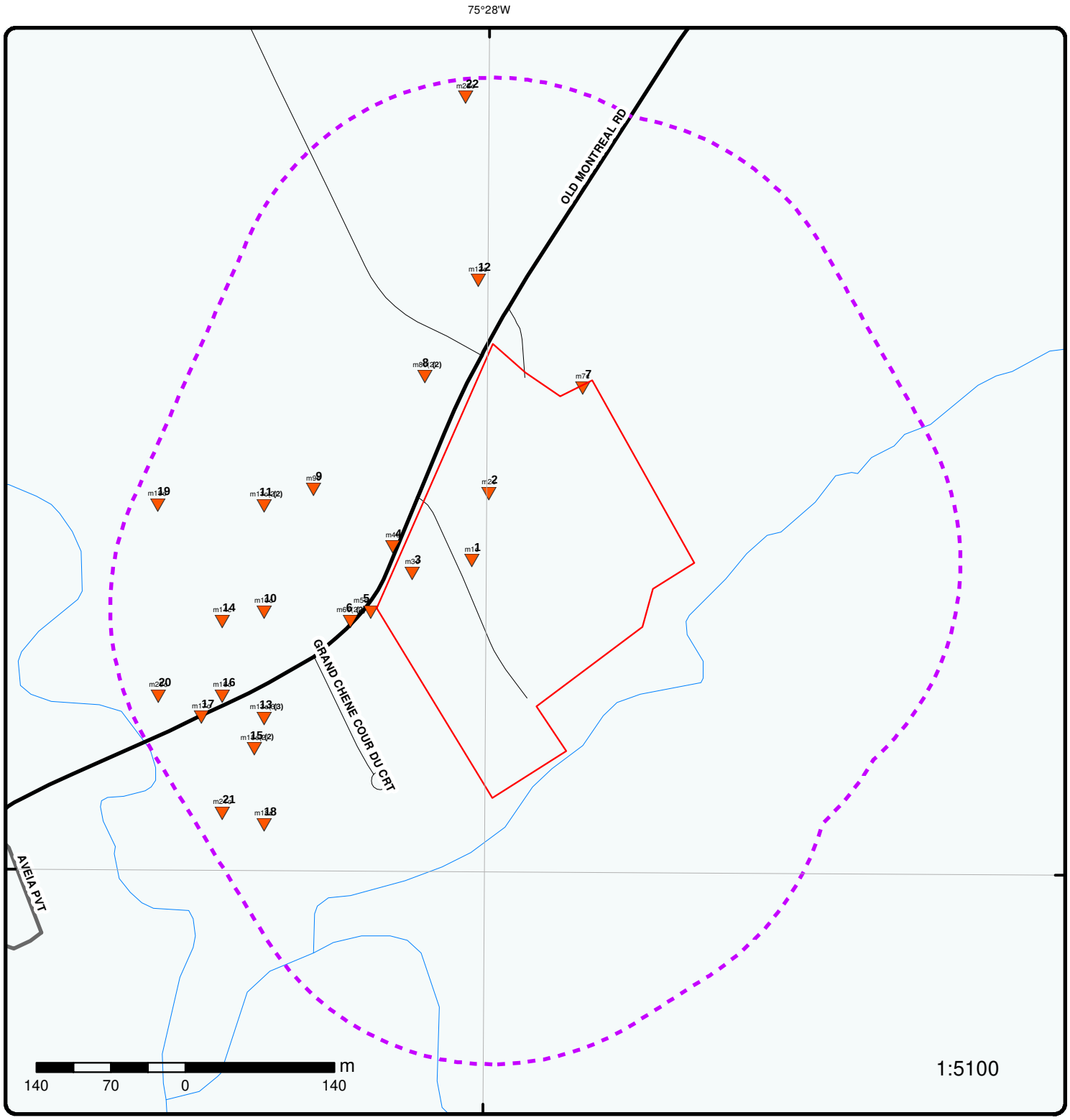
Site	Address	Distance (m)	Map Key
Word of Life Church (Ottawa/Hull)	1123 Queen Street (Old Montreal Road) Ottawa ON	135.5	11

WWIS - Water Well Information System

A search of the WWIS database, dated 1955-Mar 2014 has found that there are 24 WWIS site(s) within approximately 0.25 kilometers of the project property.

Site	Address	Distance (m)	Map Key
	lot 28 con 1 CUMBERLAND ON	0.0	1
	lot 27 con 1 ON	0.0	2
	lot 28 con 1 CUMBERLAND ON	0.0	3
	lot 28 con 1 ON	9.0	4
	lot 28 con 1 ON	6.8	5
	lot 28 con 1 ON	27.7	6

Site	Address	Distance (m)	Map Key
	lot 27 con 1 ON	0.0	7
	lot 27 con 1 ON	46.0	8
	lot 25 con 1 CUMBERLAND ON	99.2	9
	lot 28 con 1 ON	105.5	10
	lot 28 con 1 ON	135.5	11
	lot 27 con 1 ON	60.8	12
	lot 28 con 1 ON	144.1	13
	lot 28 con 1 ON	144.1	13
	lot 28 con 1 ON	144.1	13
	lot 28 con 1 ON	145.0	14
	lot 28 con 1 ON	166.9	15
	lot 28 con 1 ON	166.6	16
	lot 28 con 1 ON	194.0	17
	lot 28 con 1 ON	196.1	18
	lot 28 con 1 ON	226.7	19
	lot 28 con 1 ON	220.7	20
	lot 28 con 1 ON	223.8	21
	lot 27 con 1 ON	232.7	22

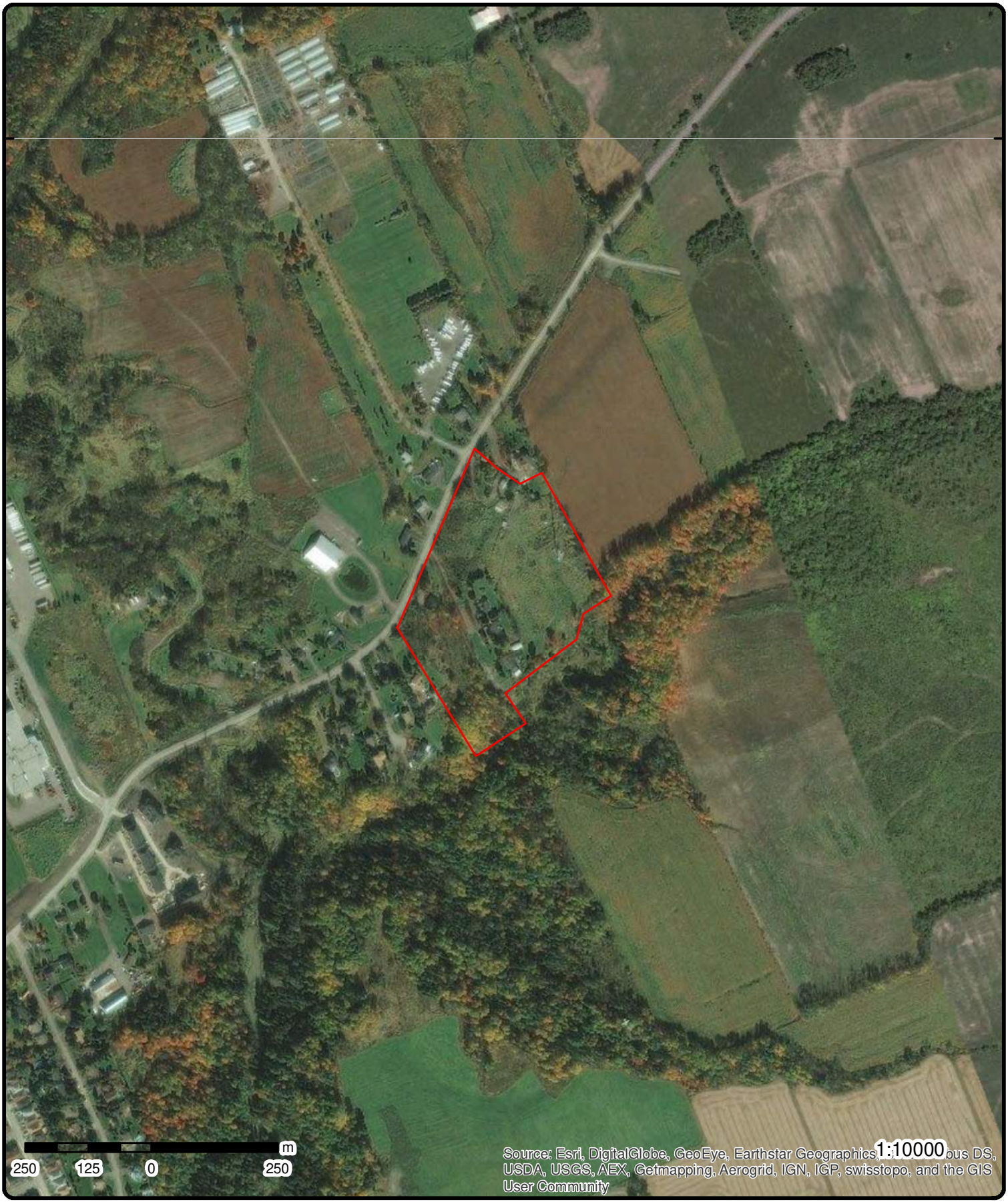


Map

Order No: 20160711137

Address: 1154-1208 Old Montreal Rd, Ottawa, 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



Aerial

Order No: 20160711137

Address: 1154-1208 Old Montreal Rd, Ottawa, ON

Source: ESRI World Imagery, Updated October 2014

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
1	1 of 1	-/0.0	82.4	lot 28 con 1 CUMBERLAND ON	WWIS

Well ID:	1534641	**Lot:**	028
Concession:	01	**Concession Name:**	CON
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463525	**Northing Nad83:**	5037969
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	02-APR-04
Sec. Water Use:		**Well Depth:**	85.3 m
Pump Rate:	15.1 LPM	**Static Water Level:**	30.57 m
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Air Precussion	**Flowing (y/n):**	
Elevation (m):	82.11	**Elevation Reliability:**	
Depth to Bedrock:	55	**Overburden/Bedrock:**	Bedrock
Water Type:	Not stated	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	16.8 m	**Original Depth:**	16.8 m
Material Colour:	BROWN	**Material:**	CLAY
+			
Thickness:	68.5 m	**Original Depth:**	85.3 m
Material Colour:	GREY	**Material:**	LIMESTONE

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
2	1 of 1	-/0.0	82.0	lot 27 con 1 ON	WWIS

Well ID:	1512408	**Lot:**	027
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463540.8	**Northing Nad83:**	5038032
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	18-JUL-72
Sec. Water Use:		**Well Depth:**	85 ft
Pump Rate:	7 GPM	**Static Water Level:**	50 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	80.67	**Elevation Reliability:**	
Depth to Bedrock:	70	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

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

--- Details ---

Thickness:	20 ft	**Original Depth:**	20 ft
Material Colour:	RED	**Material:**	CLAY
+			
Thickness:	40 ft	**Original Depth:**	60 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	10 ft	**Original Depth:**	70 ft
Material Colour:	BLACK	**Material:**	GRAVEL
+			
Thickness:	15 ft	**Original Depth:**	85 ft
Material Colour:	GREY	**Material:**	LIMESTONE

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
3	1 of 1	-/0.0	75.6	lot 28 con 1 CUMBERLAND ON	WWIS

Well ID:	1534642	**Lot:**	028
Concession:	01	**Concession Name:**	CON
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463469	**Northing Nad83:**	5037957
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Not Used	**Construction Date:**	06-APR-04
Sec. Water Use:		**Well Depth:**	
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Abandoned-Quality
Construction Method:	Not Known	**Flowing (y/n):**	
Elevation (m):	74.44	**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	No formation data
Water Type:		**Casing Material:**	

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
7	1 of 1	-/0.0	85.6	lot 27 con 1 ON	WWIS

Well ID:	1514989	**Lot:**	027
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463628.8	**Northing Nad83:**	5038131
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	26-SEP-75
Sec. Water Use:		**Well Depth:**	298 ft
Pump Rate:	3 GPM	**Static Water Level:**	75 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Air Precussion	**Flowing (y/n):**	N
Elevation (m):	85.23	**Elevation Reliability:**	
Depth to Bedrock:	76	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

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

--- Details ---			
Thickness:	17 ft	**Original Depth:**	17 ft
Material Colour:	BROWN	**Material:**	CLAY
+			
Thickness:	51 ft	**Original Depth:**	68 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	8 ft	**Original Depth:**	76 ft
Material Colour:	GREY	**Material:**	HARDPAN, BOULDERS, PACKED
+			
Thickness:	222 ft	**Original Depth:**	298 ft
Material Colour:	GREY	**Material:**	LIMESTONE, SOFT

4 **1 of 1** **W/9.0** **72.4** **lot 28 con 1 ON** **WWIS**

Well ID:	1513134	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463450.8	**Northing Nad83:**	5037982
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	13-AUG-63
Sec. Water Use:		**Well Depth:**	66 ft
Pump Rate:	8 GPM	**Static Water Level:**	32 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	71.38	**Elevation Reliability:**	
Depth to Bedrock:	53	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	53 ft	**Original Depth:**	53 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	13 ft	**Original Depth:**	66 ft
Material Colour:	GREY	**Material:**	LIMESTONE

5 **1 of 1** **WSW/6.8** **71.7** **lot 28 con 1 ON** **WWIS**

Well ID:	1517246	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463429.8	**Northing Nad83:**	5037921
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	13-DEC-79
Sec. Water Use:		**Well Depth:**	144 ft
Pump Rate:	8 GPM	**Static Water Level:**	75 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction	Rotary (Air)	**Flowing (y/n):**	N

Method:			
Elevation (m):	68.58	***Elevation Reliability:***	
Depth to Bedrock:	95	***Overburden/Bedrock:***	Unknown type (bedrock encountered)
Water Type:	FRESH	***Casing Material:***	FRESH

--- Details ---

Thickness:	13 ft	***Original Depth:***	13 ft
Material Colour:	YELLOW	***Material:***	CLAY
+			
Thickness:	47 ft	***Original Depth:***	60 ft
Material Colour:	BLUE	***Material:***	CLAY
+			
Thickness:	10 ft	***Original Depth:***	70 ft
Material Colour:	GREY	***Material:***	GRAVEL
+			
Thickness:	10 ft	***Original Depth:***	80 ft
Material Colour:	GREY	***Material:***	SAND, GRAVEL
+			
Thickness:	15 ft	***Original Depth:***	95 ft
Material Colour:	GREY	***Material:***	BOULDERS, GRAVEL
+			
Thickness:	0 ft	***Original Depth:***	144 ft
Material Colour:		***Material:***	UNKNOWN TYPE
+			
Thickness:	49 ft	***Original Depth:***	144 ft
Material Colour:	BROWN	***Material:***	SLATE

---

6 ***1 of 2*** ***WSW/27.7*** ***70.5*** ***ON*** ***BORE***

Borehole ID:	616398	***Type:***	Borehole
Use:		***Status:***	
Drill Method:		***UTM Zone:***	18
Easting:	463411	***Northing:***	5037912
Location Accuracy:		***Orig. Ground Elev m:***	73.2
Elev. Reliability Note:		***DEM Ground Elev m:***	67.6
Total Depth m:	25.3	***Primary Name:***	
Township:		***Concession:***	
Lot:		***Municipality:***	
Completion Date:	NOV-1953	***Static Water Level:***	-999.9
Primary Water Use:		***Sec. Water Use:***	

--- Details ---

Stratum ID:	218403834	***Top Depth(m):***	0.0
Bottom Depth(m):	14.3	***Stratum Desc:***	CLAY. BLUE.
+			
Stratum ID:	218403835	***Top Depth(m):***	14.3
Bottom Depth(m):	25.3	***Stratum Desc:***	BEDROCK. TY = 900.

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
				UNSPECIFIED. SEISMIC VELOCITY = 6600. BEDROCK. SEISMIC VELOCITY = 19000.	

6 **2 of 2** **WSW/27.7** **70.5** **lot 28 con 1 ON** **WWIS**

Well ID:	1513131	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463410.8	**Northing Nad83:**	5037912
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	19-NOV-53
Sec. Water Use:		**Well Depth:**	83 ft
Pump Rate:	6 GPM	**Static Water Level:**	43 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	67.59	**Elevation Reliability:**	
Depth to Bedrock:	47	**Overburden/Bedrock:**	Bedrock
Water Type:	MINERIAL	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	47 ft	**Original Depth:**	47 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	36 ft	**Original Depth:**	83 ft
Material Colour:		**Material:**	ROCK, LIMESTONE

8 **1 of 2** **NNW/46.0** **72.5** **ON** **BORE**

Borehole ID:	616403	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	463481	**Northing:**	5038142
Location Accuracy:		**Orig. Ground Elev m:**	74.7
Elev. Reliability Note:		**DEM Ground Elev m:**	71.4
Total Depth m:	44.8	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	
Completion Date:	SEP-1959	**Static Water Level:**	-999.9
Primary Water Use:		**Sec. Water Use:**	

--- Details ---

Stratum ID:	218403845	**Top Depth(m):**	14.0
Bottom Depth(m):	14.6	**Stratum Desc:**	GRAVEL.
+			
Stratum ID:	218403846	**Top Depth(m):**	14.6

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

Bottom Depth(m):	44.8	**Stratum Desc:**	LIMESTONE. 00147IED. SEISMIC VELOCITY = 6600. BEDROCK. SEISMIC VELOCITY = 19000. K. DA
+			
Stratum ID:	218403843	**Top Depth(m):**	0.0
Bottom Depth(m):	13.1	**Stratum Desc:**	CLAY.
+			
Stratum ID:	218403844	**Top Depth(m):**	13.1
Bottom Depth(m):	14.0	**Stratum Desc:**	SAND.

---

8 **2 of 2** **NNW/46.0** **72.5** **lot 27 con 1 ON** **WWIS**

Well ID:	1513130	**Lot:**	027
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463480.8	**Northing Nad83:**	5038142
Zone:	18	**Utm Reliability:**	unknown UTM
Primary Water Use:	Domestic	**Construction Date:**	15-SEP-59
Sec. Water Use:		**Well Depth:**	147 ft
Pump Rate:	9 GPM	**Static Water Level:**	71 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	71.38	**Elevation Reliability:**	
Depth to Bedrock:	48	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	43 ft	**Original Depth:**	43 ft
Material Colour:		**Material:**	CLAY
+			
Thickness:	3 ft	**Original Depth:**	46 ft
Material Colour:		**Material:**	MEDIUM SAND
+			
Thickness:	2 ft	**Original Depth:**	48 ft
Material Colour:		**Material:**	GRAVEL
+			
Thickness:	99 ft	**Original Depth:**	147 ft
Material Colour:		**Material:**	LIMESTONE

---

9 **1 of 1** **WNW/99.2** **68.8** **lot 25 con 1 CUMBERLAND ON** **WWIS**

Well ID:	1534786	**Lot:**	025
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463376	**Northing Nad83:**	5038036
Zone:	18	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:		**Construction Date:**	13-MAY-04

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

Sec. Water Use:		**Well Depth:**	89.9 m
Pump Rate:	18.9 LPM	**Static Water Level:**	21.48 m
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Air Precussion	**Flowing (y/n):**	
Elevation (m):	68.6	**Elevation Reliability:**	
Depth to Bedrock:	45	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	10.4 m	**Original Depth:**	10.4 m
Material Colour:		**Material:**	CLAY
+			
Thickness:	3.3 m	**Original Depth:**	13.7 m
Material Colour:		**Material:**	SAND, GRAVEL, BOULDERS
+			
Thickness:	76.2 m	**Original Depth:**	89.9 m
Material Colour:	GREY	**Material:**	LIMESTONE, SHALE

10	**1 of 1**	**W/105.5**	**67.4**	**lot 28 con 1 ON**	**WWIS**

Well ID:	1516407	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463329.8	**Northing Nad83:**	5037921
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	29-AUG-77
Sec. Water Use:		**Well Depth:**	50 ft
Pump Rate:	7 GPM	**Static Water Level:**	3 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Rotary (Air)	**Flowing (y/n):**	N
Elevation (m):	67.1	**Elevation Reliability:**	
Depth to Bedrock:	42	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH

--- Details ---

Thickness:	11 ft	**Original Depth:**	11 ft
Material Colour:	YELLOW	**Material:**	CLAY
+			
Thickness:	29 ft	**Original Depth:**	40 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	2 ft	**Original Depth:**	42 ft
Material Colour:	GREY	**Material:**	GRAVEL
+			

Thickness:	4 ft	**Original Depth:**	46 ft
Material Colour:	GREY	**Material:**	SLATE
+			
Thickness:	2 ft	**Original Depth:**	48 ft
Material Colour:	BLACK	**Material:**	SLATE
+			
Thickness:	2 ft	**Original Depth:**	50 ft
Material Colour:	GREY	**Material:**	SLATE

11 **1 of 2** **WNW/135.5** **67.3** **Word of Life Church (Ottawa/Hull)** **CA**
1123 Queen Street (Old Montreal Road)
Ottawa ON

Certificate #:	5012-66KQTM
Application Year:	2004
Issue Date:	11/26/2004
Approval Type:	Municipal and Private Sewage Works
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

11 **2 of 2** **WNW/135.5** **67.3** **lot 28 con 1** **WWIS**
ON

Well ID:	1516925	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463329.8	**Northing Nad83:**	5038021
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	25-APR-78
Sec. Water Use:		**Well Depth:**	150 ft
Pump Rate:	20 GPM	**Static Water Level:**	60 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Rotary (Air)	**Flowing (y/n):**	N
Elevation (m):	67.76	**Elevation Reliability:**	
Depth to Bedrock:	49	**Overburden/Bedrock:**	Mixed in a Layer
Water Type:	FRESH	**Casing Material:**	FRESH

--- Details ---

Thickness:	10 ft	**Original Depth:**	10 ft
Material Colour:	YELLOW	**Material:**	CLAY
+			
Thickness:	39 ft	**Original Depth:**	49 ft

Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	6 ft	**Original Depth:**	55 ft
Material Colour:	BROWN	**Material:**	STONES, SLATE
+			
Thickness:	85 ft	**Original Depth:**	140 ft
Material Colour:	GREY	**Material:**	LIMESTONE
+			
Thickness:	10 ft	**Original Depth:**	150 ft
Material Colour:	BROWN	**Material:**	SLATE

---

12 **1 of 1** **N/60.8** **75.2** **lot 27 con 1 ON** **WWIS**

Well ID:	1512335	**Lot:**	027
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463530.8	**Northing Nad83:**	5038232
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	31-MAY-72
Sec. Water Use:		**Well Depth:**	65 ft
Pump Rate:	20 GPM	**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	74.75	**Elevation Reliability:**	
Depth to Bedrock:	10	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	10 ft	**Original Depth:**	10 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	55 ft	**Original Depth:**	65 ft
Material Colour:	GREY	**Material:**	ROCK

---

13 **1 of 3** **WSW/144.1** **69.1** **lot 28 con 1 ON** **WWIS**

Well ID:	1518202	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463329.8	**Northing Nad83:**	5037821
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	03-MAR-83
Sec. Water Use:		**Well Depth:**	66 ft
Pump Rate:	30 GPM	**Static Water Level:**	29 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction	Rotary (Air)	**Flowing (y/n):**	N

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

Method:			
Elevation (m):	67.76	**Elevation Reliability:**	
Depth to Bedrock:	61	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	17 ft	**Original Depth:**	17 ft
Material Colour:	YELLOW	**Material:**	CLAY
+			
Thickness:	42 ft	**Original Depth:**	59 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	2 ft	**Original Depth:**	61 ft
Material Colour:	GREY	**Material:**	COARSE GRAVEL
+			
Thickness:	5 ft	**Original Depth:**	66 ft
Material Colour:	GREY	**Material:**	LIMESTONE

13	2 of 3	WSW/144.1	69.1	lot 28 con 1 ON	WWIS

Well ID:	1516909	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463329.8	**Northing Nad83:**	5037821
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	19-MAY-78
Sec. Water Use:		**Well Depth:**	63 ft
Pump Rate:	20 GPM	**Static Water Level:**	50 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Rotary (Air)	**Flowing (y/n):**	N
Elevation (m):	67.76	**Elevation Reliability:**	
Depth to Bedrock:	59	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH
--- Details ---			
Thickness:	28 ft	**Original Depth:**	28 ft
Material Colour:	YELLOW	**Material:**	CLAY
+			
Thickness:	21 ft	**Original Depth:**	49 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	10 ft	**Original Depth:**	59 ft
Material Colour:	GREY	**Material:**	GRAVEL
+			
Thickness:	4 ft	**Original Depth:**	63 ft

Material Colour:	GREY	**Material:**	SLATE

---

13 | **3 of 3** | **WSW/144.1** | **69.1** | **lot 28 con 1 ON** | **WWIS**

Well ID:	1518165	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463329.8	**Northing Nad83:**	5037821
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	12-APR-82
Sec. Water Use:		**Well Depth:**	142 ft
Pump Rate:	16 GPM	**Static Water Level:**	65 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Rotary (Air)	**Flowing (y/n):**	N
Elevation (m):	67.76	**Elevation Reliability:**	
Depth to Bedrock:	74	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	40 ft	**Original Depth:**	40 ft
Material Colour:	YELLOW	**Material:**	CLAY
+			
Thickness:	34 ft	**Original Depth:**	74 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	1 ft	**Original Depth:**	75 ft
Material Colour:	BROWN	**Material:**	SLATE
+			
Thickness:	67 ft	**Original Depth:**	142 ft
Material Colour:	BLUE	**Material:**	LIMESTONE

---

14 | **1 of 1** | **W/145.0** | **66.0** | **lot 28 con 1 ON** | **WWIS**

Well ID:	1513135	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463290.8	**Northing Nad83:**	5037912
Zone:	18	**Utm Reliability:**	unknown UTM
Primary Water Use:	Domestic	**Construction Date:**	24-MAR-65
Sec. Water Use:		**Well Depth:**	183 ft
Pump Rate:	14 GPM	**Static Water Level:**	30 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	64.91	**Elevation Reliability:**	
Depth to Bedrock:	0	**Overburden/Bedroc**	Bedrock

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

Water Type:	FRESH	**k: Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	8 ft	**Original Depth:**	8 ft
Material Colour:		**Material:**	ROCK, CLAY
+			
Thickness:	172 ft	**Original Depth:**	180 ft
Material Colour:	GREY	**Material:**	LIMESTONE
+			
Thickness:	3 ft	**Original Depth:**	183 ft
Material Colour:	WHITE	**Material:**	SANDSTONE

15 **1 of 2** **SW/166.9** **68.5** **ON** **BORE**

Borehole ID:	616395	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	463321	**Northing:**	5037792
Location Accuracy:		**Orig. Ground Elev m:**	53.3
Elev. Reliability Note:		**DEM Ground Elev m:**	67
Total Depth m:	20.7	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	
Completion Date:	AUG-1969	**Static Water Level:**	-999.9
Primary Water Use:		**Sec. Water Use:**	
--- Details ---			
Stratum ID:	218403827	**Top Depth(m):**	0.0
Bottom Depth(m):	18.3	**Stratum Desc:**	CLAY. BLUE.
+			
Stratum ID:	218403828	**Top Depth(m):**	18.3
Bottom Depth(m):	20.7	**Stratum Desc:**	LIMESTONE. GREY. 00068Y. 0007000075VELOCITY = 5100. BEDROCK. SEISMIC VELOCITY = 13500.

15 **2 of 2** **SW/166.9** **68.5** **lot 28 con 1 ON** **WWIS**

Well ID:	1513138	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463320.8	**Northing Nad83:**	5037792
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	14-AUG-69
Sec. Water Use:		**Well Depth:**	68 ft
Pump Rate:	8 GPM	**Static Water Level:**	32 ft
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Water Supply
Construction	Diamond	**Flowing (y/n):**	N

Method:			
Elevation (m):	66.97	**Elevation Reliability:**	
Depth to Bedrock:	60	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	MINERIAL, SALTY
--- Details ---			
Thickness:	60 ft	**Original Depth:**	60 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	8 ft	**Original Depth:**	68 ft
Material Colour:	GREY	**Material:**	LIMESTONE

16 **1 of 1** **WSW/166.6** **65.9** **lot 28 con 1 ON** **WWIS**

Well ID:	1513136	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463290.8	**Northing Nad83:**	5037842
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	20-SEP-64
Sec. Water Use:		**Well Depth:**	59 ft
Pump Rate:	8 GPM	**Static Water Level:**	25 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	64.27	**Elevation Reliability:**	
Depth to Bedrock:	45	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	45 ft	**Original Depth:**	45 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	14 ft	**Original Depth:**	59 ft
Material Colour:	GREY	**Material:**	LIMESTONE

17 **1 of 1** **WSW/194.0** **63.7** **lot 28 con 1 ON** **WWIS**

Well ID:	1513133	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463270.8	**Northing Nad83:**	5037822
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	28-NOV-63
Sec. Water Use:		**Well Depth:**	38 ft
Pump Rate:	8 GPM	**Static Water Level:**	15 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR

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

Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	62.38	**Elevation Reliability:**	
Depth to Bedrock:	28	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	28 ft	**Original Depth:**	28 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	10 ft	**Original Depth:**	38 ft
Material Colour:	GREY	**Material:**	LIMESTONE

---

18 **1 of 1** **SW/196.1** **70.9** **lot 28 con 1 ON** **WWIS**

Well ID:	1518331	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463329.8	**Northing Nad83:**	5037721
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	03-JUN-83
Sec. Water Use:		**Well Depth:**	66 ft
Pump Rate:	24 GPM	**Static Water Level:**	50 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Rotary (Air)	**Flowing (y/n):**	N
Elevation (m):	69.41	**Elevation Reliability:**	
Depth to Bedrock:	60	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH

--- Details ---

Thickness:	23 ft	**Original Depth:**	23 ft
Material Colour:	YELLOW	**Material:**	CLAY
+			
Thickness:	37 ft	**Original Depth:**	60 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	6 ft	**Original Depth:**	66 ft
Material Colour:	GREY	**Material:**	LIMESTONE

---

19 **1 of 1** **W/226.7** **64.9** **lot 28 con 1 ON** **WWIS**

Well ID:	1517346	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463229.8	**Northing Nad83:**	5038021

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

Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	27-AUG-80
Sec. Water Use:		**Well Depth:**	70 ft
Pump Rate:	10 GPM	**Static Water Level:**	40 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	63.42	**Elevation Reliability:**	
Depth to Bedrock:	66	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH

--- Details ---

Thickness:	7 ft	**Original Depth:**	7 ft
Material Colour:		**Material:**	PREVIOUSLY DUG
+			
Thickness:	33 ft	**Original Depth:**	40 ft
Material Colour:	GREY	**Material:**	CLAY
+			
Thickness:	18 ft	**Original Depth:**	58 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	5 ft	**Original Depth:**	63 ft
Material Colour:	BROWN	**Material:**	HARDPAN
+			
Thickness:	3 ft	**Original Depth:**	66 ft
Material Colour:	BLACK	**Material:**	GRAVEL
+			
Thickness:	4 ft	**Original Depth:**	70 ft
Material Colour:	GREY	**Material:**	LIMESTONE

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
20	1 of 1	WSW/220.7	61.8	lot 28 con 1 ON	WWIS

Well ID:	1513137	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463230.8	**Northing Nad83:**	5037842
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	12-MAR-65
Sec. Water Use:		**Well Depth:**	38 ft
Pump Rate:	7 GPM	**Static Water Level:**	20 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	60.4	**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	Overburden
Water Type:	FRESH	**Casing Material:**	FRESH

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

--- Details ---

Thickness:	30 ft	**Original Depth:**	30 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	8 ft	**Original Depth:**	38 ft
Material Colour:		**Material:**	GRAVEL

---

21 **1 of 1** **SW/223.8** **64.1** **lot 28 con 1 ON** **WWIS**

Well ID:	1513132	**Lot:**	028
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463290.8	**Northing Nad83:**	5037732
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	17-AUG-61
Sec. Water Use:		**Well Depth:**	87 ft
Pump Rate:	12 GPM	**Static Water Level:**	40 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	63.54	**Elevation Reliability:**	
Depth to Bedrock:	73	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	70 ft	**Original Depth:**	70 ft
Material Colour:	BLUE	**Material:**	CLAY
+			
Thickness:	3 ft	**Original Depth:**	73 ft
Material Colour:		**Material:**	GRAVEL, MEDIUM SAND
+			
Thickness:	14 ft	**Original Depth:**	87 ft
Material Colour:	GREY	**Material:**	LIMESTONE

---

22 **1 of 1** **N/232.7** **73.0** **lot 27 con 1 ON** **WWIS**

Well ID:	1532616	**Lot:**	027
Concession:	01	**Concession Name:**	OF
County:	OTTAWA-CARLETON	**Municipality:**	CUMBERLAND TOWNSHIP
Easting Nad83:	463519	**Northing Nad83:**	5038404
Zone:	18	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:	Domestic	**Construction Date:**	27-AUG-01
Sec. Water Use:		**Well Depth:**	126 ft
Pump Rate:	20 GPM	**Static Water Level:**	28 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N

Elevation (m):	72.26	***Elevation Reliability:***	
Depth to Bedrock:	0	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	MINERIAL
--- Details ---			
Thickness:	65 ft	***Original Depth:***	65 ft
Material Colour:		***Material:***	SHALE
+			
Thickness:	61 ft	***Original Depth:***	126 ft
Material Colour:	GREY	***Material:***	LIMESTONE

Unplottable Summary

Total: 5 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
ECA	City of Ottawa	Old Montreal Road from Antigonish Avenue to Dairy Drive	City of Ottawa ON	
SPL	Enbridge Gas Distribution Inc.	Queen Street	Ottawa ON	
SPL	HYDRO ONE	LOT 26, CONC. 1, (FORMERLY MARLBOROUGH TWP.) TRANSFORMER	OTTAWA CITY ON	
SPL	PAUL'S BACKHOE SERVICE	HWY 34 NORTH 5 - 5.5 MILES NORTH OF HWY 417 EAST 333 CHAMPLAIN ST., HAWKESBURY, ONT.	OTTAWA CITY ON	
WWIS		lot 27	ON	

Unplottable Report

Site: ***City of Ottawa***
Old Montreal Road from Antigonish Avenue to Dairy Drive City of Ottawa ON

Database: ***ECA***

Record Type:	
PDF URL:	
CofA Number:	3439-9LVLXS
Date:	7/17/14
Status:	Approved
Project Type:	Municipal and Private Sewage

Site: ***Enbridge Gas Distribution Inc.***
Queen Street Ottawa ON

Database: ***SPL***

Ref NO:	0238-62NQJF
Contaminant Code:	35
Contaminant Name:	NATURAL GAS (METHANE)
Contaminant Quantity:	
Incident Cause:	Pipe Or Hose Leak
Incident Dt:	7/7/2004
Incident Reason:	Error- Operator error
Incident Summary:	Queen St.: 4" Gas main hit, evacuations
MOE Reported Dt:	7/7/2004
Environmental Impact:	Not Anticipated
Nature of Impact:	Human Health/Safety
Receiving Medium:	Air
SAC Action Class:	M.C.B.S. - Fuel Safety
Sector Source Type:	Pipeline
Site Municipality:	Ottawa

Site: ***HYDRO ONE***
LOT 26, CONC. 1, (FORMERLY MARLBOROUGH TWP.) TRANSFORMER OTTAWA CITY ON

Database: ***SPL***

Ref NO:	207302
Contaminant Code:	
Contaminant Name:	
Contaminant Quantity:	
Incident Cause:	OTHER CAUSE (N.O.S.)
Incident Dt:	7/30/2001
Incident Reason:	OTHER
Incident Summary:	HYDRO ONE - 10 L OF NON- PCB OIL TO GROUND FROM TRANSFORMER.
MOE Reported Dt:	7/30/2001
Environmental Impact:	Confirmed
Nature of Impact:	Soil contamination
Receiving Medium:	Land
SAC Action Class:	
Sector Source Type:	
Site Municipality:	20107

Site: ***PAUL'S BACKHOE SERVICE***
HWY 34 NORTH 5 - 5.5 MILES NORTH OF HWY 417 EAST 333 CHAMPLAIN ST., HAWKESBURY, ONT.
OTTAWA CITY ON

Database: ***SPL***

Ref NO:	224046
Contaminant Code:	
Contaminant Name:	
Contaminant Quantity:	
Incident Cause:	UNKNOWN
Incident Dt:	4/15/2002
Incident Reason:	UNKNOWN
Incident Summary:	PAUL'S BACKHOE SERVICE SPILL UNKNOWN VOL OF GAS & WATER, CONTAINED
MOE Reported Dt:	4/15/2002
Environmental Impact:	POSSIBLE
Nature of Impact:	Soil contamination
Receiving Medium:	LAND / WATER
SAC Action Class:	
Sector Source Type:	
Site Municipality:	20107

Site:
lot 27 ON

Database: ***WWIS***

Well ID:	1518033	***Lot:***	027
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	OTTAWA CITY
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Cooling And A/C	***Construction Date:***	29-JAN-82
Sec. Water Use:		***Well Depth:***	100 ft
Pump Rate:	10 GPM	***Static Water Level:***	15 ft
Flow Rate:		***Clear/Cloudy:***	CLEAR
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Air Precussion	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	15	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH, MINERIAL

--- Details ---

Thickness:	10 ft	***Original Depth:***	10 ft
Material Colour:	BROWN	***Material:***	CLAY
+			
Thickness:	5 ft	***Original Depth:***	15 ft
Material Colour:	GREY	***Material:***	CLAY
+			
Thickness:	12 ft	***Original Depth:***	27 ft
Material Colour:	BLACK	***Material:***	SHALE, SOFT
+			
Thickness:	73 ft	***Original Depth:***	100 ft
Material Colour:	GREY	***Material:***	LIMESTONE

Appendix: Database Descriptions

Ecolog Environmental Risk Information Services Ltd (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 all 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 Mar 2015

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 2014

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

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: 2001-Jul 2014

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 2014

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*

Commercial Fuel Oil Tanks: Provincial CFOT

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Government Publication Date: 1948-Dec 2015

Chemical Register: 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: 1992, 1999-Jul 2014

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-Feb 2014

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-Jan 2016

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-Jun 2014

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: Feb 29, 2016

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-Jan 2016

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: Feb 29, 2016

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-Aug 2014

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

The Emergency Management Historical Event data class will store the locations of historical occurrences of emergency events. Events captured will include 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.

Government Publication Date: May 31, 2014

List of TSSA Expired Facilities: Provincial EXP

This is a list of all expired facilities that fall under the TSSA (TSSA Act & Safety Regulations), including the six regulations that exist under the Fuels Safety Division. It will include facilities such as private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. These tanks have been removed and automatically fall under the expired facilities inventory held by TSSA.

Government Publication Date: Current to Nov 2015

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.

Government Publication Date: June 2000-Oct 2015

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-Sept 2003

Fuel Storage Tank: Provincial FST

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Government Publication Date: 2010-Nov 2015

Fuel Storage Tank - Historic: Provincial FSTH

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

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-May 2015

Greehouse 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: Dec 31, 2013

TSSA Historic Incidents: Provincial HINC

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. 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, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

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*

TSSA Incidents: Provincial INC

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, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Government Publication Date: June 2009 - Nov 2015

Landfill Inventory Management Ontario: Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as 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 will include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: 2012

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-Apr 2013

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: 1994-2013

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-Aug 2010

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 Wells: Federal NEBW

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: 1993-2013

Oil and Gas Wells: Private OGW

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: 1988-2015

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-Aug 2015

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-Jan 2016

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

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 Environment maintains a database of all manufacturers and vendors of registered pesticides.

Government Publication Date: 1988-Jun 2013

TSSA Pipeline Incidents: Provincial PINC

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, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

Government Publication Date: June 2009-2014

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-Jan 2016

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: 1986-2013

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-Jan 2016

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-Jul 2014

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

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-Jun 2015

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: 1990-2013

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-Mar 2007

TSSA Variances for Abandonment of Underground Storage Tanks: Provincial VAR

The TSSA, under the Liquid Fuels Handling Code and the Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, you may apply to seek a variance from this code requirement. This is a list of all variances granted for abandoned tanks.

Government Publication Date: Current to Nov 2015

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: Feb 29, 2016

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: 1955-Mar 2014

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.

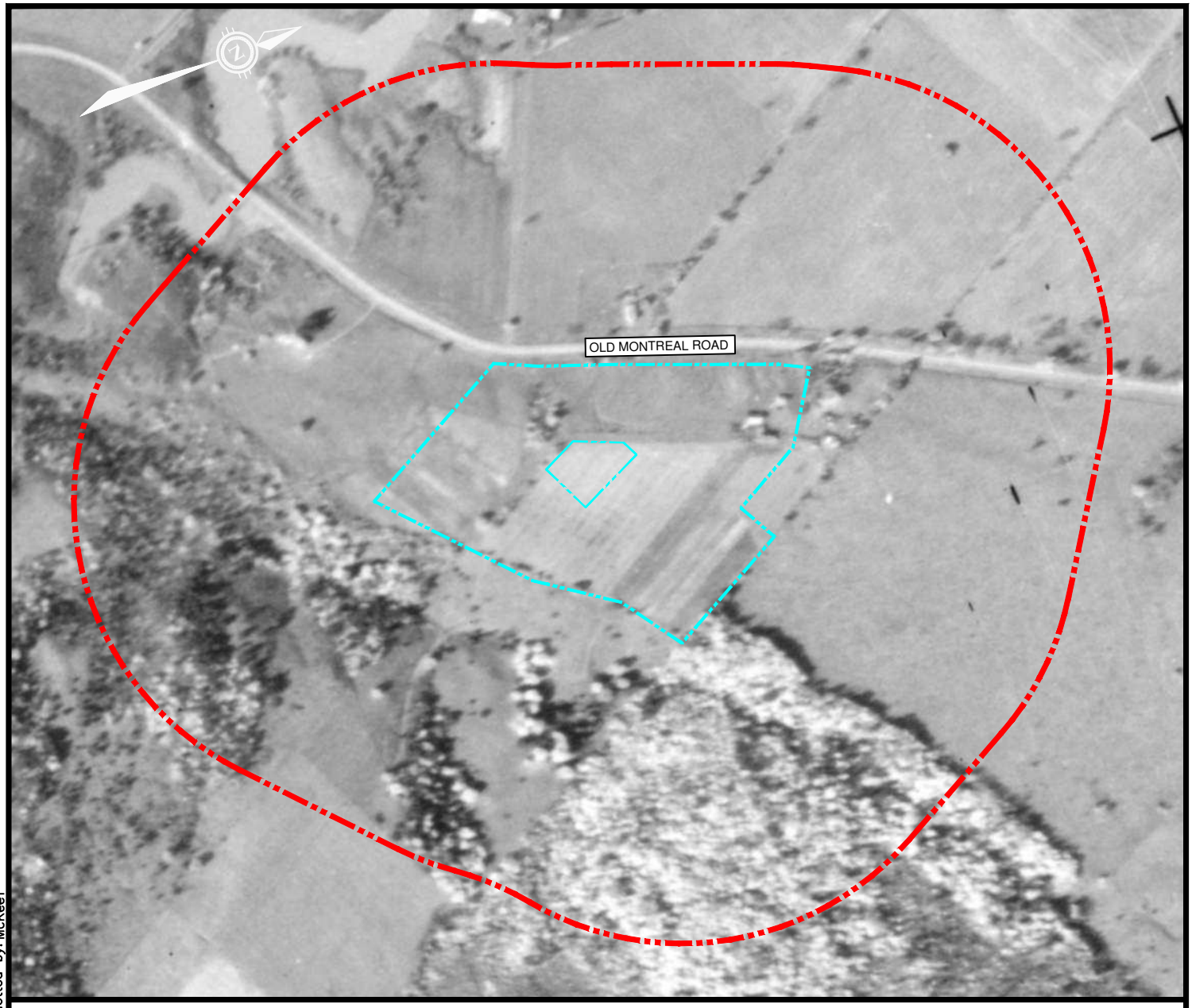
'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

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 were included as reference.

Appendix F: Aerial Photographs



LEGEND

PROPERTY BOUNDARY

STUDY AREA (250m)

0 50m 100m 200m

HORIZONTAL 1:5,000

EXP Services Inc. **www.exp.com**
t: +1.613.688.1899 | f: +1.613.225.7337
2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no. OTT-00234493-B0
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DRAWN BY: T.M.		FIG F1

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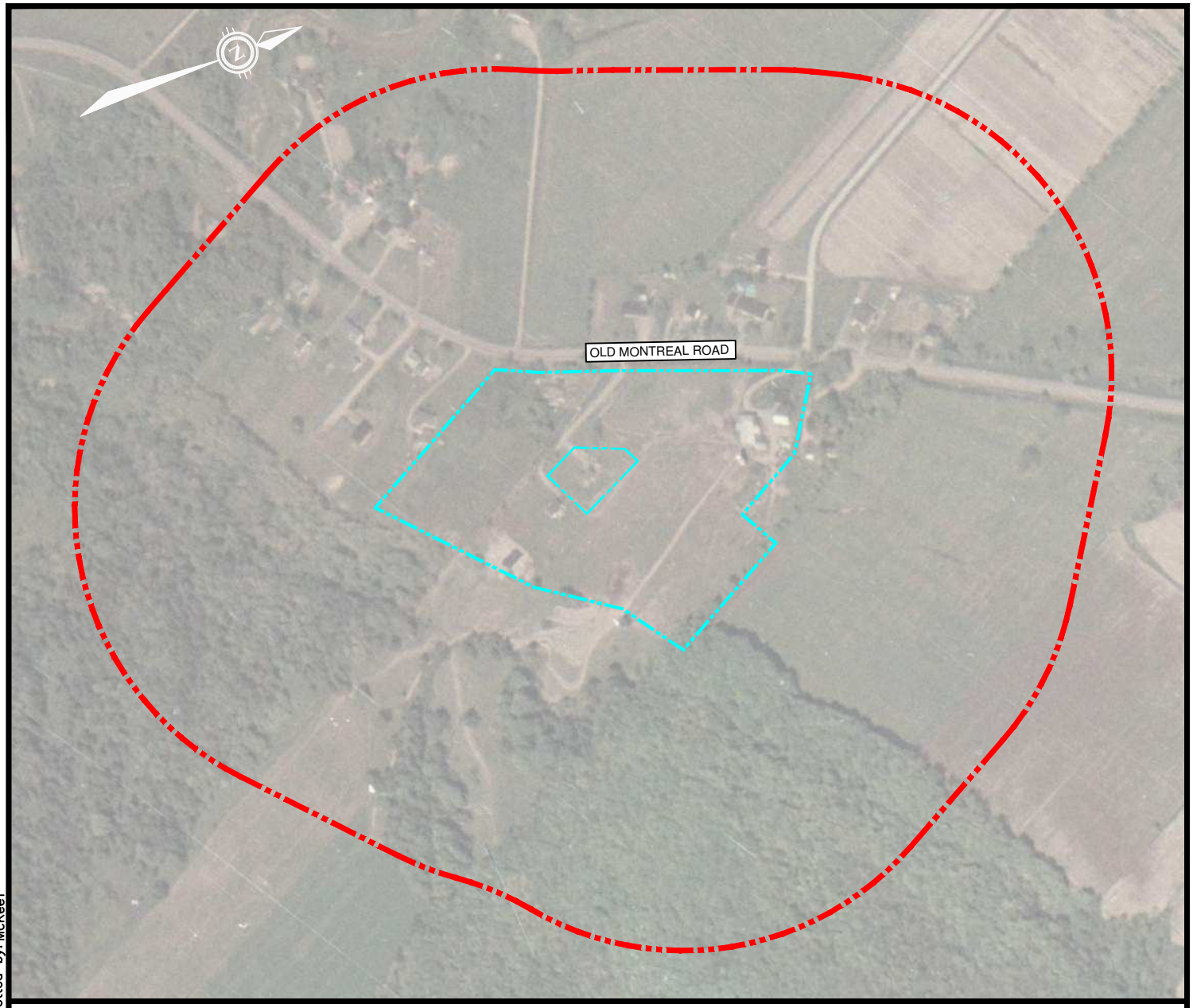

LEGEND

PROPERTY BOUNDARY

STUDY AREA (250m)

0 50m 100m 200m

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2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

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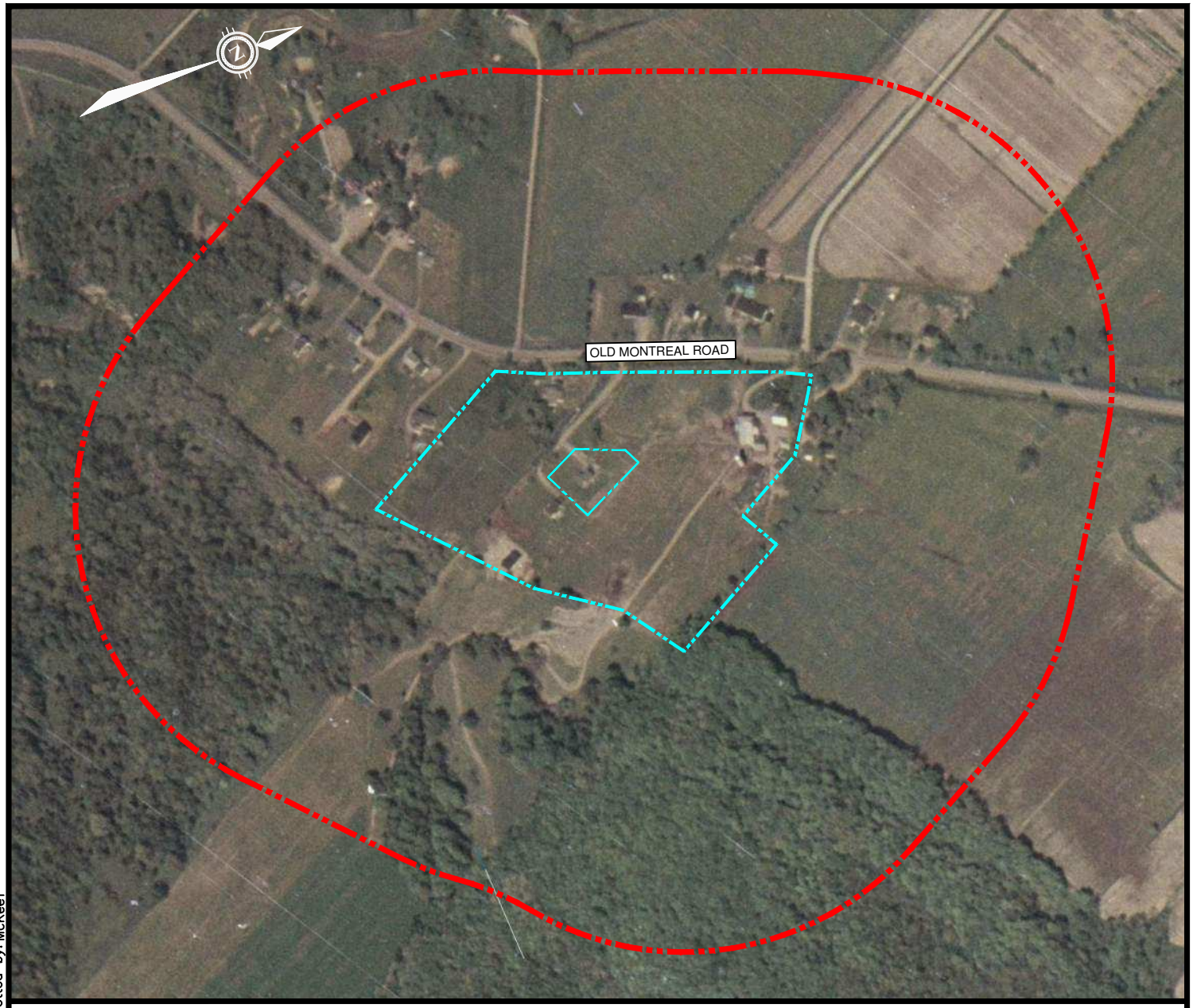

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Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no. OTT-00234493-B0
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STUDY AREA (250m)

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DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no. OTT-00234493-B0
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DRAWN BY: T.M.	TITLE: 1991 AERIAL PHOTOGRAPH 1208 OLD MONTREAL ROAD, ORLEANS, ONTARIO	FIG F4

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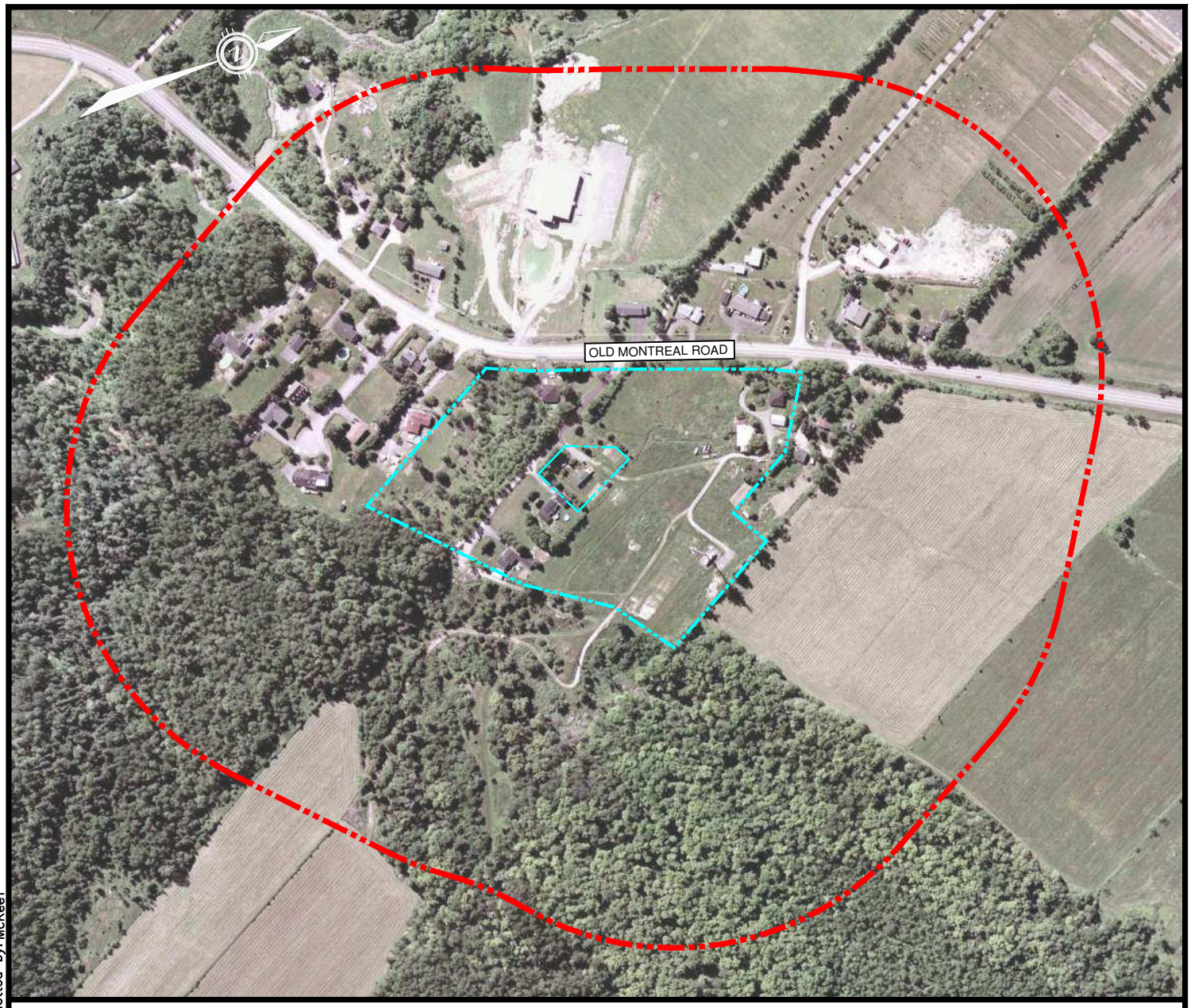

LEGEND

PROPERTY BOUNDARY

STUDY AREA (250m)

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HORIZONTAL 1:5,000

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DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no. OTT-00234493-B0
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Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no. OTT-00234493-B0
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DRAWN BY: T.M.	TITLE: 2015 AERIAL PHOTOGRAPH 1208 OLD MONTREAL ROAD, ORLEANS, ONTARIO	FIG F6

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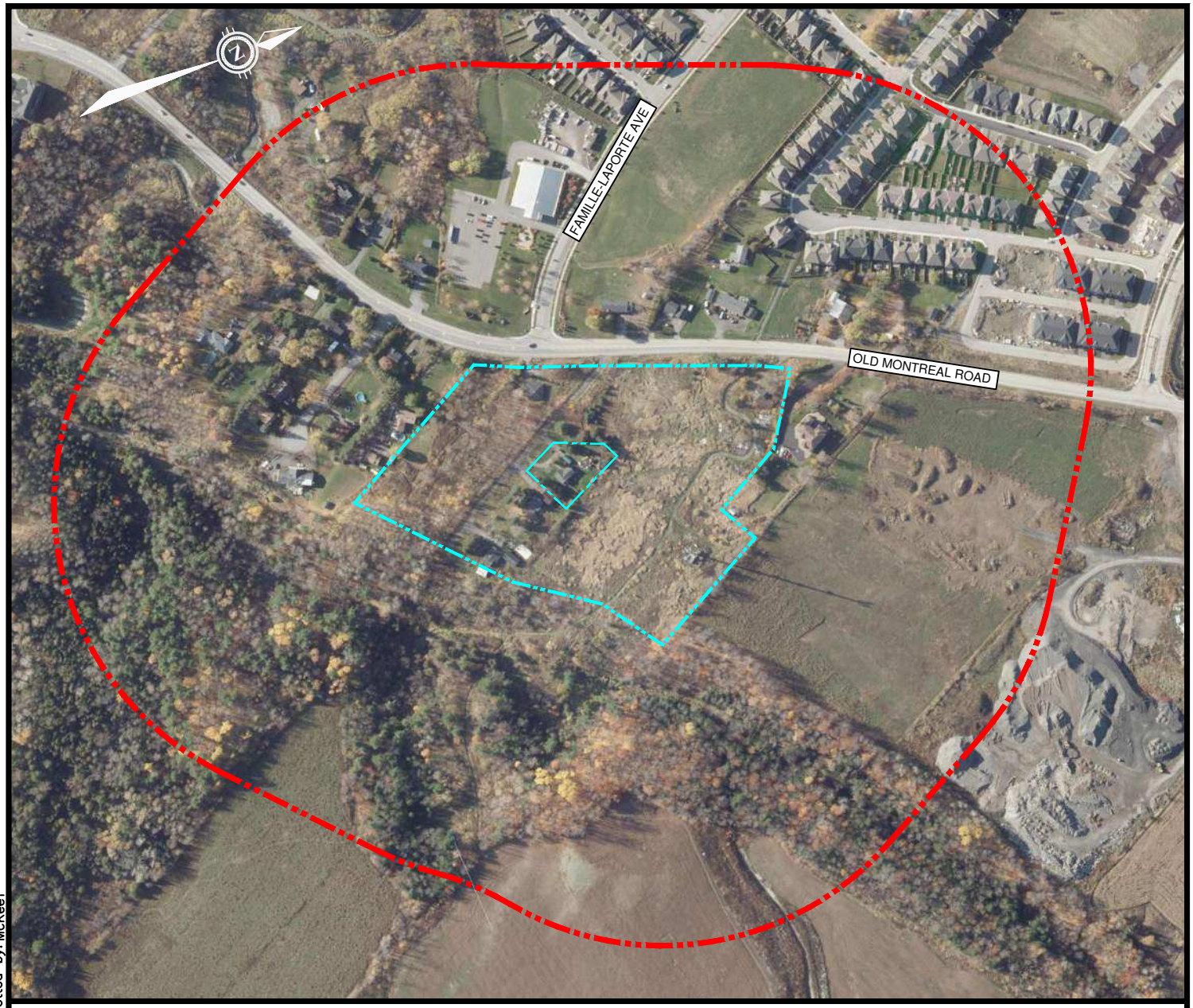

LEGEND

PROPERTY BOUNDARY

STUDY AREA (250m)

0 50m 100m 200m

HORIZONTAL 1:5,000

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2650 Queensview Drive, Suite 100
Ottawa, ON K2B 8H6, Canada

DATE: FEB 2021	CLIENT: PHOENIX HOMES, PROPOSED SUBDIVISION	project no.: OTT-00234493-B0
DESIGN: M.M./L.W. / CHECKED: M.M.		scale: 1:5,000
DRAWN BY: T.M.	TITLE: 2019 AERIAL PHOTOGRAPH 1208 OLD MONTREAL ROAD, ORLEANS, ONTARIO	FIG F7

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Appendix G: Site Photographs

Photograph No. 1

View of 1154 Old Montreal Road.

Photograph No. 2

View of former coal chute at 1154 Old Montreal Road.

Photograph No. 3

View of south part of 1154 Old Montreal Road, looking northwest.

Photograph No. 4

View of vacant residence at 1174 Old Montreal Road.

Photograph No. 5

View of mould and water damage on ceiling of main floor in 1174 Old Montreal Road.

Photograph No. 6

View of location of former fill and vent pipes at 1174 Old Montreal Road.

Photograph No. 7

View of vacant residence at 1180 Old Montreal Road, looking south.

Photograph No. 8

View of fill//vent pipes on the north side of the residence at 1180 Old Montreal Road.

Photograph No. 9

View of black mould on the walls of 1180 Old Montreal Road.

Photograph No. 10

View of the fuel oil AST in the basement of 1180 Old Montreal Road.

Photograph No. 11

View of the property south of the Phase One property.

Photograph No. 12

View of the south part of 1208 Old Montreal Road.

Photograph No. 13

View of the vacant residence at 1208 Old Montreal Road looking north.

Photograph No. 14

View of the fuel oil AST at 1208 Old Montreal Road.

Photograph No. 15

View of vent/fill pipes on the east side of the residence at 1208 Old Montreal Road.

Photograph No. 16

View of adjacent property to the east.