



GEMTEC

www.gemtec.ca

**Phase One Environmental Site Assessment
Proposed Development
5621 Fernbank Road (Part of Lot 28,
Concession 10, City of Ottawa)
Ottawa, Ontario**

experience • knowledge • integrity



expérience • connaissance • intégrité



GEMTEC

www.gemtec.ca

Submitted to:

Novatech
240 Michael Cowpland Drive, Suite 200
Ottawa, Ontario
K2M 1P6

**Phase One Environmental Site Assessment
Proposed Development
5621 Fernbank Road (Part of Lot 28,
Concession 10, City of Ottawa)
Ottawa, Ontario**

December 20, 2018
Project: 64153.97

GEMTEC Consulting Engineers and Scientists Limited
32 Steacie Drive
Ottawa, ON, Canada
K2K 2A9

December 20, 2018

File: 64153.97

Novatech
240 Michael Cowpland Drive, Suite 200
Ottawa, Ontario
K2M 1P6

Attention: **Mark Bissett, P.Eng., Senior Project Manager**

**Re: Phase One Environmental Site Assessment
Proposed Development
5621 Fernbank Road (Part of Lot 28, Concession 10, City of Ottawa)
Ottawa, Ontario**

Enclosed is our Phase One (ESA) report for the above-noted project based on the scope of work presented in our proposal dated November 22, 2018. This report was prepared by Nicole Soucy, B.A.Sc., M.A.Sc., with senior review performed by Katherine Rispoli, M.A.Sc, P.Eng, ing.



Nicole Soucy, B.A.Sc., M.A.Sc.



Katherine Rispoli, M.A.Sc., P.Eng., ing.

NS/KR

Enclosures
P:\0. Files\64100\64153.97\Phase One ESA\64153.97_PhaseOneESA_RPT01_V01_2018-12-20.docx

EXECUTIVE SUMMARY

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Novatech to carry out a Phase One Environmental Site Assessment (ESA) for the property located at 5621 Fernbank Road (Part of Lot 28, Concession 10, City of Ottawa) in Ottawa, Ontario (hereafter referred to as “the subject property”).

The primary objective of this Phase One ESA was to identify any former or current potentially contaminating activities at the subject property and its vicinity to determine if they create any areas of potential environmental concern on the subject property. This Phase One ESA was carried out in general accordance with Ontario Regulation 153/04 made under the Environmental Protection Act and meets the requirements of Part VII (Sections 23 to 31) and Schedule D of the regulation.

Section 1.0 of this report provides a brief description of the site and Section 2.0 provides the scope of investigation. Section 3.0 presents the findings of the records review. Section 4.0 presents the results of the interviews conducted. Section 5.0 presents the findings of the site reconnaissance. Section 6.0 provides a review and evaluation of information gathered. Section 7.0 presents the conclusions and recommendations of the study. Section 8.0 outlines the limitation of liability and Section 9.0 lists the references used.

No Areas of Potential Environmental Concern (APECs) were identified for the subject property, based on the Phase One ESA results.

Based on this information, it is our opinion that a Phase Two Environmental Site Assessment is not required at this time, as there were no APECs identified on the subject property.

The Phase One Environmental Site Assessment has been carried out by qualified personnel and reviewed by the undersigned. This Phase One ESA was carried out in general accordance with Ontario Regulation 153/04 made under the Environmental Protection Act and meets the requirements of Part VII (Sections 23 to 31) and Schedule D of the regulation.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	III
1.0 INTRODUCTION.....	1
2.0 SCOPE OF THE INVESTIGATION	2
3.0 RECORDS REVIEW	3
3.1 General.....	3
3.1.1 Phase One Study Area Determination	3
3.1.2 First Developed Use Determination	3
3.1.3 Fire Insurance Plans / Insurance Reports	3
3.1.4 Chain of Title.....	3
3.1.5 Environmental Reports	4
3.2 Environmental Source Information	5
3.2.1 Ecolog ERIS Database Report.....	5
3.2.2 City Directories	5
3.2.3 Technical Standards and Safety Authority	6
3.2.4 City of Ottawa – Historical Land Use Inventory	6
3.2.5 Mapping and Assessment of Former Industrial Sites	6
3.2.6 Mapping of Federally Contaminated Sites.....	6
3.2.7 Ontario Inventory of PCB Storage Sites	6
3.3 Physical Setting Sources	7
3.3.1 Aerial Photographs	7
3.3.2 Topography, Hydrology and Geology.....	8
3.3.3 Fill Materials.....	8
3.3.4 Water Bodies and Areas of Natural Significance.....	8
3.3.5 Well Records	9
4.0 INTERVIEWS.....	10
4.1 Interview	10
4.2 Assessment and Evaluation of Interview.....	10
5.0 SITE RECONNAISSANCE.....	11
5.1 General Requirements.....	11
5.1.1 Site Photographs	11
5.2 Specific Observations at Phase One Property	11
5.2.1 Onsite Structures	11
5.2.2 Observations.....	12
5.2.3 Site Services.....	12
5.3 Specific Observations within the Study Area	12
5.3.1 Services.....	12

5.3.2	Water Bodies and Areas of Natural Significance	12
5.3.3	Surrounding Properties	12
5.4	Enhanced Investigation Property	12
5.5	Written Description of Investigation	13
6.0	REVIEW AND EVALUATION OF INFORMATION.....	14
6.1	Current and Past Uses.....	14
6.2	Potentially Contaminating Activities.....	14
6.3	Areas of Potential Environmental Concern.....	14
6.4	Phase One Conceptual Site Model	15
6.4.1	Underground Utilities	15
6.4.2	Geological and Hydrogeological Information.....	15
6.4.3	Discussion of Uncertainty.....	15
7.0	CONCLUSIONS AND RECOMMENDATIONS	16
7.1	Recommendations	16
8.0	LIMITATIONS OF LIABILITY.....	18
9.0	REFERENCES.....	19

LIST OF FIGURES (FOLLOWS TEXT)

Figure 1 – Study Area Plan with Key Plan

Figure 2 – Topographic Map

LIST OF APPENDICES

Appendix A	Chain of Title
Appendix B	Ecolog ERIS Database Report
Appendix C	City Directory Records
Appendix D	Technical Standards and Safety Authority Search Results
Appendix E	City of Ottawa- Historical Land Use Inventory
Appendix F	Aerial Photographs
Appendix G	Site Photographs

1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Novatech to carry out a Phase One Environmental Site Assessment (ESA) for the property located at 5621 Fernbank Road (Part of Lot 28, Concession 10, City of Ottawa) in Ottawa, Ontario (hereafter referred to as “the subject property”). The legal description for 5621 Fernbank Road is Part of Lot 28, Concession 10, being Part 1 on Plan 5R-1034, Geographic Township of Goulbourn, City of Ottawa; PIN 04450-0197. The location of the subject property is illustrated on the Study Area Plan, Figure 1.

The subject property is presently owned by Abbott-Fernbank Holdings Inc. The contact person for the subject property is Mr. David Kardish, Vice-President – Land Development for The Regional Group at 613-230-2100.

2.0 SCOPE OF THE INVESTIGATION

The primary objective of this Phase One ESA was to identify any former or current potentially contaminating activities at the subject property and its vicinity to determine if they create any areas of potential environmental concern on the subject property.

This Phase One ESA was carried out in general accordance with Ontario Regulation 153/04 made under the Ontario Environmental Protection Act and meets the requirements of Part VII (Sections 23 to 31) and Schedule D of the regulation. The scope of the investigation includes a records review, interviews, a site reconnaissance, an evaluation of the information gathered and reporting. The Phase One ESA report will document and demonstrate how the objectives of the Phase One ESA were achieved and whether further investigation is required.

3.0 RECORDS REVIEW

3.1 General

3.1.1 Phase One Study Area Determination

The subject property has an area of 1 acre and is located at 5621 Fernbank Road in Ottawa, Ontario. The subject property was first used for agricultural activities between prior to 1946. Development is first visible surrounding the subject property between 2011 and 2013.

Historical land use in the study area was predominantly agricultural. Based on this information, a Phase One ESA study area of 250 metres surrounding the subject property is deemed sufficient for the purpose of this Phase One ESA. The location of the subject property and the extent of the Phase One ESA study area are provided on the Study Area Plan, Figure 1. A Topographic Plan is provided on Figure 2.

No land use outside the 250 metres study area has been identified as a considerable environmental concern to warrant inclusion in the study area.

3.1.2 First Developed Use Determination

Based on a review of the available historical information, the subject property has never been developed. Aerial photographs indicate the presence agricultural practices on the subject property since the earliest available historical photograph from 1946.

3.1.3 Fire Insurance Plans / Insurance Reports

Based on our knowledge of the area, no fire insurance products are available for the subject property, and therefore no search was completed.

3.1.4 Chain of Title

A chain of title search for the subject property was provided by Wentzell Titles of Kemptville, Ontario and is included in Appendix A. The legal description of 5621 Fernbank Road is Part of Lot 28, Concession 10, being Part 1 on Plan 5R-1034, Geographic Township of Goulbourn, City of Ottawa; PIN 04450-0197. The highlights of the chain of title search are described below:

- The subject property was first purchased from the Crown by James Daly Sr. in 1824; and,
- The property was then owned by multiple owners until it was purchased by Abbott-Fernbank Holdings Inc., the current property holder in 2018.

3.1.5 Available Environmental Reports

Previous environmental investigations were completed for the adjacent property, 5786 Fernbank Road, located to the north of the subject property.

- A Phase One ESA was conducted by GEMTEC (formerly Houle Chevrier Engineering Ltd., HCEL) entitled "Phase I Environmental Site Assessment, 1545 Shea Road, 5657 Fernbank Road and 5786 Fernbank Road, Brookfield Property, Ottawa, Ontario" dated October 2008. The environmental issues identified during the Phase I ESA on the adjacent property include: Debris and refuse, appliances, oil tanks, abandoned vehicles, tires, scrap metal, etc. were identified at the abandoned farm site.
- A Phase Two ESA was conducted by GEMTEC (HCEL) for the adjacent property to the north, with an area of approximately 65 hectares, the report entitled, "Phase II Environmental Site Assessment, 5611 Fernbank Road, Ottawa, Ontario" dated March 2012. Of the ten (10) test pits advanced as part of the initial investigation exceedances were identified in two (2) test pits for boron (available), cadmium, chromium (VI), lead, mercury, and zinc compared to applicable criteria. Based on these initial findings, additional investigation and removal of material was completed in 2011. About 1,170 metric tonnes of material, including soil and fill, was excavated and removed from the subject property. It was noted that the remaining fill materials, on part of 5786 Fernbank Road, showed elevated concentrations of boron, chromium (VI), lead, and mercury which exceeded MOECC Table 6 Site Condition Standards. One (1) groundwater sample from an on-site water well was analyzed for petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), metals and organochlorine pesticides. One (1) groundwater sample from groundwater inflow at a test pit was analyzed for organochlorine pesticides. No exceedances of the site condition standards for the groundwater samples were identified for the parameters analyzed.
- A Phase One ESA update was conducted by GEMTEC (HCEL) for the part of 5786 Fernbank Road in 2015 and is provided in the report entitled "Phase One Environmental Site Assessment, Part of 5786 Fernbank Road, Ottawa, Ontario", dated May 4, 2015. The Phase One ESA was carried out under the supervision of a qualified person in general accordance with the Ontario Regulation 153/04 made under the Environmental Protection Act. The area of potential environmental concern identified during the Phase One ESA related to the metal exceedances identified in the previous Phase Two ESA conducted in 2012.
- A Phase Two ESA was conducted by GEMTEC (HCEL) in 2015, which included details of remedial activities. Impacted soil was removed from four (4) zones, where the excavations totalled an area of 1,515 m² and were terminated on bedrock at depths ranging from ground surface to 1.4 metres below ground surface. Confirmatory sampling was conducted in accordance with O.Reg. 153/04 and met the applicable site condition standards. No further remediation activities were required.

- Following the remediation work completed, a Record of Site Condition was filled with the Ministry of Environment, Conservation, Parks (MECP, formerly MOECC) on October 14, 2015.

Based on the previous environmental work completed on the adjacent property, no potential environmental concerns were identified in the surrounding area outside of the metal exceedances in soil. It is further noted that the impacted soil was located approximately 225 metres northwest of the present subject property and was removed off-site.

3.2 Environmental Source Information

3.2.1 Ecolog ERIS Database Report

GEMTEC contacted Ecolog Environmental Risk Information Services Ltd. (Ecolog ERIS) to conduct a search of over fifty (50) public and private information databases for the subject property and the area within 250 metres of the subject property. The complete Ecolog ERIS report, including a list of databases searched, is provided in Appendix B. All listings were reviewed and the following entries were identified as relevant:

Address / Location	Distance from Subject Property	Company / Name	Database	Description
5615 and 5505 Fernbank Road	Adjacent	Abbott-Fernbank Holdings Inc.	Environmental Compliance Approval	An ECA was issued in 2018 for storm sewers and sanitary sewers.
5786 Fernbank Road	Adjacent	-	Eris Historical Search	A Historical ERIS standard custom report (Including but not limited to fire insurance maps and/or site plans, and city directories) was requested in 2015.
5357, 5385, 5395, 5465, and 5571 Fernbank Road	245 metres northeast	2129786 Ontario Limited c/o Monarch Group	Permit to Take Water	A PTTW instrument decision was completed in 2013.

3.2.2 City Directories

A review of the city directories from 1992 to 2011 was completed for the subject property (5621 Fernbank Road), and several adjacent properties including 5615, 5527, and 5571 Fernbank Road; 635 Haliburton Drive; and 105, 107, 111, 113, 115, and 117 Shinnay Avenue in Ottawa,

Ontario. A copy of the City Directory records is provided in Appendix C. All records were reviewed and no potentially contaminating activities were identified.

3.2.3 Technical Standards and Safety Authority

The Technical Standards and Safety Authority (TSSA) was contacted on November 22, 2018, to request available records regarding the subject property (5621 Fernbank Road), and several adjacent properties including 5615, 5527, and 5571 Fernbank Road; 635 Haliburton Drive; and 105, 107, 111, 113, 115, and 117 Shinn Avenue in Ottawa, Ontario. The response from the TSSA indicated that no records were available for the requested addresses.

A copy of the search request and the response from the TSSA are provided in Appendix D.

3.2.4 City of Ottawa – Historical Land Use Inventory

The City of Ottawa was contacted on November 23, 2018, to provide information from the Planning, Transit and the Environment Departments and from the Historical Land Use Inventory (HLUI). A response from the City of Ottawa was received on December 5, 2018. The response indicated that there are no activities associated with the subject property and no activities associated with the properties within 50 metres of the subject site. A copy of the request for information can be found in Appendix E.

3.2.5 Mapping and Assessment of Former Industrial Sites

A report entitled “Mapping and Assessment of Former Industrial Sites, City of Ottawa” dated July 1988 and prepared by Intera Technologies Ltd. was reviewed. The report provides an inventory and assessment of former industrial sites in the City of Ottawa from 1850 to 1984 that would have likely produced or handled hazardous waste and materials. No former industrial sites were identified on the subject property or within the study area.

3.2.6 Mapping of Federally Contaminated Sites

A Government of Canada, Treasury Board of Canada Secretariat, interactive map of contaminated sites was reviewed. The database provides an inventory of over four thousand (4000) federally contaminated sites across the country. The database identified no federally contaminated site within the study area.

3.2.7 Ontario Inventory of PCB Storage Sites

The Waste Management Branch of the Ontario Ministry of the Environment, Conservation and Parks (MECP) published an Ontario Inventory of PCB Storage Sites in October 1991. The publication includes information of PCB storage sites collected under O.Reg 11/82 through MECP district and regional offices. The database did not identify any PCB storage sites within the study area.

3.3 Physical Setting Sources

3.3.1 Aerial Photographs

Selected aerial photographs were examined as part of this Phase One ESA. Copies of the aerial photographs are provided in Appendix F.

Aerial photographs were obtained at approximately fifteen (15) year intervals and were selected based on suitable scales for analysis and coverage area. The earliest aerial photograph obtained was from 1946. Observations made with respect to the selected aerial photographs are discussed below:

Plate Number	Date	Photo Number	Observations
F1	1946	A10344_203	<ul style="list-style-type: none">• The subject property is used for agricultural purposes;• Structures are present within the study area, but not on the subject property; and,• Most of the surrounding area is also being used for agricultural purposes.
F2	1963	A18057_052	<ul style="list-style-type: none">• No significant changes compared to the 1946 aerial photograph.
F3	1973	A23207_176	<ul style="list-style-type: none">• No significant changes compared to the 1963 aerial photograph.
F4	1984	A26459_178	<ul style="list-style-type: none">• No significant changes compared to the 1973 aerial photograph.
F5	1994	A28149_042	<ul style="list-style-type: none">• No significant changes compared to the 1984 aerial photograph.
F6	1996	A31734_76	<ul style="list-style-type: none">• No other significant changes compared to the 1994 aerial photograph
F7	2004	A28523_163	<ul style="list-style-type: none">• No significant changes compared to the 1996 aerial photograph.
F8	2011	GeoOttawa	<ul style="list-style-type: none">• Some of the structures that were visible to the north of the subject site are no longer visible.

Plate Number	Date	Photo Number	Observations
F9	2014	GeoOttawa	<ul style="list-style-type: none"> • Residential development is visible to the north of the subject site; and, • A road has been constructed to the west of the subject site.

Based on the review of selected historical aerial photographs, the subject property has never been developed and has been used for agricultural purposes since prior to 1946.

Land use in the study area was historically agricultural with some residential (presumably farmhouses) interspersed throughout.

3.3.2 Topography, Hydrology and Geology

A topographic map based on Ontario Basic Mapping is provided on the Topographic Map, Figure 3. The subject property has a relatively flat topography and is at an elevation of approximately 105 metres above sea level. Surrounding topography generally slopes gradually downwards towards the Monahan Drain, which is located to the east of the subject property.

Surficial and bedrock geology maps of the Ottawa area indicate that the overburden in the vicinity of the subject property generally consists of glacial till with a thickness ranging from 0 to 10 metres. The bedrock is mapped as Paleozoic limestone and dolostone of the Gull River Formation.

Groundwater flow often reflects topographic features and typically flows toward nearby lakes, rivers and wetland areas. Based on the topography of the area, it is expected that the local shallow groundwater flow is towards the east. Local groundwater flow may be impacted by the nearby stormwater management pond and drainage channel, located to the north of the subject site.

3.3.3 Fill Materials

No fill material was identified on the subject site through a review of the aerial photographs, or during the site reconnaissance.

3.3.4 Water Bodies and Areas of Natural Significance

No provincially significant wetlands (PSWs) or areas of natural and scientific interest (ANSIs) were identified on the subject property or within the study area.

3.3.5 Well Records

Copies of the MECP Well Records for a 400-metre radius from the centre of the subject property were reviewed. Eight (8) wells were identified within this search radius. The locations of the adjacent water wells, based on the UTM coordinates provided in the water well records, have been plotted on Figure 2 following the text of this report. The average depth to the water table based on the static water levels available from the MOECC well records is 5.8 metres below ground surface.

The MECP well records indicate that the stratigraphy of the overburden in the area generally consists of gravel, clay and loam. Limestone bedrock was encountered in every well at an average depth of 4.3 metres below ground surface.

4.0 INTERVIEWS

An interview was carried out with two (2) individuals familiar with the subject property. Details of the interview are summarized in the following sections.

4.1 Interview

An interview was carried out with Mr. Mark Bissett, and Mr. Eric Moore manager of land development and family member of the previous property owner, respectively, of the subject site. The questions were transmitted through email on December 6, 2018, and a follow up call was completed on December 10, 2018. The following relevant information concerning potentially contaminating activities and areas of potential environmental concern were noted:

- Mr. Bissett indicated that to the best of my knowledge, the site has never been developed;
- He confirmed that the property is not serviced with any of the following: municipal water, sanitary sewer, storm sewer;
- Mr. Bissett indicated there was environmental remediation on the adjacent lands as part of the Phase Two ESA that involved the off-site disposal of earth material due to various metal exceedances in soil;
- Mr. Moore confirmed that historically agricultural practices have occurred on the subject site, however indicated that no pesticides or fertilizers were used;
- He also indicated that to the best of his knowledge, no historical fuel tanks or any sort have ever been present on the subject site; and
- Both Mr. Moore and Mr. Bissett indicated that to the best of their knowledge, no potentially environmentally harming practice or procedure has occurred on the subject property,

4.2 Assessment and Evaluation of Interview

The information provided in the interview is consistent with other information sources in that the subject property has never been developed. The metal contaminated soil remediation on the adjacent property discussed in the records review was also identified through the site interview.

5.0 SITE RECONNAISSANCE

5.1 General Requirements

A site reconnaissance was carried out on December 5, 2018 from 8:15 am to 9:15 am. The weather at the time of the site reconnaissance was light snow with a temperature of approximately -5 degrees Celsius.

The primary assessor for this Phase One Environmental Site Assessment is Ms. Nicole Soucy, B.A.Sc., M.A.Sc. She possesses a formal education, which includes a Bachelor of Applied Science with a major in Civil Engineering, and a Master of Applied Science in Civil Engineering specializing in Environmental Engineering. This formal education has provided her with the knowledge and expertise with which to identify sources of environmental concern and evaluate their potential to cause environmental contamination. In addition, Ms. Soucy has successfully completed Workplace Hazardous Materials Information System (WHMIS) and Associated Environmental Site Assessors of Canada Inc. (AESAC) training.

The Phase One ESA was carried out under the supervision of Ms. Katherine Rispoli, M.A.Sc., P.Eng., ing., a Professional Engineer in the Province of Ontario to ensure that the Phase One ESA has been carried out to meet the general objectives and requirements of Ontario Regulation 153/04. Ms. Rispoli is a Qualified Person to conduct environmental site assessments and file Record of Site Condition applications, as defined by O.Reg 153/04.

5.1.1 Site Photographs

Photographs of the subject property were taken during the course of the site reconnaissance to document the general condition of the subject property and any areas of potential environmental concern. The relevant photographs are presented in Appendix G. A discussion of the photographs is provided in the following table:

Plate Number	Compass Orientation	Description
G1	South	Pole mounted transformer identified within the study area. No staining or other impacts were identified.
G2	West	Ditch along the south boundary of the site near Fernbank Road
G3	East	Catch Basin identified in the ditch along Fernbank Road on the south side of the subject property

5.2 Specific Observations at Phase One Property

5.2.1 Onsite Structures

No structures were observed on site during the historical review or site reconnaissance.

5.2.2 Observations

The following observations were made for the subject property and subject area:

- The subject property is undeveloped with some vegetation cover;
- The property to the east of the subject site was under construction;
- Fill material was identified west of the subject property;
- A ditch was identified to run just south of the subject site along Fernbank Road; and,
- A pole mounted transformer was identified; no staining or impacts were observed.

5.2.3 Site Services

The subject site is not serviced with any of the following: municipal water, sanitary sewer, storm sewer.

5.3 Specific Observations within the Study Area

5.3.1 Services

Some properties in the study area are fully serviced with hydro, water, natural gas, and sanitary and storm sewers, others use well water and septic systems.

Ground cover within the study area was typically grass (agricultural/trees) although during the site visit it was snow covered.

5.3.2 Water Bodies and Areas of Natural Significance

No water bodies or areas of natural significance were observed in the study area.

5.3.3 Surrounding Properties

The following general observations were made for the properties surrounding the subject property:

- Agricultural lands were identified in all directions from the study area;
- A road was identified adjacent south to the subject site; and,
- Significant residential development has occurred north of the subject property.

5.4 Enhanced Investigation Property

The Phase One ESA property is not an enhanced investigation property, since the available information indicates that the subject property has never been used as a commercial garage, gasoline outlet, dry cleaning facility or for other industrial purposes.

5.5 Written Description of Investigation

The site reconnaissance was carried out on December 5, 2018, by Ms. Nicole Soucy B.A.Sc, M.A.Sc of GEMTEC. The site reconnaissance was carried out to determine if there were environmental concerns with the subject properties and/or surrounding property uses.

A detailed written description of the investigation and the results of the site reconnaissance investigation are provided in Sections 5.1 to 5.4.

No potentially contaminating activities (PCAs) were identified on the subject property or in the study area during the site reconnaissance.

6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Current and Past Uses

Current and past uses of the subject property are documented in the following table:

Year	Owner	Description of Property Use	Observations
1824 to 2018	James Daly Sr.	Undeveloped	Aerial photographs were available for many years; no structures were identified on the subject property. The property appears to be used as agricultural lands only.
2018	Abbott - Fernbank Holdings Inc.	Undeveloped	Site reconnaissance confirms no structures are visible on the subject site.

6.2 Potentially Contaminating Activities

No potentially contaminating activities were identified on the subject property or within the subject area.

6.3 Areas of Potential Environmental Concern

No APECs were identified for the subject property, based on the Phase One ESA results.

The available information was reviewed in a comprehensive manner starting with available historical information, followed by the results of the site reconnaissance and finally the results of the interviews. These three components were evaluated using our professional experience, judgment and available documentation including guidelines to determine potentially contaminating activities. Available historical records were cross-referenced with other records to verify their accuracy. The observations from the site reconnaissance and information provided through the interview validated the available historical records for the subject property, and vice versa. The potentially contaminating activities were then reassessed using our professional experience and judgment in order to identify the areas of potential environmental concern on the subject property. In combination, the factual review of available historical records and application of professional judgment have led to a thorough analysis that is sufficient for the purposes of the Phase One ESA.

6.4 Phase One Conceptual Site Model

The required details of the Phase One Conceptual Site Model are presented on Figure 1 and 2, as noted in the following table:

Conceptual Model Detail	Figure
Existing Buildings and Structures	Study Area Plan, Figure 1
Water Bodies	Topographic Map, Figure 2
Areas of Natural Significance	Not Present within the Phase One Study Area
Drinking Water Wells	Topographic Map, Figure 2
Roads	Study Area Plan, Figure 1
Adjacent Property Use	Study Area Plan, Figure 1
Potentially Contaminating Activities	Study Area Plan, Figure 1
Areas of Potential Environmental Concern	Study Area Plan, Figure 1

6.4.1 Underground Utilities

There is potential for underground utilities to affect contaminant transport on or to the subject property, if contaminants are present.

6.4.2 Geological and Hydrogeological Information

Surficial and bedrock geology maps of the Ottawa area indicate that the overburden in the vicinity of the subject property generally consists of glacial till with a thickness ranging from 0 to 10 metres. The bedrock is mapped as Paleozoic limestone and dolostone of the Gull River Formation.

Groundwater flow often reflects topographic features and typically flows toward nearby lakes, rivers and wetland areas. Based on the topography of the area, it is expected that the local shallow groundwater flow is towards the east. Local groundwater flow may be impacted by the nearby stormwater management pond and drainage channel, located to the north of the subject site.

6.4.3 Discussion of Uncertainty

There is uncertainty with the Phase One Conceptual Site Model associated with using well record data, topographic and geology maps from external sources. Information based on these sources may have changed since publishing due to construction, seasonal variations, or other factors.

7.0 CONCLUSIONS AND RECOMMENDATIONS

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Novatech to carry out a Phase One Environmental Site Assessment (ESA) for the subject property located at 5621 Fernbank Road (Part of Lot 28, Concession 10, City of Ottawa) in Ottawa, Ontario.

The available information was reviewed in a comprehensive manner starting with available historical information, followed by the results of the site reconnaissance and interviews. These three components were evaluated using our professional experience, judgment and available documentation including guidelines to determine potentially contaminating activities. Using site-specific geological and hydrogeological information, we determined the likelihood of contamination on the subject property due to the potentially contaminating activities in order to establish areas of potential environmental concern. The identification of areas of potential environmental concern was guided by our professional experience and judgment. This analysis constitutes a comprehensive review of the available information and factual data that is sufficient for the purposes of the Phase One ESA.

No Areas of Potential Environmental Concern (APECs) were determined through the Phase One ESA to exist for the subject property.

7.1 Recommendations

Based on this information, it is our opinion that a Phase Two Environmental Site Assessment is not required at this time, as there were no APECs identified on the subject property.

The Phase One Environmental Site Assessment has been carried out by qualified personnel and reviewed by the undersigned. This Phase One ESA was carried out in general accordance with Ontario Regulation 153/04 made under the Environmental Protection Act and meets the requirements of Part VII (Sections 23 to 31) and Schedule D of the regulation.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.



Nicole Soucy, B.A.Sc., M.A.Sc.
Environmental Scientist



Katherine Rispoli, P.Eng., ing., M.A.Sc.
Environmental Engineer



8.0 LIMITATIONS OF LIABILITY

The Phase One Environmental Site Assessment has been supervised and reviewed the qualified person. This Phase One ESA was carried out in general with Ontario Regulation 153/04 made under the Environmental Protection Act and meets the requirements of Part VII (Sections 23 to 31) and Schedule D of the regulation.

The results of this Phase One ESA should in no way be construed as a warranty that the subject property is free from any and all contaminants other than those noted in this report, nor that all compliance issues have been addressed.

This report was prepared for the exclusive use of Novatech and is based on data and information collected during the Phase One ESA of the property conducted by Gemtec Consulting Engineers and Scientists Ltd. This report may not be relied upon by any other person or entity without the express written consent of Gemtec Consulting Engineers and Scientists Ltd. and Novatech. In evaluating this site, Gemtec Consulting Engineers and Scientists Ltd. has relied in good faith on information provided by others. We accept no responsibility for any deficiencies or inaccuracies in this report as a result of omissions, misinterpretations, or fraudulent acts of others.

The assessment of environmental conditions and possible site hazards presented has been made using the available historical and technical data collected and provided by others. The conclusions provided herein represent the best judgment of Gemtec Consulting Engineers and Scientists Ltd. based on current environmental standards. Due to the nature of the investigation and the limited data available, we cannot warrant against undiscovered environmental liabilities.

The scope of the Phase One ESA is sufficient to identify existing and/or potential environmental liabilities that are obvious from visual examination of surface features and from available sources of information. This level of work is a method of risk reduction, not risk elimination. No building materials, water, liquid, gas, products or chemical sampling and/or testing on or in the vicinity of the subject property was carried out as part of this assessment. The Phase One ESA does not include a program of intrusive observation/testing. These activities would be carried out as part of a Phase Two ESA. This environmental assessment included only a cursory overview of the neighbouring land uses from public right of ways and from the subject property and does not constitute a complete assessment of the adjacent sites.

9.0 REFERENCES

Geography Network Canada. Ontario Basic Mapping (<http://www.geographynetwork.ca/website/obm/viewer.htm>). October 2004.

Geological Survey of Canada. Urban Geology of the National Capital Region (http://gsc.nrcan.gc.ca/urbgeo/natcap/index_e.php). November 5, 2007.

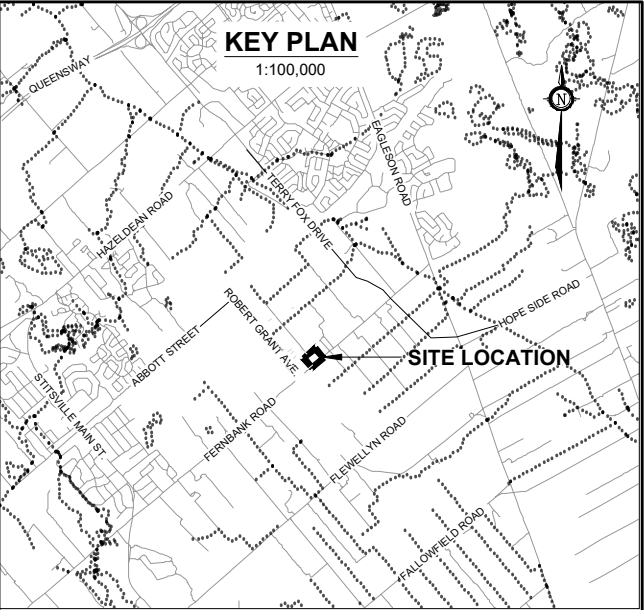
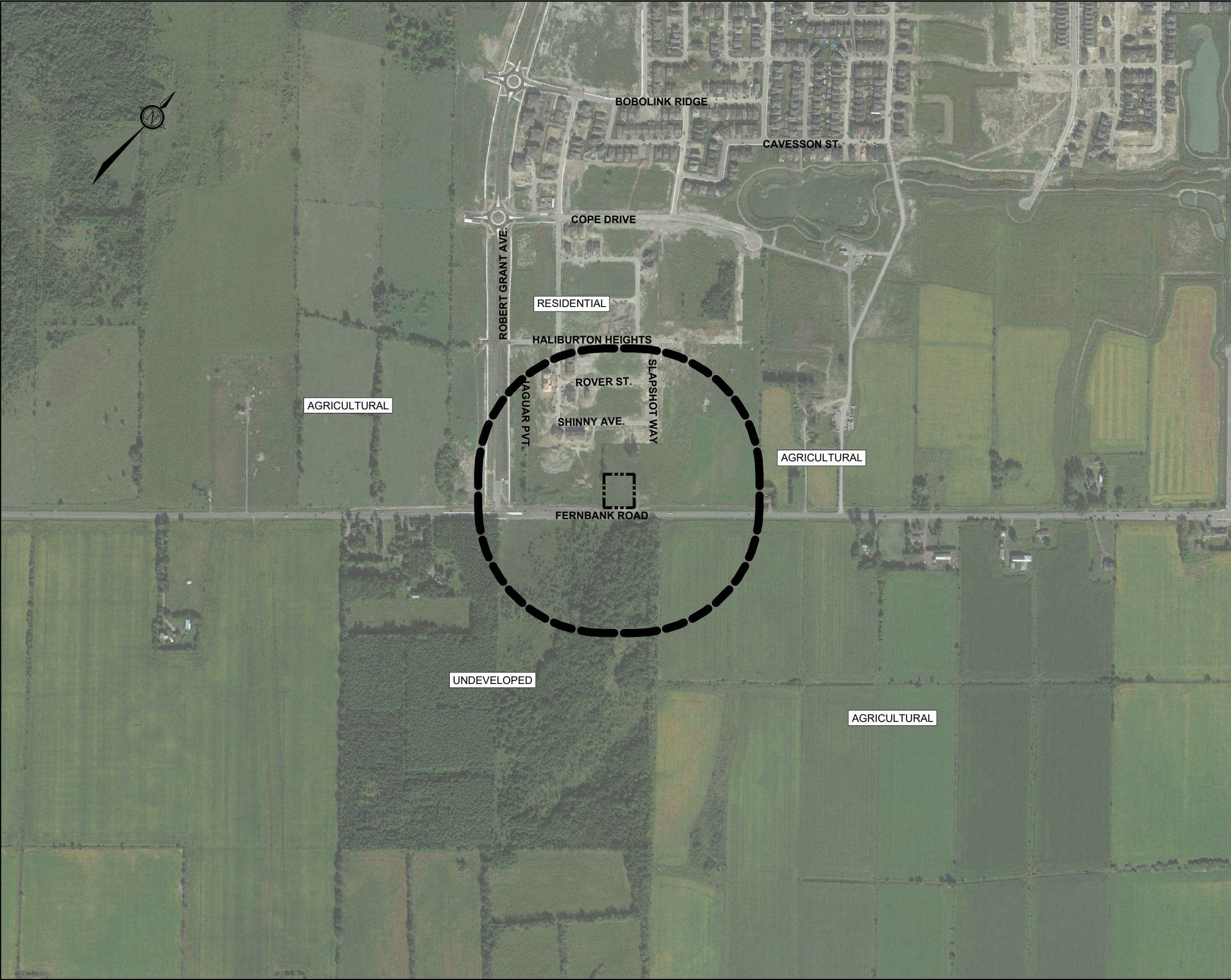
GeoOttawa Maps. (<http://maps.ottawa.ca/geoottawa/>).

Intera Technologies Ltd. Mapping and Assessment of Former Industrial Sites, City of Ottawa, Volume 1. July 1988. Project Reference H87-053.

Treasury Board of Canada - Secretariat. Mapping of Federally Contaminated Sites. (<https://map-carte.tbs-sct.gc.ca/map-carte/fcsi-rscf/map-carte.aspx?Language=EN&qid=2305646&backto=https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=2305646>)

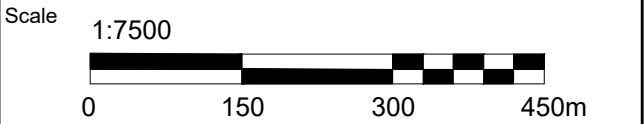
Ontario Ministry of the Environment, Conservation and Parks (Waste Management Branch). Ontario Inventory of PCB Storage Sites, (https://ia802302.us.archive.org/22/items/ontariopcb sites91onta/ONTARIOINVENTORY_00_SN SN_07164.pdf). January 1992

Ontario Ministry of the Environment, Conservation and Parks. Ontario Regulation 153/04, Made under the Environmental Protection Act, Part XV.1 – Records of Site Condition. January 1, 2014.



- LEGEND**
- SUBJECT SITE
 - 250 METRE BUFFER SHOWING EXTENT OF STUDY AREA

* No APECs identified in the Phase One Environmental Site Assessment Study Area

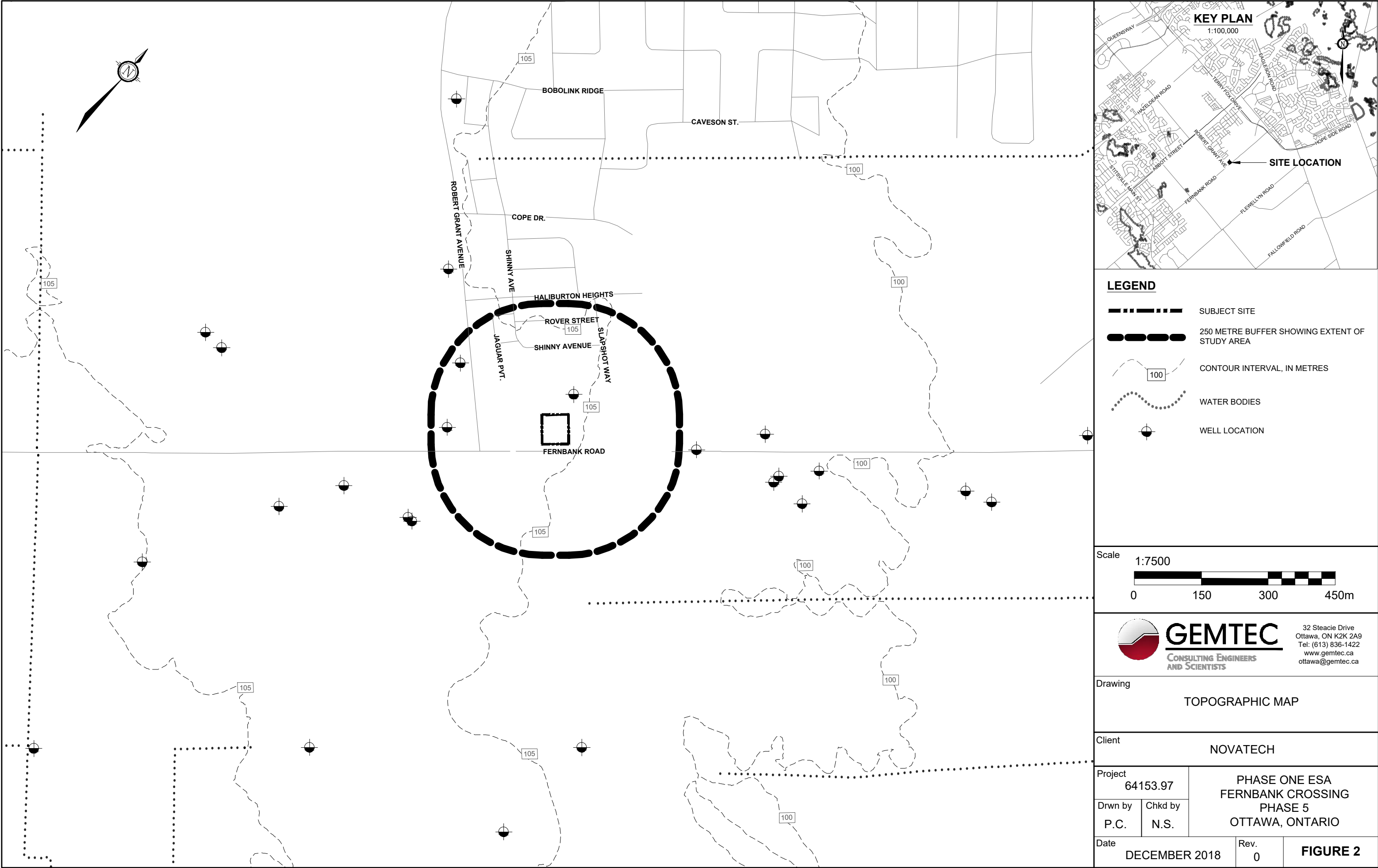




GEMTEC
CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive
Ottawa, ON K2K 2A9
Tel: (613) 836-1422
www.gemtec.ca
ottawa@gemtec.ca

Drawing		STUDY AREA PLAN		
Client		NOVATECH		
Project		PHASE ONE ESA 5621 FERNBANK ROAD (PART OF LOT 28, CONCESSION 10) OTTAWA, ONTARIO		
Drwn by	Chkd by			
P.C.	N.S.			
Date	Rev.	FIGURE 1		
DECEMBER 2018	0			





APPENDIX A

Chain of Title

Atty: Neale Conroy

ENVIRONMENTAL SEARCH

Re: 64153.97 - Torrance Road,

PURCHASER

Ottawa

INSTRUMENT #	TYPE	DATE	VENDOR	PURCHASER
	Patent	May 20 1824	Crown	James Leely Sr.
GB 650	Will	May 5 1874	Elizabeth Leely (Heir of James Leely)	Leely Leely
GB 4602	Deed	Oct 7 1900	Leely Leely, James Leely, William Leely Eliza Leely	George A. Leely
GB 5082	Deed	April 4 1903	George A. Leely	Franklin A. Leely
GB 5730	Deed	April 1904	Franklin A. Leely	Thomas Leely
GB 5688	Deed	Oct 29 1906	Thomas Leely	Thomas G. Leely
GB 9537	Deed	Apr 25 1944	Thomas G. Leely	George H. Leely
C+182395	Deed	Oct 29 1973	George H. Leely	Trust Regional Development Limited & Second Regional Development Limited

ENVIRONMENTAL SEARCH

INSTRUMENT #	TYPE	DATE	VENDOR	PURCHASER
CT 182399	Quit Claim	Oct 29 1973	Terrebonne Trust & Development Trust	George M. Moore
CT 203038	Deed	Nov 27 1974	Terrebonne Development Trusted & Second Regional Development Trust	George M. Moore Bernie L. Moore
NS 151237	Deed	May 26 1982	George M. Moore Bernie L. Moore	Terrebonne Estate Trusted
NS 229469	Deed	Feb 16 1984	Terrebonne Estate Trusted	Bernie L. Moore
N 402970	Deed	Aug 14 1987	Bernie L. Moore	Eric George Moore Bernie L. Moore
OC 2042455	Deed	Oct 4 2018	Bernie L. Moore Eric George Moore	Abbott - Terrebonne Holdings Inc. (Current Owner)
* Legal Description is: Part of Lot 28, Concession 10, being Part 1 on Plan SR-1034, Registered Township of Emmerson, City of Ottawa. PIN 04450-0192.				



APPENDIX B

Ecolog ERIS Database Report



DATABASE REPORT

Project Property: *Fernbank Crossing 64153.97
5621 Fernbank Road 64153.97
Kanata ON K2S 1B6
64153.97*

Project No: *64153.97*

Report Type: *Standard Express Report*

Order No: *20181122056*

Requested by: *GEMTEC Consulting Engineers and
Scientists Limited (Ontario)*

Date Completed: *November 22, 2018*

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

www.erisinfo.com

Table of Contents

Table of Contents.....	2
Executive Summary.....	3
Executive Summary: Report Summary.....	4
Executive Summary: Site Report Summary - Project Property.....	6
Executive Summary: Site Report Summary - Surrounding Properties.....	7
Executive Summary: Summary By Data Source.....	8
Map.....	10
Aerial.....	11
Topographic Map.....	12
Detail Report.....	13
Unplottable Summary.....	18
Unplottable Report.....	19
Appendix: Database Descriptions.....	22
Definitions.....	31

Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

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.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Limited Partnership ("ERIS") using various sources of information, including information provided by Federal and Provincial government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report(s) are protected by copyright owned by ERIS Information Limited Partnership. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

Executive Summary

Property Information:

Project Property: *Fernbank Crossing 64153.97
5621 Fernbank Road 64153.97 Kanata ON K2S 1B6*

Project No: *64153.97*

Coordinates:

Latitude: *45.266055*
Longitude: *-75.883328*
UTM Northing: *5,012,885.88*
UTM Easting: *430,703.22*
UTM Zone: *UTM Zone 18T*

Elevation: *351 FT
106.88 M*

Order Information:

Order No: *20181122056*
Date Requested: *November 22, 2018*
Requested by: *GEMTEC Consulting Engineers and Scientists Limited (Ontario)*
Report Type: *Standard Express Report*

Historical/Products:

City Directory Search *CD - Subject Site plus 10 Adjacent Properties*

Executive Summary: Report Summary

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

Database	Name	Searched	Project Property	Within 0.25 km	Total
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBI	National Energy Board Pipeline Incidents	Y	0	0	0
NEBW	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGW	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	TSSA Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	0	0
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	TSSA Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	2	2
Total:			0	5	5

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>
--------------------	-----------	--------------------------	----------------	---------------------	--------------------------	------------------------

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>
<u>1</u>	ECA	Abbott-Fernbank Holdings Inc.	5615 Fernbank Rd 5505 Fernbank Road Ottawa ON K2C 0P9	ENE/48.9	-1.08	<u>13</u>
<u>2</u>	WWIS		lot 28 con 10 STITTSCVILLE ON Well ID: 7112934	NNW/90.9	0.00	<u>13</u>
<u>3</u>	BORE		ON	ENE/132.5	-1.54	<u>15</u>
<u>4</u>	EHS		5786 Fernbank Road Ottawa ON	NW/239.1	1.00	<u>15</u>
<u>5</u>	WWIS		lot 28 con 10 STITTSCVILLE ON Well ID: 7215393	SW/244.8	2.00	<u>16</u>

Executive Summary: Summary By Data Source

BORE - Borehole

A search of the BORE database, dated 1875-Jul 2014 has found that there are 1 BORE 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>
	ON	ENE	132.47	<u>3</u>

ECA - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011-Oct 31, 2018 has found that there are 1 ECA 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>
Abbott-Fernbank Holdings Inc.	5615 Fernbank Rd 5505 Fernbank Road Ottawa ON K2C 0P9	ENE	48.90	<u>1</u>

EHS - ERIS Historical Searches

A search of the EHS database, dated 1999-Jul 31, 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>
	5786 Fernbank Road Ottawa ON	NW	239.14	<u>4</u>

WWIS - Water Well Information System

A search of the WWIS database, dated Dec 31, 2017 has found that there are 2 WWIS 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>
	lot 28 con 10 STITTSCVILLE ON <i>Well ID: 7112934</i>	NNW	90.88	<u>2</u>
	lot 28 con 10 STITTSCVILLE ON	SW	244.82	<u>5</u>

Equal/Higher Elevation

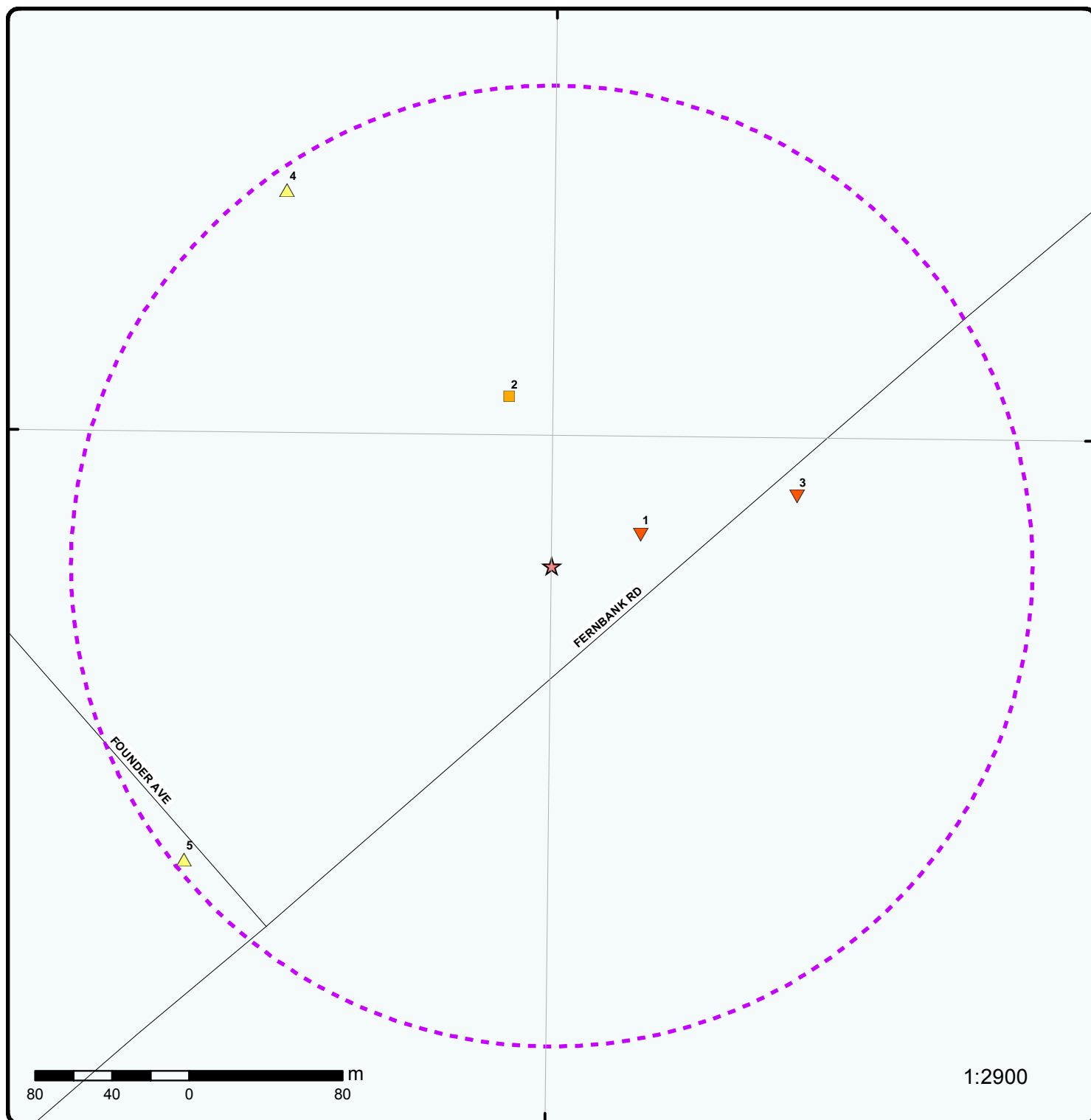
Address

Direction

Distance (m)

Map Key

Well ID: 7215393



Map : 0.25 Kilometer Radius

Order No: 20181122056

Address: 5621 Fernbank Road 64153.97, Kanata, ON K2S 1B6 CA



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 (2017)

Address: 5621 Fernbank Road 64153.97, Kanata, ON K2S 1B6 CA

Source: ESRI World Imagery

Order No: 20181122056

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



© ERIS Information Limited Partnership

75°54'W

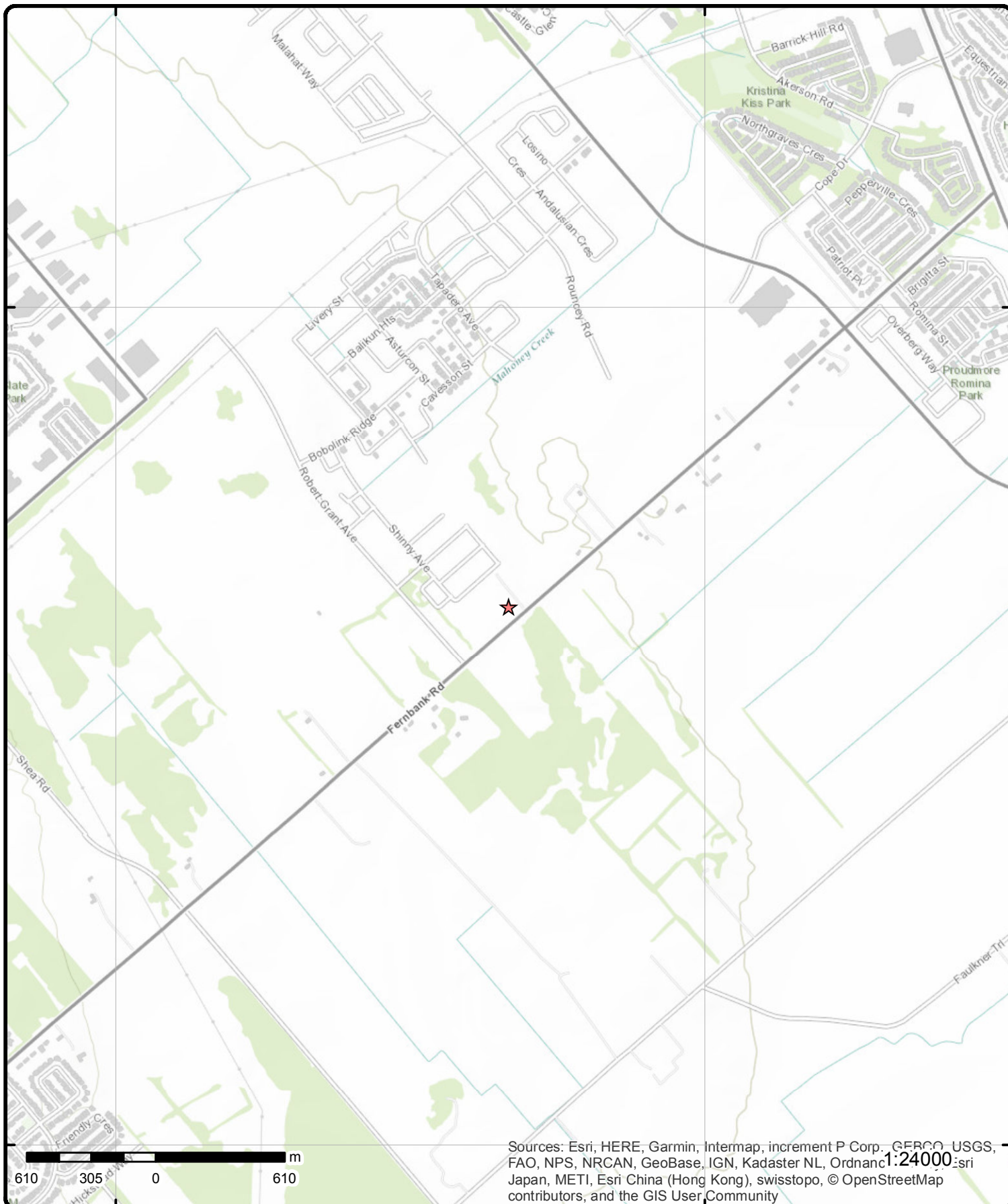
75°52'30"W

45°16'30"N

45°16'30"N

45°15'N

45°15'N



Topographic Map

Address: 5621 Fernbank Road 64153.97, Kanata, ON K2S 1B6 CA

Source: ESRI World Topographic Map

Order No: 20181122056



© ERIS Information Limited Partnership

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 1	ENE/48.9	105.8 / -1.08	Abbott-Fernbank Holdings Inc. 5615 Fernbank Rd 5505 Fernbank Road Ottawa ON K2C 0P9	ECA
<div> <div> Approval No: 9805-AWPM7Q Approval Date: 2018-03-14 Status: Approved Record Type: ECA Link Source: IDS Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS Address: 5615 Fernbank Rd 5505 Fernbank Road Full Address: Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/6114-AWCJZW-14.pdf </div> <div> SWP Area Name: MOE District: City: Longitude: Latitude: </div> </div>					
2	1 of 1	NNW/90.9	106.9 / 0.00	lot 28 con 10 STITTICVILLE ON	WWIS
<div> <div> Well ID: 7112934 Construction Date: Primary Water Use: Sec. Water Use: Final Well Status: Abandoned-Other Water Type: Casing Material: Audit No: Z84380 Tag: Construction Method: Elevation (m): Elevation Reliability: Depth to Bedrock: Well Depth: Overburden/Bedrock: Pump Rate: Static Water Level: Flowing (Y/N): Flow Rate: Clear/Cloudy: </div> <div> Data Entry Status: Data Src: Date Received: 10/14/2008 Selected Flag: Yes Abandonment Rec: Yes Contractor: 1558 Form Version: 7 Owner: Street Name: 5611 FERNBANK RD. County: OTTAWA-CARLETON Municipality: GOULBOURN TOWNSHIP Site Info: Lot: 028 Concession: 10 Concession Name: CON Easting NAD83: Northing NAD83: Zone: UTM Reliability: </div> </div>					
<u>Bore Hole Information</u>					
<div> <div> Bore Hole ID: 1001835741 DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole: Cluster Kind: Date Completed: 18-AUG-08 Remarks: Elevrc Desc: Location Source Date: Improvement Location Source: </div> <div> Elevation: 106.08 Elevrc: Zone: 18 East83: 430681 Org CS: UTM83 North83: 5012974 UTMRC: 3 UTMRC Desc: margin of error : 10 - 30 m Location Method: wwr </div> </div>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Improvement Location Method: Source Revision Comment: Supplier Comment:					
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1001936834			
Layer:		1			
Plug From:					
Plug To:					
Plug Depth UOM:		m			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1001936836			
Layer:		3			
Plug From:					
Plug To:					
Plug Depth UOM:		m			
<u>Annular Space/Abandonment Sealing Record</u>					
Plug ID:		1001936835			
Layer:		2			
Plug From:					
Plug To:					
Plug Depth UOM:		m			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		1001936840			
Method Construction Code:					
Method Construction:					
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		1001936831			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1001936838			
Layer:					
Material:					
Open Hole or Material:					
Depth From:					
Depth To:					
Casing Diameter:					
Casing Diameter UOM:		cm			
Casing Depth UOM:		m			
<u>Construction Record - Screen</u>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<hr/>					
Screen ID:		1001936839			
Layer:					
Slot:					
Screen Top Depth:					
Screen End Depth:					
Screen Material:					
Screen Depth UOM:		m			
Screen Diameter UOM:		cm			
Screen Diameter:					
 <u>Water Details</u>					
Water ID:		1001936837			
Layer:					
Kind Code:					
Kind:					
Water Found Depth:					
Water Found Depth UOM:		m			
 <u>Hole Diameter</u>					
Hole ID:		1001936833			
Diameter:					
Depth From:					
Depth To:					
Hole Depth UOM:		m			
Hole Diameter UOM:		cm			
<hr/>					
<u>3</u>	1 of 1	ENE/132.5	105.3 / -1.54	ON	BORE
Borehole ID:	610509			Type:	Borehole
Use:				Status:	
Drill Method:				UTM Zone:	18
Easting:	430831			Northing:	5012922
Location Accuracy:				Orig. Ground Elev m:	103
Elev. Reliability Note:				DEM Ground Elev m:	103
Total Depth m:	-999			Primary Name:	
Township:				Concession:	
Lot:				Municipality:	
Completion Date:	AUG-1970			Static Water Level:	-999.9
Primary Water Use:				Sec. Water Use:	
 <u>--Details--</u>					
Stratum ID:	218385776			Top Depth(m):	0.0
Bottom Depth(m):	3.0			Stratum Desc:	UNSPECIFIED. SEISMIC VELOCITY = 1500.
Stratum ID:	218385777			Top Depth(m):	3.0
Bottom Depth(m):				Stratum Desc:	BEDROCK. SEISMIC VELOCITY = 16000. BEDROCK. SEISMIC VELOCITY = 18500. SILT. GREY,FIRM.
<hr/>					
<u>4</u>	1 of 1	NW/239.1	107.9 / 1.00	5786 Fernbank Road Ottawa ON	EHS
Order No:	20150209008			Municipality:	Ottawa (Goulbourn)
Status:	C			Lot/Building Size:	
Report Type:	Custom Report			X:	-75.885108
Date Received:	09-FEB-15			Y:	45.267802
Report Date:	13-FEB-15			Search Radius (km):	.25
Client Prov/State:	ON				

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Previous Site Name: Nearest Intersection: Additional Info Ordered: Fire Insur. Maps and/or Site Plans; City Directory					
<u>5</u>	1 of 1	SW/244.8	108.9 / 2.00	lot 28 con 10 STITTSVILLE ON	WWIS
<div> <div> Well ID: 7215393 Construction Date: Primary Water Use: Sec. Water Use: Final Well Status: Abandoned-Other Water Type: Casing Material: Audit No: Z155265 Tag: Construction Method: Elevation (m): Elevation Reliability: Depth to Bedrock: Well Depth: Overburden/Bedrock: Pump Rate: Static Water Level: Flowing (Y/N): Flow Rate: Clear/Cloudy: </div> <div> Data Entry Status: Data Src: Date Received: 1/27/2014 Selected Flag: Yes Abandonment Rec: Yes Contractor: 1119 Form Version: 7 Owner: Street Name: 5555 FERNBANK ROAD County: OTTAWA-CARLETON Municipality: GOULBOURN TOWNSHIP Site Info: Lot: 028 Concession: 10 Concession Name: CON Easting NAD83: Northing NAD83: Zone: UTM Reliability: </div> </div>					
<u>Bore Hole Information</u>					
<div> <div> Bore Hole ID: 1004698259 DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole: Cluster Kind: Date Completed: 11-NOV-13 Remarks: Elevrc Desc: Location Source Date: Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment: </div> <div> Elevation: 107.51 Elevrc: Zone: 18 East83: 430512 Org CS: UTM83 North83: 5012733 UTMRC: 4 UTMRC Desc: margin of error : 30 m - 100 m Location Method: wwr </div> </div>					
<u>Annular Space/Abandonment Sealing Record</u>					
<div> <div> Plug ID: 1005057830 Layer: 1 Plug From: 18.67 Plug To: 0 Plug Depth UOM: ft </div> </div>					
<u>Annular Space/Abandonment Sealing Record</u>					
<div> <div> Plug ID: 1005057829 Layer: 1 Plug From: 0 </div> </div>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Plug To:		13.67			
Plug Depth UOM:		ft			
<u>Method of Construction & Well Use</u>					
Method Construction ID:		1005057828			
Method Construction Code:					
Method Construction:					
Other Method Construction:					
<u>Pipe Information</u>					
Pipe ID:		1005057822			
Casing No:		0			
Comment:					
Alt Name:					
<u>Construction Record - Casing</u>					
Casing ID:		1005057826			
Layer:					
Material:					
Open Hole or Material:					
Depth From:					
Depth To:					
Casing Diameter:					
Casing Diameter UOM:		inch			
Casing Depth UOM:		ft			
<u>Construction Record - Screen</u>					
Screen ID:		1005057827			
Layer:					
Slot:					
Screen Top Depth:					
Screen End Depth:					
Screen Material:					
Screen Depth UOM:		ft			
Screen Diameter UOM:		inch			
Screen Diameter:					
<u>Water Details</u>					
Water ID:		1005057825			
Layer:					
Kind Code:					
Kind:					
Water Found Depth:					
Water Found Depth UOM:		ft			
<u>Hole Diameter</u>					
Hole ID:		1005057824			
Diameter:					
Depth From:					
Depth To:					
Hole Depth UOM:		ft			
Hole Diameter UOM:		inch			

Unplottable Summary

Total: 5 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	WOODSIDE ACRES DEVELOPMENT CORP.	FERNBANK RD./JAMES LEWIS AVE.	GOULBOURN TWP. ON	
ECA	City of Ottawa	Terry Fox Drive (from Cope Drive to Fernbank Road)	Ottawa ON	K1P 1J1
ECA	Stittsville South Inc. and 1384341 Ontario Ltd.	5970 Fernbank	Ottawa ON	K2C 0P9
PTTW	2129786 Ontario Limited c/o Monarch Group	West Park Subdivision 5357, 5385, 5395, 5465, and 5571 Fernbank Road, Ottawa CITY OF OTTAWA	ON	
WWIS		lot 16 con 10	STITTSVILLE ON	

Unplottable Report

Site: WOODSIDE ACRES DEVELOPMENT CORP.
FERNBANK RD./JAMES LEWIS AVE. GOULBOURN TWP. ON

Database:
CA

Certificate #: 7-0199-99-
Application Year: 99
Issue Date: 4/16/1999
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: City of Ottawa
Terry Fox Drive (from Cope Drive to Fernbank Road) Ottawa ON K1P 1J1

Database:
ECA

Approval No: 0462-6D4N3R
Approval Date: 2005-06-08
Status: Approved
Record Type: ECA
Link Source: IDS
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Address: Terry Fox Drive (from Cope Drive to Fernbank Road)
Full Address:
Full PDF Link: <https://www.accessenvironment.ene.gov.on.ca/instruments/9179-6CZ23K-14.pdf>

SWP Area Name:
MOE District:
City: Ottawa
Longitude:
Latitude:

Site: Stittsville South Inc. and 1384341 Ontario Ltd.
5970 Fernbank Ottawa ON K2C 0P9

Database:
ECA

Approval No: 3415-ADQLJG
Approval Date: 2016-09-21
Status: Approved
Record Type: ECA
Link Source: IDS
Approval Type: ECA-MUNICIPAL AND PRIVATE SEWAGE WORKS
Project Type: MUNICIPAL AND PRIVATE SEWAGE WORKS
Address: 5970 Fernbank
Full Address:
Full PDF Link: <https://www.accessenvironment.ene.gov.on.ca/instruments/5712-ACUPA5-14.pdf>

SWP Area Name:
MOE District:
City: Ottawa
Longitude:
Latitude:

Site: 2129786 Ontario Limited c/o Monarch Group
West Park Subdivision 5357, 5385, 5395, 5465, and 5571 Fernbank Road, Ottawa CITY OF OTTAWA ON

Database:
PTTW

EBR Registry No.: 011-8843
Ministry Ref. No.: 5012-94HR3M
Notice Type: Instrument Decision
Notice Date: December 11, 2013
Proposal Date: April 16, 2013
Year: 2013
Proponent Address: 3584 Jockvale Road, Ottawa Ontario, Canada K2C 3H4
Instrument Type: (OWRA s. 34) - Permit to Take Water

Location Other:**Location:**

West Park Subdivision 5357, 5385, 5395, 5465, and 5571 Fernbank Road, Ottawa CITY OF OTTAWA

Site:

lot 16 con 10 STITTSVILLE ON

Database:
WWIS

Well ID: 1535826

Construction Date:

Primary Water Use:

Sec. Water Use:

Final Well Status:

Water Type:

Casing Material:

Audit No: Z17647

Tag:

Construction Method:

Elevation (m):

Elevation Reliability:

Depth to Bedrock:

Well Depth:

Overburden/Bedrock:

Pump Rate:

Static Water Level:

Flowing (Y/N):

Flow Rate:

Clear/Cloudy:

Data Entry Status:

Data Src:

Date Received: 9/29/2005

Selected Flag: Yes

Abandonment Rec:

Contractor: 6907

Form Version: 3

Owner:

Street Name: 7035 FERNBANK RD

County: OTTAWA-CARLETON

Municipality: GOULBOURN TOWNSHIP

Site Info:

Lot: 016

Concession: 10

Concession Name: CON

Easting NAD83:

Northing NAD83:

Zone:

UTM Reliability:

Bore Hole Information

Bore Hole ID: 11316365

DP2BR:

Spatial Status:

Code OB: u

Code OB Desc: all layers are unknown type

Open Hole:

Cluster Kind:

Date Completed: 05-JUL-05

Remarks:

Elevrc Desc:

Location Source Date:

Improvement Location Source:

Improvement Location Method:

Source Revision Comment:

Supplier Comment:

Elevation:

Elevrc:

Zone:

East83:

Org CS:

North83:

UTMRC:

UTMRC Desc:

Location Method: na

Overburden and Bedrock**Materials Interval**

Formation ID: 932997256

Layer: 2

Color:

General Color:

Mat1:

Most Common Material:

Mat2:

Other Materials:

Mat3:

Other Materials:

Formation Top Depth: 20

Formation End Depth: 60

Formation End Depth UOM: ft

**Overburden and Bedrock
Materials Interval**

Formation ID: 932997255
Layer: 1
Color:
General Color:
Mat1:
Most Common Material:
Mat2:
Other Materials:
Mat3:
Other Materials:
Formation Top Depth: 0
Formation End Depth: 20
Formation End Depth UOM: ft

**Method of Construction & Well
Use**

Method Construction ID: 961535826
Method Construction Code: B
Method Construction: Other Method
Other Method Construction:

Pipe Information

Pipe ID: 11331220
Casing No: 1
Comment:
Alt Name:

Results of Well Yield Testing

Pump Test ID: 11345705
Pump Set At: 50
Static Level:
Final Level After Pumping:
Recommended Pump Depth:
Pumping Rate:
Flowing Rate:
Recommended Pump Rate:
Levels UOM: ft
Rate UOM: LPM
Water State After Test Code:
Water State After Test:
Pumping Test Method:
Pumping Duration HR:
Pumping Duration MIN:
Flowing:

Appendix: Database Descriptions

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

Abandoned Aggregate Inventory:

Provincial

[AAGR](#)

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

Government Publication Date: Sept 2002*

Aggregate Inventory:

Provincial

[AGR](#)

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

Government Publication Date: Up to Sep 2018

Abandoned Mine Information System:

Provincial

[AMIS](#)

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

Government Publication Date: 1800-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-Jul 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

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

Government Publication Date: Feb 28, 2017

Chemical Register:

Private

CHEM

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

Government Publication Date: 1999-Jul 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 2012 - Jul 2018

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-Sep 2018

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-Jul 31, 2018

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

Dry Cleaning Facilities:

Federal

DRYCLEANERS

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

Government Publication Date: Jan 2004-Dec 2016

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 31, 2018

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-Jul 31, 2018

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 31, 2018

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-Jul 31, 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 and tanks - for which there was once a registration - no longer registered with the Fuels Safety Program of the Technical Standards and Safety Authority (TSSA). Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. Tanks which have been removed from the ground are included in the expired facilities inventory held by the TSSA. Notes: the Fuels Safety Division did not register private fuel underground/aboveground storage tanks prior to January of 1990, or furnace oil tanks prior to May 1, 2002; nor does the Division register waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

Federal Convictions:

Federal

FCON

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

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land:

Federal

FCS

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

Government Publication Date: Jun 2000-Aug 2018

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

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

Government Publication Date: Feb 28, 2017

Fuel Storage Tank - Historic:

Provincial

FSTH

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

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary:

Provincial

GEN

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

Government Publication Date: 1986-June 30, 2018

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 2016

TSSA Historic Incidents:

Provincial

HINC

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

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks:

Federal

IAFT

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

Government Publication Date: 1950-Aug 2003*

TSSA Incidents:Provincial [INC](#)

List of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC) and made available by the Technical Standards and Safety Authority (TSSA). Under the Technical Standards & Safety Act (2000), the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors, and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

Landfill Inventory Management Ontario:Provincial [LIMO](#)

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Sep 30, 2017

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*

Environmental Penalty Annual Report:Provincial [MISA PENALTY](#)

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

Government Publication Date: Jan 1, 2011 - Dec 31, 2017

Mineral Occurrences:Provincial [MNR](#)

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

Government Publication Date: 1846-Jan 2018

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, 2016

National Defense & Canadian Forces Fuel Tanks:Federal [NDFT](#)

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

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills:

Federal

NDSP

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

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites:

Federal

NDWD

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

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents:

Federal

NEBI

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

Government Publication Date: 2008-Jun 30, 2018

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-August 31, 2018

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 OGSRL Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-May 2018

Inventory of PCB Storage Sites:

Provincial

OPCB

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

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

Orders:

Provincial

ORD

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

Government Publication Date: 1994-Jul 31, 2018

Canadian Pulp and Paper:

Private

PAP

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

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

Parks Canada Fuel Storage Tanks:

Federal

PCFT

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

Government Publication Date: 1920-Jan 2005*

Pesticide Register:

Provincial

PES

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

Government Publication Date: 1988-Mar 2018

TSSA Pipeline Incidents:

Provincial

PINC

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

Government Publication Date: Feb 28, 2017

Private and Retail Fuel Storage Tanks:

Provincial

PRT

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

Government Publication Date: 1989-1996*

Permit to Take Water:

Provincial

PTTW

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

Government Publication Date: 1994-Jul 31, 2018

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-Sep 2018

Retail Fuel Storage Tanks:

Private

RST

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

Government Publication Date: 1999-Jul 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-Jul 2018

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.

Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of tank variances in the province. The TSSA updates information in its system on an ongoing basis; this listing is hence limited by the record date provided here.

Government Publication Date: Feb 28, 2017

Waste Disposal Sites - MOE CA Inventory:

Provincial

[WDS](#)

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

Government Publication Date: Oct 2011-Oct 31, 2018

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: Dec 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 C

City Directory Records

City Directory Information Source

Vernon's Ottawa and Area Criss Cross Directory

PROJECT NUMBER: 20181122056	
Site Address:	5621 Fernbank Road, Kanata, Ontario
Year: 2011	
Site Listing:	-Address Not Listed
Adjacent Properties:	
5527 Fernbank Road	-Address Not Listed
5571 Fernbank Road	-Res (1 Tenant)
5615 Fernbank Road	-Address Not Listed
635 Haliburton (Heights)	-Address Not Listed

105 Shinny Avenue	-Address Not Listed
107 Shinny Avenue	-Address Not Listed
111 Shinny Avenue	-Address Not Listed
113 Shinny Avenue	-Address Not Listed
115 Shinny Avenue	-Address Not Listed
117 Shinny Avenue	-Address Not Listed

PROJECT NUMBER: 20181122056	
Site Address:	5621 Fernbank Road, Kanata, Ontario
Year: 2006	
Site Listing:	-Address Not Listed
Adjacent Properties:	
5527 Fernbank Road	-Address Not Listed

5571 Fernbank Road	-Res (1 Tenant)
5615 Fernbank Road	-Address Not Listed
635 Haliburton (Heights)	-Address Not Listed
105 Shinny Avenue	-Address Not Listed
107 Shinny Avenue	-Address Not Listed
111 Shinny Avenue	-Address Not Listed
113 Shinny Avenue	-Address Not Listed
115 Shinny Avenue	-Address Not Listed
117 Shinny Avenue	-Address Not Listed

PROJECT NUMBER: 20181122056	
Site Address:	5621 Fernbank Road, Kanata, Ontario
Year: 2001-02	
Site Listing:	-Address Not Listed

Adjacent Properties:	
5527 Fernbank Road	-Address Not Listed
5571 Fernbank Road	-Res (1 Tenant)
5615 Fernbank Road	-Address Not Listed
635 Haliburton (Heights)	-Address Not Listed
105 Shinny Avenue	-Address Not Listed
107 Shinny Avenue	-Address Not Listed
111 Shinny Avenue	-Address Not Listed
113 Shinny Avenue	-Address Not Listed
115 Shinny Avenue	-Address Not Listed
117 Shinny Avenue	-Address Not Listed

PROJECT NUMBER: 20181122056	
------------------------------------	--

Site Address:	5621 Fernbank Road, Kanata, Ontario
Year: 1996-97	
Site Listing:	-Address Not Listed
Adjacent Properties:	
5527 Fernbank Road	-Address Not Listed
5571 Fernbank Road	-Res (1 Tenant)
5615 Fernbank Road	-Address Not Listed
635 Haliburton (Heights)	-Address Not Listed
105 Shinny Avenue	-Address Not Listed
107 Shinny Avenue	-Address Not Listed
111 Shinny Avenue	-Address Not Listed
113 Shinny Avenue	-Address Not Listed
115 Shinny Avenue	-Address Not Listed

117 Shinny Avenue	-Address Not Listed

PROJECT NUMBER: 20181122056	
Site Address:	5621 Fernbank Road, Kanata, Ontario
Year: 1992	
Site Listing:	-Address Not Listed
Adjacent Properties:	
5527 Fernbank Road	-Address Not Listed
5571 Fernbank Road	-Res (1 Tenant)
5615 Fernbank Road	-Address Not Listed
635 Haliburton (Heights)	-Address Not Listed
105 Shinny Avenue	-Address Not Listed
107 Shinny Avenue	-Address Not Listed

111 Shinny Avenue	-Address Not Listed
113 Shinny Avenue	-Address Not Listed
115 Shinny Avenue	-Address Not Listed
117 Shinny Avenue	-Address Not Listed

-All listings for businesses were listed as they are in the city directory.

-Listings that are residential are listed as “residential” with the number of tenants. The name of the residential tenant is not listed in the above city directory

*****Kanata Ontario is listed from 1992 to 2011 within the City Directory Archives*****



APPENDIX D

Technical Standards and Safety Authority Search Results

Nicole Soucy

From: Public Information Services [publicinformationservices@tssa.org]
Sent: Friday, November 23, 2018 12:19 PM
To: Nicole Soucy
Subject: RE: TSSA Search 64153.97

Follow Up Flag: Follow up
Flag Status: Flagged

NO RECORD

Hello Nicole. Thank you for your request for confirmation of public information.

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

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

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

Kind regards,

Gaya

From: Nicole Soucy <nicole.soucy@gemtec.ca>
Sent: November 22, 2018 1:07 PM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: TSSA Search 64153.97

Hello,

Please complete a search for the following addresses:

- 105, 107, 111, 115, 117 Shinn Avenue
- 635 Haliburton Heights
- 5571, 5527, 5615, and 5621 Fernbank Road

All in Ottawa (Kanata), Ontario

Thanks,

Nicole



GEMTEC
CONSULTING ENGINEERS
AND SCIENTISTS

Nicole Soucy, B.A.Sc., M.A.Sc.
Environmental Scientist
Ottawa, ON
tel: 613.836.1422 x265 / toll-free: 1.877.243.6832
mobile: 613.929.5630 / fax: 613.836.9731

This email is directed in confidence solely to the person(s) to whom it was addressed and may contain privileged, confidential or private information that is not to be disclosed. If you are not the addressee or an authorized representative thereof, please contact the sender and delete this email and any attachments. GEMTEC Consulting Engineers and Scientists Limited does not accept liability for any damage caused by any virus transmitted by this email. It is the recipients' responsibility to screen this email and its attachments for viruses prior to opening them.

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



APPENDIX E

City of Ottawa – Historical Land Use Inventory



File Number: D06-03-18-0083

5 December 2018

Nicole Soucy
Gemtec
32 Steacie Dr.
Ottawa, ON
K2K 2A9

Sent via email [Nicole.Soucy@gemtec.ca]

Dear Ms. Soucy,

**Re: Information Request
5621 Fernbank Drive, Ottawa, Ontario ("Subject Property")**

Internal Department Circulation

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

- No information was returned on the Subject Property from Departmental circulation.

Search of Historical Land Use Inventory

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

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

The HLUI database was also searched for activity associated with properties located within 50m of the Subject Property. The search revealed the following:

- There are no activities associated with the properties located within 50m of the Subject Property.

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Planning, Infrastructure and Economic
Development Department

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 21690
Fax: (613) 560-6006
www.ottawa.ca

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

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 21690
Télééc: (613) 560-6006
www.ottawa.ca

Additional information may be obtained by contacting:

Ontario's Environmental Registry

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

The Ontario Land Registry Office

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

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

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

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

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

If you have any further questions or comments, please contact Craig Hamilton at 613-580-2424 ext. 21690 or HLUI@ottawa.ca

Sincerely,

A handwritten signature in black ink, appearing to read "Craig H.", written in a cursive style.

Craig Hamilton

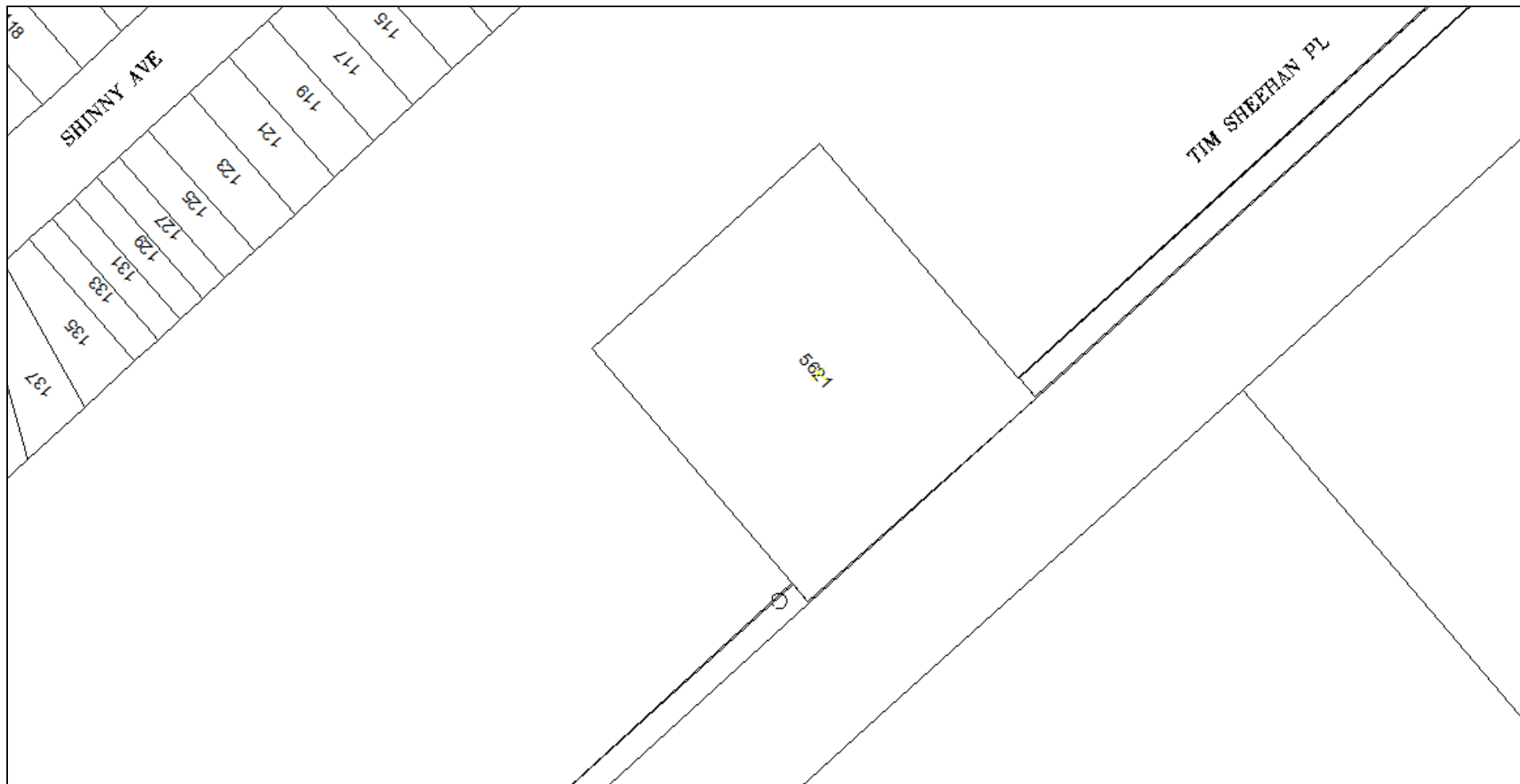
Per:

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

MB/CH

Attach: 1

cc: File no. D06-03-18-0083




Scale 1: n/a

5621 Fernbank Road
Ottawa, ON
File # D06-03-18-0083
Craig Hamilton



Overview

ID# = Activity Identification Number

 = Subject Site



APPENDIX F

Aerial Photographs



GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

1946 AERIAL PHOTOGRAPH

Project

PHASE ONE ESA
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.

64153.97

FIGURE F1



GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

1963 AERIAL PHOTOGRAPH

Project

PHASE ONE ESA
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.

64153.97

FIGURE F2



GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

1973 AERIAL PHOTOGRAPH

Project

PHASE ONE ESA
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.

64153.97

FIGURE F3



GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

1984 AERIAL PHOTOGRAPH

Project

PHASE ONE ESA
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.

64153.97

FIGURE F4



GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

1994 AERIAL PHOTOGRAPH

Project

PHASE ONE ESA
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.

64153.97

FIGURE F5



GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

2004 AERIAL PHOTOGRAPH

Project

PHASE ONE ESA
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.

64153.97

FIGURE F6



APPENDIX G

Site Photographs





GEMTEC

CONSULTING ENGINEERS
AND SCIENTISTS

32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

DITCH ALONG THE SOUTH BOUNDARY
OF THE SITE NEAR FERNBANK ROAD

Project PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.
64153.97

FIGURE G2



32 Steacie Drive, Ottawa, ON K2K 2A9
T: (613) 836-1422 | www.gemtec.ca | ottawa@gemtec.ca

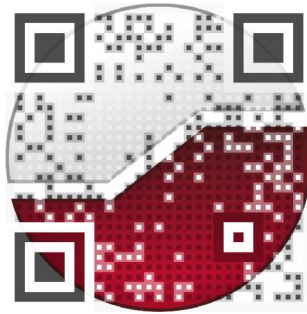
CATCH BASIN IDENTIFIED IN THE DITCH ALONG FERNBANK ROAD
ON THE SOUTH SIDE OF THE SUBJECT PROPERTY

Project PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
FERNBANK ROAD, OTTAWA, ONTARIO

Project No.
64153.97

FIGURE G3

experience • knowledge • integrity



civil
geotechnical
environmental
field services
materials testing

civil
géotechnique
environnementale
surveillance de chantier
service de laboratoire des matériaux

expérience • connaissance • intégrité

