Geotechnical Engineering

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Geological Engineering

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Archaeological Studies

Paterson Group Inc.

Consulting Engineers
154 Colonnade Road South
Ottawa (Nepean), Ontario
Canada K2E 7J5

Tel: (613) 226-7381
Fax: (613) 226-6344
www.patersongroup.ca

patersongroup

Phase I - Environmental Site Assessment

3713 Borrisokane Road
Ottawa, Ontario

Prepared For

Caivan Communities

November 25, 2019

Report: PE4810-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Caivan Communities to conduct a Phase I – Environmental Site Assessment (Phase I ESA) of 3713 Borrisokane Road, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

According to the historical research, the subject property has never been formally developed and has historically been used for agricultural purposes. Sometime beginning in the 1950's, the subject property was used for aggregate extraction purposes. The neighbouring properties in the vicinity of the subject property were historically comprised of vacant lands or were used for agricultural purposes, followed by aggregate extraction activities. No environmental concerns were noted with regard to the historical use of the subject site or neighbouring properties.

Following the historical review, a site inspection was conducted on November 22, 2019. The subject property is currently vacant and no longer used for aggregate extraction purposes. The former extraction pit was noted to have been backfilled in with imported fill material. Due to the unknown quality of the fill material, it is considered to represent an area of potential environmental concern with respect to the subject property.

The neighbouring properties consist primarily of vacant grassland as well as tree and brush covered land. The land to the north is currently under development with a residential subdivision. An active landfill (Trail Road Landfill) was identified approximately 150 m to the west of the subject property. Based on the separation distance, as well as our knowledge of the landfill, the active landfill is not considered to pose an environmental concern to the subject property. No environmental concerns were identified with respect to the neighbouring properties.

Recommendations

Based on the results of this assessment, it is our opinion that **a Phase II - Environmental Site Assessment will be required for the subject property.**

1.0 INTRODUCTION

At the request of Caivan Communities, Paterson Group (Paterson) conducted a Phase I – Environmental Site Assessment (Phase I ESA) for 3713 Borrisokane Road, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the subject property and study area as well as to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Hugo Lalonde of Caivan Communities. Mr. Lalonde can be reached by telephone at 613-295-5082.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all our findings and results of the environmental conditions at this site.

This Phase I ESA report has been prepared in general accordance with Ontario Regulation 153/04, as amended, under the Environmental Protection Act, and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical, and regulatory information, as well as a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as local, provincial, and federal agencies, and was limited within the scope-of-work, time, and budget of the project herein.

2.0 PROPERTY INFORMATION

Address:	3713 Borrisokane Road, Ottawa, Ontario.
Legal Description:	Part of Lot 9, Concession 3 (Rideau Front); Registered Plan 5R-6254; Geographic Township of Nepean, in the City of Ottawa, Ontario.
Property Identification Number (PIN):	04592-0035
Location:	The subject property is located on the east side of Borrisokane Road, approximately 515 m southeast of Cambrian Road, in the City of Ottawa, Ontario. Refer to Figure 1 – Key Plan for the site location.
Latitude and Longitude:	45° 14' 27" N, 75° 45' 00" W

Site Description:

Configuration:	Irregular
Site Area:	32.16 ha (approximate)
Zoning:	ME2 – Mineral Extraction Zone
Current Use:	The subject property is currently vacant.
Services:	The subject property is not currently serviced. The neighbouring lands are currently being serviced with municipal water and sewer services.

3.0 SCOPE OF INVESTIGATION

The scope of work for this Phase I – Environmental Site Assessment was as follows:

- Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases, and regulatory agencies;
- Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
- Conduct interviews with persons knowledgeable of current and historic operations on the subject property and, if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

4.0 RECORDS REVIEW

4.1 General

Phase I ESA Study Area Determination

A radius of approximately 250 m was determined to be appropriate as a Phase I ESA study area for this assignment. Properties located outside the 250 m radius are not considered to have impacted the subject property, based on their significant distance from the site.

First Developed Use Determination

Based on a review of available historical information, the subject property has never been formally developed and has historically been used for agricultural purposes as well as for the extraction of aggregates (sand pit).

National Archives

Fire insurance plans and city directories are not available for the area of the subject site and neighbouring properties.

Topographic Survey Plan

A topographic plan, prepared by J. D. Barnes Limited in July 2019, was reviewed as part of this assessment. The plan depicts the subject property in its current configuration.

4.2 Environmental Source Information

National Pollutant Release Inventory

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically as part of this assessment. No records of pollutant releases were listed in the database for the subject site or for any properties located within the Phase I study area.

PCB Waste Storage Site Inventory

A search of the national PCB waste storage site inventory was conducted as part of this assessment. No PCB waste storage sites were identified within the Phase I study area.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields Environmental Site Registry was conducted electronically for the subject site and for properties located within the Phase I study area as part of this assessment.

One (1) Record of Site Condition (RSC) was filed for a property within general vicinity of the subject site. The property addressed 3640 Greenbank Road, located immediately north of the subject property, had an RSC (#225796) completed in July 2019 by Paterson Group Inc. Based on the results of the subsurface investigation conducted for the RSC site, it was determined that the soil and groundwater beneath the site was in compliance with the selected MECP Table 3 standards and that no remediation would be required for the site. As a result, this RSC site is not considered to pose a concern to the subject property.

MECP Coal Gasification Plant Inventory

The Ontario Ministry of Environment, Conservation and Parks document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the subject property. A review of this document did not identify any former coal gasification plants located on the subject property or within the Phase I study area.

MECP Waste Disposal Site Inventory

The Ontario Ministry of Environment and Climate Change document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of this assessment. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants, and coal tar distillation plants situated in the Province of Ontario. A review of this document did not identify any relevant records pertaining to the subject site or for properties located within the Phase I study area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted electronically via the Ontario Ministry of Natural Resources and Forestry (MNRF) website. No natural features or areas of natural significance were identified on the subject property or within the Phase I study area.

City of Ottawa Old Landfill Sites

The document prepared by Golder Associates entitled “Old Landfill Management Strategy, Phase I - Identification of Sites, City of Ottawa”, was reviewed. No former landfill sites were identified within the Phase I study area, however it should be noted that one (1) active landfill (Trail Road Landfill) was identified approximately 150 m west of the subject site.

Based on our review of monitoring reports prepared for this landfill, it is not considered to pose an environmental concern to the subject property. Furthermore, based on its separation distance, as well as its generally down-wind location, any noise and odour generated by the landfill are not considered to pose a significant concern to the subject property. It should also be noted that the active portion of the landfill is moving westward away from the subject property.

City of Ottawa Historical Land Use Inventory Database

As part of a Phase I ESA completed for the property addressed 3809 Borrisokane Road, located immediately to the south of the subject site, a requisition form was submitted to the City of Ottawa on October 4, 2019 to request information from the City’s Historical Land Use Inventory (HLUI 2005) database for information pertaining to this property as well as any properties located within a 250 m radius.

The response received from the City indicated that no records or activities were identified with respect to the aforementioned property or the surrounding properties, which include the current subject site as part of this assessment. A copy of the response from the City has been included in Appendix 2.

ERIS Database Report

A database report, prepared by ERIS Ltd. (Environmental Risk Information Services), dated July 24, 2019, was acquired and reviewed as part of this assessment. The report did not identify any environmental records pertaining to the subject site or neighbouring properties. A copy of the complete ERIS report has been included in Appendix 2.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals, commencing with the earliest available photograph. Based on the review, the following observations have been made:

1946 *(Poor Scale)* The subject property appears to be undeveloped at this time and consists primarily of agricultural land. Neighbouring properties appear to be vacant and used for agricultural purposes.

1956 *(Poor Scale)* An area within the western portion of the subject property appears to have been cleared and stripped of topsoil and vegetation (for possible aggregate extraction). No significant changes are apparent with respect to the surrounding properties.

1967 *(Poor Quality)* Some small storage barns can be seen on the southwest portion of the subject property. The property immediately to the north appears to have been partially cleared and stripped of topsoil and vegetation (for possible aggregate extraction).

1976 *(City of Ottawa Website)* No significant changes are apparent with respect to the subject property. The property immediately to the south appears to have been cleared and stripped of topsoil and vegetation for the purpose of an aggregate extraction pit.

1988 *(Poor Scale)* The subject property appears to be fully cleared and stripped of topsoil and vegetation and is undergoing aggregate extraction. The Trail Road Landfill can be seen approximately 150 m to the west of the subject property.

1999 *(City of Ottawa Website)* The subject property appears to be used for the extraction of aggregates at this time. Highway No. 416 and Borrisokane Road can be seen in their current configuration to the west of the subject property at this time.

2008 *(City of Ottawa Website)* The aggregate pit on the subject property appears to be undergoing the process of being filled in at this time. No significant changes are apparent with respect to the surrounding properties.

2018 *(Google Earth)* The aggregate pit on the subject property appears to be continuing the process of being filled in at this time. No significant changes are apparent with respect to the surrounding properties.

Copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic information was obtained from Natural Resources Canada – The Atlas of Canada website. The topographic maps indicate that the elevation of the subject property is approximately 110 m above sea level. The regional topography in the general area of the subject property slopes down towards the north, in the general direction of the Jock River. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website, as a part of this assessment. According to the publication and mapping information, the subject property is situated within the St. Lawrence Lowlands. According to the description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." The subject property is specifically located within the Central St. Lawrence Lowland area, which is rarely more than 150 m above sea level.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on the information from NRCAN, the bedrock within the area of the subject property consists of dolomite of the Oxford Formation. The surficial geology within the area of the subject property consists predominantly of glaciofluvial deposits, with an overburden thickness ranging from 15 m to 25 m.

MECP Water Well Records

A search of the MECPs website for all drilled well records within 250 m of the subject site was conducted as part of this assessment. The search identified five (5) well records within the Phase I study area. The records pertain to wells drilled in the area between 1994 and 2016 and used for domestic household or test hole purposes. According to the well records, the overburden stratigraphy in the general area of the subject property generally consists of brown sand and silt.

Water Bodies and Areas of Natural Significance

No water bodies are present on the subject property or within the Phase I study area. The nearest named water body with respect to the subject property is the Jock River, located approximately 1.5 km to the north.

5.0 SITE RECONNAISSANCE

5.1 General Requirements

The site inspection was conducted on November 22, 2019, between 2:00 PM and 3:00 PM. Weather conditions were partly cloudy, with a temperature of approximately 4°C.

Mr. Nick Sullivan, from the Environmental Department of Paterson Group, conducted the site inspection. In addition to the subject property, the uses of neighbouring properties within the Phase I study area were also assessed at the time of the site inspection.

5.2 Specific Observations at the Phase I Property

Site Features

The subject property is currently vacant and no longer utilized as an aggregate extraction pit. The former extraction pit was noted to have been backfilled in with imported fill material. The site topography slopes gradually down to the southwest, while the regional topography slopes gradually downwards to the north, in the direction of the Jock River. No unusual visual or olfactory observations were noted at the time of the site inspection.

Water drainage on the subject property occurs primarily via infiltration as well as surface runoff towards a drainage ditch adjacent to Borrisokane Road. Small pools of ponded water were observed on the ground surface at the time of the site inspection. No signs of surficial staining or indications of potential sub-surface contamination were observed within the ponded water at the time of the site inspection.

A depiction of the subject property is presented on Drawing PE4810-1 – Site Plan, in the Figures section of this report.

Buildings and Structures

The subject property is not formally developed, however, several wood framed storage buildings were present on the western portion of the property at the time of the site inspection. These storage buildings were noted to be used for storing soil and are finished on the exterior with wood and a sloped metal roof. A small wood framed structure was also observed in the western portion of the property. The structure, which was noted to be used as a weigh-scale office, is finished on the exterior with wood and a sloped metal roof.

None of the structures observed on-site contained any heating equipment or fuel tanks. No environmental concerns were noted with respect to the structures observed on the subject property at the time of the site inspection.

Underground Utilities

There are no underground utilities present on the subject property that we are aware of.

Potential Environmental Concerns

- **Fuels and Chemical Storage**

  No chemicals, above ground storage tanks (ASTs), or signs of underground storage tanks (USTs) were observed on the exterior of the subject property at the time of the site inspection.

- **Hazardous Materials and Unidentified Substances**

  No hazardous materials, unidentified substances, spills, surficial staining, abnormal odours, or indications of potential sub-surface contamination were observed on the subject property at the time of the site inspection.

- **Transformer Oil and Polychlorinated Biphenyls (PCBs)**

  One (1) pole mounted transformer was observed in the western portion of the subject property, adjacent to the weigh-scale office. The transformer was noted to be in good condition, as no leaks or stains were observed at the time of the site inspection.

- **Waste Management**

  No waste materials are currently being generated on the subject property.

- **Soil Stockpiles**

  The subject property contains several large soil stockpiles scattered throughout the western portion of the property. These stockpiles are native soils that were extracted from the site when the subject property was formerly as an aggregate extraction pit. These soil stockpiles are scheduled to be removed from the subject property and as a result, are not considered to pose an environmental concern.

- **Fill Material**

  Fill material was observed spread over the majority of the subject property. This fill material was imported on-site following the decommissioning of the former aggregate extraction activity. Due to the unknown quality of the fill material, it is considered to represent an area of potential environmental concern with respect to the subject property.

- **Wastewater Discharges**

  No wastewater is currently being generated on the subject site. Stormwater runoff is currently discharged from the subject site via infiltration within the property as well as sheet flow towards a drainage ditch adjacent to Borrisokane Road.

- **Ozone Depleting Substances (ODSs)**

  No ODSs were observed on the subject property at the time of the site inspection.

Neighbouring Properties

Land use adjacent to the subject property was observed as follows:

North: Vacant tree and brush covered land currently under development with a residential subdivision, followed by Cambrian Road;

South: Vacant land currently under development with a residential subdivision;

East: Vacant tree and brush covered land, followed by residential dwellings;

West: Borrisokane Road, followed by Highway No. 416, tree and brush covered land, followed by the Trail Road Landfill.

Based on its separation distance, as well as our knowledge of the landfill, the active landfill site to the west is not considered to pose an environmental concern to the subject property. Current land use adjacent to the subject property is illustrated on Drawing PE4810-1 – Surrounding Land Use Plan in the Appendix.

6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Land Use History

Based on a review of available historical information, the subject property has never been formally developed and has historically been used for agricultural purposes as well as for aggregate extraction purposes.

Potentially Contaminating Activities (PCAs)

The presence of on-site fill material of unknown quality, used to reinstate the former aggregate extraction pit, is considered to be a PCA on the subject property.

The Trail Road Landfill, located approximately 150 m to the west of the subject property, was identified as an existing PCA within the Phase I study area. Based on its separation distance, as well as our knowledge of the landfill, the active landfill site to the west is not considered to pose an environmental concern to the subject property.

Areas of Potential Environmental Concern (APECs)

As previously mentioned, the existing fill material present throughout the subject property is considered to represent an APEC with respect to the subject property. No other APECs were identified with respect to the subject property.

Contaminants of Potential Concern (CPCs)

Based on the nature of the APEC identified on the subject property, the CPCs with respect to the subject property are considered to be metals, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (PHCs F_1-F_4), as well as benzene, toluene, ethylbenzene, and xylenes (BTEX). The CPCs are expected to be limited to the fill materials, as opposed to the native soils or groundwater.

6.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, the subject property is located in an area of dolomite bedrock, with an overburden ranging from 15 m to 25 m in thickness and consisting of glaciofluvial deposits. Groundwater is anticipated to be encountered within the overburden unit and flow in a northerly direction towards the Jock River.

Existing Buildings and Structures

The subject property contains a small weigh-scale office and several small wood barns, used for storing soil. These are present on the western portion of the subject property.

Areas of Natural Significance

No areas of natural significance were identified on the subject property or within the Phase I study area.

Water Bodies

No water bodies are present on the subject property or within the Phase I study area. The nearest named water body with respect to the subject property is the Jock River, located approximately 1.5 km to the north.

Water Wells

A search of the MECPs website for all drilled well records within 250 m of the subject site was conducted as part of this assessment. The search identified five (5) well records within the Phase I study area. The records pertain to wells drilled in the area between 1994 and 2016 and used for domestic household or groundwater monitoring purposes. According to the well records, the overburden stratigraphy in the general area of the subject property generally consists of brown sand and silt.

Neighbouring Land Use

Neighbouring land use within the Phase I study area consists mainly of vacant land and residential dwellings. No environmental concerns were identified with respect to the current use of the neighbouring properties.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 6.1 of this report, the following Potentially Contaminating Activities were identified on the subject property:

- ❑ Fill material of unknown quality, used to infill the former aggregate extraction pit across the subject property.

This PCA is considered to represent an APEC with respect to the subject property.

The following PCA was identified off of the subject property, yet within the Phase I study area:

- ❑ An active landfill site (Trail Road Landfill), located approximately 150 m west of the subject property.

Based on its separation distance, as well as our knowledge of the landfill, the active landfill site is not considered to pose an environmental concern to the subject property.

Contaminants of Potential Concern

The CPCs identified with respect to the subject property are considered to be metals, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (PHCs F1-F4), as well as benzene, toluene, ethylbenzene, and xylenes (BTEX). The CPCs are expected to be limited to the fill materials, as opposed to the native soils or groundwater.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that the PCA identified on the subject property is considered to represent an on-site APEC, whereas the PCA identified off of the subject site, yet within the Phase I Study area, does not represent an APEC with respect to the subject property. The presence of PCAs were confirmed by a variety of independent sources, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

7.0 CONCLUSION

7.1 Assessment

Paterson Group was retained by Caivan Communities to conduct a Phase I – Environmental Site Assessment (Phase I ESA) of 3713 Borrisokane Road, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

According to the historical research, the subject property has never been formally developed and has historically been used for agricultural purposes. Sometime beginning in the 1950's, the subject property was used for aggregate extraction purposes. The neighbouring properties in the vicinity of the subject property were historically comprised of vacant lands or were used for agricultural purposes, followed by aggregate extraction activities. No environmental concerns were noted with regard to the historical use of the subject site or neighbouring properties.

Following the historical review, a site inspection was conducted on November 22, 2019. The subject property is currently vacant and no longer used for aggregate extraction purposes. The former extraction pit was noted to have been backfilled in with imported fill material. Due to the unknown quality of the fill material, it is considered to represent an area of potential environmental concern with respect to the subject property.

The neighbouring properties consist primarily of vacant grassland as well as tree and brush covered land. The land to the north is currently under development with a residential subdivision. An active landfill (Trail Road Landfill) was identified approximately 150 m to the west of the subject property. Based on the separation distance, as well as our knowledge of the landfill, the active landfill is not considered to pose an environmental concern to the subject property. No environmental concerns were identified with respect to the neighbouring properties.

7.2 Recommendations

Based on the results of this assessment, it is our opinion that **a Phase II - Environmental Site Assessment will be required for the subject property.**

8.0 STATEMENT OF LIMITATIONS

This Phase I – Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04, as amended, and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical, and regulatory information as well as a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as local, provincial, and federal agencies and was limited within the scope-of-work, time, and budget of the project herein.

Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Caivan Communities. Permission and notification from Caivan Communities and Paterson Group will be required to release this report to any other party.

Paterson Group Inc.

Nick Sullivan, B.Sc.

Mark S. D'Arcy, P.Eng., QP_{ESA}

Report Distribution:

- Caivan Communities
- Paterson Group Inc.

9.0 REFERENCES

Federal Records

- Natural Resources Canada Air Photo Library.
- Natural Resources Canada The Atlas of Canada.
- Geological Survey of Canada Surficial and Subsurface Mapping.
- Environment Canada, National Pollutant Release Inventory.
- National PCB Waste Storage Site Inventory.
- National Archives of Canada.

Provincial Records

- MECP Freedom of Information and Privacy Office.
- MECP Municipal Coal Gasification Plant Site Inventory, 1991.
- MECP Waste Disposal Site Inventory, 1991.
- MECP Brownfields Environmental Site Registry.
- MECP Water Well Inventory.
- Office of Technical Standards and Safety Authority, Fuels Safety Branch.
- Ministry of Natural Resources and Forestry Areas of Natural Significance.
- Chapman, L.J., and Putnam, D.F., 1984: 'The Physiography of Southern Ontario, Third Edition', Ontario Geological Survey Special Volume 2.

Municipal Records

- The City of Ottawa eMap website.
- City of Ottawa Document "Old Landfill Management Strategy, Phase I – Identification of Sites", prepared by Golder Associates, 2004.

Local Information Sources

- Previous Engineering Reports.
- Personal Interviews.

Public Information Sources

- Google Earth.
- Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4810-1 – SITE PLAN

DRAWING PE4810-2 – SURROUNDING LAND USE PLAN

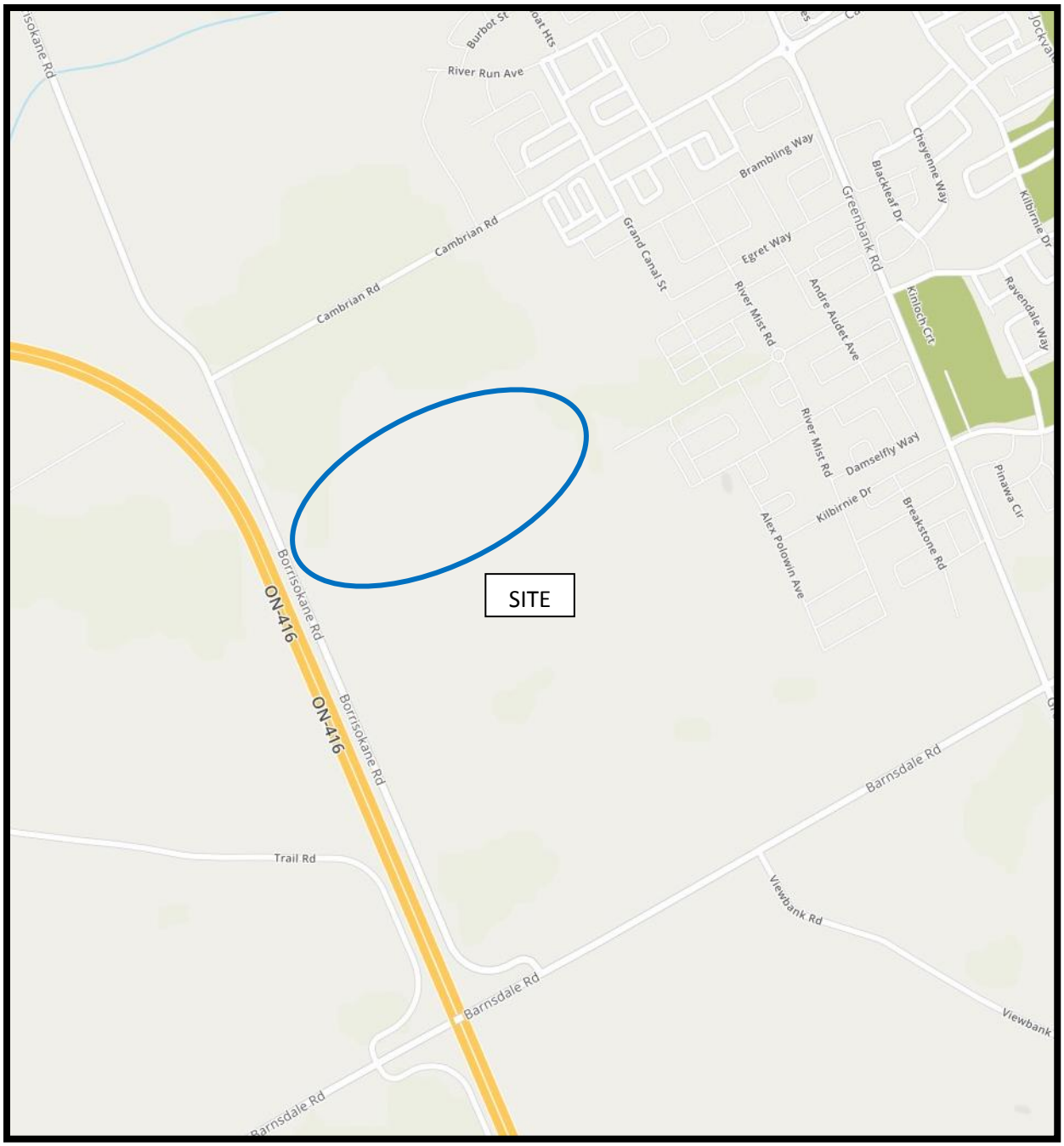


FIGURE 1

KEY PLAN

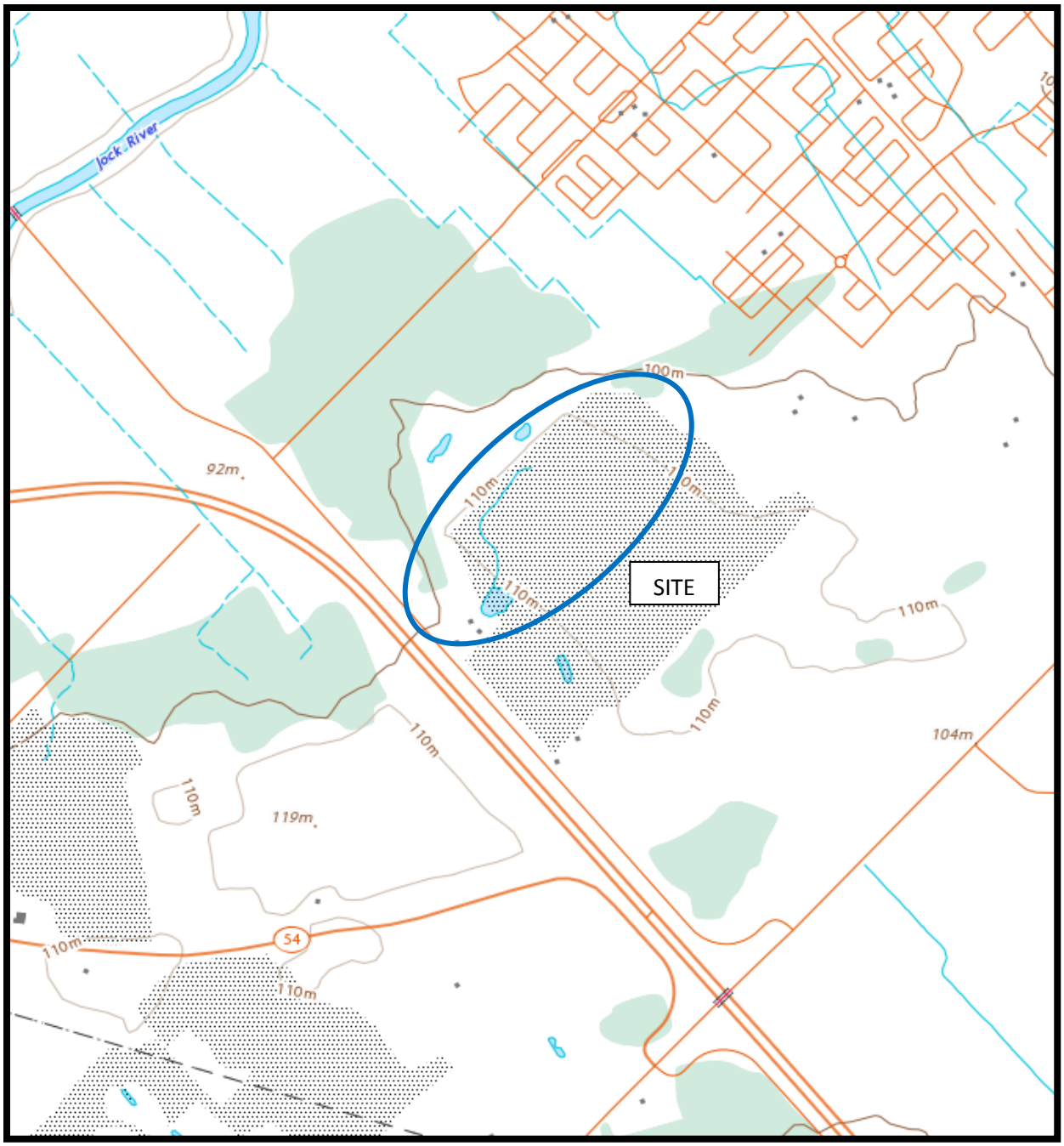
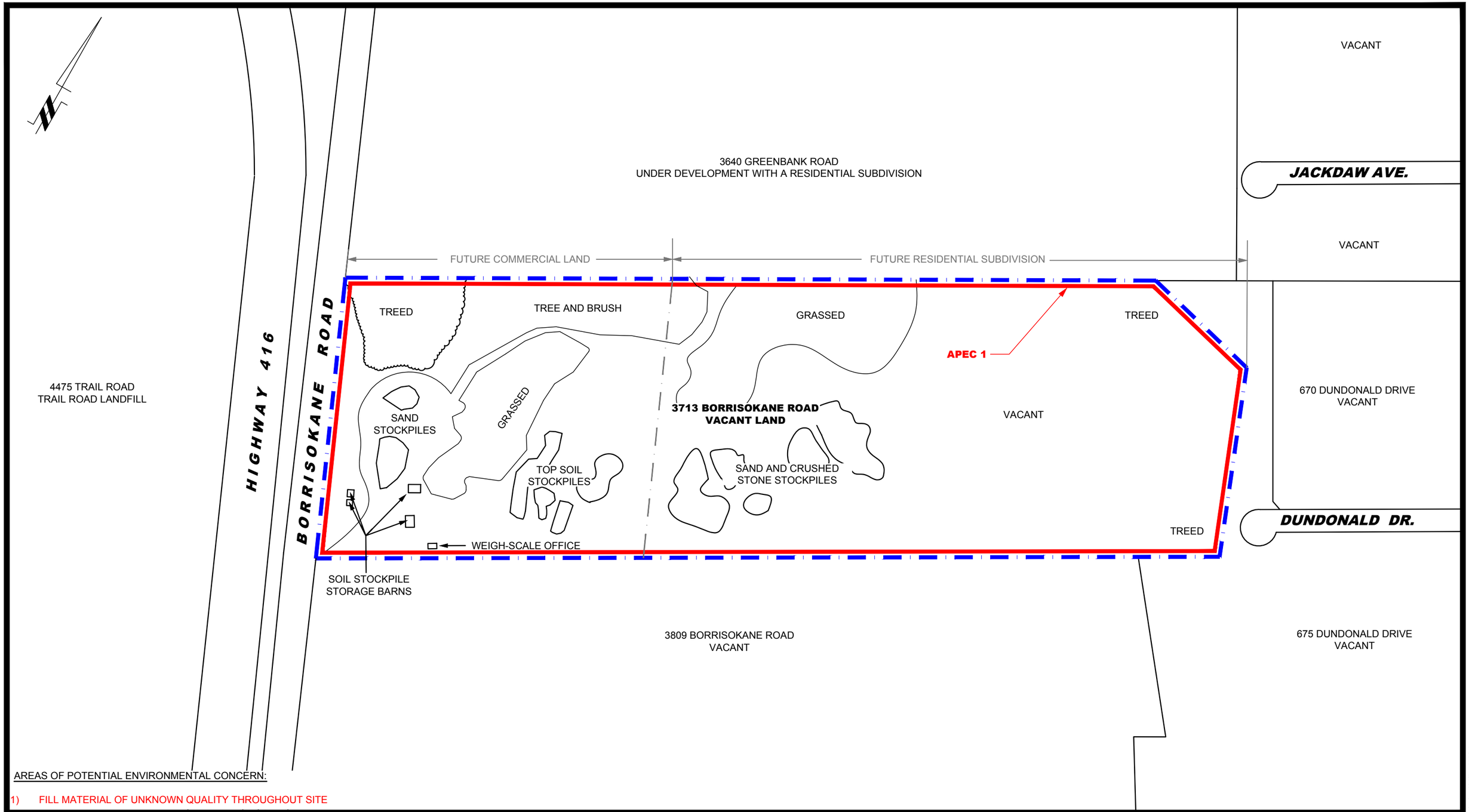


FIGURE 2

TOPOGRAPHIC MAP



AREAS OF POTENTIAL ENVIRONMENTAL CONCERN:

1) FILL MATERIAL OF UNKNOWN QUALITY THROUGHOUT SITE

patersongroup
consulting engineers

154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

CAIVAN COMMUNITIES

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
3713 BORRISOKANE ROAD

OTTAWA, ONTARIO

Title: **SITE PLAN**

Scale: 1:4000	Date: 11/2019
Drawn by: YA	Report No.: PE4810-1
Checked by: NS	Dwg. No.: PE4810-1
Approved by: MSD	Revision No.:

11x17

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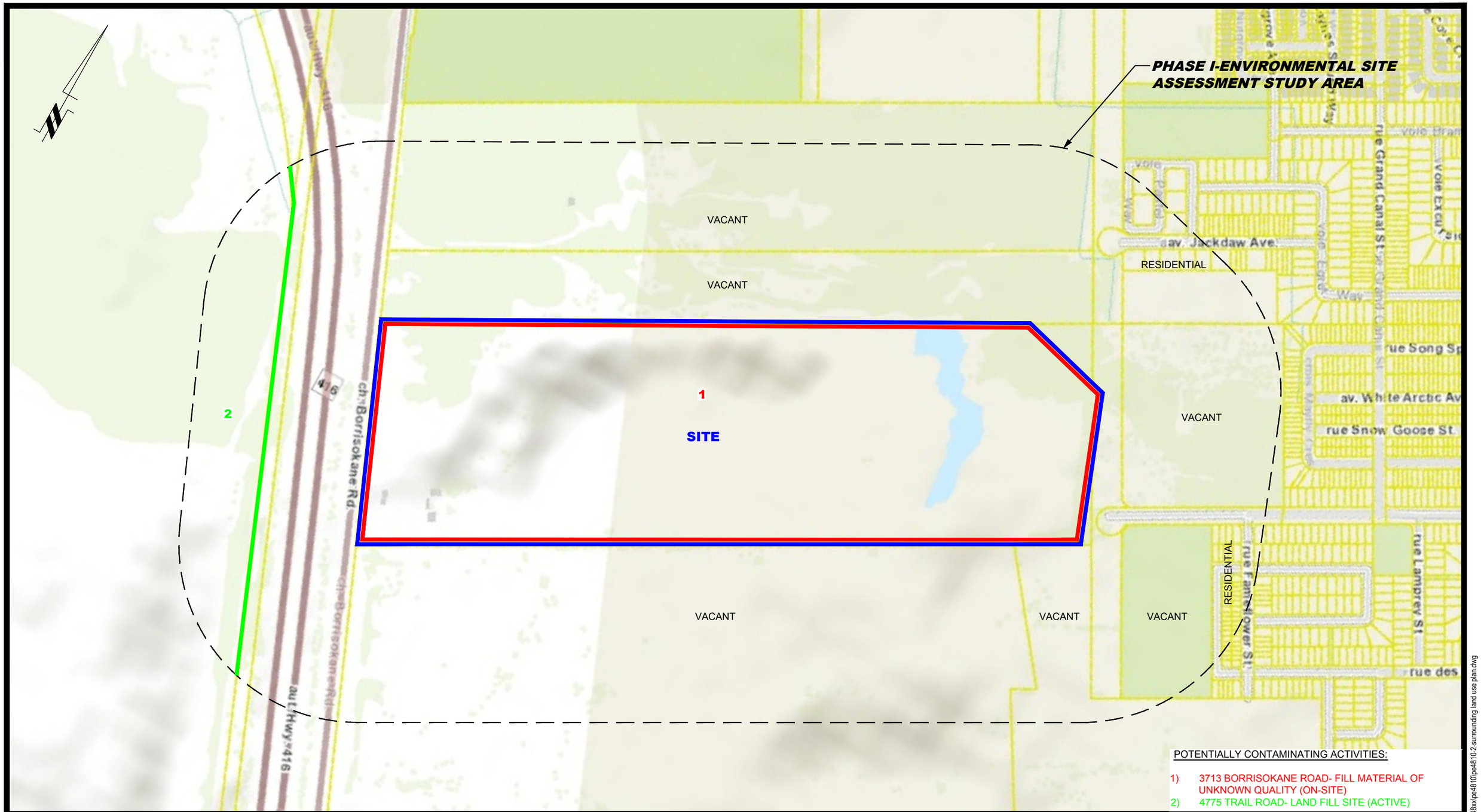

patersongroup
consulting engineers

154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

CAIVAN COMMUNITIES

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
3713 BORRISOKANE ROAD

OTTAWA, ONTARIO

Title:

SURROUNDING LAND USE PLAN

Scale: 1:5000	Date: 11/2019
Drawn by: YA	Report No.: PE4810-1
Checked by: NS	Dwg. No.: **PE4810-2**
Approved by: MSD	Revision No.:

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APPENDIX 1

TOPOGRAPHIC PLAN

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

TOPOGRAPHIC DETAIL

PART OF LOTS 7, 8 AND 9 CONCESSION 3 (RIDEAU FRONT)

GEOGRAPHIC TOWNSHIP OF NEPEAN
NOW IN THE
CITY OF OTTAWA

SCALE 1 : 1500

J.D. BARNES LIMITED

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

ELEVATION

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE PUBLISHED BENCHMARK NO. 001196403710, HAVING AN ELEVATION OF 91.724 m.

LOT 9 CONCESSION 3 (RIDEAU FRONT)

PART 1, PLAN 4R-21820

PART 6

PART 8

PART 9

5R-13374 5R-13374

KNOWN AS BORRISOKANE ROAD (PER BY-LAW 2017-58, INSTRUMENT No. OC1870932)

PART 12

PART 13

PART 15

PART 16

PART 17

PART 18

PART 2, PLAN 5R-6254
PART 1, PLAN 5R-13403
LOT 9 CONCESSION 3 (RIDEAU FRONT)

PART 2 PLAN 5R-13403

PART 3 PLAN 5R-13403

LOT 8 CONCESSION 3 (RIDEAU FRONT)

LOT 8
CONCESSION 3
(RIDEAU FRONT)

PART 2, PLAN 4R-28416

PART 3, PLAN 4R-28416

REGISTERED PLAN 4M-1626

BLOCK 74

BLOCK 72

PART 2, PLAN 4R-22633

PART 6 PLAN 4R-29284

4M-1560

181

BLOCK 175

PART 14 PLAN 4R-29284

PART 13 PLAN 4R-29284

PART 1 PLAN 4R-22633

PART 1 PLAN 4R-29284

promenade Dundonald Drive

BLOCK 176

REGISTERED PLAN 4M-1626

LOT 7 CONCESSION 3 (RIDEAU FRONT)

PART 2, PART 2, PLAN 4RP-L2A1N1 924R-21192

LEGEND

SP_SPOT	DENOTES	SPOT ELEVATION
HP	DENOTES	HYDRO POLE
PL_POST	DENOTES	POST
NA_TOPSL	DENOTES	TOP OF SLOPE
NA_BOTSL	DENOTES	BOTTOM OF SLOPE
LI_BREAK	DENOTES	BREAK LINE
SU_AEDGE	DENOTES	EDGE OF ASPHALT
CL_ROAD	DENOTES	CENTRELINE OF ROAD
NA_WATER	DENOTES	EDGE OF WATER
DI_TOP	DENOTES	TOP OF DITCH
DI_BTM	DENOTES	BOTTOM OF DITCH
DI_CL	DENOTES	CENTRELINE OF DITCH
FE_PW	DENOTES	POST AND WIRE FENCE
SU_GRVRD	DENOTES	GRAVEL ROAD

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2430 DON REID DRIVE, SUITE 204, OTTAWA, ON K1H 1E1
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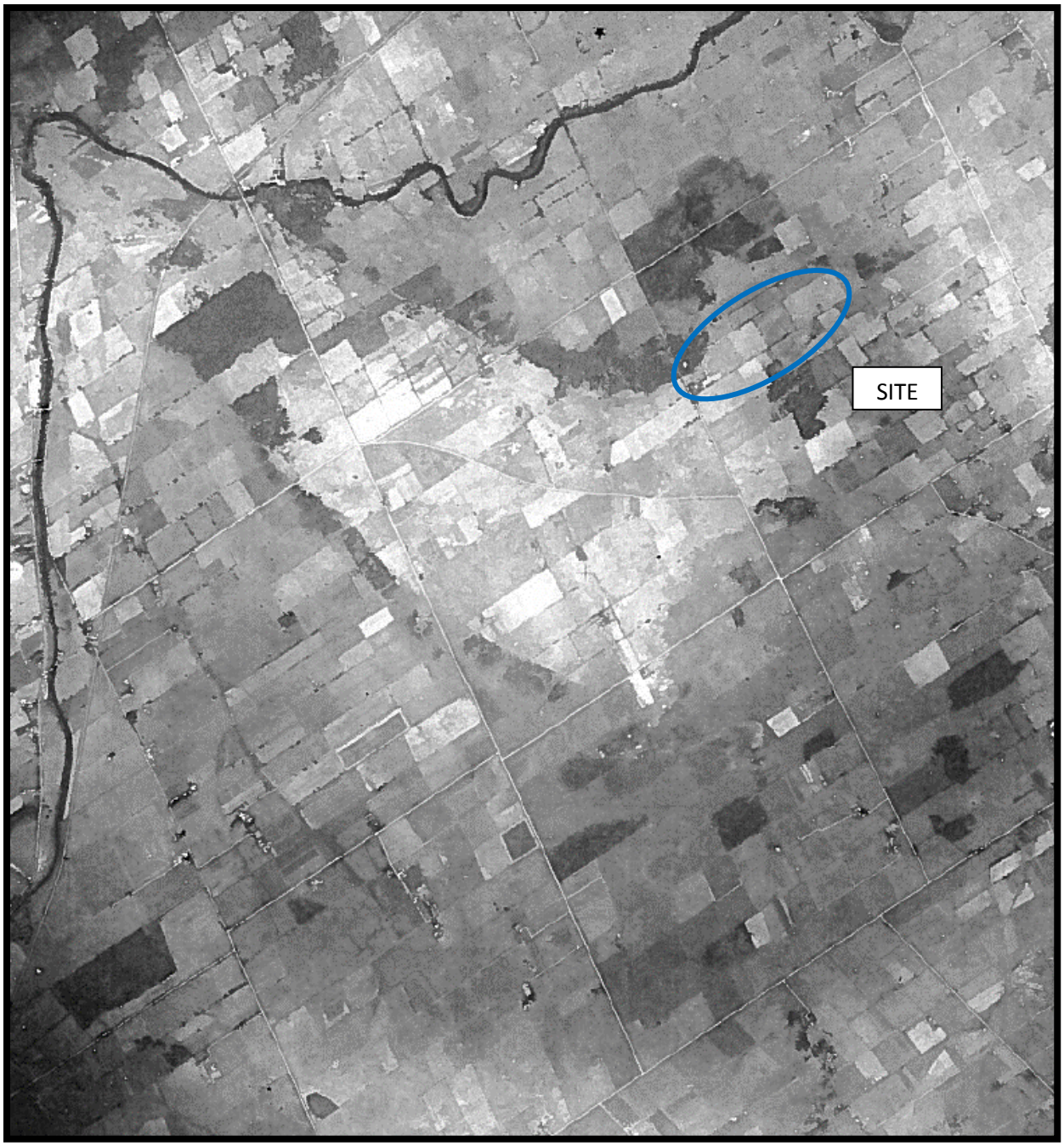
DRAWN BY:	CHECKED BY:	REFERENCE NO.:
NS	CF	18-10-145-00

FILE: G:\19-10-074\00\Drawing\Topo\19-10-074-00_Topo2019.dgn DATE: 06/10/19

PLOTTED: 7/26/2019



AERIAL PHOTOGRAPH
1946

AERIAL PHOTOGRAPH
1956

AERIAL PHOTOGRAPH
1967

AERIAL PHOTOGRAPH
1976

AERIAL PHOTOGRAPH
1988

AERIAL PHOTOGRAPH
1999

AERIAL PHOTOGRAPH
2008

AERIAL PHOTOGRAPH
2018

Site Photographs

PE4810 3713 Borrisokane Road, Ottawa, Ontario November 22, 2019

Photograph 1: View of the western portion of the property, facing east.

Photograph 2: View of the northern portion of the property, facing south.

Photograph 3: View of the eastern portion of the property, facing west.

Photograph 4: View of the southern portion of the property, facing north.

Photograph 5: View of the central portion of the property, facing west.

Photograph 6: View of a small storage building, used to store soil stockpiles, as well as a small weigh scale office.

APPENDIX 2

MECP WATER WELL RECORDS

HLUI DATABASE REPORT

ERIS DATABASE REPORT

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 1528163 MUNICIP. 15008 CON. RF LOT 03

COUNTY OR DISTRICT: [redacted]
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Mapleton
CON 3 | BLOCK, TRACT, SURVEY, ETC: Plan 3RF (SR14400) | LOT Pt 8
[redacted] PH 3 North Glover KOA 2T0
DATE COMPLETED: DAY 15 MO 8 YR 94
RC ELEVATION RC BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
grey	clay	stone		0	22
grey	hardpan	gravel		22	31
grey	limestone			31	150
grey	sandstone	white layers		150	223

31
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
150	Not tested
218	

(1 FRESH 2 SALTY 3 SULPHUR 4 MINERALS 6 GAS)

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 STEEL	.188	0	35
6	4 OPEN HOLE		35	223

(1 STEEL 2 GALVANIZED 3 CONCRETE 4 OPEN HOLE 5 PLASTIC)

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
10-13	14-17	cement grouted
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

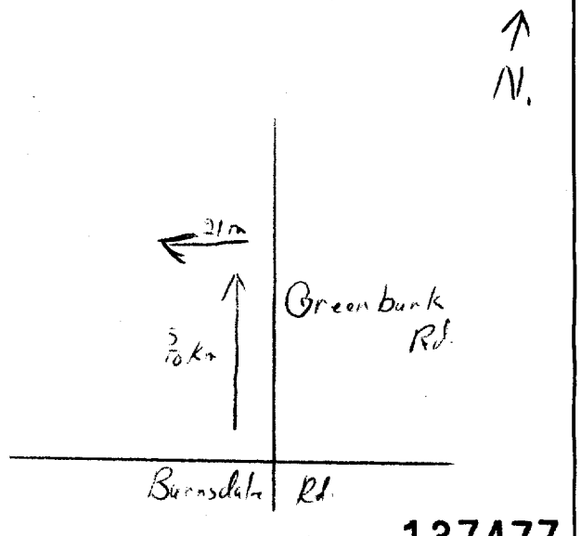
PUMPING TEST METHOD: 1 ☐ PUMP Air 2 ☐ BAILER
PUMPING RATE: 12 GPM
DURATION OF PUMPING: 1 HOURS 0 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☑ RECOVERY) 15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
~~0~~ 0 FEET	120 FEET	11 FEET	10 FEET	10 FEET	10 FEET

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☐ CLEAR 2 ☑ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☑ DEEP
RECOMMENDED PUMP SETTING: 120 FEET
RECOMMENDED PUMPING RATE: 10 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS: 137477

FINAL STATUS OF WELL

1 ☑ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED ☐ DEWATERING

WATER USE

1 ☑ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF CONSTRUCTION

1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☑ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR: D. Mains Well Drilling
WELL CONTRACTOR'S LICENCE NUMBER: 3644
ADDRESS: Box 326, Richmond Ont
NAME OF WELL TECHNICIAN:
WELL TECHNICIAN'S LICENCE NUMBER: T-8004
SIGNATURE OF TECHNICIAN/CONTRACTOR:
SUBMISSION DATE: DAY 15 MO 8 YR 94

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR 3644 | DATE RECEIVED SEP 06 1994
DATE OF INSPECTION | INSPECTOR
REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

Ontario Ministry of the Environment

A087279

Well Tag No. for Master Well *(Place Sticker and/or Print Below)*

A 087279

Master Well Record for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 1 of 3

[redacted]

Address of Well Location (Street Number/Name, RR)	Township	Lot	Concession
4375 Trail Rd			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Hanna	Ontario	

UTM Coordinates	Zone	Easting	Northing	GPS Unit Make	Model	Mode of Operation
NAD 83	18	440833	5009111	Garmin	Etrex	☐ Undifferentiated ☑ Averaged ☐ Differentiated, specify

Overburden and Bedrock Materials *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From	Depth (Metres) To
Brn	Sand	Silt	soft, dry	0	4.27

Hole Details

Depth (Metres) From	Depth (Metres) To	Diameter (Centimetres)
0	4.27	8.25

Water Use

☐ Public ☐ Industrial ☐ Not used ☑ Other, *specify*
☐ Domestic ☐ Commercial ☐ Dewatering
☐ Livestock ☐ Municipal ☑ Monitoring
☐ Irrigation ☑ Test Hole ☐ Cooling & Air Conditioning

Method of Construction

☐ Cable Tool ☐ Air Percussion ☐ Digging
☐ Rotary (Conventional) ☐ Diamond ☐ Boring
☐ Rotary (Reverse) ☐ Jetting ☑ Other, *specify*
☐ Rotary (Air) ☐ Driving Direct Push

Status of Well

☑ Test Hole ☐ Abandoned, Insufficient Supply
☐ Replacement Well ☐ Abandoned, Poor Water Quality
☐ Dewatering Well ☑ Other, *specify* monitoring
☐ Alteration (Construction) ☐ Abandoned, other, *specify*

Construction Details

Inside Diameter (Centimetres)	Material (steel, plastic, fibreglass, concrete, galvanized)	Wall Thickness	Depth (Metres) From	Depth (Metres) To
2.61	PVC Riser	.338	0	3.35

No Casing and Screen Used

Open Hole ☐ Yes ☐ No

Static Water Level Test

Metres

Screen

☐ Galvanized ☐ Steel ☐ Fibreglass ☐ Concrete ☑ Plastic

Outside Diameter (Centimetres)	Slot No.
3.34	10

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From	Depth Set at (Metres) To	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
0	3.1	Benseal	
3.1	4.27	sand	

Water Details

Water found at Depth	Kind of Water
Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth	Kind of Water
Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth	Kind of Water
Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

Disinfected ☐ Yes ☐ No If no, provide reason:

Date Master Well Completed (yyyy/mm/dd): 2009/08/27

Cluster Information *(Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)*

Total Wells in Cluster	Please indicate Number of Cluster Well Information Log Sheets Submitted
4	1
Total Wells on this Property	
4	

Location of Well Cluster

Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.

☐ Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the above-noted th
Si
M
Si

[redacted]

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Soil Sampling	7241

Business Address (Street No./Name, number, RR)	Municipality
12-147 West Beaver Creek	Richmond Hill

Province	Postal Code	Business E-mail Address
ON	L4B1G6	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
905 764-9804	Robinson, Travis

Well Technician's Licence No.	Signature of Technician	Date Submitted (yyyy/mm/dd)
3154		2009/09/04

Ministry Use Only

Audit No.	Well Contractor No.
M 02588	
Date Received (yyyy/mm/dd)	Date of Inspection (yyyy/mm/dd)
SEP 22 2009	

Remarks

RR 1796 Minimum Pump

Ontario Ministry of the Environment

Well A 087279 (Well Tag No.)

A087279

Cluster Well Information for Cluster Well Construction

Regulation 903 Ontario Water Resources Act

Page 2 of 3

[redacted]

Address of Well Location (Street Number/Name, RR)	Lot	Concession	Township	County/District/Municipality
4375 Trail Rd				

City/Town/Village	Province	Postal Code	GPS Unit Make	Model	Unit Mode of Operation	
Ottawa	Ontario		Garmin	Etrex	☐ Differentiated, specify:	☐ Undifferentiated ☐ Averaged

upon request

Signature of Technician/Contractor	Date (yyyy/mm/dd)

Well # on Sketch	UTM Coordinates Zone	Easting	Northing	Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres) From	To	Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
2	18	440748	5009219	3.1	8.25	Direct Push	PVC	2.13	2.13	3.1	Benseal				2009/08/2
3	18	440684	5009402	3.66	8.25	Direct Push	PVC	2.74	2.74	3.60	Benseal				2009/08/2
4	18	440616	5009552	3.1	8.25	Direct Push	PVC	2.13	2.13	3.1	Benseal				2009/08/27

Well Contractor and Well Technician Information

Business Name of Well Contractor	Business Address (Street Number/Name, RR)	Municipality	Province
Strata Soil Sampling	#2-147 West Beaver Creek	Richmond Hill	ON

Postal Code	Business Telephone No. (inc. area code)	Well Contractor's Licence No.	Business E-mail Address
L4B1C6			

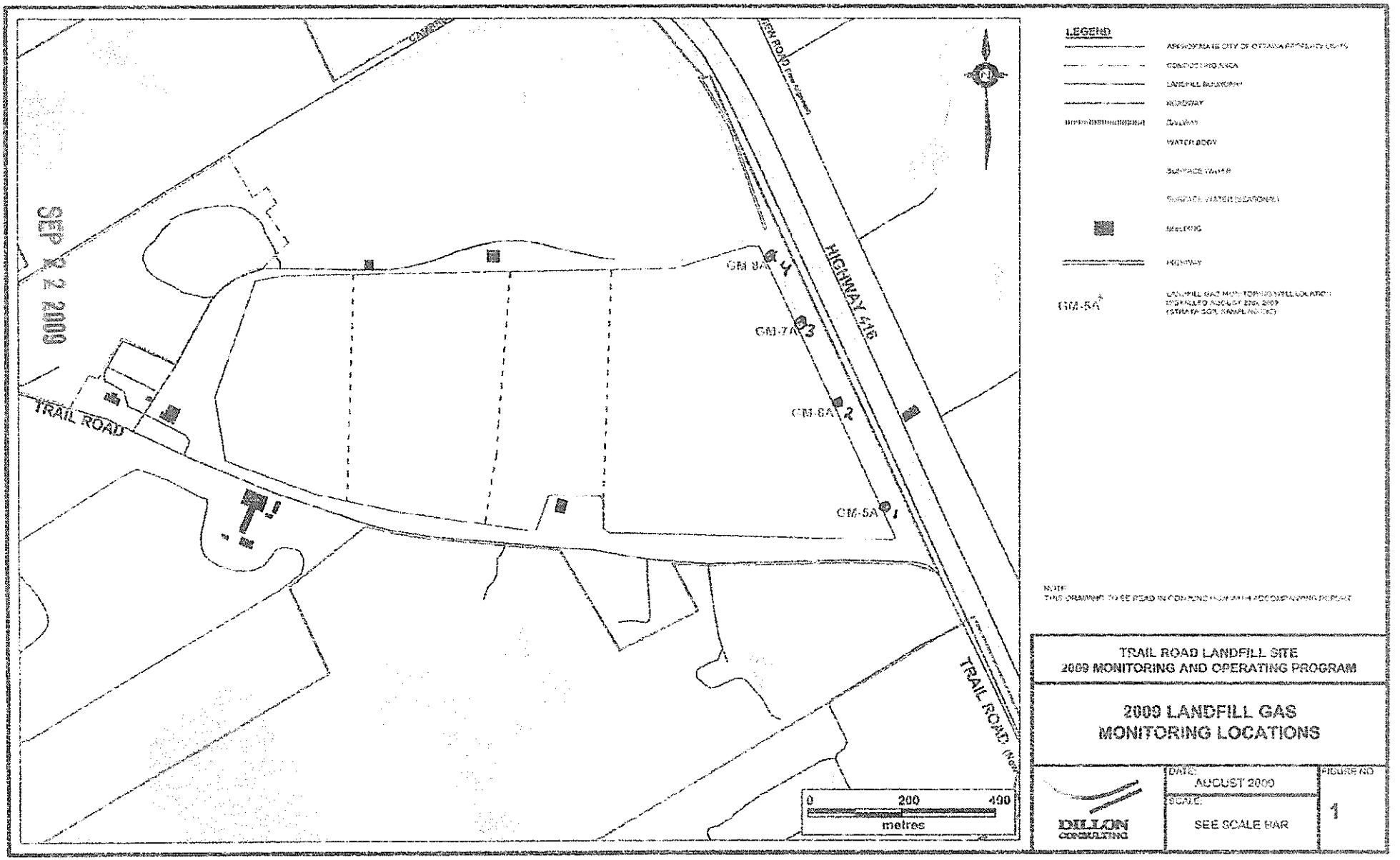
Name of Well Technician (First Name, Last Name)	Well Technician's Licence No.	Date Submitted (yyyy/mm/dd)	Signature of Technician
Travis Robinson	31594	2009/09/04	BB 1796

Date 1st Well in Cluster Constructed (yyyy/mm/dd)	Date Last Well in Cluster Constructed (yyyy/mm/dd)
2009/08/27	2009/08/27

Ministry Use Only

Date Received (yyyy/mm/dd)	Date Inspected (yyyy/mm/dd)
SEP 22 2009	
Audit No: C06026	Remarks: M025488

1991 (11/2006) Ministry's Copy


SEP 22 2009
TRAIL ROAD
HIGHWAY 416
TRAIL ROAD
GM-8A
GM-7A
GM-6A
GM-5A
0
200
400
metres
LEGEND
WATER BODY
BUILDING
HIGHWAY
TRAIL ROAD LANDFILL SITE
2009 MONITORING AND OPERATING PROGRAM
2009 LANDFILL GAS
MONITORING LOCATIONS
DILLON CONSULTING
DATE: AUGUST 2009
SCALE: SEE SCALE BAR
FIGURE NO 1

Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the Open Data catalogue.

Go Back to Map

Well ID

Well ID Number: 7267739
Well Audit Number: *C33707*
Well Tag Number: *A187172*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441810.00 Northing: 5010333.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed

Method of Construction & Well Use

Method of Construction	Well Use

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7328

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production

Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter

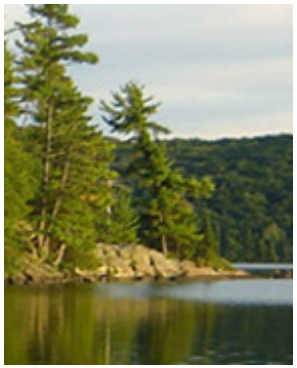
Audit Number: C33707

Date Well Completed: March 14, 2016

Date Well Record Received by MOE: July 25, 2016

Updated: October 29, 2019
Share facebook twitter Print
Tags

- Environment and energy,
- Drinking water



Ministry of the Environment, Conservation and Parks

The Ministry of the Environment, Conservation and Parks works to protect and sustain the quality of Ontario's air, land, and water. We also coordinate Ontario's actions on climate change in the name of healthier communities, ecological protection and economic prosperity.

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- Taxes and benefits
- Travel and recreation

- about Ontario
- privacy
- accessibility

- terms of use

Ontario — Ministry of the Environment and Climate Change

Measurements recorded in: ☑ Metric ☐ Imperial

Well Tag No. **Tag#: A190843** A190843

Well Record

Regulation 903 Ontario Water Resources Act

S-19480 Page _____ of _____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
City of	Ottawa		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
110 Laurier Avenue West, 5th Floor	Ottawa	ON	K1P 1J1	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
Trail Road Landfill			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Ottawa	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	440744	5009359		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
Brn	Topsoil	Sand	Soft	0	.31
Brn	Sand	Silt, gravel	Soft	.31	3.35

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0	.31	Monument, Concrete	
.31	1.52	Bentonyte	
1.52	3.35	Sand	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☑ Boring ☐ Digging
☐ Air percussion
☐ Other, *specify* _____

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☑ Test Hole ☑ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify* _____

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
5.20	PVC	.390	0	1.83

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
6.03	PVC	10	1.83	3.35

Status of Well

☐ Water Supply
☐ Replacement Well
☑ Test Hole
☐ Recharge Well
☐ Dewatering Well
☑ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Water Details

Water found at Depth (m/ft)	☐ Gas	Kind of Water: ☐ Fresh ☐ Untested ☐ Other, *specify*

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	3.35	15.24

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify* _____

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping _____ hrs + _____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

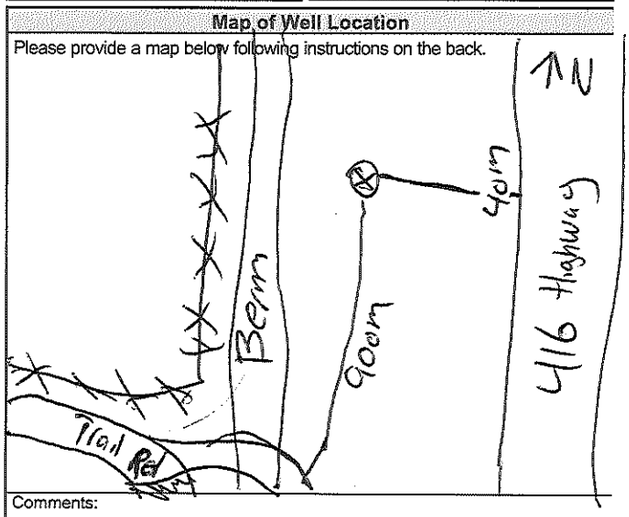
Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Strata Drilling Group	7241

Business Address (Street Number/Name)	Municipality
165 Shields Court	Markham

Province	Postal Code	Business E-mail Address
Ont	L3R 6V8	wrecords@stratasoil.com

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
905 940 7919	Kauffeldt, Kajus

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
3935	Kajus Kauffeldt	2016/11/28

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No		2016/11/25

Ministry Use Only

Audit No. Z238155

DEC 23 2016 Received

0506E (2014/11)

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- Driving and Roads

Map: Well records

This map allows you to search and view well record information from reported wells in Ontario.

Full dataset is available in the Open Data catalogue.

Recommended for you

How to use a Ministry of the Environment map

Technical documentation: Metadata record

Go Back to Map

Well ID

Well ID Number: 7277726
Well Audit Number: *Z238154*
Well Tag Number: *A190844*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	TRAIL ROAD LANDFILL
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 440681.00 Northing: 5009540.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	LOAM		SOFT	0 m	.31 m
BRWN	SAND	GRVL	LOOS	.31 m	3.35 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE	
.31 m	1.52 m	BENTONITE	
1.52 m	3.35 m	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use

Boring

Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	1.83 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	1.83 m	3.35 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level

If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter
0 m	3.35 m	15.24 cm

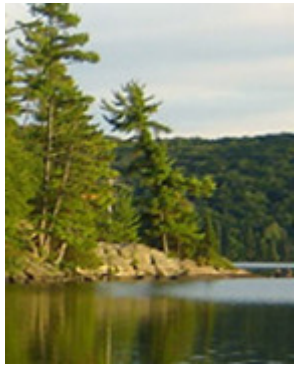
Audit Number: Z238154

Date Well Completed: November 23, 2016

Date Well Record Received by MOE: December 23, 2016

Updated: October 29, 2019
Share facebook twitter Print
Tags

- Environment and energy,
- Drinking water



Ministry of the Environment, Conservation and Parks

The Ministry of the Environment, Conservation and Parks works to protect and sustain the quality of Ontario's air, land, and water. We also coordinate Ontario's actions on climate change in the name of healthier communities, ecological protection and economic prosperity.

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- Business and economy
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- Rural and north
- Taxes and benefits

- Travel and recreation

- about Ontario
- privacy
- accessibility
- terms of use

File Number: D06-03-19-0162

November 26, 2019

Nick Sullivan
Paterson Group
154 Colonnade Road South
Ottawa, ON, K2E 7J5

Sent via email [nsullivan@patersongroup.ca]

Dear Mr. Sullivan,

Re: Information Request
«3809 Borrisokane Road», Ottawa, Ontario ("Subject Property")

Internal Department Circulation

The Planning, Infrastructure and Economic Development Department has the following information in response to your request for information regarding the Subject Property:

- **Solid Waste Services**: The Solid Waste Services Database identifies properties that are located within 5 km of a Waste Management Facility. The Solid Waste Services Database has identified that the subject property is located within 1.0 km of the Trail Waste Facility (4309 Trail Road); within 2.0 km of the Barnsdale YLW (4296 Barnsdale Road); and within 3.0 km of the Plastco Waste Converson Facility (4478 Trail Road).

Search of Historical Land Use Inventory

This acknowledges receipt of the signed Disclaimer regarding your request for information from the City's Historical Land Use Inventory (HLUI 2005) database for the Subject Property.

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

The HLUI database was also searched for activity associated with properties located within 250m of the Subject Property. The search revealed the following:

City of Ottawa
Planning, Infrastructure and Economic Development Department

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 14743
Fax: (613) 560-6006
www.ottawa.ca

Ville d'Ottawa
Services de la planification, de l'infrastructure et du développement économique

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 14743
Téléc: (613) 560-6006
www.ottawa.ca

- There are no activities associated with the properties located within 250m of the Subject Property.

A site map has been included to show the location of the Subject Property.

Additional information may be obtained by contacting:

Ontario's Environmental Registry

The Environmental Registry found at **http://www.ebr.gov.on.ca/ERS-WEB-External/** contains "public notices" about environmental matters being proposed by all government ministries covered by the Environmental Bill of Rights. The public notices may contain information about proposed new laws, regulations, policies and programs or about proposals to change or eliminate existing ones. By using keys words i.e. name of proponent/owner and the address one can ascertain if there is any information on the proponent and address under the following categories: Ministry, keywords, notice types, Notice Status, Acts, Instruments and published date (all years).

The Ontario Land Registry Office

Registration of real property is recorded in the Ontario Land Registry Office through the Land Titles Act or the Registry Act. Documents relating to title and other agreements that may affect your property are available to the public for a fee. It is recommended that a property search at the Land Registry Office be included in any investigation as to the historic use of your property. The City of Ottawa cannot comment on any documents to which it is not a party.

Court House
161 Elgin Street 4th Floor
Ottawa ON K2P 2K1
Tel: (613) 239-1230
Fax: (613) 239-1422

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.

Furthermore, the HLUI database and the results of this search in no way confirm the presence or absence of contamination or pollution of any kind. This information is provided on the assumption that it will not be relied upon by any person for any purpose whatsoever. The City of Ottawa denies all liability to any persons attempting to rely on any information provided from the HLUI database.

Please note that in responding to your request, the City of Ottawa does not guarantee or comment on the environmental condition of the Subject Property. You may wish to contact the Ontario Ministry of Environment and Climate Change for additional information.

If you have any further questions or comments, please contact Samantha Gatchene at 613-580-2424 ext. 14743 or HLUI@ottawa.ca

Sincerely,

Samantha Gatchene

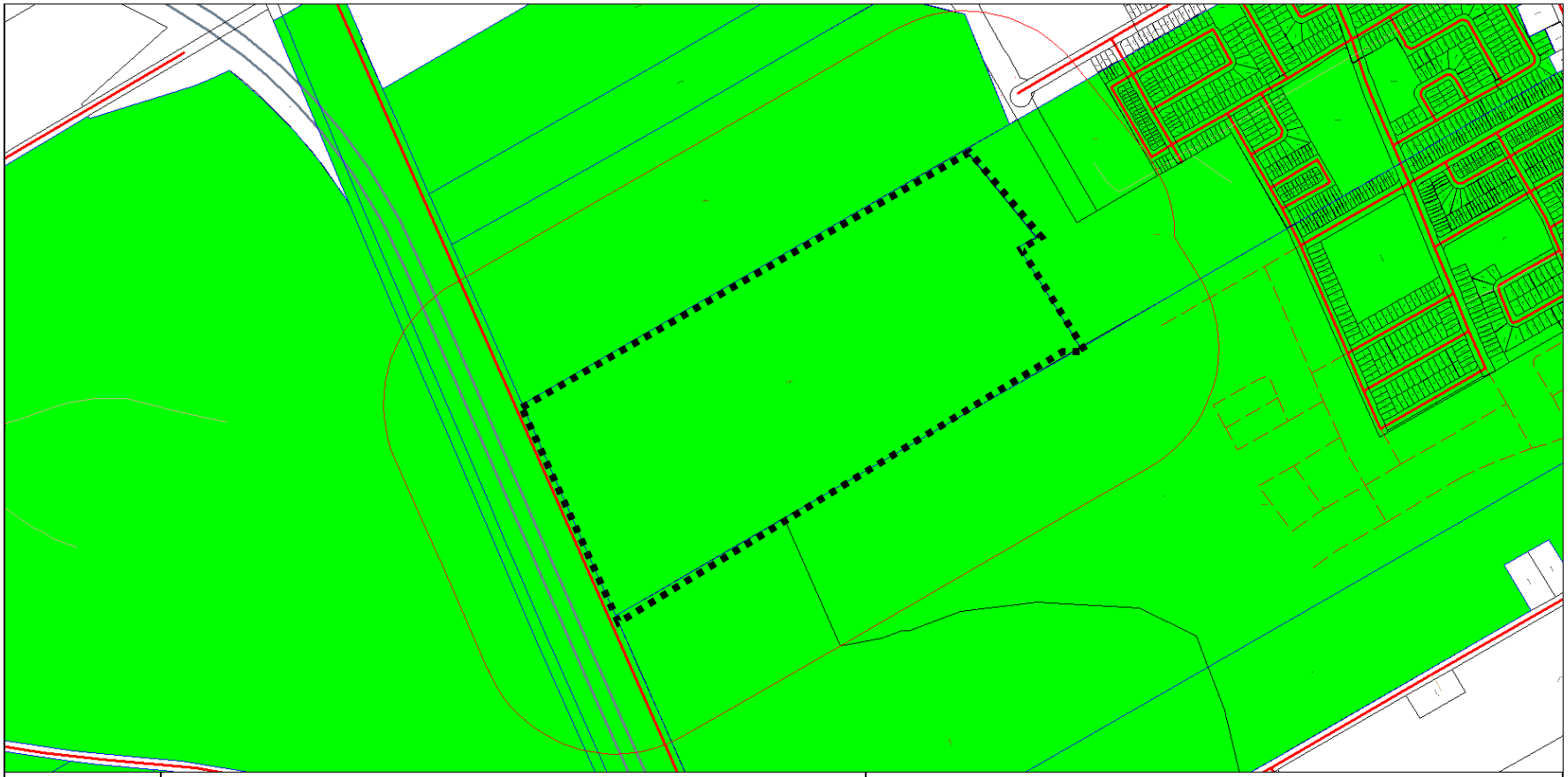
Per:

Michael Boughton, MCIP, RPP
Senior Planner
Development Review East
Planning Services
Planning, Infrastructure and Economic Development Department

MB/SG

Enclosures

cc: File no. D06-03-19-0162



Scale 1: n/a	3809 Borrisokane Road Ottawa, ON File # D06-03-19-0162 Samantha Gatchene Ottawa	Overview = Subject Site

ENVIRONMENTAL RISK INFORMATION SERVICES

DATABASE REPORT

Project Property:	*Phase I ESA* *3713 Borrisokane Road* *Nepean ON K2J 0T2*
Project No:	*PE4689*
Report Type:	*Standard Report*
Order No:	*20190718218*
Requested by:	*Paterson Group Inc.*
Date Completed:	*July 24, 2019*

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

Table of Contents

Executive Summary

Property Information:

Project Property:	*Phase I ESA* *3713 Borrisokane Road Nepean ON K2J 0T2*
Project No:	*PE4689*

Coordinates:

Latitude:	*45.240741*
Longitude:	*-75.749773*
UTM Northing:	*5,009,967.59*
UTM Easting:	*441,154.41*
UTM Zone:	*UTM Zone 18T*

Elevation: *344 FT*
104.98 M

Order Information:

Order No:	*20190718218*
Date Requested:	*July 18, 2019*
Requested by:	*Paterson Group Inc.*
Report Type:	*Standard Report*

Historical/Products:

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	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	0	0
CA	*Certificates of Approval*	Y	0	0	0
CDRY	*Dry Cleaning Facilities*	Y	0	0	0
CFOT	*Commercial Fuel Oil Tanks*	Y	0	0	0
CHEM	*Chemical Register*	Y	0	0	0
CNG	*Compressed Natural Gas Stations*	Y	0	0	0
COAL	*Inventory of Coal Gasification Plants and Coal Tar Sites*	Y	0	0	0
CONV	*Compliance and Convictions*	Y	0	0	0
CPU	*Certificates of Property Use*	Y	0	0	0
DRL	*Drill Hole Database*	Y	0	0	0
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
EPAR	*Environmental Penalty Annual Report*	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	*Greenhouse 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

Database	Name	Searched	Project Property	Within 0.25 km	Total
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBP	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGWE	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	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	0	0	0
	Total:		0	0	0

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number

No records found in the selected databases for the project property.

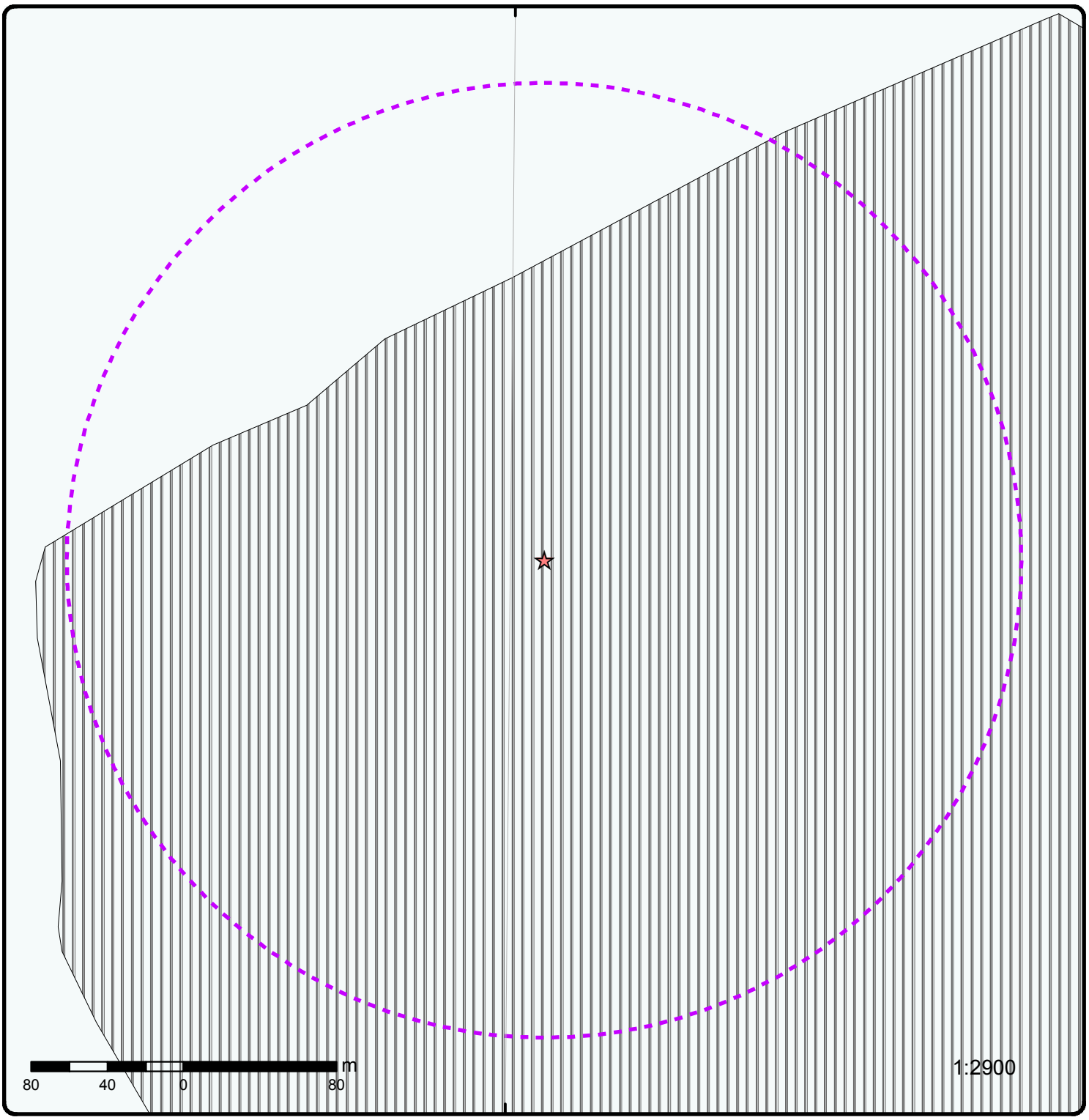
Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number

No records found in the selected databases for the surrounding properties.

Executive Summary: Summary By Data Source

No records found in the selected databases for the project property or surrounding properties.



Map : 0.25 Kilometer Radius

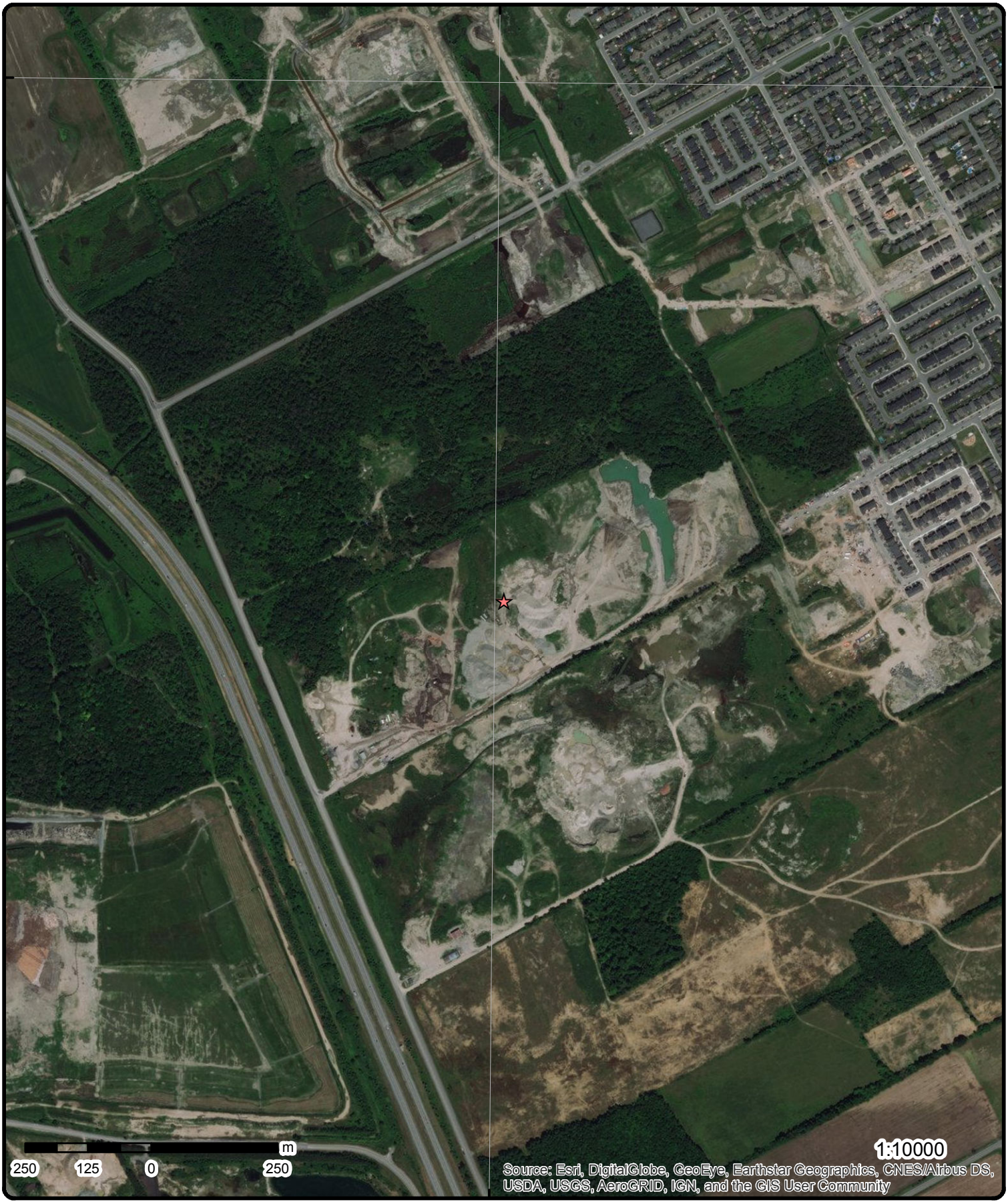
Order No: 20190718218

Address: 3713 Borrisokane Road, Nepean, ON, K2J 0T2

ENVIRONMENTAL RISK INFORMATION SERVICES

- Expressway
- Principal Highway
- Secondary Highway
- Major Road
- Local road
- Trail
- Proposed Road
- Ferry Route/Ice Road
- Industrial and Resource - Regions
- Main Line
- Sidetrack
- Transit Line
- Abandoned Line
- National Park
- Provincial or Territorial Park
- Other Park
- Golf Course or Driving Range
- Park or Sports Field
- Other Recreation Area

Source: © 2015 DMTI Spatial Inc.



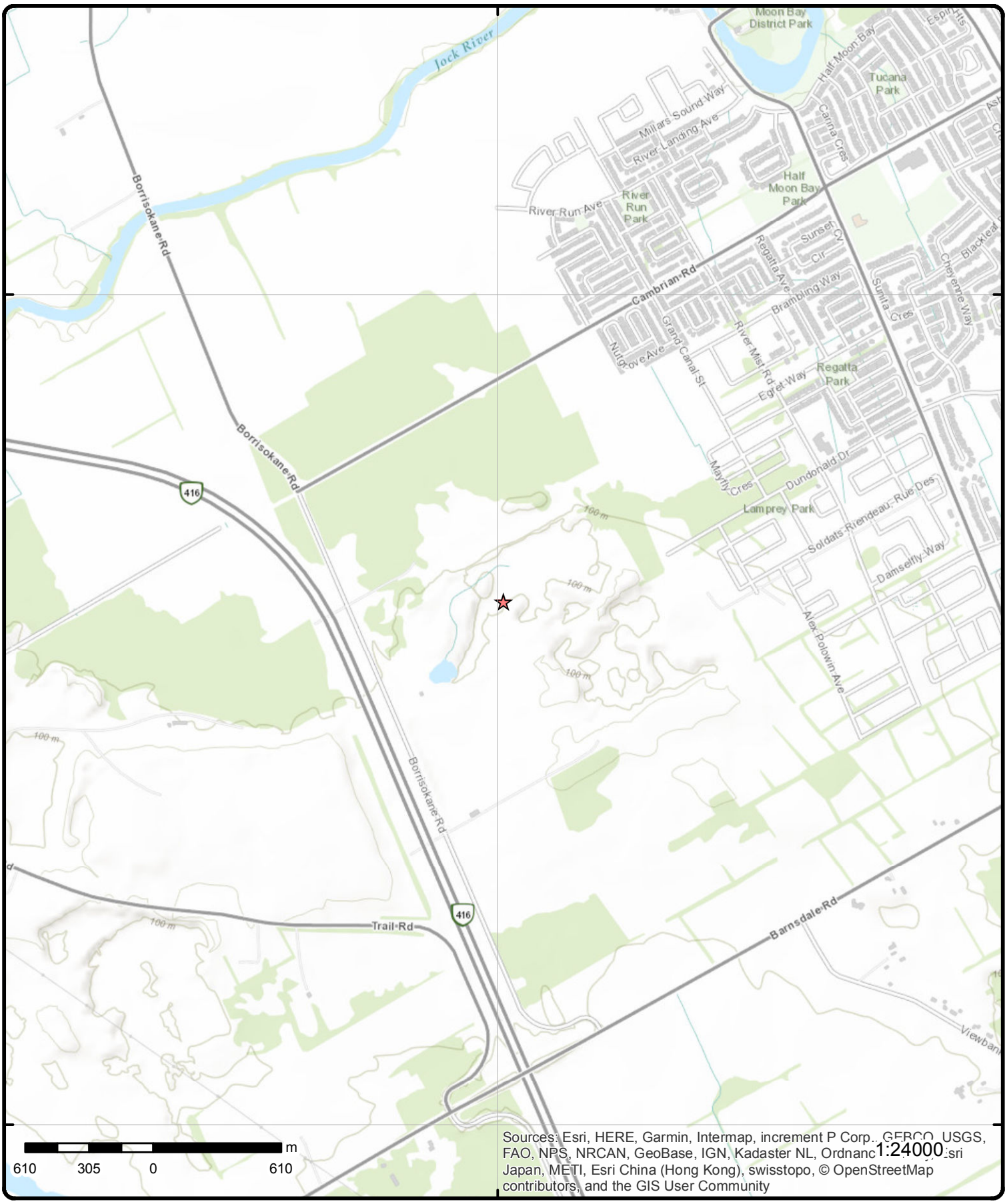
Aerial (2017)

Address: 3713 Borrisokane Road, Nepean, ON, K2J 0T2

Source: ESRI World Imagery

Order No: 20190718218

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



Topographic Map

Address: 3713 Borrisokane Road, Nepean, ON, K2J 0T2

Source: ESRI World Topographic Map

Order No: 20190718218

ENVIRONMENTAL RISK INFORMATION SERVICES

Detail Report

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

No records found in the selected databases for the project property or surrounding properties.

Unplottable Summary

Total: 11 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
AGR	Marcel Brazeau Limited	Lot Pt 8, Con III RF	NEPEAN ON	
AGR	George W. Drummond Limited	Lot 9, Con III RF	NEPEAN ON	
LIMO	Fernand Leduc Cumberland	West 1/2 of Lot 9, Concession 3 Ottawa	ON	
LIMO	Cumberland Landfill Fernand Leduc City of Ottawa	Lot 9, Concession 3 Ottawa	ON	
WWIS		lot 9	ON	
WWIS		lot 9	ON	
WWIS		lot 8	ON	
WWIS		lot 8	ON	
WWIS		lot 8	ON	
WWIS		lot 9	ON	
WWIS		lot 9	ON	

Unplottable Report

Site: ***Marcel Brazeau Limited***
Lot Pt 8, Con III RF NEPEAN ON

Database: ***AGR***

ID:	4219	***Location Name:***	
Current Status:		***Licenced Area (ha):***	43.7
Status Date:		***Extraction Area:***	
Effective Date:		***Authority Type:***	
Approval Type:	Class A Licence	***Section:***	
Operation Type:	Pit	***Municipality:***	OTTAWA
Max Annual Tonnage:	300000	***County:***	OTTAWA-CARLETON R
Unlimited Tonnage:		***District:***	

Site: ***George W. Drummond Limited***
Lot 9, Con III RF NEPEAN ON

Database: ***AGR***

ID:	4074	***Location Name:***	
Current Status:		***Licenced Area (ha):***	22.3
Status Date:		***Extraction Area:***	
Effective Date:		***Authority Type:***	
Approval Type:	Class A Licence	***Section:***	
Operation Type:	Pit	***Municipality:***	OTTAWA
Max Annual Tonnage:	350000	***County:***	OTTAWA-CARLETON R
Unlimited Tonnage:		***District:***	

Site: ***Fernand Leduc Cumberland***
West 1/2 of Lot 9, Concession 3 Ottawa ON

Database: ***LIMO***

ECA/Instrument No:	A460604	***Natural Attenuation:***	
Oper Status 2016:	Closed	***Liners:***	
C of A Issue Date:		***Cover Material:***	
C of A Issued to:		***Leachate Off-Site:***	
Lndfl Gas Mgmt (P):		***Leachate On Site:***	
Lndfl Gas Mgmt (F):		***Req Coll Lndfll Gas:***	
Lndfl Gas Mgmt (E):		***Lndfll Gas Coll:***	
Lndfl Gas Mgmt Sys:		***Total Waste Rec:***	
Landfill Gas Mntr:		***TWR Methodology:***	
Leachate Coll Sys:		***TWR Unit:***	
ERC Est Vol (m3):		***Tot Aprv Cap Unit:***	
ERC Volume Unit:		***Financial Assurance:***	
ERC Dt Last Det:		***Last Report Year:***	
Landfill Type:		***MOE Region:***	
Source File Type:		***MOE District:***	
Fill Rate:		***Site County:***	
Fill Rate Unit:		***Lot:***	
Tot Fill Area (ha):		***Concession:***	
Tot Site Area (ha):		***Latitude:***	
Footprint:		***Longitude:***	
Tot Apprv Cap (m3):		***Easting:***	
Contam Atten Zone:		***Northing:***	
Grndwtr Mntr:		***UTM Zone:***	
Surf Wtr Mntr:		***Data Source:***	
Air Emis Monitor:			
Approved Waste Type:			
Client Site Name:			
ERC Methodology:			
Site Name:	Fernand Leduc Cumberland		

Site Location Details:
Service Area:
Page URL:

Site: ***Cumberland Landfill Fernand Leduc City of Ottawa***
Lot 9, Concession 3 Ottawa ON

Database: ***LIMO***

ECA/Instrument No:	A461602	***Natural Attenuation:***	
Oper Status 2016:	Closed	***Liners:***	
C of A Issue Date:		***Cover Material:***	
C of A Issued to:		***Leachate Off-Site:***	
Lndfl Gas Mgmt (P):		***Leachate On Site:***	
Lndfl Gas Mgmt (F):		***Req Coll Lndfll Gas:***	
Lndfl Gas Mgmt (E):		***Lndfll Gas Coll:***	
Lndfl Gas Mgmt Sys:		***Total Waste Rec:***	
Landfill Gas Mntr:		***TWR Methodology:***	
Leachate Coll Sys:		***TWR Unit:***	
ERC Est Vol (m3):		***Tot Aprv Cap Unit:***	
ERC Volume Unit:		***Financial Assurance:***	
ERC Dt Last Det:		***Last Report Year:***	
Landfill Type:		***MOE Region:***	
Source File Type:		***MOE District:***	
Fill Rate:		***Site County:***	
Fill Rate Unit:		***Lot:***	
Tot Fill Area (ha):		***Concession:***	
Tot Site Area (ha):		***Latitude:***	
Footprint:		***Longitude:***	
Tot Apprv Cap (m3):		***Easting:***	
Contam Atten Zone:		***Northing:***	
Grndwtr Mntr:		***UTM Zone:***	
Surf Wtr Mntr:		***Data Source:***	
Air Emis Monitor:			
Approved Waste Type:			
Client Site Name:			
ERC Methodology:			
Site Name:	Cumberland Landfill Fernand Leduc City of Ottawa		

Site Location Details:
Service Area:
Page URL:

Site:
lot 9 ON

Database: ***WWIS***

Well ID:	1521953	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	11/2/1987
Sec. Water Use:	Cooling And A/C	***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1558
Casing Material:		***Form Version:***	1
Audit No:	19330	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	NEPEAN TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	009
Well Depth:		***Concession:***	
Overburden/Bedrock:		***Concession Name:***	
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	
Flowing (Y/N):		***Zone:***	
Flow Rate:		***UTM Reliability:***	
Clear/Cloudy:			

Bore Hole Information

Bore Hole ID:	10043766	***Elevation:***	
DP2BR:	6	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***North83:***	
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	9/26/1987	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931049764
Layer:	2
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	78
Other Materials:	MEDIUM-GRAINED
Mat3:	85
Other Materials:	SOFT
Formation Top Depth:	6
Formation End Depth:	170
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931049765
Layer:	3
Color:	2
General Color:	GREY
Mat1:	18
Most Common Material:	SANDSTONE
Mat2:	78
Other Materials:	MEDIUM-GRAINED
Mat3:	
Other Materials:	
Formation Top Depth:	170
Formation End Depth:	275
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931049763
Layer:	1
Color:	6
General Color:	BROWN
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Other Materials:	STONES
Mat3:	79
Other Materials:	PACKED
Formation Top Depth:	0
Formation End Depth:	6

Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID:
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10592336
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930076486
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 21
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930076487
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 275
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991521953
Pump Set At:
Static Level: 12
Final Level After Pumping: 125
Recommended Pump Depth: 160
Pumping Rate: 20
Flowing Rate:
Recommended Pump Rate: 5
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934902869
Test Type: Draw Down
Test Duration: 60

Test Level: 125
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934108234
Test Type: Draw Down
Test Duration: 15
Test Level: 125
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934392338
Test Type: Draw Down
Test Duration: 30
Test Level: 125
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934653477
Test Type: Draw Down
Test Duration: 45
Test Level: 125
Test Level UOM: ft

Water Details

Water ID: 933479686
Layer: 1
Kind Code: 2
Kind: SALTY
Water Found Depth: 270
Water Found Depth UOM: ft

Site:
lot 9 ON

Database:
WWIS

Well ID: 1521954
Construction Date:
Primary Water Use: Domestic
Sec. Water Use: Cooling And A/C
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No: 19331
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:
Clear/Cloudy:

Data Entry Status:
Data Src: 1
Date Received: 11/2/1987
Selected Flag: Yes
Abandonment Rec:
Contractor: 1558
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: NEPEAN TOWNSHIP
Site Info:
Lot: 009
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10043767
DP2BR: 6
Spatial Status:

Elevation:
Elevrc:
Zone: 18

Code OB: r
Code OB Desc: Bedrock
Open Hole:
Cluster Kind:
Date Completed: 9/28/1987
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

East83:
North83:
Org CS:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931049767
Layer: 2
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2: 78
Other Materials: MEDIUM-GRAINED
Mat3: 85
Other Materials: SOFT
Formation Top Depth: 6
Formation End Depth: 170
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931049768
Layer: 3
Color: 2
General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2: 78
Other Materials: MEDIUM-GRAINED
Mat3:
Other Materials:
Formation Top Depth: 170
Formation End Depth: 275
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931049766
Layer: 1
Color: 6
General Color: BROWN
Mat1: 05
Most Common Material: CLAY
Mat2: 12
Other Materials: STONES
Mat3: 79
Other Materials: PACKED
Formation Top Depth: 0
Formation End Depth: 6
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID:
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10592337
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930076489
Layer: 2
Material:
Open Hole or Material:
Depth From:
Depth To: 255
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930076488
Layer: 1
Material:
Open Hole or Material:
Depth From:
Depth To: 21
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930076490
Layer: 3
Material:
Open Hole or Material:
Depth From:
Depth To: 275
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991521954
Pump Set At:
Static Level: 12
Final Level After Pumping: 125
Recommended Pump Depth: 175
Pumping Rate: 25
Flowing Rate:
Recommended Pump Rate: 5
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0

Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934653478
Test Type: Draw Down
Test Duration: 45
Test Level: 125
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934108235
Test Type: Draw Down
Test Duration: 15
Test Level: 125
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934902870
Test Type: Draw Down
Test Duration: 60
Test Level: 125
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934392339
Test Type: Draw Down
Test Duration: 30
Test Level: 125
Test Level UOM: ft

Water Details

Water ID: 933479687
Layer: 1
Kind Code: 2
Kind: SALTY
Water Found Depth: 268
Water Found Depth UOM: ft

Site:
lot 8 ON

Database:
WWIS

Well ID: 1522816
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Recharge Well
Water Type:
Casing Material:
Audit No: 27054
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:

Data Entry Status:
Data Src: 1
Date Received: 10/26/1988
Selected Flag: Yes
Abandonment Rec:
Contractor: 3644
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: NEPEAN TOWNSHIP
Site Info:
Lot: 008
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Clear/Cloudy:

Bore Hole Information

Bore Hole ID:	10044623	***Elevation:***	
DP2BR:	67	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***North83:***	
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	8/8/1988	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931052666
Layer:	3
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	90
Other Materials:	VERY
Mat3:	85
Other Materials:	SOFT
Formation Top Depth:	67
Formation End Depth:	90
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931052667
Layer:	4
Color:	2
General Color:	GREY
Mat1:	15
Most Common Material:	LIMESTONE
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	90
Formation End Depth:	100
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931052664
Layer:	1
Color:	2
General Color:	GREY
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Other Materials:	STONES
Mat3:	

Other Materials:
Formation Top Depth: 0
Formation End Depth: 28
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931052665
Layer: 2
Color: 2
General Color: GREY
Mat1: 14
Most Common Material: HARDPAN
Mat2: 11
Other Materials: GRAVEL
Mat3:
Other Materials:
Formation Top Depth: 28
Formation End Depth: 67
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID:
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10593193
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930078054
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 69
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930078055
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 100
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991522816
Pump Set At:

Static Level: 7
Final Level After Pumping: 60
Recommended Pump Depth: 60
Pumping Rate: 20
Flowing Rate:
Recommended Pump Rate: 15
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934647962
Test Type:
Test Duration: 45
Test Level: 60
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934386979
Test Type:
Test Duration: 30
Test Level: 60
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934111556
Test Type:
Test Duration: 15
Test Level: 60
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934905170
Test Type:
Test Duration: 60
Test Level: 60
Test Level UOM: ft

Water Details

Water ID: 933480847
Layer: 2
Kind Code: 1
Kind: FRESH
Water Found Depth: 94
Water Found Depth UOM: ft

Water Details

Water ID: 933480846
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 75
Water Found Depth UOM: ft

Site:
lot 8 ON

Database:
WWIS

Well ID:	1500396	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	2/26/1948
Sec. Water Use:	0	***Selected Flag:***	Yes
Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1107
Casing Material:		***Form Version:***	1
Audit No:		***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	OTTAWA CITY (GLOUCESTER)
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	008
Well Depth:		***Concession:***	
Overburden/Bedrock:		***Concession Name:***	JG
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	
Flowing (Y/N):		***Zone:***	
Flow Rate:		***UTM Reliability:***	
Clear/Cloudy:			

Bore Hole Information

Bore Hole ID:	10022441	***Elevation:***	
DP2BR:	28	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***North83:***	
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	10/29/1947	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	930989161
Layer:	1
Color:	3
General Color:	BLUE
Mat1:	05
Most Common Material:	CLAY
Mat2:	12
Other Materials:	STONES
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	28
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	930989162
Layer:	2
Color:	
General Color:	
Mat1:	26

Most Common Material: ROCK
Mat2: 19
Other Materials: SLATE
Mat3:
Other Materials:
Formation Top Depth: 28
Formation End Depth: 51
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID:
Method Construction Code: 1
Method Construction: Cable Tool
Other Method Construction:

Pipe Information

Pipe ID: 10571011
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930037816
Layer: 2
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 51
Casing Diameter: 4
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930037815
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 28
Casing Diameter: 4
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991500396
Pump Set At:
Static Level: 6
Final Level After Pumping: 6
Recommended Pump Depth:
Pumping Rate: 8
Flowing Rate:
Recommended Pump Rate: 8
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 2
Pumping Duration HR: 0
Pumping Duration MIN: 30
Flowing: N

Water Details

Water ID:	933452913
Layer:	1
Kind Code:	5
Kind:	Not stated
Water Found Depth:	51
Water Found Depth UOM:	ft

Site:
lot 8 ON

Database:
WWIS

Well ID:	1528401	***Data Entry Status:***	
Construction Date:		***Data Src:***	1
Primary Water Use:	Domestic	***Date Received:***	1/26/1995
Sec. Water Use:		***Selected Flag:***	Yes
Final Well Status:	Abandoned-Quality	***Abandonment Rec:***	
Water Type:		***Contractor:***	1558
Casing Material:		***Form Version:***	1
Audit No:	147796	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	NEPEAN TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	008
Well Depth:		***Concession:***	
Overburden/Bedrock:		***Concession Name:***	
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	
Flowing (Y/N):		***Zone:***	
Flow Rate:		***UTM Reliability:***	
Clear/Cloudy:			

Bore Hole Information

Bore Hole ID:	10049938	***Elevation:***	
DP2BR:		***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	_	***East83:***	
Code OB Desc:	No formation data	***North83:***	
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	12/9/1994	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Annular Space/Abandonment Sealing Record

Plug ID:	933113303
Layer:	1
Plug From:	0
Plug To:	41
Plug Depth UOM:	ft

Method of Construction & Well Use

Method Construction ID:	
Method Construction Code:	0

Method Construction: Not Known
Other Method Construction:

Pipe Information

Pipe ID: 10598508
Casing No: 1
Comment:
Alt Name:

Site:
lot 9 ON

Database: ***WWIS***

Well ID: 1520053
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:
Final Well Status: Water Supply
Water Type:
Casing Material:
Audit No:
Tag:
Construction Method:
Elevation (m):
Elevation Reliability:
Depth to Bedrock:
Well Depth:
Overburden/Bedrock:
Pump Rate:
Static Water Level:
Flowing (Y/N):
Flow Rate:
Clear/Cloudy:

Data Entry Status:
Data Src: 1
Date Received: 10/8/1985
Selected Flag: Yes
Abandonment Rec:
Contractor: 3644
Form Version: 1
Owner:
Street Name:
County: OTTAWA-CARLETON
Municipality: NEPEAN TOWNSHIP
Site Info:
Lot: 009
Concession:
Concession Name:
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

Bore Hole ID: 10041903
DP2BR:
Spatial Status:
Code OB: o
Code OB Desc: Overburden
Open Hole:
Cluster Kind:
Date Completed: 8/29/1985
Remarks:
Elevrc Desc:
Location Source Date:
Improvement Location Source:
Improvement Location Method:
Source Revision Comment:
Supplier Comment:

Elevation:
Elevrc:
Zone: 18
East83:
North83:
Org CS:
UTMRC: 9
UTMRC Desc: unknown UTM
Location Method: na

Overburden and Bedrock Materials Interval

Formation ID: 931043587
Layer: 2
Color: 2
General Color: GREY
Mat1: 14
Most Common Material: HARDPAN
Mat2: 11
Other Materials: GRAVEL
Mat3:
Other Materials:
Formation Top Depth: 49
Formation End Depth: 78

Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931043588
Layer: 3
Color: 2
General Color: GREY
Mat1: 11
Most Common Material: GRAVEL
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 78
Formation End Depth: 82
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931043586
Layer: 1
Color: 2
General Color: GREY
Mat1: 05
Most Common Material: CLAY
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 49
Formation End Depth UOM: ft

Method of Construction & Well Use

Method Construction ID:
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10590473
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930073156
Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 79
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991520053
Pump Set At:
Static Level: 1
Final Level After Pumping: 20
Recommended Pump Depth: 20
Pumping Rate: 100
Flowing Rate:
Recommended Pump Rate: 10
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934376713
Test Type:
Test Duration: 30
Test Level: 20
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934655464
Test Type:
Test Duration: 45
Test Level: 20
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934904433
Test Type:
Test Duration: 60
Test Level: 20
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934110331
Test Type:
Test Duration: 15
Test Level: 20
Test Level UOM: ft

Water Details

Water ID: 933477201
Layer: 1
Kind Code: 1
Kind: FRESH
Water Found Depth: 82
Water Found Depth UOM: ft

Site:
lot 9 ON

Database: ***WWIS***

Well ID: 1530478
Construction Date:
Primary Water Use: Domestic
Sec. Water Use:

Data Entry Status:
Data Src: 1
Date Received: 3/2/1999
Selected Flag: Yes

Final Well Status:	Water Supply	***Abandonment Rec:***	
Water Type:		***Contractor:***	1119
Casing Material:		***Form Version:***	1
Audit No:	182459	***Owner:***	
Tag:		***Street Name:***	
Construction Method:		***County:***	OTTAWA-CARLETON
Elevation (m):		***Municipality:***	NEPEAN TOWNSHIP
Elevation Reliability:		***Site Info:***	
Depth to Bedrock:		***Lot:***	009
Well Depth:		***Concession:***	
Overburden/Bedrock:		***Concession Name:***	
Pump Rate:		***Easting NAD83:***	
Static Water Level:		***Northing NAD83:***	
Flowing (Y/N):		***Zone:***	
Flow Rate:		***UTM Reliability:***	
Clear/Cloudy:			

Bore Hole Information

Bore Hole ID:	10052013	***Elevation:***	
DP2BR:	49	***Elevrc:***	
Spatial Status:		***Zone:***	18
Code OB:	r	***East83:***	
Code OB Desc:	Bedrock	***North83:***	
Open Hole:		***Org CS:***	
Cluster Kind:		***UTMRC:***	9
Date Completed:	11/18/1998	***UTMRC Desc:***	unknown UTM
Remarks:		***Location Method:***	na
Elevrc Desc:			
Location Source Date:			
Improvement Location Source:			
Improvement Location Method:			
Source Revision Comment:			
Supplier Comment:			

Overburden and Bedrock Materials Interval

Formation ID:	931075626
Layer:	2
Color:	
General Color:	
Mat1:	05
Most Common Material:	CLAY
Mat2:	13
Other Materials:	BOULDERS
Mat3:	
Other Materials:	
Formation Top Depth:	4
Formation End Depth:	49
Formation End Depth UOM:	ft

Overburden and Bedrock Materials Interval

Formation ID:	931075625
Layer:	1
Color:	
General Color:	
Mat1:	28
Most Common Material:	SAND
Mat2:	
Other Materials:	
Mat3:	
Other Materials:	
Formation Top Depth:	0
Formation End Depth:	4

Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931075628
Layer: 4
Color: 2
General Color: GREY
Mat1: 18
Most Common Material: SANDSTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 117
Formation End Depth: 190
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

Formation ID: 931075627
Layer: 3
Color: 2
General Color: GREY
Mat1: 15
Most Common Material: LIMESTONE
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 49
Formation End Depth: 117
Formation End Depth UOM: ft

Annular Space/Abandonment Sealing Record

Plug ID: 933115625
Layer: 1
Plug From: 2
Plug To: 54
Plug Depth UOM: ft

Method of Construction & Well Use

Method Construction ID:
Method Construction Code: 5
Method Construction: Air Percussion
Other Method Construction:

Pipe Information

Pipe ID: 10600583
Casing No: 1
Comment:
Alt Name:

Construction Record - Casing

Casing ID: 930090709
Layer: 1
Material: 4

Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 52
Casing Diameter: 8
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930090710
Layer: 2
Material: 1
Open Hole or Material: STEEL
Depth From:
Depth To: 54
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930090711
Layer: 3
Material: 4
Open Hole or Material: OPEN HOLE
Depth From:
Depth To: 190
Casing Diameter: 6
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pump Test ID: 991530478
Pump Set At:
Static Level: 36
Final Level After Pumping: 180
Recommended Pump Depth: 180
Pumping Rate: 4
Flowing Rate:
Recommended Pump Rate: 4
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: N

Draw Down & Recovery

Pump Test Detail ID: 934663013
Test Type: Recovery
Test Duration: 45
Test Level: 36
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934118874
Test Type: Recovery
Test Duration: 15
Test Level: 130
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934902183
Test Type: Recovery
Test Duration: 60
Test Level: 36
Test Level UOM: ft

Draw Down & Recovery

Pump Test Detail ID: 934385050
Test Type: Recovery
Test Duration: 30
Test Level: 84
Test Level UOM: ft

Water Details

Water ID: 933490630
Layer: 2
Kind Code: 5
Kind: Not stated
Water Found Depth: 172
Water Found Depth UOM: ft

Water Details

Water ID: 933490629
Layer: 1
Kind Code: 5
Kind: Not stated
Water Found Depth: 170
Water Found Depth UOM: ft

Appendix: Database Descriptions

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

Abandoned Aggregate Inventory: Provincial AAGR

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

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

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

Government Publication Date: Up to Sep 2018

Abandoned Mine Information System: Provincial AMIS

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

Government Publication Date: 1800-Oct 2018

Anderson's Waste Disposal Sites: Private ANDR

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

Government Publication Date: 1860s-Present

Automobile Wrecking & Supplies: Private AUWR

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

Government Publication Date: 1999-Jan 31, 2019

Borehole: Provincial BORE

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

Government Publication Date: 1875-Jul 2018

Certificates of Approval: Provincial CA

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

Government Publication Date: 1985-Oct 30, 2011*

Dry Cleaning Facilities: Federal CDRY

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

Government Publication Date: Jan 2004-Dec 2017

Commercial Fuel Oil Tanks: Provincial CFOT

List of commercial underground fuel oil tanks made available by the Fuels Safety Program of the Technical Standards & Safety Authority (TSSA). Ontario Regulation 213/01 of the Technical Standards and Safety Act (2000) requires that all underground tanks be registered with the TSSA. Note: the Fuels Safety Division does not register waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of commercial fuel tanks in the province. The TSSA updates information in its system on an ongoing basis; this listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

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: 1999-Jan 31, 2019

Compressed Natural Gas Stations: Private CNG

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

Government Publication Date: Dec 2012 - Mar 2019

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-May 2019

Certificates of Property Use: Provincial CPU

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

Government Publication Date: 1994-Jun 30, 2019

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 - Oct 2018

Environmental Activity and Sector Registry: Provincial EASR

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

Government Publication Date: Oct 2011-Jun 31, 2019

Environmental Registry: Provincial EBR

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

Government Publication Date: 1994-Jun 30, 2019

Environmental Compliance Approval: Provincial ECA

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

Government Publication Date: Oct 2011-Jun 31, 2019

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-Apr 30, 2019

Environmental Issues Inventory System: Federal EIIS

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

Government Publication Date: 1992-2001*

Emergency Management Historical Event: Provincial EMHE

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

Government Publication Date: Dec 31, 2016

Environmental Penalty Annual Report: Provincial EPAR

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

Government Publication Date: Jan 1, 2011 - Dec 31, 2018

List of TSSA Expired Facilities: Provincial EXP

List of facilities and tanks - for which there was once a registration - no longer registered with the Fuels Safety Program of the Technical Standards and Safety Authority (TSSA). Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. Tanks which have been removed from the ground are included in the expired facilities inventory held by the TSSA. Notes: the Fuels Safety Division did not register private fuel underground/aboveground storage tanks prior to January of 1990, or furnace oil tanks prior to May 1, 2002; nor does the Division register waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

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: Jun 2000-May 2019

Fisheries & Oceans Fuel Tanks: Federal FOFT

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

Government Publication Date: 1964-Sep 2018

Fuel Storage Tank: Provincial FST

List of registered private and retail fuel storage tanks made available by the Fuels Safety Program of the Technical Standards & Safety Authority (TSSA). Ontario Regulation 213/01 of the Technical Standards and Safety Act (2000) requires that all underground tanks be registered with the TSSA. Notes: the Fuels Safety Division did not register private fuel underground/aboveground storage tanks prior to January of 1990, or furnace oil tanks prior to May 1, 2002; nor does the Division register waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of fuel storage tanks/tank facilities in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

Fuel Storage Tank - Historic: Provincial FSTH

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

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

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

Government Publication Date: 1986-Mar 31, 2019

Greenhouse Gas Emissions from Large Facilities: Federal GHG

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

Government Publication Date: 2013-Dec 2017

TSSA Historic Incidents: Provincial HINC

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

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

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

Government Publication Date: 1950-Aug 2003*

TSSA Incidents: Provincial INC

List of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC) and made available by the Technical Standards and Safety Authority (TSSA). Under the Technical Standards & Safety Act (2000), the 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. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

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: Feb 28, 2019

Canadian Mine Locations: Private MINE

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

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

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

Government Publication Date: 1846-Jan 2019

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

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

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

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

Government Publication Date: Dec 31, 2017

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

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

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

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

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

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

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents: Federal NEBI

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

Government Publication Date: 2008-Dec 31, 2018

National Energy Board Wells: Federal NEBP

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

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES): Federal NEES

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

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

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

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

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

Government Publication Date: 1993-May 2017

Oil and Gas Wells: Private OGWE

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

Government Publication Date: 1988-May 31, 2019

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-May 2018

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-Jun 30, 2019

Canadian Pulp and Paper: Private PAP

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

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

Parks Canada Fuel Storage Tanks: Federal PCFT

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

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

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

Government Publication Date: 1988-Mar 2019

TSSA Pipeline Incidents: Provincial PINC

List of pipeline incidents (strikes, leaks, spills) made available by the Technical Standards and Safety Authority (TSSA). Under the Technical Standards & Safety Act (2000), the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors, and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of pipeline incidents in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

Private and Retail Fuel Storage Tanks: Provincial PRT

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

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

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

Government Publication Date: 1994-Jun 30, 2019

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: 1986-2016

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-May 2019

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-Jan 31, 2019

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-Feb 2019

Wastewater Discharger Registration Database: Provincial SRDS

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

Government Publication Date: 1990-Dec 31, 2017

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-Aug 2018

TSSA Variances for Abandonment of Underground Storage Tanks: Provincial VAR

List of variances granted for abandoned tanks. Under the Technical Standards and Safety Authority (TSSA) Liquid Fuels Handling Code and Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, an application may be sought for a variance from this code requirement.
Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of tank variances in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

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

Government Publication Date: Oct 2011-Jun 31, 2019

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: Feb 28, 2019

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Nick Sullivan, B.Sc.

patersongroup

- Geotechnical Engineering
- Environmental Engineering
- Hydrogeology
- Geological Engineering
- Materials Testing
- Building Science
- Archaeological Services

POSITION

Junior Environmental Scientist

EDUCATION

McMaster University, B.Sc. 2016
Earth & Environmental Science

Niagara College, Cert. 2017
Environmental Management & Assessment

EXPERIENCE

2018 – Present
Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Junior Environmental Scientist

SELECT LIST OF PROJECTS

Phase I & II Environmental Site Assessments - Ottawa & Brockville
Contaminated Soil and Groundwater Sampling - Ottawa & Kingston
Geotechnical Investigations of Soil and Rock Stratigraphy - Ottawa
Supervising of Environmental Remediation Programs - Ottawa
Designated Substance Surveys - Ottawa
Outdoor Education Interpreter - Canadian Parks & Wilderness Society
Invasive Species Management - Credit Valley Conservation Authority
Public Trail Assessments - Niagara Peninsula Conservation Authority

Mark S. D'Arcy, P. Eng

patersongroup

- Geotechnical Engineering
- Environmental Engineering
- Hydrogeology
- Geological Engineering
- Materials Testing
- Building Science
- Archaeological Services

POSITION

Associate and Supervisor of the Environmental Division
Senior Environmental/Geotechnical Engineer

EDUCATION

Queen's University, B.A.Sc.Eng, 1991
Geotechnical / Geological Engineering

MEMBERSHIPS

Ottawa Geotechnical Group
Professional Engineers of Ontario

EXPERIENCE

1991 to Present
Paterson Group Inc.
Associate and Senior Environmental/Geotechnical Engineer
Environmental and Geotechnical Division
Supervisor of the Environmental Division

SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island
Agricultural Supply Facilities - Eastern Ontario
Laboratory Facility - Edmonton (Alberta)
Ottawa International Airport - Contaminant Migration Study - Ottawa
Richmond Road Reconstruction - Ottawa
Billings Hurdman Interconnect - Ottawa
Bank Street Reconstruction - Ottawa
Environmental Review - Various Laboratories across Canada - CFIA
Dwyer Hill Training Centre - Ottawa
Nortel Networks Environmental Monitoring - Carling Campus - Ottawa
Remediation Program - Block D Lands - Kingston
Investigation of former landfill sites - City of Ottawa
Record of Site Condition for Railway Lands - North Bay
Commercial Properties - Guelph and Brampton
Brownfields Remediation - Alcan Site - Kingston
Montreal Road Reconstruction - Ottawa
Appleford Street Residential Development - Ottawa
Remediation Program - Ottawa Train Yards
Remediation Program - Bayshore and Heron Gate
Gladstone Avenue Reconstruction - Ottawa
Somerset Avenue West Reconstruction - Ottawa