



Phase I Environmental Site Assessment - 49 Folkard Lane, Picton, Ontario

Cambium Reference No.: 6563-002

2018-04-17

Prepared for: Cosmopolitan Homes Ltd.



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Executive Summary

Cosmopolitan Homes Ltd. retained Cambium Inc. to complete a Phase I Environmental Site Assessment of the property at 49 Folkard Lane, in Picton, Ontario (the Site). The roughly 3.44 hectare Site consists of an irregular-shaped land parcel that is currently undeveloped and vacant.

The Phase I Environmental Site Assessment was undertaken to identify potential and actual environmental concerns associated with current and historical activities at the Site and surrounding properties, for the purpose of supporting a Site Plan application.

The Phase I Environmental Site Assessment was conducted consistent with the standard practices established in Canadian Standards Association Standard Z768-01 (Reaffirmed 2016), which identifies the following principal components of a Phase I Environmental Site Assessment: a records review; a site visit; interviews; and evaluation of information and reporting.

Based on the findings of the records review and site visit, the following potential on-site source of environmental contamination was identified:

- A culvert drains onto the west side of the Site, which collects water from an off-site ditch connected to the Picton Golf and Country Club

Potential off-site sources of contamination were identified related to listings in the Ontario Spills database, three (3) of which were related to spills of fuel. Based on the reported quantity of spilled fuel (20 L or less) and/or the inferred location of the occurrence, the listings are not considered to pose an environmental concern for the Site.

Cambium recommends the following best management practices be implemented:

- Secure the Site to prevent on-site dumping, vehicle storage, and snow disposal
- In consultation with the appropriate regulatory authority, redirect the culvert on the west side of the Site such that it no longer drains on-site



- One (1) possible groundwater monitoring well was observed on-site, which should be abandoned as per the requirements of R.R.O. 1990, Regulation 903 - Wells.

Based on the information obtained for this Phase I Environmental Site Assessment, there is no confirmed evidence to suggest a potential for environmental liability associated with the Site; therefore, Cambium concludes that a Phase II Environmental Site Assessment (i.e., soils and groundwater investigation) is not warranted for the Site at this time.

A Freedom of Information request was submitted to the Ministry of the Environment and Climate Change, for environmentally significant records pertaining to the Site. A response was not received from the Ministry prior to completion of this report. Results of the Freedom of Information request will be provided under separate cover if they change the findings of the Phase I Environmental Site Assessment.



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1.0 Introduction

Cosmopolitan Homes Ltd. (the 'Client') retained Cambium Inc. (Cambium) to complete a Phase I Environmental Site Assessment (ESA) of the property at 49 Folkard Lane, Picton, Ontario (the Site). The assessment was completed as a matter of due diligence to identify actual and potential environmental concerns associated with current and historical activities at the Site and surrounding properties, for the purpose of supporting a Site Plan application.

This Phase I ESA was conducted consistent with the standard practices for Phase I ESAs established in the Canadian Standards Association (CSA) Standard Z768-01 (CSA, 2016). This report describes the methods used to investigate actual and/or potential environmental concerns affecting the Site at the time of the assessment.

1.1 Scope of Work

The Phase I ESA consisted of the following:

- A review of pertinent background and historical information including documents such as aerial photographs, city directories, and topographic maps (as available)
- A review and summary of available environmental records obtained from the Site and/or public and private sources
- A site visit and observation of the surrounding properties from publicly accessible areas
- Interview(s) with person(s) knowledgeable of the history of the Site
- Preparation of this report documenting the findings of the Phase I ESA and recommendations for further work, if any, required to ascertain the environmental condition of the Site

No intrusive sampling was completed as part of this Phase I ESA. While the report considers potential environmental concerns, both past and present, it is limited by the availability of information obtained at the time of the assessment.



2.0 Site Description

The Site consists of an approximately 3.44 ha (8.50 acre), irregular-shaped land parcel at 49 Folkard Lane. The Universal Transverse Mercator (UTM) coordinates for the centre of the Site are Zone 18T 329013 E 4877212 N. The site location is shown on Figure 1.

The Site is undeveloped and vacant, and based on site observations, is used for informal recreational purposes (walking trails, recreational vehicles, etc.). The topography of the Site is generally flat. The Site is surrounded on all sides by residential properties, with commercial land use also noted to the north and west.

Picton Bay is located near the east property boundary of the Site. The Site and surrounding land uses are shown on Figure 2. Photographs of the Site are included in Appendix A.



3.0 Phase I ESA Investigation Methodology

3.1 Records Review

Cambium made all appropriate inquiries to obtain the following information and documents as was reasonably ascertainable and pertained to the Site:

- Topographic maps
- Aerial photographs
- City directories
- Property use records (industrial use directories, contaminated site registries, etc.)
- Land parcel register (i.e., Land Title)
- Site plans, building plans, etc.

Information obtained from the Records Review is discussed in Section 4.1.

3.1.1 Miscellaneous Document Review

The following documents were available for review and were used to develop the information database for this report:

- Ontario Base Mapping accessed through Land Information Ontario
- The Physiography of Southern Ontario map through the Ontario Geological Survey (Chapman & Putnam, 1984)
- Aerial imagery available from Google Earth, the Prince Edward County GIS website and the National Air Photo Library (Figure 3 to Figure 7)
- A Freedom of Information (FOI) request was submitted to the Ministry of the Environment and Climate Change (MOECC). A copy of the FOI request is included in Appendix B.



- A request was submitted to the Technical Standards and Safety Authority (TSSA) for available records regarding underground or aboveground storage tanks (USTs or ASTs) at the Site. A copy of the TSSA request is included in Appendix B.
- A search of the City directories for the Site and surrounding properties was not conducted as the rural setting of the Site indicates there would likely be no records.
- A Property Registry search was completed for the Site by Environmental Risk Information Services Ltd. (ERIS). A copy of the Property Registry is included in Appendix C.
- A request was submitted to Opta Information Intelligence (Opta) for available Fire Insurance Plans (FIPs), Insurance Inspection Reports, and Site Plans pertaining to the Site. A copy of the Opta report is included in Appendix D.
- The *Waste Disposal Site Inventory* (MOE, 1991) was reviewed to identify waste disposal sites within 1,000 m of the Site.
- The *Inventory of Industrial Facilities Producing or Using Coal Tar or Related Tars in Ontario* (MOE, 1988a) was reviewed to identify facilities that produced or used coal or related tars within 1,000 m of the Site.
- The *Inventory of Coal Gasification Plant Waste Sites in Ontario* (MOE, 1988b) was reviewed to identify coal gasification plant waste sites within 1,000 m of the Site.
- Previous environmental reports pertaining to the Site were requested from the Client.

3.1.2 Regulatory Records Review

ERIS is a private environmental database and information service company. Cambium contracted ERIS to provide a Database Report for the Site (ERIS, 2016), a copy of which was received on March 16, 2018. The ERIS report summarizes the findings of a search of various federal, provincial, and private source databases for the Site and properties within a search radius of 250 m from the centre of the Site. This search radius was chosen to ensure that all parts of the adjacent properties were included in the database search. An exhaustive list and



detailed description of the various databases searched for in this report is presented in the ERIS report in Appendix E.

3.1.3 Site Visit

A site visit was conducted on March 16, 2018 to observe the Site and adjacent properties (from the Site as well as nearby publicly accessible areas) to identify potential on-site and off-site sources of environmental contamination. The site visit was used to identify the following, if present:

- Areas of surface staining or stressed vegetation
- Areas with fill and/or debris
- The location, contents, construction details, and volumes of ASTs and USTs, and drums, totes, bins, or other containers
- Potable or non-potable water sources, including current and/or historical water sources
- Current and historical sewage works, including locations
- Waste water discharge points
- Water bodies and intermittent ditches
- Ground cover and surface materials
- Below ground access points (e.g., manholes)
- Location of current or historical railway lines or spurs
- Unidentified substances, staining, or corrosion observed at the Site, including within buildings and/or structures
- Existing structures to obtain a general description of the structures, including the number, age, and height of all buildings
- Improvements to the building(s) and/or structures at the Site
- Entries and exits to the buildings and structures



- Heating and cooling systems of each building and/or structure
- Drains, pits, and sumps, including documenting the purpose and use

Additionally, the following aspects were discussed and identified, if applicable:

- Hazardous materials currently and historically stored at the Site
- By-products and/or wastes of the current or historical operations at the Site
- Raw materials currently or historically stored/handled at the Site
- Oil/water separators and/or hydraulic lift equipment (e.g., elevators, in-ground hoists, and loading docks), if any, at the Site
- Vehicle or equipment maintenance areas
- Spills or releases of materials, including dates, locations, materials involved, and volumes

3.1.4 Site Interviews

In an effort to obtain further information regarding the site use, occupancy history, and environmental conditions of the Site, interviews are conducted with persons knowledgeable of the Site. This may include current occupants and/or owners of the Site, or an individual with control of the Site or authority to act on behalf of the owner; previous owners and/or occupants; and/or, where the owner/occupant is not available, at least one owner or occupant of an adjacent property and one provincial or municipal government official, both of whom should be familiar with the Site.



4.0 Phase I ESA Findings

4.1 Records Review

Information obtained from the documents summarized in Section 3.1 is discussed below.

4.1.1 Miscellaneous Document Review

The following information was obtained from the documents collected as part of the records review:

- A topographic map (MNR, 2018) of the study area provided information regarding the regional topography, inferred groundwater flow direction, surface water drainage, and general development in the area surrounding the Site. Refer to Figure 1.
 - The topography of the Site is generally flat, and appears to be a low point within the local area. Ground surface elevation is about 95 m above sea level.
 - Surface water drainage at the Site is expected to infiltrate the ground surface.
 - Regional surface water drainage is expected to flow overland to the east toward Picton Bay which is adjacent to the east property boundary of the Site.
 - Based on the topography and proximity to Picton Bay, the inferred shallow groundwater is easterly.
- Physiography of Southern Ontario mapping (Chapman & Putnam, 1984) indicates that the Site is within the Prince Edward Peninsula physiographic region, characterized by shallow unconsolidated soil over undifferentiated carbonate and clastic sedimentary rock, exposed at surface or covered by a discontinuous, thin layer of drift.
- Bedrock is mapped as limestone, dolostone, shale, arkose and/or sandstone of the Ottawa Group, Simcoe Group and Shadow Lake Formation (OGS, 2007).
- Based on a review of aerial imagery, the Site and surrounding properties were agricultural and residential use until the 1960s. The Site was used for agricultural



purposes until at least 1962, and was vacant by 1986. The surrounding properties have been primarily residential since 1986, with a golf course also noted off-site. A detailed review of aerial imagery is presented in Appendix F.

- The Land Titles Search indicated that the most recent transfer of site ownership was from 1178571 Ontario Inc. to 2596172 Ontario Inc. in September 2017.
- The request submitted to OPTA indicated there were no FIPs, Insurance Inspection Reports, or Site Plans pertaining to the Site.
- Review of the *Waste Disposal Site Inventory* (MOE, 1991) did not identify waste disposal sites within 1,000 m of the Site.
- Review of the *Inventory of Industrial Facilities Producing or Using Coal Tar or Related Tars in Ontario* (MOE, 1988a) did not identify industrial facilities that produced or used coal tar or related tars within 1,000 m of the Site.
- Review of the *Inventory of Coal Gasification Plant Waste Sites in Ontario* (MOE, 1988b) did not identify coal gasification plant waste sites within 1,000 m of the Site.

4.1.2 Regulatory Records Review

Responses to FOI requests to regulatory bodies are summarized below. Copies of the FOI requests and responses are included in Appendix B.

A response to the FOI request submitted to the MOECC was not received prior to completion of this report. The results of the FOI request will be provided under separate cover if they change the findings of the Phase I ESA.

A response to the request submitted to the TSSA was not received prior to completion of this report. The results of the TSSA request will be provided under separate cover if they change the findings of the Phase I ESA.

The ERIS report contained the following pertinent listings for the Site and neighbouring properties. A copy of the ERIS report is provided in Appendix D.



On-Site Records

There were no records for the Site.

Off-Site Records

The ERIS report contained listings in the Water Well Information System and ERIS Historical Searches databases for properties within a 250 m radius. Review of these listings indicated the data was for properties not in close proximity to the Site or was not environmentally significant.

Several unplottable listings were identified in the ERIS report, including four (4) listings in the Ontario Spills database, three (3) of which were related to spills of fuel. Based on the reported quantity of spilled fuel (20 L or less) and/or the inferred location of the occurrence, the listings do not suggest a potential for significant environmental concern associated with the Site. A review of the remaining unplottable listings did not identify potential environmental concerns for the Site.

4.2 Site Visit

Mr. Tyler Jamieson, M.Sc., conducted a site visit on March 16, 2018. The weather during the site visit was sunny and clear, and weather conditions did not impede the assessment. A photographic record of the site visit is presented in Appendix A. The site visit findings are described below.

4.2.1 Buildings and Site Usage

The Site is undeveloped and vacant, and is free of any permanent structures and/or buildings. The majority of the Site consists of grassed and treed areas. Access to the Site is from Highway 49 which runs adjacent to the west Site boundary. A culvert drains onto the west side of the Site, which collects water from an off-site ditch connected to the Picton Golf and Country Club (734 County Road 49). Based on the site interviews, it is understood that the Municipality will be diverting this culvert to drain off-site.



4.2.2 Storage Tanks

No evidence of USTs or ASTs (i.e. fill/vent pipes) were observed during Cambium's recent site visit.

Cambium's presence/absence assessment of storage tanks was based on visual observations, review of available historical mapping (e.g., FIPs), and information available from relevant regulatory agencies (e.g., the TSSA). Storage tanks that may have been present historically or that currently exist without documentation may not be identifiable.

4.2.3 Materials and Storage

No chemicals or materials storage were observed on-site. A sailboat was observed to be stored on-site, and it is understood that vehicles have been stored on-site for short periods of time, though no vehicles were observed during the site visit. A small snow pile was observed on-site, which suggested that snow from neighbouring properties had been placed on-site.

4.2.4 Oil/Water Separators

No oil/water separators were observed on-site during the recent site visit.

4.2.5 Vehicle and Equipment Maintenance

No vehicle or equipment maintenance was observed on-site during the recent site visit.

4.2.6 Waste – Solid, Liquid, or Hazardous/Industrial

No domestic waste or hazardous waste is currently generated on-site. Minor quantities of refuse (e.g., vehicle axle, brush pile, concrete light posts, wood) appeared to have been placed in several areas at the Site. Based on the nature of the observed refuse, it is not expected to pose an environmental concern for the Site.

4.2.7 Sumps, Drains, Pits, and Lagoons

No sumps, drains, pits, or lagoons were observed on-site during the recent site visit.



4.2.8 Spills

No spills were observed or reported during the site visit.

4.2.9 Stains

No significant staining was observed during the site visit.

4.2.10 Fill

No significant amount of fill is expected to have been imported to the Site. The surface elevation at the Site is generally similar to the surrounding properties. During the site visit, two (2) piles of aggregate material (crushed limestone and granular) were noted on-site. Based on the quantity and nature of the fill material, it is not expected to pose a significant environmental concern for the Site.

4.2.11 Air Emissions

There was no evidence of sources of process-related air emissions at the Site.

4.2.12 Special Attention Items

4.2.12.1 Polychlorinated Biphenyls

No evidence of PCB's were observed on-site during the recent site visit.

As discussed in Section 4.1.2, no records of PCBs were identified at the Site in the ERIS report.

4.2.12.2 Asbestos

No evidence of asbestos was observed on-site during the recent site visit.

As discussed in Section 4.1.2, no records of asbestos were identified at the Site in the ERIS report.

4.2.12.3 Lead

No evidence of lead was observed on-site during the recent site visit.



4.2.12.4 Microbial Contamination and Mould

No evidence of mould was observed during the recent site visit.

4.2.12.5 Ozone Depleting Substances

No evidence of ozone depleting substances was observed at the Site.

4.2.12.6 Urea Formaldehyde Foam Insulation

No evidence of urea formaldehyde foam insulation was observed at the Site.

4.2.12.7 Radon, Noise, Electric and Magnetic Fields, and Vibration

There was no evidence to suggest radon gas, electric or magnetic fields, or vibration present at the Site. Additionally, there was no excessive noise observed during the site visit.

4.2.13 Pesticides and Herbicides

No pesticides or insecticides were observed during the site visit.

4.2.14 Potable Water Supply

The neighbouring properties are supplied with potable water from on-site drinking water wells. No evidence of drinking water wells was observed on-site during the site visit.

4.2.15 Septic Fields

No evidence of a septic field was observed during the site visit.

4.2.16 Environmental Monitoring

One (1) possible groundwater monitoring well was observed during the site visit; however, aside from a geotechnical investigation in 2017, no environmental monitoring was reported during the interviews.



4.2.17 Stressed Vegetation

There was no evidence of stressed vegetation or differential plant growth observed during the site visit.

4.2.18 Fires

There was no evidence of historical fires observed during the site visit.

4.2.19 Odours

No strong, pungent, or noxious odours were observed during the site visit.

4.2.20 Unidentified Substances

No unidentified substances were observed or reported during the site visit.

4.2.21 Adjacent Land Uses

The properties within 100 m surrounding the Site are utilized for residential and commercial purposes. No significant environmental concerns are expected associated with the current and former uses of the adjacent properties.

Adjacent property uses include:

- North: residential and commercial (Picton Golf and Country Club)
- South: residential
- East: residential
- West: residential and commercial (Blumen Garden Bistro and Picton Golf and Country Club)

4.3 Interviews

Cambium interviewed Mr. Carl Smith, President of Cosmopolitan Homes, which has owned the Site since 2017, as well as Mr. Ray Essiambre, a planning consultant associated with the site development. While performing the site visit, a neighbour who has lived across the road from



the Site for 50 years, was also available for an interview. Information obtained during the interview is incorporated throughout Section 4.0.



5.0 Environmental Concerns

Based on the findings of the records review and site visit, the following potential on-site source of environmental contamination was identified:

- A culvert drains onto the west side of the Site, which collects water from an off-site ditch connected to the Picton Golf and Country Club

Potential off-site sources of contamination were identified related to listings in the Ontario Spills database, three (3) of which were related to spills of fuel. Based on the reported quantity of spilled fuel (20 L or less) and/or the inferred location of the occurrence, the listings are not considered to pose an environmental concern for the Site.



6.0 Conclusions and Recommendations

Conclusions and recommendations regarding the current environmental conditions at the Site were based solely on the results from the document review, regulatory records review, and site visit.

Based on the information obtained for this Phase I ESA, there is no confirmed evidence to suggest a potential for environmental liability associated with the Site; therefore, Cambium concludes that a Phase II ESA (i.e., soils and groundwater investigation) is not warranted for the Site at this time.

Cambium recommends the following best management practices be implemented:

- Secure the Site to prevent on-site dumping, vehicle storage, and snow disposal
- In consultation with the appropriate regulatory authority, redirect the culvert on the west side of the Site such that it no longer drains on-site
- One (1) possible groundwater monitoring well was observed on-site, which should be abandoned as per the requirements of R.R.O. 1990, Regulation 903 - Wells.

As part of the Phase I ESA, an FOI request was submitted to the MOECC, for environmentally significant records pertaining to the Site. A response from the MOECC was not received prior to completion of the report. The results of the FOI request will be provided under separate cover if they change the findings of the Phase I ESA.



7.0 Qualifications of the Assessor

This Phase I ESA was completed by under the supervision of Bernie Taylor, P.Eng. as per CSA Standard Z768-01. Credentials are presented in Appendix G. Information presented in this report is true and accurate to the best of the assessors' knowledge.

Respectfully submitted,

Cambium Inc.

David Fleming, B.Sc., Dipl.
Senior Environmental Technician

Bernie Taylor, P.Eng.
Project Manager



8.0 Cambium Qualifications and Limitations

Limited Warranty

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

Reliance on Materials and Information

The findings and results presented in reports prepared by Cambium are based on the materials and information provided by the client to Cambium and on the facts, conditions and circumstances encountered by Cambium during the performance of the work requested by the client. In formulating its findings and results into a report, Cambium assumes that the information and materials provided by the client or obtained by Cambium from the client or otherwise are factual, accurate and represent a true depiction of the circumstances that exist. Cambium relies on its client to inform Cambium if there are changes to any such information and materials. Cambium does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Cambium will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Cambium during the provision of services, work or reports.

Facts, conditions, information and circumstances may vary with time and locations and Cambium's work is based on a review of such matters as they existed at the particular time and location indicated in its reports. No assurance is made by Cambium that the facts, conditions, information, circumstances or any underlying assumptions made by Cambium in connection with the work performed will not change after the work is completed and a report is submitted. If any such changes occur or additional information is obtained, Cambium should be advised and requested to consider if the changes or additional information affect its findings or results.

When preparing reports, Cambium considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Cambium is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations, governmental guidelines and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

Site Assessments

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

Only conditions at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site chosen for study by the client, or any other matter not specifically addressed in a report prepared by Cambium, are beyond the scope of the work performed by Cambium and such matters have not been investigated or addressed.

Reliance

Cambium's services, work and reports may be relied on by the client and its corporate directors and officers, employees, and professional advisors. Cambium is not responsible for the use of its work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Cambium without Cambium's express written consent. Any party that relies on services or work performed by Cambium or a report prepared by Cambium without Cambium's express written consent, does so at its own risk. No report of Cambium may be disclosed or referred to in any public document without Cambium's express prior written consent. Cambium specifically disclaims any liability or responsibility to any such party for any loss, damage, expense, fine, penalty or other such thing which may arise or result from the use of any information, recommendation or other matter arising from the services, work or reports provided by Cambium.

Limitation of Liability

Potential liability to the client arising out of the report is limited to the amount of Cambium's professional liability insurance coverage. Cambium shall only be liable for direct damages to the extent caused by Cambium's negligence and/or breach of contract. Cambium shall not be liable for consequential damages.

Personal Liability

The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.

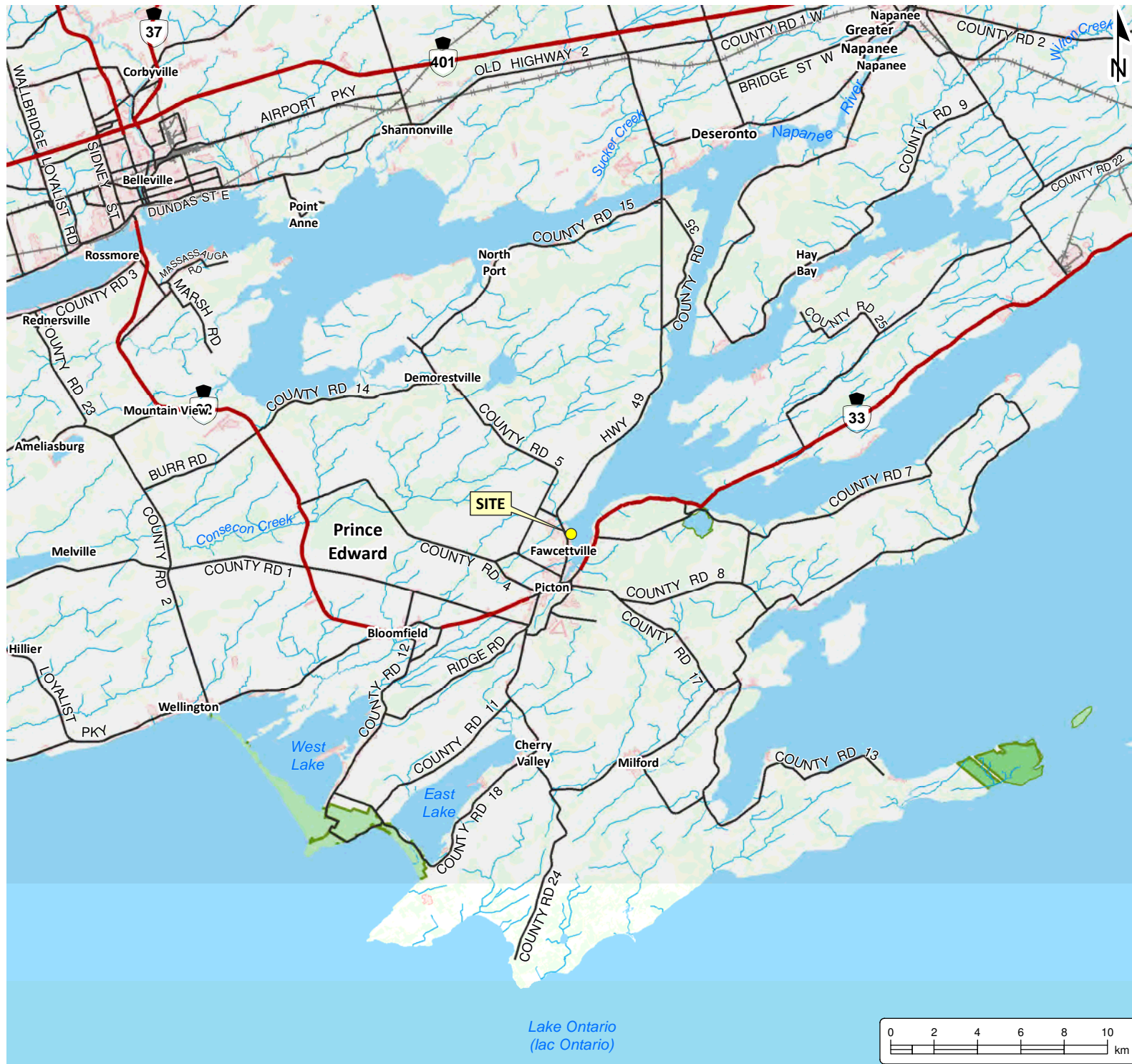
9.0 References

- Chapman, L., & Putnam, D. (1984). *The Physiographic Regions of Southern Ontario, Third Edition*. Ontario Ministry of Natural Resources.
- CSA. (2016). *Z768-01 (R2016) - Phase I Environmental Site Assessment*. Canadian Standards Association.
- ERIS. (2016). *Database Report*. Environmental Risk Information Services Ltd.
- MNRF. (2018, 02 13). *Make a Topographic Map*. Retrieved from Ministry of Natural Resources and Forestry:
http://www.giscoeapp.lrc.gov.on.ca/matm/Index.html?site=Make_A_Topographic_Map&viewer=MATM&locale=en-US
- MOE. (1988a). *Inventory of Industrial Facilities Producing or Using Coal Tar or Related Tars in Ontario, Volume I*. Ministry of the Environment. November 1988.
- MOE. (1988b). *Inventory of Coal Gasification Plant Waste Sites in Ontario*. Ministry of the Environment. November 1988.
- MOE. (1988b). *Inventory of Coal Gasification Plant Waste Sites in Ontario*. Ministry of the Environment. November 1988.
- MOE. (1991). *Waste Disposal Site Inventory*. Ministry of the Environment. June 1991.
- MOE. (1991). *Waste Disposal Site Inventory*. Ministry of the Environment. June 1991.
- OGS. (2007). *Paleozoic geology of southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 219*. Ontario Geological Survey.
- OGS. (2010). *Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV*. Ontario Geological Survey.



Figures

O:\GIS\project_L\0600-6559\6553-002_Cosmopolitan Homes - Phase I ESA and EIS - 49 Folkard Lane, Picton\2018-03-16 Fig 1 - Regional Location Plan.mxd



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT**
COSMOPOLITAN HOMES
49 Folkard Lane, Picton, Ontario

- LEGEND**
- Highway
 - Major Road
 - Railroad
 - Watercourse
 - Water Area
 - Provincial Park
 - Federal Protected Area
 - Built-Up Area
 - Wooded Area

Notes:
 - Base mapping features are © Queen's Printer of Ontario, 2017 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
 - Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
 - Cambium Inc. makes every effort to ensure this map is free from errors but cannot be held responsible for any damages due to error or omissions. This map should not be used for navigation or legal purposes. It is intended for general reference use only.



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 Peterborough, Ontario, K9H 1G5
 Tel: (705) 742.7900 Fax: (705) 742.7907
 www.cambium-inc.com

REGIONAL LOCATION PLAN

Project No.: 6563-002	Date: March 2018
Scale: 1:250,000	Projection: NAD 1983 UTM Zone 18N
Created by: CPM	Checked by: BT
Figure: 1	

O:\GIS\project_L\MC\6500-6559\6563-002_Cosmopolitan Homes - Phase I ESA and EIS - 49 Folkard Lane, Picton\2018-03-16 Fig 2 - Site Plan.mxd



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT**
COSMOPOLITAN HOMES
49 Folkard Lane, Picton, Ontario

LEGEND
 Present Day Subject Property (approximate)

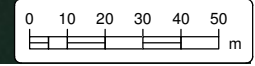
LAND USE

Notes:
 - Subject Property (approximate) was obtained from the Prince Edward County Online GIS.
 - Base mapping features are © Queen's Printer of Ontario, 2017 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
 - Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
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**SITE PLAN AND
SURROUNDING LAND USE**

Project No.: 6563-002	Date: April 2018
Scale: 1:2,000	Rev.: NAD 1983 UTM Zone 18N
Created by: CPM	Checked by: BT
Figure: 2	




O:\GIS\project_L\MC\6500-6559\6563-002 Cosmopolitan Homes - Phase I ESA and EIS - 49 Folkard Lane, Picton\2018-03-20 Fig 3 - 1929 Aerial Imagery.mxd



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT**
COSMOPOLITAN HOMES
49 Folkard Lane, Picton, Ontario

LEGEND

 Present Day Subject
Property (approximate)

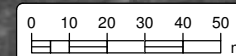
Notes:
-1929 Aerial Imagery was obtained from the National Air Photo Library.
-Subject Property (approximate) was obtained from the Prince Edward County Online GIS.
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- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
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1929 AERIAL IMAGERY

Project No.:	6563-002	Date:	April 2018
Scale:	1:2,000	Rev.:	
Created by:	CPM	Projection:	NAD 1983 UTM Zone 18N
Checked by:	BT	Figure:	3




O:\GIS\project_L\MC\6500-6559\6553-002_Cosmopolitan Homes - Phase I ESA and EIS - 49 Folkard Lane, Picton\2018-03-20 Fig 4 - 1962 Aerial Imagery.mxd



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT**
COSMOPOLITAN HOMES
49 Folkard Lane, Picton, Ontario

LEGEND

 Present Day Subject Property (approximate)

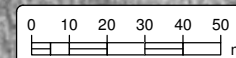
Notes:
-1962 Aerial Imagery was obtained from the National Air Photo Library.
-Subject Property (approximate) was obtained from the Prince Edward County Online GIS.
- Base mapping features are © Queen's Printer of Ontario, 2017 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
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1962 AERIAL IMAGERY

Project No.:	6563-002	Date:	April 2018
Scale:	1:2,000	Rev.:	
Created by:	CPM	Projection:	NAD 1983 UTM Zone 18N
Checked by:	BT	Figure:	4




O:\GIS\project_L\MC\6500-6559\6563-002 Cosmopolitan Homes - Phase I ESA and EIS - 48 Folkard Lane, Picton\2018-03-20 Fig 5 - 1986 Aerial Imagery.mxd



PHASE I ENVIRONMENTAL SITE ASSESSMENT COSMOPOLITAN HOMES 49 Folkard Lane, Picton, Ontario

LEGEND

 Present Day Subject Property (approximate)

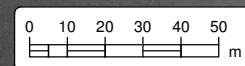
Notes:
-1986 Aerial Imagery was obtained from the National Air Photo Library.
-Subject Property (approximate) was obtained from the Prince Edward County Online GIS.
- Base mapping features are © Queen's Printer of Ontario, 2017 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
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1986 AERIAL IMAGERY

Project No.: 6563-002	Date: April 2018
Scale: 1:2,000	Projection: NAD 1983 UTM Zone 18N
Created by: CPM	Checked by: BT
Figure: 5	




O:\GIS\project_L\MC\6500-6559\6563-002 Cosmopolitan Homes - Phase I ESA and EIS - 49 Folkard Lane, Picton\2018-03-20 Fig 6 - 2005 Aerial Imagery.mxd



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT**
COSMOPOLITAN HOMES
49 Folkard Lane, Picton, Ontario

LEGEND

 Present Day Subject Property (approximate)

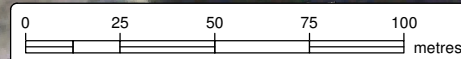
Notes:
-2005 Aerial Imagery was obtained from Google Earth.
-Subject Property (approximate) was obtained from the Prince Edward County Online GIS.
- Base mapping features are © Queen's Printer of Ontario, 2017 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
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2005 AERIAL IMAGERY

Project No.: 6563-002	Date: April 2018
Scale: 1:2,000	Projection: NAD 1983 UTM Zone 18N
Created by: CPM	Checked by: BT
Figure: 6	




O:\GIS\project_L\MC\6500-6559\6563-002_Cosmopolitan Homes - Phase I ESA and EIS - 48 Folkard Lane, Picton\2018-03-20 Fig 7 - 2016 Aerial Imagery.mxd



PHASE I ENVIRONMENTAL SITE ASSESSMENT

COSMOPOLITAN HOMES
49 Folkard Lane, Picton, Ontario

LEGEND

 Present Day Subject Property (approximate)

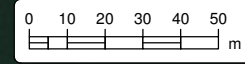
Notes:
- Subject Property (approximate) was obtained from the Prince Edward County Online GIS.
- Base mapping features are © Queen's Printer of Ontario, 2017 (this does not constitute an endorsement by the Ministry of Natural Resources or the Ontario Government).
- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
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2016 AERIAL IMAGERY

Project No.: 6563-002	Date: April 2018
Scale: 1:2,000	Rev.: NAD 1983 UTM Zone 18N
Created by: CPM	Checked by: BT
Figure: 7	





Appendix A

Photographs



Photo 1 Grassy clearing on-site



Photo 2 ATV trails on-site



Photo 3 Aggregate pile located on-site



Photo 4 Aggregate pile located on-site



Photo 5 Culvert draining onto west side of Site



Photo 6 Vehicle axel and small brush pile on-site



Photo 7 Old concrete light posts on-site



Photo 8 Brush pile located on-site



Photo 9 Sail boat parked on-site



Photo 10 Possible monitoring well on-site



Photo 11 Wood debris on-site



Photo 12 New home north of Site



Photo 13 County Road 49, looking south from Folkard Lane



Photo 14 Looking east from Site



Photo 15 Homes south of Site of Folkard Lane



Appendix B

Freedom of Information Requests



Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on completion and use of this form. Our fax no. is (416) 314-4285.

Requester Data			For Ministry Use Only	
Kevin Damsbaek Cambium Inc. 52 Hunter Street East PO Box 325 Peterborough, Ontario, K9H 1G5 kevin.damsbaek@cambium-inc.com			FOI Request No.	Date Request Received
Telephone/Fax Nos. Tel. 705-742-7900 X217 Fax 705-742-7907			Fee Paid <input type="checkbox"/> ACCT <input type="checkbox"/> CHQ <input type="checkbox"/> VISA/MC <input type="checkbox"/> CASH <input type="checkbox"/> CNR <input type="checkbox"/> ER <input type="checkbox"/> NOR <input type="checkbox"/> SWR <input type="checkbox"/> WCR <input type="checkbox"/> SAC <input type="checkbox"/> IEB <input type="checkbox"/> EAA <input type="checkbox"/> EMR <input type="checkbox"/> SWA	
Your Project/Reference No.	Signature/Print Name of Requester			
6563-002				
Request Parameters				
Municipal Address / Lot, Concession, Geographic Township (Municipal address essential for cities, towns or regions)				
49 Folkard Lane, Picton, ON				
Present Property Owner(s) and Date(s) of Ownership				
2596172 Ontario Inc.				
Previous Property Owner(s) and Date(s) of Ownership				
Present/Previous Tenant(s), (if applicable)				
Search Parameters			Specify Year(s) Requested	
<i>Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.</i>				
Environmental concerns (General correspondence, occurrence reports, abatement)			All years	
Orders			All years	
Spills			All years	
Investigations/prosecutions > Owner AND tenant information must be provided			All years	
Waste Generator number/classes			All years	
Certificates of Approval > Proponent information must be provided				
1985 and prior records are searched manually. Search fees in excess of \$300.00 could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). If supporting documents are also required, mark SD box and specify type e.g. maps, plans, reports, etc.				
			SD	Specify Year(s) Requested
air - emissions				All Years
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)				All Years
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations				All Years
waste water - industrial discharges				All Years
waste sites - disposal, landfill sites, transfer stations, processing sites, incinerator sites				All Years
waste systems - PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste				All Years
pesticides - licenses				All Years

A \$5.00 non-refundable application fee, payable to the Minister of Finance, is mandatory. The cost of locating on-site and/or preparing any record is \$30.00/hour and 20 cents/page for photocopying and you will be contacted for approval for fees in excess of \$30.00.

From: Kevin Damsbaek
Sent: Tuesday, March 13, 2018 2:17 PM
To: 'Public Information Services'
Subject: Information Request - 49 Folkard Lane, Picton, ON (6563-002)

Good afternoon,
Could you please complete a search for available records for 49 Folkard Lane, Picton, ON? Thank you!

Sincerely,



Kevin Damsbaek, P. Eng.
Project Coordinator

Cambium Inc. - Peterborough
Environmental | Building Sciences | Geotechnical | Construction Monitoring
p: [705-742-7900](tel:705-742-7900) ext. 217 | c: [705-927-0110](tel:705-927-0110) | w: cambium-inc.com

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Appendix C

Parcel Registry Search

PROPERTY DESCRIPTION: PT LT 110 RCP 28 HALLOWELL PT 1, 2, 3, 4 47R5524 T/W & S/T PE169590; S/T PE172455; PRINCE EDWARD

PROPERTY REMARKS:

ESTATE/QUALIFIER:
FEE SIMPLE
LT CONVERSION QUALIFIED

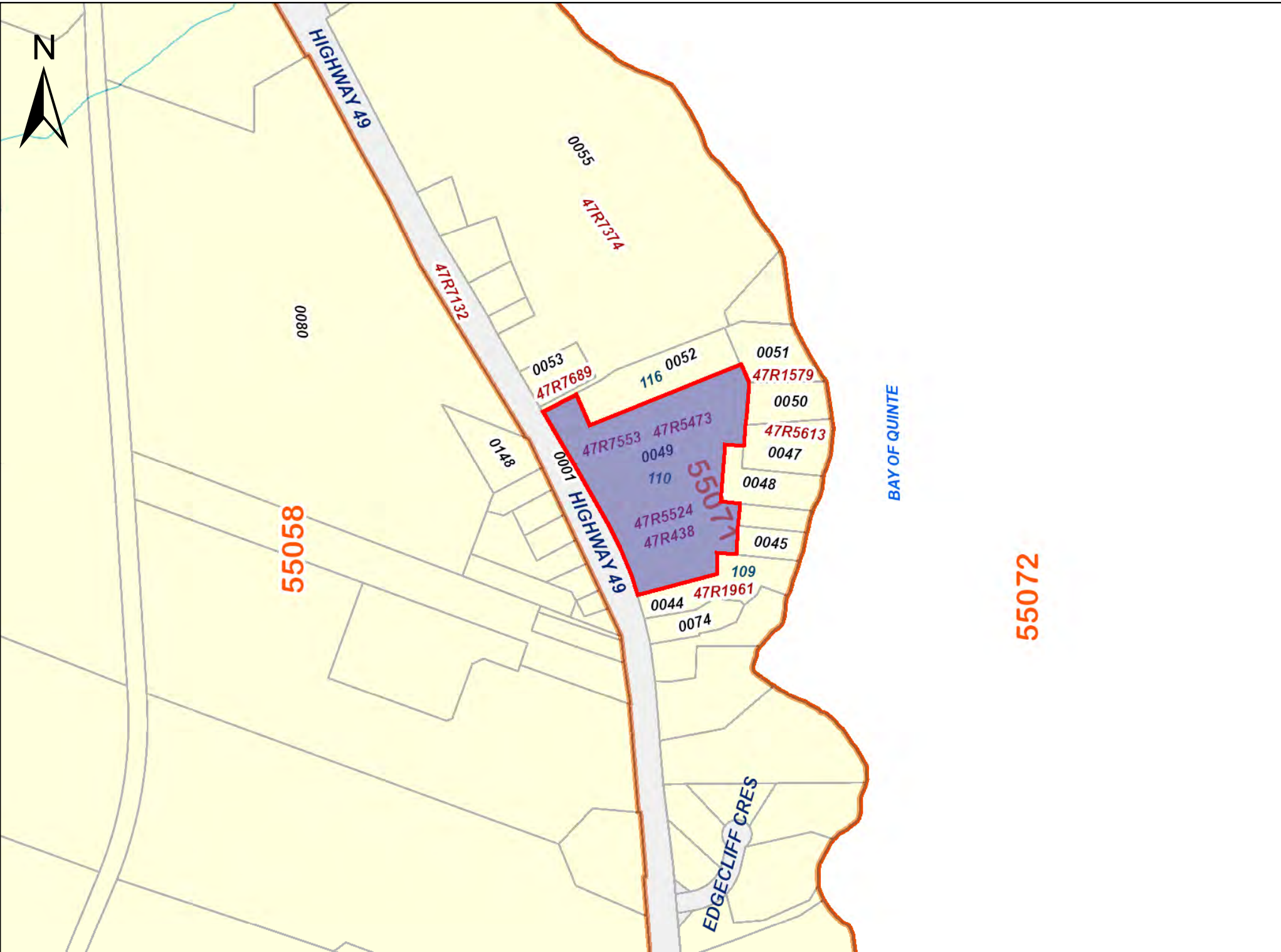
RECENTLY:
RE-ENTRY FROM 55071-0071

PIN CREATION DATE:
2011/01/31

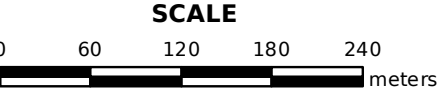
OWNERS' NAMES
2596172 ONTARIO INC.

CAPACITY SHARE

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/CHKD
** PRINTOUT INCLUDES ALL DOCUMENT TYPES (DELETED INSTRUMENTS NOT INCLUDED) **						
**SUBJECT, ON FIRST REGISTRATION UNDER THE LAND TITLES ACT, TO:						
** SUBSECTION 44(1) OF THE LAND TITLES ACT, EXCEPT PARAGRAPH 11, PARAGRAPH 14, PROVINCIAL SUCCESSION DUTIES *						
** AND ESCHEATS OR FORFEITURE TO THE CROWN.						
** THE RIGHTS OF ANY PERSON WHO WOULD, BUT FOR THE LAND TITLES ACT, BE ENTITLED TO THE LAND OR ANY PART OF						
** IT THROUGH LENGTH OF ADVERSE POSSESSION, PRESCRIPTION, MISDESCRIPTION OR BOUNDARIES SETTLED BY						
** CONVENTION.						
** ANY LEASE TO WHICH THE SUBSECTION 70(2) OF THE REGISTRY ACT APPLIES.						
**DATE OF CONVERSION TO LAND TITLES: 2011/01/31 **						
47R438	1973/10/26	PLAN REFERENCE				C
47R5473	1992/05/12	PLAN REFERENCE				C
47R5524	1992/06/25	PLAN REFERENCE				C
47R7553	2003/10/21	PLAN REFERENCE				C
PE172455	2004/09/15	TRANSFER EASEMENT			BELL CANADA	C
EC45580	2017/09/13	TRANSFER	\$947,500	1178571 ONTARIO INC.	2596172 ONTARIO INC.	C
REMARKS: PLANNING ACT STATEMENTS.						
EC45581	2017/09/13	CHARGE	\$600,000	2596172 ONTARIO INC.	1178571 ONTARIO INC.	C



PRINTED ON 07 MAR, 2018 AT 14:48:39
FOR EEGOOLAB



PROPERTY INDEX MAP
PRINCE EDWARD(No. 47)

LEGEND

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

THIS IS NOT A PLAN OF SURVEY

NOTES

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

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

FOR DIMENSIONS OF PROPERTIES BOUNDARIES SEE RECORDED PLANS AND DOCUMENTS

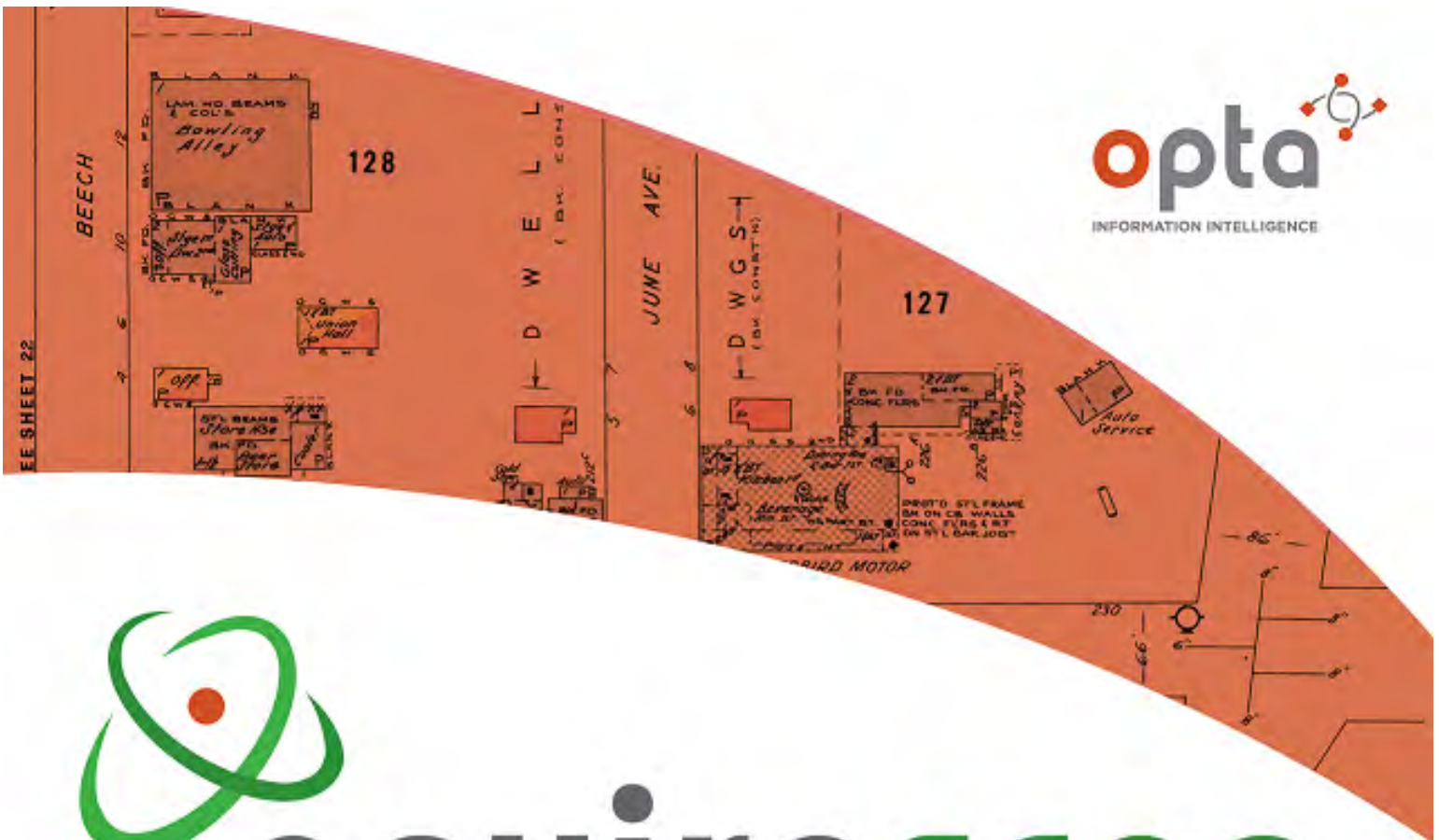
ONLY MAJOR EASEMENTS ARE SHOWN

REFERENCE PLANS UNDERLYING MORE RECENT REFERENCE PLANS ARE NOT ILLUSTRATED





Appendix D
OPTA Report



enviroscan



An SCM Company

175 Commerce Valley Drive W
Markham, Ontario L3T 7Z3

T: 905-882-6300
W: www.optaintel.ca

Report Completed By:

Catherine

Site Address:

49 Folkard Lane Prince Edward ON

Project No:

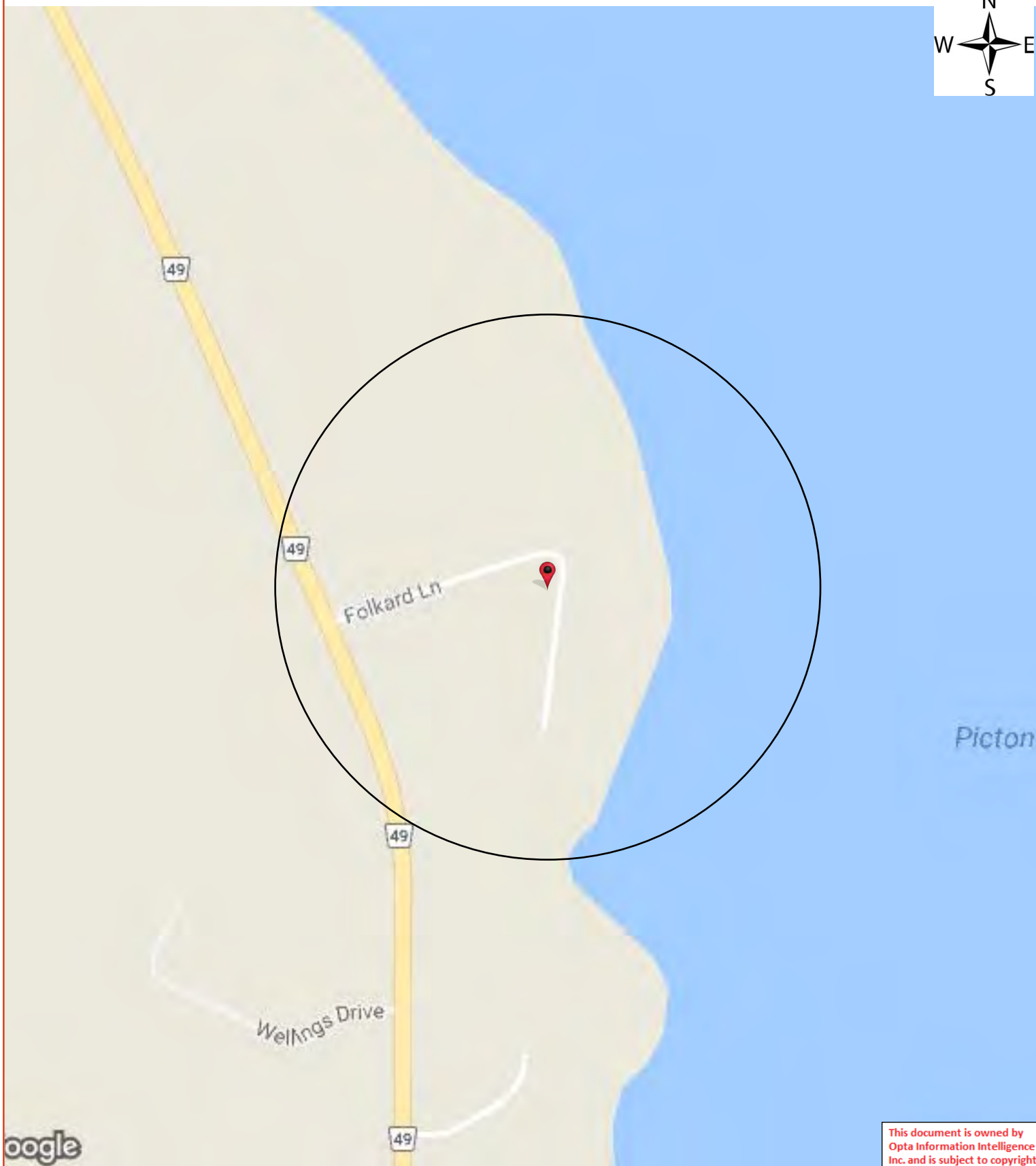
20180305134

Opta Order ID:

46432

Requested by:
Eleanor Goolab
Eris

Date Completed:
3/12/2018 7:15:07 AM





Opta Historical Environmental Services Enviroscan TM Terms and Conditions

Report

The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in Opta's records relating to the described property (hereinafter referred to as the "Property"). Opta makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property or in Opta's possession at the time of Report delivery to the purchaser. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. Opta does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.

Disclaimer

Opta disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on Opta Reports or from any tortious acts or omissions of Opta's agents, employees or representatives.

Entire Agreement

The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.

Governing Document

In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.

Law

This agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.



175 Commerce Valley Drive W
Markham, Ontario
L3T 7Z3

T: 905.882.6300
Toll Free: 905.882.6300
F: 905.882.6300

An SCM Company
www.optaintel.ca

Page: 4

Project Name: Phase I ESA 49
Folkard Lane Picton

Project #: 20180305134
P.O. #: 6563002

ENVIROSCAN Report

No Records Found

Requested by:
Eleanor Goolab

Date Completed: 03/12/2018 07:15:07



OPTA INFORMATION INTELLIGENCE

No Records Found

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the front of this document.





Appendix E
ERIS Report

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



DATABASE REPORT

Project Property: *Phase I ESA - 49 Folkard Lane, Picton
49 Folkard Lane
Prince Edward County ON K0K2T0
6563-002*

Project No: *20180305134*

Report Type: *Standard Report*

Order No: *20180305134*

Requested by: *Cambium Environmental*

Date Completed: *March 12, 2018*

**Environmental Risk
Information Services**
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

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

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Executive Summary

Property Information:

Project Property: *Phase I ESA - 49 Folkard Lane, Picton
49 Folkard Lane Prince Edward County ON K0K2T0*

Project No: 6563-002

Coordinates:

Latitude: 44.028144
Longitude: -77.133677
UTM Northing: 4,877,212.04
UTM Easting: 329,013.84
UTM Zone: UTM Zone 18T

Elevation: 297 FT
90.57 M

Order Information:

Order No: 20180305134
Date Requested: March 5, 2018
Requested by: Cambium Environmental
Report Type: Standard Report

Historical/Products:

Insurance Products *Fire Insurance Maps/Inspection Reports/Site Specific Plans*
Land Title Search *Current Title Search*

Executive Summary: Report Summary

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.25 km</i>	<i>Total</i>
AAGR	<i>Abandoned Aggregate Inventory</i>	Y	0	0	0
AGR	<i>Aggregate Inventory</i>	Y	0	0	0
AMIS	<i>Abandoned Mine Information System</i>	Y	0	0	0
ANDR	<i>Anderson's Waste Disposal Sites</i>	Y	0	0	0
AUWR	<i>Automobile Wrecking & Supplies</i>	Y	0	0	0
BORE	<i>Borehole</i>	Y	0	0	0
CA	<i>Certificates of Approval</i>	Y	0	0	0
CFOT	<i>Commercial Fuel Oil Tanks</i>	Y	0	0	0
CHEM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
COAL	<i>Inventory of Coal Gasification Plants and Coal Tar Sites</i>	Y	0	0	0
CONV	<i>Compliance and Convictions</i>	Y	0	0	0
CPU	<i>Certificates of Property Use</i>	Y	0	0	0
DRL	<i>Drill Hole Database</i>	Y	0	0	0
EASR	<i>Environmental Activity and Sector Registry</i>	Y	0	0	0
EBR	<i>Environmental Registry</i>	Y	0	0	0
ECA	<i>Environmental Compliance Approval</i>	Y	0	0	0
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	0	1	1
EIIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
EMHE	<i>Emergency Management Historical Event</i>	Y	0	0	0
EXP	<i>List of TSSA Expired Facilities</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FOFT	<i>Fisheries & Oceans Fuel Tanks</i>	Y	0	0	0
FST	<i>Fuel Storage Tank</i>	Y	0	0	0
FSTH	<i>Fuel Storage Tank - Historic</i>	Y	0	0	0
GEN	<i>Ontario Regulation 347 Waste Generators Summary</i>	Y	0	0	0
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
HINC	<i>TSSA Historic Incidents</i>	Y	0	0	0
IAFT	<i>Indian & Northern Affairs Fuel Tanks</i>	Y	0	0	0
INC	<i>TSSA Incidents</i>	Y	0	0	0
LIMO	<i>Landfill Inventory Management Ontario</i>	Y	0	0	0
MINE	<i>Canadian Mine Locations</i>	Y	0	0	0
MNR	<i>Mineral Occurrences</i>	Y	0	0	0
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.25 km</i>	<i>Total</i>
NCPL	<i>Non-Compliance Reports</i>	Y	0	0	0
NDFT	<i>National Defense & Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense & Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence & Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBW	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGW	<i>Oil and Gas Wells</i>	Y	0	0	0
OOGW	<i>Ontario Oil and Gas Wells</i>	Y	0	0	0
OPCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
ORD	<i>Orders</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PES	<i>Pesticide Register</i>	Y	0	0	0
PINC	<i>TSSA Pipeline Incidents</i>	Y	0	0	0
PRT	<i>Private and Retail Fuel Storage Tanks</i>	Y	0	0	0
PTTW	<i>Permit to Take Water</i>	Y	0	0	0
REC	<i>Ontario Regulation 347 Waste Receivers Summary</i>	Y	0	0	0
RSC	<i>Record of Site Condition</i>	Y	0	0	0
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	0	0
SPL	<i>Ontario Spills</i>	Y	0	0	0
SRDS	<i>Wastewater Discharger Registration Database</i>	Y	0	0	0
TANK	<i>Anderson's Storage Tanks</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
VAR	<i>TSSA Variances for Abandonment of Underground Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Sites - MOE CA Inventory</i>	Y	0	0	0
WDSH	<i>Waste Disposal Sites - MOE 1991 Historical Approval Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Information System</i>	Y	0	1	1
			Total:	0	2
				2	2

Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
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No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev Diff (m)</i>	<i>Page Number</i>
1	WWIS		lot 7 con 1 OUTSKIRTS OF PICTON ON	NW/61.1	-0.31	12
2	EHS		647 Hwy 49 Picton ON	WSW/243.0	4.27	17

Executive Summary: Summary By Data Source

EHS - ERIS Historical Searches

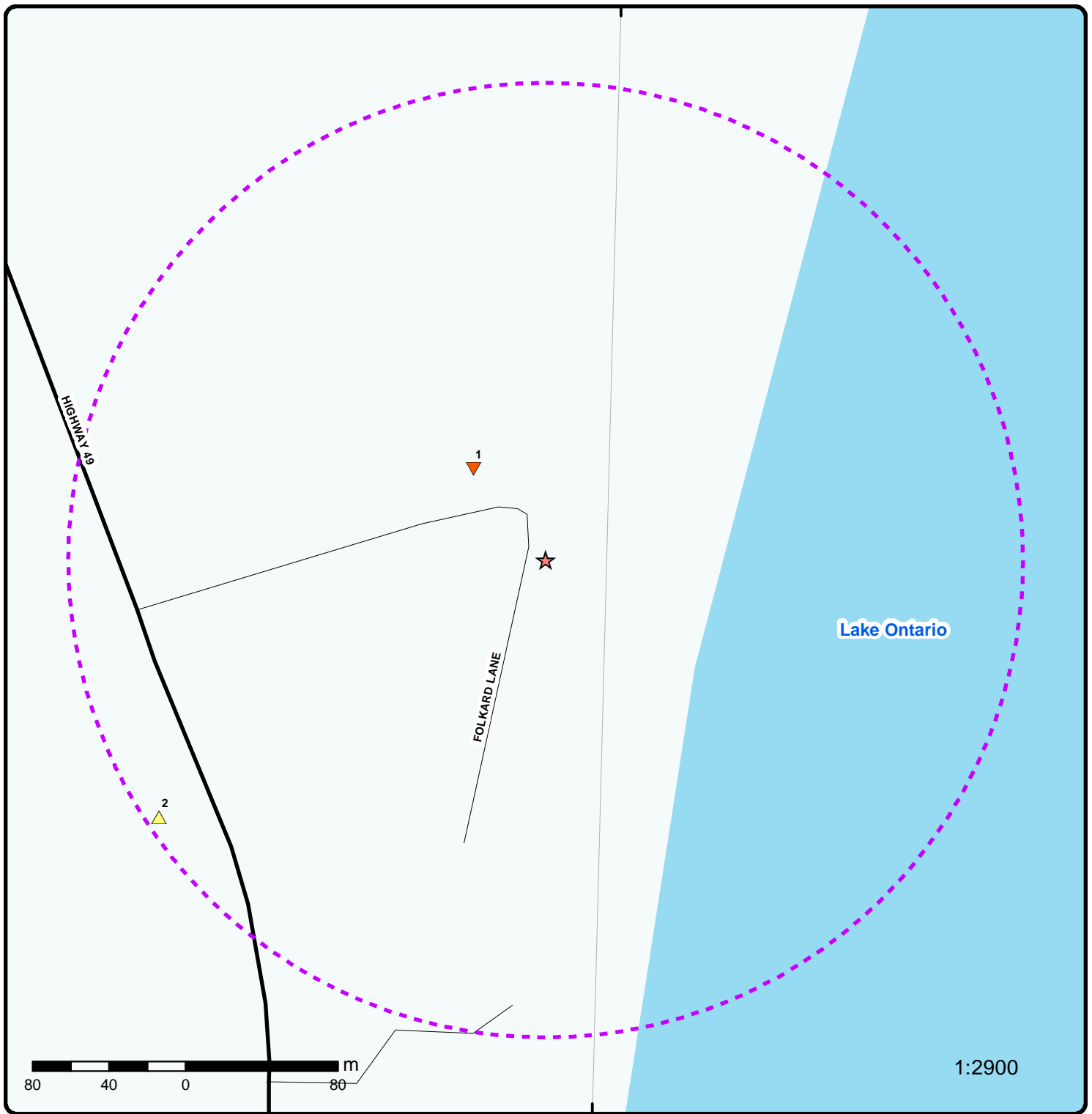
A search of the EHS database, dated 1999-Feb 28, 2018 has found that there are 1 EHS site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	647 Hwy 49 Picton ON	WSW	243.00	2

WWIS - Water Well Information System

A search of the WWIS database, dated Mar 31, 2017 has found that there are 1 WWIS site(s) within approximately 0.25 kilometers of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
	lot 7 con 1 OUTSKIRTS OF PICTON ON	NW	61.07	1



Map : 0.25 Kilometer Radius

Order No: 20180305134

Address: 49 Folkard Lane, Prince Edward County, ON, K0K2T0



1:2900

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



Aerial (2016)

Address: 49 Folkard Lane, Prince Edward County, ON, K0K2T0

Source: ESRI World Imagery

Order No: 20180305134



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Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Topographic Map

Address: 49 Folkard Lane, Prince Edward County, ON, K0K2T0

Source: ESRI World Topographic Map

Order No: 20180305134



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Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<p><u>1</u></p> <p>Well ID: 7189428 Construction Date: Primary Water Use: Domestic Sec. Water Use: Final Well Status: Water Supply Water Type: Casing Material: Audit No: Z133699 Tag: A130717 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:</p> <p><u>Bore Hole Information</u></p> <p>Bore Hole ID: 1004177766 DP2BR: Code OB: Code OB Desc: Open Hole: Elevation: 92.619331 Elevrc: Remarks: Elevrc Desc: Location Source Date: Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:</p> <p><u>Overburden and Bedrock</u> <u>Materials Interval</u></p> <p>Formation ID: 1004481661 Layer: 1 Color: 6 General Color: BROWN Mat1: 02 Most Common Material: TOPSOIL Mat2: Other Materials: Mat3: 85 Other Materials: SOFT</p>	<p>1 of 1</p> <p>NW/61.1</p> <p>90.3 / -0.31</p> <p>lot 7 con 1 OUTSKIRTS OF PICTON ON</p> <p>Data Entry Status: Data Src: Date Received: 10/12/2012 Selected Flag: 1 Abandonment Rec: Contractor: 6005 Form Version: 7 Owner: Street Name: 116 FOLKARD LANE County: PRINCE EDWARD Municipality: HALLOWELL TOWNSHIP Site Info: Lot: 007 Concession: 01 Concession Name: CPR NW Easting NAD83: Northing NAD83: Zone: UTM Reliability:</p> <p>Spatial Status: Cluster Kind: UTMRC: 4 UTMRC Desc: margin of error : 30 m - 100 m Location Method: wwr Org CS: UTM83 Date Completed: 8/29/2012</p>	<p>.....</p> <p>WWIS</p>			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Formation Top Depth:		0.00			
Formation End Depth:		2.00			
Formation End Depth UOM:		ft			
Formation ID:		1004481662			
Layer:		2			
Color:		6			
General Color:		BROWN			
Mat1:		17			
Most Common Material:		SHALE			
Mat2:					
Other Materials:					
Mat3:		80			
Other Materials:		POROUS			
Formation Top Depth:		2.00			
Formation End Depth:		5.00			
Formation End Depth UOM:		ft			
Formation ID:		1004481663			
Layer:		3			
Color:		2			
General Color:		GREY			
Mat1:		15			
Most Common Material:		LIMESTONE			
Mat2:					
Other Materials:					
Mat3:		73			
Other Materials:		HARD			
Formation Top Depth:		5.00			
Formation End Depth:		147.00			
Formation End Depth UOM:		ft			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1004481697			
Layer:		1			
Plug From:		0.00			
Plug To:		20.00			
Plug Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		1004481696			
Method Construction Code:		1			
Method Construction:		Cable Tool			
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		1004481659			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1004481667			
Layer:		1			
Material:		1			
Open Hole or Material:		STEEL			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
<i>Depth From:</i>		0.00			
<i>Depth To:</i>		20.00			
<i>Casing Diameter:</i>		6.25			
<i>Casing Diameter UOM:</i>		inch			
<i>Casing Depth UOM:</i>		ft			
 <u>Construction Record - Screen</u>					
<i>Screen ID:</i>		1004481668			
<i>Layer:</i>					
<i>Slot:</i>					
<i>Screen Top Depth:</i>					
<i>Screen End Depth:</i>					
<i>Screen Material:</i>					
<i>Screen Depth UOM:</i>		ft			
<i>Screen Diameter UOM:</i>		inch			
<i>Screen Diameter:</i>					
 <u>Results of Well Yield Testing</u>					
<i>Pump Test ID:</i>		1004481660			
<i>Pump Set At:</i>		143.00			
<i>Static Level:</i>		61.00			
<i>Final Level After Pumping:</i>		113.00			
<i>Recommended Pump Depth:</i>		143.00			
<i>Pumping Rate:</i>		2.00			
<i>Flowing Rate:</i>					
<i>Recommended Pump Rate:</i>		2.00			
<i>Levels UOM:</i>		ft			
<i>Rate UOM:</i>		GPM			
<i>Water State After Test Code:</i>		1			
<i>Water State After Test:</i>		CLEAR			
<i>Pumping Test Method:</i>		0			
<i>Pumping Duration HR:</i>		1			
<i>Pumping Duration MIN:</i>					
<i>Flowing:</i>		N			
 <u>Draw Down & Recovery</u>					
<i>Pump Test Detail ID:</i>		1004481670			
<i>Test Type:</i>		Recovery			
<i>Test Duration:</i>		1			
<i>Test Level:</i>		111.75			
<i>Test Level UOM:</i>		ft			
<i>Pump Test Detail ID:</i>		1004481669			
<i>Test Type:</i>		Draw Down			
<i>Test Duration:</i>		1			
<i>Test Level:</i>		62.58			
<i>Test Level UOM:</i>		ft			
<i>Pump Test Detail ID:</i>		1004481672			
<i>Test Type:</i>		Recovery			
<i>Test Duration:</i>		2			
<i>Test Level:</i>		110.41			
<i>Test Level UOM:</i>		ft			
<i>Pump Test Detail ID:</i>		1004481671			
<i>Test Type:</i>		Draw Down			
<i>Test Duration:</i>		2			
<i>Test Level:</i>		64.16			
<i>Test Level UOM:</i>		ft			

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Pump Test Detail ID:		1004481673			
Test Type:		Draw Down			
Test Duration:		3			
Test Level:		66.45			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481674			
Test Type:		Recovery			
Test Duration:		3			
Test Level:		109.04			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481676			
Test Type:		Recovery			
Test Duration:		4			
Test Level:		107.93			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481675			
Test Type:		Draw Down			
Test Duration:		4			
Test Level:		68.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481678			
Test Type:		Recovery			
Test Duration:		5			
Test Level:		106.79			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481677			
Test Type:		Draw Down			
Test Duration:		5			
Test Level:		70.43			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481679			
Test Type:		Draw Down			
Test Duration:		10			
Test Level:		78.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481680			
Test Type:		Recovery			
Test Duration:		10			
Test Level:		100.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481682			
Test Type:		Recovery			
Test Duration:		15			
Test Level:		104.29			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481681			
Test Type:		Draw Down			
Test Duration:		15			
Test Level:		88.60			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481684			
Test Type:		Recovery			
Test Duration:		20			
Test Level:		101.20			
Test Level UOM:		ft			

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction/ Distance (m)</i>	<i>Elev/Diff (m)</i>	<i>Site</i>	<i>DB</i>
Pump Test Detail ID:		1004481683			
Test Type:		Draw Down			
Test Duration:		20			
Test Level:		97.37			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481685			
Test Type:		Draw Down			
Test Duration:		25			
Test Level:		99.04			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481686			
Test Type:		Recovery			
Test Duration:		25			
Test Level:		99.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481687			
Test Type:		Draw Down			
Test Duration:		30			
Test Level:		101.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481688			
Test Type:		Recovery			
Test Duration:		30			
Test Level:		97.54			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481690			
Test Type:		Recovery			
Test Duration:		40			
Test Level:		95.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481689			
Test Type:		Draw Down			
Test Duration:		40			
Test Level:		107.06			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481692			
Test Type:		Recovery			
Test Duration:		50			
Test Level:		93.12			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481691			
Test Type:		Draw Down			
Test Duration:		50			
Test Level:		113.00			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481694			
Test Type:		Recovery			
Test Duration:		60			
Test Level:		92.08			
Test Level UOM:		ft			
Pump Test Detail ID:		1004481693			
Test Type:		Draw Down			
Test Duration:		60			
Test Level:		113.00			
Test Level UOM:		ft			

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

Water ID: 1004481666
Layer: 1
Kind Code: 8
Kind: Untested
Water Found Depth: 113.00
Water Found Depth UOM: ft

Hole Diameter

Hole ID: 1004481664
Diameter: 8.62
Depth From: 0.00
Depth To: 20.00
Hole Depth UOM: ft
Hole Diameter UOM: inch

Hole ID: 1004481665
Diameter: 8.25
Depth From: 20.00
Depth To: 147.00
Hole Depth UOM: ft
Hole Diameter UOM: inch

2	1 of 1	WSW/243.0	94.8 / 4.27	647 Hwy 49 Picton ON	EHS
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Order ID: 82735	Date Received: 9/6/2006
Order No: 20060906010	Lot/Building Size:
Customer ID: 36630	Municipality:
Company ID: 77	Client Prov/State: ON
Status: C	Search Radius (km): 0.3
Report Code: 3CAN	Large Radius: 2
Report Type: Complete Report	X: -77.136155
Report Date: 9/14/2006	Y: 44.026885
Report Requested by: Pinchin Environmental Ltd.	
Nearest Intersection:	
Previous Site Name:	
Additional Info Ordered: Fire Insur. Maps And /or Site Plans	

Unplottable Summary

Total: **9** Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	Isaiah Tubbs Resort	Lot 7, Concession 1 South Side of West	Prince Edward ON	
CA		Lot 7, Concession 1	Prince Edward County ON	
PTTW	Cottage Advisors of Canada Inc.	Lot 7,8, Concession 1	Prince Edward ON	
PTTW	Ducks Unlimited Canada	Lot 7, Concession 1	Prince Edward ON	
PTTW	Ducks Unlimited Canada	Lot 7, Concession 1	Prince Edward ON	
SPL	Essroc Canada Inc.	Highway 49	Prince Edward ON	
SPL	ONTARIO HYDRO	LOT 8, CON 1 FBQ MOTOR VEHICLE (OPERATING FLUID)	PRINCE EDWARD CITY ON	
SPL		Bay of Quinte, between the lighthouse and Hwy 49 bridge	Prince Edward ON	
SPL	Waste Management of Canada Corporation	HWY # 49, PICTON.<UNOFFICIAL>	Prince Edward ON	

Unplottable Report

Site: *Isaiah Tubbs Resort*
Lot 7, Concession 1 South Side of West Prince Edward ON

Database:
CA

Certificate #:
Application Year: 02
Issue Date: 8/13/02
Approval Type: Municipal & Private sewage
Status: Cancelled
Application Type: Notice
Client Name:: The Spot To Be Limited
Client Address:: R.R. #1
Client City:: Picton
Client Postal Code:: K0K 2T0
Project Description:: This application is an amendment to the existing Certificate of Approval No. 3-0669-98-006 for the expansion of subsurface disposal facility
Contaminants::
Emission Control::

Site: *Lot 7, Concession 1 Prince Edward County ON*

Database:
CA

Certificate #: 5421-4KNPA4
Application Year: 00
Issue Date: 5/26/00
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name:: The Spot To Be Limited
Client Address:: R.R. #1
Client City:: Picton
Client Postal Code:: K0K 2T0
Project Description:: The purpose of this modification is to change the source of the effluent going to the distribution field from that which was indicated on the original Certificate of Approval. This change will not increase DDSF, as a number of buildings on the original Certificate of Approval were not constructed. As a result of these changes, appropriate septic tanks, lift stations and pumping mains will be constructed.
Contaminants::
Emission Control::

Site: *Cottage Advisors of Canada Inc.*
Lot 7,8, Concession 1 Prince Edward ON

Database:
PTTW

EBR Registry No.: 011-0514
Ministry Ref. No.: 3338-873NK7
Year: 2010
Proposal Date: July 05, 2010
Notice Date:
Notice Type: Instrument Proposal
Proponent Address: 525 Dundas Street East Belleville Ontario Canada K8N 1G4
Instrument Type: (OWRA s. 34) - Permit to take water
Location: Lot 7,8, Concession 1, Prince Edward County
Location Other:

Site: *Ducks Unlimited Canada*
Lot 7, Concession 1 Prince Edward ON

Database:
PTTW

EBR Registry No.: 011-4708

Ministry Ref. No.: 4760-8LGKJC
Year: 2011
Proposal Date: October 05, 2011
Notice Date:
Notice Type: Instrument Proposal
Proponent Address: 1-614 Norris Court Kingston Ontario Canada K7P 2R9
Instrument Type: (OWRA s. 34) - Permit to take water
Location: Lot 7, Concession 1 Prince Edward County
Location Other:

Site: **Ducks Unlimited Canada**
Lot 7, Concession 1 Prince Edward ON

Database:
PPTW

EBR Registry No.: 011-4708
Ministry Ref. No.: 4760-8LGKJC
Year: 2011
Proposal Date: October 05, 2011
Notice Date:
Notice Type: Instrument Decision
Proponent Address: 1-614 Norris Court Kingston Ontario Canada K7P 2R9
Instrument Type: (OWRA s. 34) - Permit to take water
Location: Molyneux Wetland Lot 7, Concession 1 Prince Edward County CITY OF PRINCE EDWARD COUNTY
Location Other:

Site: **Essroc Canada Inc.**
Highway 49 Prince Edward ON

Database:
SPL

Ref No:	8100-9CQH6A	Sector Type:	Motor Vehicle
Contaminant Name:	DIESEL FUEL	Source Type:	
Contaminant Code:	13	Receiving Medium:	
Contaminant Limit 1:		Receiving Env:	
Contam Limit Freq 1:		Environment Impact:	Confirmed
Contaminant UN No 1:		Nature of Impact:	Soil Contamination
Contaminant Qty:	20 L	SAC Action Class:	Land Spills
Material Group:		Year:	
MOE Reported Dt:	2013/10/22	Site Address:	Highway 49
Health/Env Conseq:		Site Conc:	
Incident Dt:	2013/10/22	Site Lot:	
Incident Cause:	Leak/Break	Site County/District:	
Incident Event:		Site Municipality:	Prince Edward
Incident Reason:	Unknown / N/A	Site Postal Code:	
Incident Summary:	ESSROC: 20 L diesel to ground from water truck		

Site: **ONTARIO HYDRO**
LOT 8, CON 1 FBQ MOTOR VEHICLE (OPERATING FLUID) PRINCE EDWARD CITY ON

Database:
SPL

Ref No:	79316	Sector Type:	
Contaminant Name:		Source Type:	
Contaminant Code:		Receiving Medium:	LAND
Contaminant Limit 1:		Receiving Env:	
Contam Limit Freq 1:		Environment Impact:	CONFIRMED
Contaminant UN No 1:		Nature of Impact:	Soil contamination
Contaminant Qty:		SAC Action Class:	
Material Group:		Year:	
MOE Reported Dt:	7/21/1992	Site Address:	
Health/Env Conseq:		Site Conc:	
Incident Dt:	7/21/1992	Site Lot:	
Incident Cause:	PIPE/HOSE LEAK	Site County/District:	
Incident Event:		Site Municipality:	68101
Incident Reason:	EQUIPMENT FAILURE	Site Postal Code:	
Incident Summary:	ONTARIO HYDRO: 3-4 L DIESEL FUEL TO GRND FROM BROKEN FUEL LINE ON TRUCK		

Site:

Bay of Quinte, between the lighthouse and Hwy 49 bridge Prince Edward ON

Database:
SPL

Ref No:	2013-967HZ6	Sector Type:	Tank - Above Ground
Contaminant Name:	FURNACE OIL	Source Type:	
Contaminant Code:	13	Receiving Medium:	
Contaminant Limit 1:		Receiving Env:	
Contam Limit Freq 1:		Environment Impact:	Confirmed
Contaminant UN No 1:		Nature of Impact:	Soil Contamination; Surface Water Pollution
Contaminant Qty:	0 other - see incident description	SAC Action Class:	Watercourse Spills
Material Group:		Year:	
MOE Reported Dt:	27-MAR-13	Site Address:	Bay of Quinte, between the lighthouse and Hwy 49 bridge
Health/Env Conseq:		Site Conc:	
Incident Dt:	27-MAR-13	Site Lot:	
Incident Cause:	Leak/Break	Site County/District:	
Incident Event:		Site Municipality:	Prince Edward
Incident Reason:	Unknown / N/A	Site Postal Code:	
Incident Summary:	Furnace oil spill in Bay of Quinte, Telegraph Narrows		

Site: Waste Management of Canada Corporation
HWY # 49, PICTON.<UNOFFICIAL> Prince Edward ON**Database:**
SPL

Ref No:	5747-62XR6D	Sector Type:	Other
Contaminant Name:	SEWAGE SLUDGE	Source Type:	
Contaminant Code:	44	Receiving Medium:	Land
Contaminant Limit 1:		Receiving Env:	
Contam Limit Freq 1:		Environment Impact:	Confirmed
Contaminant UN No 1:		Nature of Impact:	Soil Contamination
Contaminant Qty:	1.52905198776758 m3	SAC Action Class:	
Material Group:	Waste	Year:	
MOE Reported Dt:	7/16/2004	Site Address:	
Health/Env Conseq:		Site Conc:	
Incident Dt:	7/16/2004	Site Lot:	
Incident Cause:	Other Discharges	Site County/District:	
Incident Event:		Site Municipality:	Prince Edward
Incident Reason:	Equipment/Vehicles	Site Postal Code:	
Incident Summary:	Waste MGT-2 cubic yards sewage sludge to hwy 49		

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 2017

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-Nov 2016

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, 2018

Borehole:

Provincial [BORE](#)

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

Government Publication Date: 1875-Jul 2014

Certificates of Approval:

Provincial [CA](#)

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

Government Publication Date: 1985-Oct 30, 2011*

Commercial Fuel Oil Tanks:

Provincial [CFOT](#)

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

Government Publication Date: 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, 2018

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 31, 2012

Inventory of Coal Gasification Plants and Coal Tar Sites:

Provincial [COAL](#)

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

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions:

Provincial [CONV](#)

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

Government Publication Date: 1989-Nov 2017

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-Oct 2017

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-Nov 30, 2017

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-Oct 2017

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-Oct 2017

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-Oct 2017

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-Feb 28, 2018

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

List of TSSA Expired Facilities:

Provincial **EXP**

List of facilities with removed tanks which were once 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 automatically fall under the expired facilities inventory held by TSSA.

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-Dec 2017

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 2017

Fuel Storage Tank:

Provincial **FST**

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

Government Publication Date: 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-December 31, 2017

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 2015

TSSA Historic Incidents:

Provincial **HINC**

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks:

Federal **IAFT**

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

Government Publication Date: 1950-Aug 2003*

TSSA Incidents:

Provincial **INC**

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Government Publication Date: 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: Dec 31, 2013

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-Feb 2017

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, 2014

National Defense & Canadian Forces Fuel Tanks:

Federal

NDFT

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

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills:

Federal

NDSP

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

Government Publication Date: Mar 1999-Aug 2010

National Defence & Canadian Forces Waste Disposal Sites:

Federal

NDWD

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

Government Publication Date: 2001-Apr 2007*

National Energy Board 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, 2017

National Energy Board Wells:

Federal

NEBW

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

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES):

Federal

NEES

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

Government Publication Date: 1974-2003*

National PCB Inventory:

Federal

NPCB

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

Government Publication Date: 1988-2008*

National Pollutant Release Inventory:

Federal

NPRI

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

Government Publication Date: 1993-May 2017

Oil and Gas Wells:

Private

OGW

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

Government Publication Date: 1988-December 31, 2017

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-Oct 2017

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-Oct 2017

Canadian Pulp and Paper:

Private

PAP

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

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

Parks Canada Fuel Storage Tanks:

Federal

PCFT

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

Government Publication Date: 1920-Jan 2005*

Pesticide Register:

Provincial PES

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

Government Publication Date: 1988-Aug 2017

TSSA Pipeline Incidents:

Provincial PINC

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

Government Publication Date: 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-Oct 2017

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-Nov 2017

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, 2018

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-Sep 2017

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, 2016

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 2017

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.

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 31, 2017

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: Mar 31, 2017

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 F

Aerial Photo Review



Year	Source	Scale	Notes
1929	NAPL	1:2,000	The Site is agricultural. Neighbouring properties are residential/agricultural to the north, woodlot/agricultural to the west, and residential/agricultural to the south and east. Folkard Lane is not present.
1962	NAPL	1:2,000	The Site and neighbouring properties are similar to 1929, with additional residential development to the west of the Site. Folkard Lane is present and traverses the north portion of the Site, leading to an off-site residence adjacent to the northeast corner property boundary of Site.
1986	PEC GIS	1:2,000	The Site is no longer agricultural, but remains vacant. Recreational trails are present on-site. Folkard Lane has been extended within the east and south property boundaries of the Site to accommodate residential development to the east of the Site.
2005	Google	1:2,000	The Site and neighbouring properties are similar to 1986. Additional shrub and tree cover is present on-site. The golf course is present northwest of the Site.
2016	Google	1:2,000	The Site and neighbouring properties are similar to 2005. Additional shrub and tree cover is present on-site. A pile of material (observed to be crushed limestone during the site visit) is noted on the west portion of the Site.

Sources: NAPL – National Air Photo Library
 PEC GIS – Prince Edward County GIS
 Google – Google Earth Pro



Appendix G

Curriculum Vitae



BERNIE TAYLOR, P.ENG.

Project Manager

Mr. Taylor holds a Bachelor of Engineering degree from Dalhousie University and a Master of Environmental Studies degree from York University. Mr. Taylor is a licensed Professional Engineer (P.Eng.) with Professional Engineers Ontario (PEO) and is a Qualified Person (QP_{ESA}) for Environmental Site Assessments under the Environmental Protection Act. He has over 10 years of employment experience in the environmental field, working throughout Ontario.

SUMMARY OF PROFESSIONAL EXPERIENCE

- 2014 - Present Project Manager. Cambium Inc.
Peterborough, Ontario, Canada
Provide technical support and coordination for environmental site assessments (ESAs), contaminant remediation, and hydrogeological and wastewater assessments. Mr. Taylor has extensive experience with proposal and report preparation including data compilation, interpretation, and review of final reports.
- 2014 Project Engineer. The Greer Galloway Group
Peterborough, Ontario, Canada
Coordinated environmental projects including landfill monitoring, contaminated site work, and permit applications. Consulted with regulatory agencies to obtain environmental permits for infrastructure projects (road rehabilitation, culvert replacements, etc.), and provided contract administration and supervision for said projects.
- 2012 - 2014 Project Engineer. AiMS Environmental
Markham, Ontario, Canada
Conducted ESAs for manufacturing facilities, gas stations, repair shops and dry cleaners. Mr. Taylor has provided peer review of environmental work conducted by others, successfully filed numerous Ministry of Environment approved Record of Site Conditions (RSCs), and worked with remediation contractors to complete clean-up of contaminated sites.
- 2009 - 2012 Environmental Planner. City of Toronto, Forestry Department
Toronto, Ontario, Canada
Worked as part of a team to implement and manage multi-stakeholder brownfield restoration projects. Mr. Taylor coordinated consultants performing ecological and environmental studies, negotiated capital project funding commitments from external municipal departments, and coordinated public consultation meetings with diverse stakeholder groups.
- 2002 - 2006 Engineer in Training. WESA
Kingston, Ontario
Worked on a broad range of environmental projects, including ESAs, groundwater characterization studies for mining sites, contaminated site remediation, groundwater supply assessment for land severance and development, drinking water treatment evaluations, designated substance surveys and permit applications related to waste management, biosolid spreading and water.



PROFESSIONAL ASSOCIATIONS

- Licenced Member, Professional Engineers Ontario

EDUCATION & TRAINING

Education

- | | |
|------|---|
| 2009 | Master in Environmental Studies. York University. |
| 2002 | B.Eng. (Environmental Engineering). Dalhousie University. |

Courses

- | | |
|------------|---|
| 2017 | Smart Remediation Conference, Toronto, Ontario |
| 2015 | Smart Remediation Conference, Toronto, Ontario |
| 2013, 2015 | Brownfields Remediation Seminar, Toronto, Ontario |
| 2011 | Hands-on HEC-HMS (Hydrologic Modeling System), Toronto, Ontario |
| 2008 | GIS for Planning and Resource Management. York University, Toronto, Ontario |
| 2006 | Stormwater Modelling with SWMM and PCSWMM, Mississauga, Ontario |
| 2005 | Stormwater Management and Advancement Treatment and Design, Kingston, Ontario |
| 2004 | Small Landfill Operators Course, Kingston, Ontario |
| 2003 | Operation of Small Drinking Water Systems, Kingston, Ontario |

LANGUAGES

- English (written fluent, verbal fluent, reading fluent)

SELECTED EXPERIENCE

ENVIRONMENTAL SITE ASSESSMENTS

Mr. Taylor has completed Environmental Site Assessments (ESA) on Brownfield sites, existing commercial and industrial properties, and vacant lands. Various assessments included the removal of fuel storage tanks, contaminant delineation and remediation, risk assessment, and filing of Records of Site Condition. Contaminants of concern have included petroleum hydrocarbons, chlorinated solvents, volatile and semi-volatile organic compounds, polycyclic aromatic hydrocarbons and metals.



CONTAMINATED SITE REMEDIATION

Projects included the remediation of 200 tonnes of contaminated soil caused by a perforated heating oil underground storage tank (UST) at an apartment complex in Toronto. Work included: coordinating an age-dating investigation to determine approximately when the fuel leak began, delineation of onsite contamination via borehole and monitoring well installation, supervising excavation of impacted soil from both inside and outside the building, supervision of building underpinning installation, and performing confirmation testing as per O. Reg. 153/04.

RECORD OF SITE CONDITION (RSC)

Obtained RSCs for subdivision and commercial development sites in the Greater Toronto Area and Peterborough. Mr. Taylor designed Phase I and II ESA work plans, conducted field work and/or coordinated field staff for the collection of soil and groundwater samples, compiled RSC reports and application packages, and consulted with the MOECC to ensure successful permit applications.

MUNICIPAL INFRASTRUCTURE PROJECTS

Provided contract administration for road rehabilitation and culvert installation projects for several municipalities, which included contractor liaison, field supervision, and preparation of payment certificates. Mr. Taylor also inspected culverts and storm and sanitary sewers, and assisted with the preparation of detail design drawings. For bridge and culvert work, Mr. Taylor consulted with regulatory agencies (DFO, MOE, MNR, Transport Canada and Conservation Authority) to obtain environmental permits.

ECOLOGICAL RESTORATION

Worked as part of a team to implement and manage urban ecological restoration projects, including a large wetland and bird meadow project in the Don River valley. Mr. Taylor coordinated consultants performing environmental and ecological studies (including surveys for birds, flora, and other fauna), and coordinated site design revisions based on consultations with stakeholder groups such as the Conservation Authority.

GROUND WATER CHARACTERIZATION (MINING)

Worked with senior staff on groundwater and surface water characterization studies for mining sites near Sudbury and Thunderbay. Produced hydrographs, stratigraphy cross-sections and potentiometric maps, and interpreted analytical data. Conducted hydraulic testing in the field, interpreted hydrogeological data using AquiferTest software; and field supervised packer testing and down-hole camera inspections.



DRINKING WATER TREATMENT EVALUATIONS

Mr. Taylor performed drinking water evaluations for several municipalities and retirement homes in accordance with O. Reg. 170/03 to ensure that facilities were supplying safe drinking water. The evaluations included: water supply testing, identification of treatment deficiencies, conceptual treatment design, and coordination with water treatment subcontractor to ensure that compliant systems were installed as designed.

WATER SUPPLY AND SEPTIC ASSESSMENT

Assessed groundwater supply for land severance and development purposes by performing pump tests and collecting samples of water supply wells. Where water yield was insufficient in comparison with MOE guidelines, Mr. Taylor supervised hydraulic fracturing of water supply wells. Mr. Taylor also assessed soil conditions for residential septic effluent, which included collecting soil samples for percolation tests.

WASTE MANAGEMENT

Prepared annual reports for municipal landfills, which included an assessment of surface water and ground water analytical data to characterize potential contaminant plumes, and a review of operational requirements (signage, waste cover, site access, etc.). Mr. Taylor also established a waste transfer station at a closed landfill, and worked as part of a team to perform a recycling audit as part of a waste reclamation program.

BIOSOLID SPREADING

Assessed the suitability of numerous agriculture areas for the application of a compost mixture from a cardboard paper mill, as per MOE guidelines. Mr. Taylor conducted fieldwork to determine soil nutrient content, produced maps showing areas of permitted biosolid spreading, prepared permit applications, and worked with MOE to obtain Certificate of Approval.