December 2016

REPORT ON

Phase I Environmental Site Assessment 3370 Greenbank Street, Barnett Lands Ottawa, Ontario

Submitted to:
Jim Burghout
Claridge Homes Corporation
2001-210 Gladstone
Ottawa, Ontario
K2P 0Y6

REPORT

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Executive Summary

Golder Associates Ltd. (Golder) was retained by Claridge Homes (South Nepean) Inc. ("Claridge") to conduct a Phase I Environmental Site Assessment (Phase I ESA) for the property located at 3370 Greenbank Road, adjacent to the Jock River in Ottawa, Ontario, known as Burnett Lands (hereinafter collectively referred to as the "Site" or "Phase I Property") as shown on Figures 1 and 2. The Site has an approximate area of 15.5 hectares (38.4 acres) and is proposed to be developed with a residential development. The Site is located immediately west of Greenbank Road, approximately 400 m south of the intersection with Jockvale Road. The southwest boundary of the Site is adjacent to the Jock River and consists of a low-lying flood plain.

This Phase I ESA was completed in general accordance with the Ontario Regulation (O.Reg.) 153/04 (as amended). The Phase I ESA also meets the requirements of the Canadian Standards Association ("CSA") Standard Z768-01, *Phase I Environmental Site Assessment* (reaffirmed 2012). It is understood that this Phase I ESA is being carried out to support a Site Plan application for the Site with the City of Ottawa (the City) and that a Record of Site Condition (RSC) pursuant to *Ontario Regulation 153/04 – Records of Site Condition – Part XV.1 of the Act*, made under the *Environmental Protection Act,* will not be filed for the Site.

The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.

The Phase I ESA was completed in general accordance with the requirements of Schedule D of O.Reg.153/04 as amended, as well as with the CSA Phase I ESA requirements and included a review of available current and historical information regarding the Site and surrounding properties, a Site reconnaissance, interviews, evaluation of readily available information, and reporting, subject to the limitations outlined in Section 8.0 of this report. The Site has been used only for agricultural and residential purposes, as such, is not considered an enhanced investigation property as defined by O. Reg. 153/04.

Based on the information obtained from the City of Ottawa geo-map, the legal description of the Site is Nepean Con 3 RF PT Lot 13 RP;5R 6494 Parts 1 and 3 and Parts 4 and 8.

At the time of the Site visit, on March 10, 2016, the Site was occupied by an abandoned farm consisting of a house, barns, an equipment storage shed, and two silos and agricultural land. Two trailers were present at the southwest part of the Site and are currently occupied by the former Site owner (Burnett). At the time of the Site visit, no access was provided to the abandoned farm house and the equipment storage shed and as such, these structures were not assessed as part of the Phase I ESA. No operations or any other activities were being carried out at the Site other than the residential related activities associated with the trailers on the Site. Historically, the Site has been used for agricultural purposes and has been developed with the farm structures prior to 1947.

At the time of the Phase I ESA, the neighbouring properties within the Phase I Study Area were used for agricultural, residential and institutional purposes. The Site was surrounded by agricultural lands to the north and west, the Jock River, residential dwellings and agricultural lands to the south, and Greenbank Road, St. Joseph High School, green spaces and residential dwellings to the east.

Based on the information collected as part of this Phase I ESA, no potentially contaminating activities (PCAs) were identified on the Site or on the Phase I Study Area that may result in areas of potential environmental concern (APECs) on the Site. However, there is some uncertainty associated with these findings due to the following limitations:

- No access was provided to the residential house or the equipment storage shed located on the Site. Both structures were locked and not accessible during the Site visit.

A vent and fill pipes extending from the exterior west wall of the house were noted during the Site visit. The pipes are most likely associated with a heating oil aboveground storage tank (AST) located in the basement of the house. No staining or other evidence of potential spills or leaks were noted on the ground surface at the area of the fill and vent pipes. However, as there was no access to the residential house at the time of the Site visit, it was not possible to observe the condition of the AST, the installation details or any indication of spills or leaks associated with the AST inside the house. As no access was provided to the equipment storage shed, this structure was not assessed as part of this Phase I ESA.

- Presence of snow cover on the Site restricted the observations for potential evidence of stained soil, discoloration or stressed vegetation.

Various debris including old appliances, two old cars and a RV, old tires, rims, construction debris (wood, metal, cardboard), plastic pails and drums were discarded south of the house in the area between the equipment storage shed and the abandoned barn and along the driveway along the south part of the Site. Tree, wood, cardboard and metal debris were also noted in the south part of the Site at the end of the driveway. In addition, an old steel AST labeled as coloured fuel tank was discarded in the south part of the Site, along the driveway. No staining was noted in the area of the old cars, the discarded AST and the debris where the ground surface was exposed, however, due to the presence of thick snow cover, the observations of the ground surface were limited.

Given that no APECs were identified on the Site during the Phase I ESA (pending the above limitations), a Phase II ESA is not recommended to be carried out at the Site at this time. However, the following is recommended to be completed during the Site redevelopment:

- All debris, the old AST and the old cars and the RV discarded in the south part of the Site should be removed from the Site and disposed of in accordance with regulations. The observed debris predominantly consisted of the household waste, tree and wood debris, cardboard, construction debris and old furniture. Due to the nature of these type of debris, the likelihood for subsurface impacts due to the storage of the debris is considered to be low. However, if evidence of contamination (staining, odour, sheen, stressed vegetation or discoloration) is observed during the removal of the debris, the old cars and the discarded AST, shallow soil sampling should be completed in the potentially impacted areas to confirm the presence/absence of potential subsurface impacts.

- In addition, the following building related issues were identified at the Site:
- Based on the year of the house and the farm structures construction (prior to 1947), ACMs (friable and non-friable) may be present in these structures, given that the use of friable ACMs was generally discontinued in the late 1970s/early 1980s. It is understood that the structures will be demolished prior to the Site redevelopment. As such, the suspected ACMs should be sampled in accordance with the O.Reg. 278/05 to confirm the presence/absence of asbestos in these materials. All ACMs should be abated prior to demolition activities.
- Based on the year of the house and the farm structures construction (prior to 1947), lead-containing paints may be present in the buildings. Although the structures were most likely repainted since their construction, it is possible that the original paint layer may be lead-containing. In addition, lead solder may be present on the water pipe joints in the house. Lead related issues should be dealt prior to demolition activities.

Responses to requests for information from the MNR and City of Ottawa were not received in time for this report. If a response is received within 12 months of the request submittal, Golder will review the response and will advise of any noteworthy findings.

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1.0 INTRODUCTION

1.1 Phase I Property Information

Golder Associates Ltd. (Golder) was retained by Claridge Homes (South Nepean) Inc. ("Claridge") to conduct a Phase I Environmental Site Assessment (Phase I ESA) for the property located at 3370 Greenbank Road, adjacent to the Jock River in Ottawa, Ontario, known as Burnett Lands (hereinafter collectively referred to as the "Site" or "Phase I Property") as shown on Figures 1 and 2. The Site has an approximate area of 15.5 hectares (38.4 acres) and is proposed to be developed with a residential development. The Site is located immediately west of Greenbank Road, approximately 400 m south of the intersection with Jockvale Road. The southwest boundary of the Site is adjacent to the Jock River and consists of a low-lying flood plain.

The general Site location is shown on Figure 1.

Based on the information obtained from the City of Ottawa geo-map, the legal description of the Site is Nepean Con 3 RF PT Lot 13 RP;5R 6494 Parts 1 and 3 and Parts 4 and 8.

Contact information for the Site including the current owner is provided as follows:

Table 1: Phase I ESA Property Information

Address	Current Site Owner	Contact Information
3370 Greenbank Road, Ottawa, Ontario	Claridge Homes (South Nepean) Inc.	Jim Burghout Claridge Homes (South Nepean) Inc. 2001-210 Gladstone Avenue Ottawa, Ontario K2P 0Y6 Email: jim.burghout@claridgehomes.com Tel: 613-233-6030, 613-301-5000

It is understood that the Site is proposed to be developed with a residential subdivision. A Site plan is provided as Figure 2. A draft survey plan of the Site is included in Appendix A of this report.

2.0 SCOPE OF INVESTIGATION

A Phase I ESA is a preliminary qualitative assessment of the environmental condition of a property, based on a review of current activities and historical information for the subject property and also a review of relevant and readily available environmental information for the surrounding properties within a 250 m radius of the boundaries of the Site (collectively referred to as "Phase I Study Area").

According to Ontario Regulation (O.Reg. 153/04) the objectives of a Phase I ESA are:

- To develop a preliminary determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase I Study Area;
- To assess the need for Phase II Environmental Site work;
- To provide a basis for carrying out any Phase II Environmental Site work (if needed);
- Provide adequate preliminary information about environmental conditions in the land or water on, in or under the Phase I Property for the conduct of a risk assessment following completion of a Phase II ESA, if needed; and,
- To identify and report on evidence of actual and/or potential contamination on the Site from current and historical activities at the Site or from adjacent properties.

Additionally, and specific to this Site:

- To complete limited topsoil sampling and analysis for free cyanide to confirm the presence/absence of free cyanide previously identified in topsoil in one of the borehole locations on a utility corridor on the Site.

This Phase I ESA was completed in general accordance with the Ontario Regulation (O.Reg.) 153/04 (as amended). The Phase I ESA also meets the requirements of the Canadian Standards Association ("CSA") Standard Z768-01, *Phase I Environmental Site Assessment* (reaffirmed 2012). It is understood that this Phase I ESA is being carried out to support a Site Plan application for the Site with the City of Ottawa (the City) and that a Record of Site Condition (RSC) pursuant to *Ontario Regulation 153/04 – Records of Site Condition – Part XV.1 of the Act*, made under the *Environmental Protection Act,* will not be filed for the Site.

As the Site has been used for agricultural and residential purposes. As such, the Site is not considered an enhanced investigation property as defined by O. Reg. 153/04 (as amended).

3.0 HISTORICAL RECORDS REVIEW

3.1 General

3.1.1 Phase I Study Area Determination

For the purpose of this Phase I ESA, the Phase I Study Area is defined as the Site and the area within approximately 250 metres of the boundaries of the Site. Based on Golder's review of the historical and current information completed as part of the Phase I ESA for the area surrounding the Site and observations made during the Site visit, it was concluded that assessing information pertaining to properties within 250 metres of the Site was sufficient to achieve the objective of the Phase I ESA.

3.1.2 First Developed Use Determination

Based on the information obtained in documentation reviewed (discussed in the next sections of this report), the Site was first developed with a farm (farm house, silos, barn and storage shed) sometime prior to 1947 and has been used for agricultural purposes since then. The following rationale was used to support that the first developed use of the Phase One property:

- The 1947 aerial photograph shows the Site as agricultural land and occupied by the farm house and the farm structures that are currently present on the Site. The subsequent aerial photographs (1953, 1985, 1994 and 2002, 2011 and 2014) show the Site still as agricultural land and occupied by the farm structures; and,
- The Site Representative indicated that the Site was historically used for agricultural purposes (farm).

3.1.3 Review of Fire Insurance Maps and Reports

Research was carried out at the National Archives in Ottawa, Ontario to review fire insurance plans or drawings for the Site. No fire insurance plans were available for the Site.

3.1.4 Chain of Title

Chain of Title information was not ordered as it was deemed that the information from the other records review would satisfy the objectives of the records search and that the information to be provided in a Chain of Title would not contribute additional environmental information relevant to the Phase I ESA. Based on the information provided by the Site Representative the current Site owner is Claridge Homes (South Nepean) Inc. who took ownership in 2011. Prior to this, the Site was owned by Kelvin and Joan Burnett.

3.1.5 Review of Street Directories

Golder ordered a street directory search from EcoLog Environmental Risk Information Services Ltd. ("EcoLog ERIS") for the years 1960, 1965, 1970, 1975, 1980, 1984, 1990, 1995/96, 1999/2000, 2004/05, and 2011 for the Site and surroundings properties. The review of the street directories indicated the following:

- The Site was first listed in 1995/96 as Burnett Kelvin J. and was listed as such in 2004/05 and 2011; and,
- The surrounding properties were never listed or were listed as residential since 1995/96 to the present and as Compass Group Canada and Ottawa Carleton Catholic Scholl Board (3333 Greenbank Road listed in 2004/05 and 2011).
- A copy of the street directories is included in Appendix C.

The review of the street directories did not identify any potentially contaminating activities (PCAs) on the Site or on surrounding lands that could result in areas of potential environmental concern (APECs) on the Site.

3.1.6 Previous Environmental Reports

Golder previously completed Phase I and II ESA investigations (in 2015) within the Site as part of the City of Ottawa's proposed South Nepean Collector (SNC) collector sewer which will cross the Site as described in the following reports:

1) Report entitled: "Phase I Environmental Site Assessment of, South Nepean Collector Phase 2 Bren-Maur Road at Longfields Drive to Strandherd Drive, Ottawa, ON", prepared for Novatech Engineering Consultants on behalf of the City of Ottawa, dated March 2015, report No. 1523645-1".

2) Report entitled: *"Phase II Environmental Site Assessment and Material Management, South Nepean Collector Phase 2, Ottawa, ON",* prepared for Novatech Engineering Consultants on behalf of the City of Ottawa, dated March 2015, report No. 1523645-23".

It is understood that since the proposed SNC will cross the Site owned by Claridge, copies of these reports were also provided to Claridge.

Based on the information provided in these reports, free cyanide concentrations exceeding the Ministry of Environment and Climate Change (MOECC) Table 3 Standards were identified in topsoil in three of the sampled locations along the SNC alignment, and one of the locations exceeding the MOECC standards was located on the Site. It was identified that the free cyanide impacts in the topsoil are possibly due to the past pesticide application, as the Site and the surrounding lands have been used for agricultural purposes for many years. No free cyanide exceedances of the City of Ottawa storm or sanitary sewer use by law criteria were identified in the groundwater samples collected as part of the South Nepean Collector project.

3.2 Topsoil Sampling

To confirm the presence/absence of free cyanide in topsoil at the Site identified in the previous Phase II ESA investigation completed for the proposed South Nepean Collector which included area surrounding the Site and part of the Site (as described above), during the geotechnical investigation carried out concurrently with this Phase I ESA, a total of 10 soil samples were collected from the topsoil and the underlying soil immediately below the topsoil from five (5) out of the seven (7) geotechnical boreholes completed on the Site. The soil samples were collected from BH16-101(A), BH16-202 (B), BH16-104 (D), BH16-105 E and BH16-106 (F). The sampling locations are shown on Figure 2. Five (5) of the soil samples were collected from the topsoil from the upper 0.30 m and five (5) soil samples were collected from the layer below topsoil, from about 0.30 to 0.76 mbgs to vertically delineate any free cyanide impacts if identified in the topsoil. The 5 soil samples collected from the topsoil were submitted to Paracel for laboratory analysis of free cyanide and the remaining 5 deeper soil samples were kept for potential laboratory submission pending the results from the topsoil samples submission. The results were compared to MOECC Table 8 Standards (Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Table 8 Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition) considered to be applicable for the Site. The soil analytical results are presented in Table 1 included in Appendix F. The laboratory certificate of analysis are included in Appendix F.

The soil analytical results indicated that the concentration of free cyanide in all five (5) soil samples collected from the topsoil were below the method detection limit of 0.12 µg/g. However, due to the nature of the sample matrix, the soil samples were diluted by a factor of four which resulted in elevated method detection limits of 0.12 µg/g which are above the MOECC Table 8 Standards for free cyanide of 0.051 µg/g. As such, it is inconclusive whether the topsoil samples contained free cyanide concentrations above the MOECC Table 8 Standards. Golder contacted Paracel laboratory to request more information about the free cyanide analysis and the reason for the sample dilution. The lab indicated that due to the matrix interferences it is not uncommon to have false positive free cyanide results in soil and in order to avoid matrix interference and potential false positive results, the soil samples were diluted. Following the receipt of the results from the first sample submission and the elevated method detection limits, Golder submitted the 5 deeper soil samples collected from below the topsoil samples for analysis of free cyanide and requested the lab to run the analysis without dilution. The results of the second sample submission indicated that the free cyanide concentrations in the five deeper soil sample were below the method detection limit (0.03 µg/g) and below the MOECC Table 8 Standards (0.051 µg/g). The soil analytical results are presented in Table 1 included in Appendix F. The laboratory certificate of analysis are included in Appendix F.

Based on the analytical results from the soil sampling completed as part of this Phase I ESA and the information provided by the laboratory, it is considered that it is likely the free cyanide exceedance originally identified in one of the soil samples collected from the Site during the Phase II ESA completed as part of the SNC project was false positive due to matrix interferences, however, if the topsoil will be re-used on Site it is recommended to complete additional sampling and analysis for free cyanide of the topsoil to confirm the validity of the above assumption.

3.3 Environmental Source Information

3.3.1 Ministry of the Environment Correspondence

The Ontario Ministry of Environment and Climate Change (MOECC) was contacted (refer to copy of correspondence in Appendix B) to provide an Index Report with respect to active orders and approvals for the Site as detailed below:

- Active orders under the Environmental Protection Act (EPA), the Ontario Water Resources Act (OWRA), and the Pesticides Act (PA); and,
- Approvals under Sections 9 and 39 of the EPA as well as Sections 52 and 53 of the OWRA.

A response from MOECC was received by Golder on March 10, 2016. The review of the MOECC response indicated that no Active Orders or Environmental Compliance Approvals have been issued for the Site.

3.3.2 City of Ottawa Correspondence

Golder forwarded a request to Mr. Jim Burghout on February 29, 2016 to complete the property information form which is required as part of the submittal package to the City of Ottawa for releasing environmental related information for the Site. A follow up email was sent on March 3, 2016 the City (refer to copy of correspondence in Appendix B).

At the time of writing this report, the completed property information form has not been received and as such, no request was sent to the City of Ottawa.

3.3.3 City of Ottawa Document Review

Prior to the 2001 amalgamation, the City did not have a consolidated database of environmental concerns for City properties and typically referred all inquiries to the *1988 Mapping and Assessment of Former Industrial Sites, City of Ottawa, Intera Technologies Ltd.* (hereafter known as the "1988 Intera Report"). This report describes an inventory and assessment study of former industrial sites that were active in the former (prior to the 2001 amalgamation) City of Ottawa from 1850 to 1984 that likely produced or handled hazardous wastes and materials. The sites were subsequently screened to identify higher priority sites which were subdivided into Group I, Group II and Group III sites.

- Group I Sites – Sufficient evidence to indicate that wastes are present on-Site and that there is a high potential for environmental impact;
- Group II Sites – Sufficient evidence to indicate that wastes are likely remnant on-Site; and,
- Group III Sites – Unlikely that significant quantities of waste exist at the Site today and therefore the potential for environmental impact is minimal.

Since the Site was not within the former City of Ottawa municipal boundary (prior to 2001 amalgamation), a review of the 1988 Intera report could not be performed as a part of this Phase I ESA.

3.3.4 Review of the 2004 City of Ottawa Waste Disposal Sites Inventory

The review of the *2004 City of Ottawa Waste Disposal Sites Inventory* as described in the report entitled *"Old Landfill Management Strategy, Phase 1-Identification of Sites, City of Ottawa, Ontario*", completed by Golder for the City of Ottawa, dated October 2004 indicated that the Site is not registered as an active or closed waste disposal site and that no active or close waste disposal sites are located within 1 km of the Site.

3.3.5 Ministry of Natural Resources (MNR)

An information request was sent to the Ministry of Natural Resources (MNR) on February 2, 2016 (refer to copy of correspondence in Appendix B). Records requested included any information related to areas of natural significance in the vicinity of the Site, as well as any other environmental concerns that may be related to the Site and surrounding area.

At the time of writing this report, a response from MNR had not been received. If a response is received within 12 months of the request submittal, Golder will review the response and will advise of any noteworthy findings.

A natural environment study is being carried out at the Site as part of the project. The findings of the natural environment study will be presented under a separate cover.

3.3.6 Technical Standards and Safety Authority Correspondence

The Technical Standards and Safety Authority (TSSA) was contacted via e-mail (refer to copy of correspondence in Appendix B) to determine if any commercial fuel underground storage tanks (USTs) were registered on the Site or on the surrounding properties within 250 m of the Site.

Ms. Sarah Quibell of the TSSA replied on February 29, 2016 and indicated that the TSSA have no records for any fuel underground storage tanks on the Site or surrounding properties. It should be noted that there is currently no requirement in Ontario to register private underground fuel oil storage tanks for heating purposes. The TSSA has maintained records since 1989.

3.3.7 EcoLog ERIS Report

Golder contracted the services of EcoLog ERIS to conduct a search of their federal, provincial and private sector databases for information on the Site and surrounding area within 250 m of the Site. The complete EcoLog ERIS report, including a brief description of each of the databases searched for the Phase I ESA, is included in Appendix C. The following is a summary of the findings as identified within the EcoLog ERIS report for the Site and for the surrounding properties within the Phase I Study Area:

On-Site

Water Well Information System (WWIS).

- Ecolog ERIS report listed one water well record for the Site. The water well was constructed in 1954 for domestic and livestock water supply. It was indicated that the well was installed at a depth of approximately 21 m (68 ft. and that the depth to the water is 3 m (10 ft.).

Surrounding Properties within 250 m of the Site

The databases that list properties within 250 m of the Site were searched and the following records were found:

- Seven records of boreholes and 17 records of water wells on surrounding lands. The water wells are for domestic and livestock water supply purposes;
- Ottawa Catholic District School Board (St. Joseph Catholic Secondary School) located at 3333 Greenbank Road (adjacent property east of Greenbank Road and the Site) is listed as a hazardous waste generator. The hazardous waste listed included waste oils & lubricants, photo processing wastes, oil skimmings & sludges, petroleum distillates, inorganic laboratory chemicals, paint/pigment/coating residues and waste compressed gases; and,
- 10 L of gas and motor oil reportedly spilled into the Jock River at Greenbank Road in 1989 due to a motorist who drove a car into Jock River. No other information was provided.

The review of the EcoLog ERIS report did not identify PCAs that may have resulted in APECs on the Site.

3.4 Physical Settings Sources

3.4.1 Aerial Photographs

Aerial photographs for the Site for the years 1976, 1991, 1999, 2002, 2005, 2007, 2008, 2011 and 2014 from the City of Ottawa geo-map (http://maps.ottawa.ca/geoOttawa/) were reviewed on-line. In addition, selected aerial photographs for the Site were obtained from the National Air Photo Library (NAPL) in Ottawa, Ontario by Golder personnel for years 1947, 1953, 1985, 1994 and 2002 in order to help develop an understanding of the history of the development of the Site and surrounding properties (within 250 m). Copies of all the aerial photographs obtained from the NAPL are presented in Appendix D.

Information obtained from the review of relevant aerial photographs is summarized in the table below.

Table 2: Aerial Photographs

Date	Site	Surrounding Property Direction			
		North	East	South	West
1947	The Site is developed with the farm house and the farm related structures that are currently present on the Site. The remaining part of the Site is occupied by agricultural lands.	Agricultural lands and isolated farms.	Greenbank Road followed by agricultural lands	The Jock River, agricultural lands and isolated farms.	Agricultural lands
1953	As per 1947	As per 1947	As per 1947	As per 1947	As per 1947
1976	Similar to 1953	Similar to 1953	Similar to 1953 with the addition of a greenhouse further to the east	Similar to 1953 with the addition of residential dwellings immediately south of the Site.	Similar to 1953
1985	Similar to 1976	Similar to 1976	Similar to 1976	Similar to 1976	Similar to 1976
1991-1994	Similar to 1985 with the addition of old cars visible along the south Site boundary, near the Jock River and a trailer along the southeast part of the Site.	Similar to 1985 with the addition of some residential dwellings to the northeast.	Similar to 1985	Similar to 1985	Similar to 1985
2002	Similar to 1991-94 with the addition of more old cars, tires and debris, stored along the south side of the Site and an additional trailer located at the southeast part of the Site.	Similar to 1991-94	St. Joseph High Scholl appears just east Greenbank Road	Similar to 1991-94	Similar to 1991-94
2007	As per 2002	As per 2002	As per 2002	As per 2002	As per 2002
2014	The Site is still occupied by the farm house, a storage shed, barns, silos, and 2 trailers, however, most of the old cars, debris, tires and an old shed previously located along the south side of the Site have been removed.	As per 2007	As per 2007	As per 2007	As per 2007

The review of the aerial photographs indicated that the Site was developed with the current farm house and associated farm structures prior to 1947 and was used for agricultural and residential purposes since at least 1947. Old cars, some debris and tires were also stored along the south side of the Site sometime between 1991 and 2014 when most of the debris and cars appear to be have been removed.

The surrounding lands have been occupied by agricultural lands and farms prior to 1947 and have been used for agricultural and residential purposes since at least 1947 until present.

3.4.2 Topography, Hydrology, Geology

The following records were reviewed to identify topographic, geologic and hydrogeological conditions at the Site. A topographic map (Ontario Base Map) showing the Site and the Phase I Study Area and the location of any water bodies is provided in Figure 3. Refer to Section 5.0 for additional information on Site features, as observed at the time of the Site visit.

Topic	Conditions	Comment / Source
Topography of Site and Surrounding Area	The Site is generally flat with a gentle downward slope from east to west and from north to south. A shallow ditch (Burnett Municipal Drain) runs north-south and crosses the middle of the Site. The overall slope of the area is downwards to the south, towards the Jock River located along the south boundary of the Site.	Site and surrounding area observations.
Overburden Soils	■ Topsoil, underlain by silty clay over glacial till comprised of silty sand, some gravel, cobbles and boulders.	Map 1506A, *Surficial Geology*, Ottawa, Ontario, Belanger J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open file D3256, 2001. Based on the information provided in the geotechnical investigation carried out by Golder concurrently with this Phase I ESA to support the Site Plan application with the City of Ottawa.
Type of Bedrock	Oxford formation-dolostone, minor shale and sandstone.	Map 1508A.

Topic	Conditions	Comment / Source
Depth to Bedrock	0 to 2 m below the ground surface (mbgs) at the south part and 5 to 10 mbgs in the north part. More than 7 mbgs (the termination depth of the boreholes) in most of the boreholes across the Site and 2 mbgs at the east part (BH16-107) where the borehole was terminated at auger refusal.	Map 1508A. Generalized Bedrock Geology, Ottawa, Ontario, Belanger J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open file D3256, 2001. Based on the information provided in the geotechnical investigation carried out by Golder concurrently with this Phase I ESA to support the Site Plan application with the City of Ottawa.
Inferred Local Groundwater Flow	The inferred groundwater flow direction is towards south, towards the Jock River located along the south boundary of the Site.	Figure 3 – Topographic Map Site observations
Site Grade Relative to the Adjoining Properties	The Site is at grade with the surrounding lands. The overall slope of the area is downwards to the south, towards the Jack River located along the south boundary of the Site.	Site observations
Depth to Groundwater	0.9 mbgs At the time of preparation of this, the water levels in the monitoring wells installed during the geotechnical investigations have not been measured.	Based on the groundwater level measured in a monitoring well located on the Site during the 2015 Phase II ESA completed as part of the proposed South Nepean Collector.

3.4.3 Fill Materials

Topic	Conditions	Comment / Source
Fill Materials	No piles of imported fill material were observed during the Site visit. In addition, no fill was found in the boreholes completed on the Site during the geotechnical investigation completed concurrently with this Phase I ESA.	Site observations Geotechnical investigation completed for the Site by Golder in February 2016.

3.4.4 Water Bodies and Area(s) of Natural Significance

Topic	Conditions	Comment / Source
Nearest Open Water Body	Jock River located along the south boundary of the Site.	Site observations, Figure 3 – Topographic Map
Areas of Natural Significance (ANS)	Based on the information obtained from the City of Ottawa geo-map, no evaluated wetlands are located on the Site or within the Phase One Study Area. No areas of natural or scientific interest (ANSI) are located on the Site or within 250 m of the Site. At the time of the preparation of this report a response from MNR had not been received. A natural environment study is being carried out at the Site as part of the project. The findings of the natural environment study will be presented under a separate cover.	ANS Map review and the City of Ottawa geomap

3.4.5 Water Wells

Topic	Conditions	Comment / Source
Water Wells on Site (location, stratigraphy of the overburden, from ground surface to bedrock, depth to bedrock, depth to water table, drilling date, use)	During the Site visit, a dug water well was observed on the north side of the residential house. The same well was identified in the Ecolog ERIS report as water supply well for domestic and livestock purposes. The well was installed into the bedrock at a depth of approximately 21 m (68 ft.) and the depth to the water is 3 m (10 ft.). The well was installed in 1954. The stratigraphy encountered in the well was described as “hardpan”, boulders to a depth of 5.8 m underlain by limestone bedrock. In addition to the water supply well, three monitoring wells finished with stick up casings are located on the Site. Two of wells were installed in BH16-101 and BH16-103 during the geotechnical investigation carried out at the Site concurrently with this Phase I ESA and the third well (MW16-2) was installed as part of other City of Ottawa project.	The EcoLog ERIS database report, Site observations. Geotechnical investigation carried out at the Site as part of this project.

Topic	Conditions	Comment / Source
Water Wells on the Neighbouring Properties (location, stratigraphy of the overburden, from ground surface to bedrock, depth to bedrock, depth to water table, drilling rate, use)	Based on the EcoLog ERIS report, 17 water wells are located in the Phase I Study Area (within 250 metres of the Site). It was indicated that the wells were completed within the bedrock and were used mainly for domestic and livestock water supply. Details regarding the stratigraphy, depth to bedrock and water table in the 17 water wells is provided in the Ecolog ERIS report included in Appendix B.	The EcoLog ERIS database report.

3.5 Site Operating Records

The Site has been always used for agricultural and residential purposes and, as such, no Site operating records would be available to be provided to Golder for review.

4.0 INTERVIEWS

A Phase I ESA interview questionnaire was sent to Mr. Jim Burghout of Claridge Homes (the Site Representative) to obtain environmental related information about the Site. Based on the information provided by the Site Representative, the following information pertinent to the Phase I ESA was obtained:

- The current Site owner is Claridge Homes (South Nepean) Inc. who took the ownership in 2011. Prior to that the Site was owned by Kelvin and Joan Burnett.
- The Site has been historically used as a farm.
- The Site is currently occupied by a farm house, a barn, a shed which are vacant.
- The former Site owner (Burnett) lives currently in a trailer located on the southeast part of the Site.
- The Site Representative indicated that he is not aware of the presence of any historical or current fuel underground storage tanks ("USTs") on the Site. In addition, he indicated that he is not aware of the presence of any historical or current fuel aboveground storage tanks ("ASTs") on the Site.
- No storage, handling or management of chemicals takes place at the Site.
- There is garbage around the old barn shed located on the Site.
- He is not aware of any fuel or chemical spills or releases.
- No asbestos-containing material ("ACM") survey has been previously conducted at the Site.
- The house is not connected to the municipal water supply or the municipal storm and sanitary sewers.
- There is water supply water well on the Site that supplies the water. There is a septic system on the Site.

The information provided by the Site Representative does not indicate any issues of potential environmental concern.

5.0 SITE RECONNAISSANCE

5.1 General Requirements

Ms. Maria Staneva, a due diligence assessor with Golder, conducted a Site visit on March 10, 2016. The duration of the Site visit was approximately 2 hours. The Site visit included a tour of the Site and a cursory inspection of neighbouring properties from the Site and publicly accessible areas. The access to the Site is via Greenbank Road. As the time of the Site visit, the Site was covered with snow which restricted the observations for potential presence of stains, sheens, distressed vegetation or discoloration. In addition, there was no access to the residential house and the farm equipment storage shed and as such, these structures were not assessed as part of the Phase I ESA. Sections 5.2 to 5.4 present the observations made during the Site visit. The Site visit was documented with photographs and additional notes.

At the time of the Site visit, the weather conditions were cloudy and foggy and the temperature was approximately 10°C. Photographs of some of the features noted during the Site visit are attached in Appendix E.

5.2 Site Specific Observations

At the time of the Site visit, the Site was occupied by an abandoned farm house, an equipment storage shed, barns, two silos, two trailers and agricultural land. No operations or any other activities were being carried out at the Site at the time of the Site visit other than residential related activities associated with the two trailers occupied by the former Site owner.

The specific observations made during the Site reconnaissance are presented herein.

5.2.1 Site Details

Topic	Observations	Comment / Source
Total Area of the Site	15.5 hectares (38.4 acres)	City of Ottawa geo-map, the Site Representative
Number and Age of Buildings on the Site	The following structures were noted on the Site: An abandoned residential house Abandoned equipment storage shed Abandoned barns 2 silos 2 trailers reportedly occupied by the former Site owner (Barnett family) The age of the buildings is unknown, however, based on the aerial photographs review the farm house and related farm structures were built prior to 1947 and the trailers were installed between 1976 and 1991.	Site observations, aerial photographs
Building Area	Unknown	

Topic	Observations	Comment / Source
Number of Floors (include all levels, whether above or below ground)	An abandoned residential house – two storey house Abandoned equipment storage shed – one storey Abandoned barn-one storey 2 trailers reportedly occupied by the former Site owner (Barnett family) – one storey	Site observations
Number, Age, and Depth of Levels Below Ground Level	An abandoned residential house – one level basement Abandoned equipment storage shed – none Abandoned barn-none 2 trailers reportedly occupied by the former Site owner (Barnett family) –none	Site observations
Approximate Percentage of Site Consisting of Landscaped/ Grassed/Bare Ground Areas	Approximately 95% the Site is occupied by agricultural fields and 5% is gravel covered surfaces associated with the Site access road and the driveway west of the farm house.	Site observations
Approximate Percentage of Site Consisting of Paved or Other Sealed Surface Materials	No sealed or paved surfaces were noted during the Site visit, however it should be noted that majority of the Site was snow covered which restricted the ground surface observations.	Site observations
Number and Details of all Aboveground Storage Tanks (ASTs)	Vent and fill pipes extending from the exterior west wall of the house were noted during the Site visit. The pipes are most likely associated with a heating oil AST located in the basement of the house. No staining or other evidence of potential spills or leaks were noted on the ground surface at the area of the fill and vent pipes. However, as there was no access to the residential house at the time of the Site visit, it was not possible to observe the condition of the AST, the installation details or any indication of spills or leaks associated with the AST inside the house. In addition, an old discarded steel AST for coloured fuel was observed along the south side of the Site, north of the driveway along the south part of the Site. No evidence of staining was noted in the area of the AST, however, the observations were limited due to the presence of significant snow cover on the ground.	Site observations

Topic	Observations	Comment / Source
Number and Details of all Underground Storage Tanks (USTs)	No evidence (fill/vent pipes extending through walls or slabs/ground surface, no staining or any obvious odours) was observed during the Site visit to indicate the current or former presence of fuel or chemical USTs.	Site observations, TSSA, Ecolog ERIS report
Asbestos-Containing Materials (ACMs)	Based on the year of the construction of the farm house and the farm structures (prior to 1947), it is Golder's opinion that ACMs (friable and non-friable) may be present in these structures, given that the use of friable ACMs was generally discontinued in the late 1970s/early 1980s. The house and the equipment storage shed were not accessible at the time of the Site visit, as such, no observations were made with respect to the potential presence of ACMs. If demolition of the house and the farm structures is undertaken, the suspected ACMs should be sampled according the O.Reg. 278/05 to confirm the presence/absence of asbestos in these materials. All ACMs should be abated prior to demolition activities.	Site observations
Polychlorinated Biphenyls (PCB) Containing Materials and Equipment	Based on the year of the construction of the farm house and the farm structures (prior to 1947), the fluorescent light ballasts within the house may contain PCBs, since the use of PCB-containing materials in products, equipment, machinery, electrical transformers and capacitors was discontinued in the early 1980s. The house was not accessible at the time of the Site visit, as such, no observations were made with respect to the potential presence of PCB containing materials. One pole-mounted electrical transformer was observed on the Site, southwest of the house.	Site observations
Lead-Based Paints (LBPs)	Based on the year of the construction of the farm house and the farm structures (prior to 1947), lead-containing paints may be present in the building. Although the house was most likely repainted since its construction, it is possible that the original paint layer may be lead-containing and lead solder may be present on the water pipe joints. Lead related issues should be dealt with during demolition of the house and the farm structure.	Site observations

Topic	Observations	Comment / Source
Potable and Non-Potable Water Sources	The water at the Site is supplied by a dug water well located north of the house.	Site observations, Ecolog ERIS report
Utility Lines Present (i.e., Electrical, Natural Gas, other)	Electrical overhead lines are present on the Site.	Site observations
Entry and Exit Points for Site Buildings	One entry and exit point for each of the buildings.	Site observations
Existing and Former Heating System(s) (include fuel type / source)	The house was most likely heated with heating oil since fill and vent pipes likely associated with a heating oil AST were noted to extend from the west exterior wall of the house. The other farm structures at the Site were not heated. The two trailers on the Site appear to be heated by electricity.	Site observations
Existing and Former Cooling System(s) (include fuel type / source)	Most likely no cooling system was present in the house as no air conditioning units were noted from the exterior observations.	Site observations
Drains, Pits, and Sumps (include current use, if any, and former use)	None identified	Site observations
Unidentified Substances	None identified Manure was present on the ground of one of the barns located south of the house.	Site observations
Stains or Corrosion Located near a Potential Discharge Location	None identified	Site observations
Location of any Current and Former Wells	A dug water supply well is located just north of the house. In addition, 3 stick up monitoring wells are present on the Site. One of the wells is identified as 16-2 and was noted along the south side of the Site, just south of the driveway along the south part of the Site. The other two wells were installed in BH16-101 and BH16-103 as part of the geotechnical investigation recently completed on the Site by Golder.	Site observations, EcoLog ERIS report
Sanitary/Process Wastewater Receptor	The buildings on the Site are abandoned and no sanitary or process wastewater is generated at the Site with the exception of the sanitary water generated from the trailers located at the southeast part of the Site and currently occupied by the former Site owner.	Site observations
Sanitary Sewer Connection	The Site is not currently connected to the municipal sanitary or storm sewer.	Site observations
Septic Systems	There is a septic system on the Site,	Site Representative

Topic	Observations	Comment / Source
	however, the exact location is unknown.	
Storm Water Flow	A shallow ditch identified as Burnett Municipal Drain crosses the middle of the Site in north-south direction. The surface water run-off from the central part of the Site appears to be locally towards the Burnett Municipal Drain; drainage from the south portion appears to be towards the Jock River.	Site observations
Storm Sewer Connection	There are no storm sewers on the Site.	Site observations
Ground Cover (i.e. grass, gravel, soil, or pavement, etc.)	The majority of the Site is covered by agricultural fields. The south part is covered by grass and the access road is gravel covered.	Site observations, aerial photographs
Current or Former Railway Lines or Spurs	■ No railway lines or spurs were observed or reported on the Site.	Site observations and aerial photographs
Presence of Stained Soil, Pavement, or Stressed Vegetation	None identified, however, it should be noted that at the time of the Site visit the ground surface was snow covered which restricted the observations for potential presence of stained ground surfaces. In addition, no access was provided to the residential house and the equipment storage shed and as such, no observations for potential presence of staining were made in these structures.	Site observations
Presence of Fill and/or Debris Materials	No piles of fill material were observed during the Site and no fill is expected to present on the Site based on the findings from the geotechnical investigation recently completed on the Site by Golder. However, various debris were present on the Site at several locations as follows: 1. Old appliances, tires, rims, empty pails, construction debris, wood planks and skids, a fence roll, old furniture, and old RV were noted discarded south of the house in the area between the equipment storage shed and the abandoned barn. 2. Various household waste, old furniture, parts, construction debris and materials and old boat were discarded in the abandoned barn located south of the house. 3. Two old cars, tires, construction debris, plastic drums, discarded old steel AST for coloured fuel were noted south of the Site	Site observations and the geotechnical investigation recently completed for the Site by Golder

Topic	Observations	Comment / Source
	along both sides of the driveway along the south part of the Site. 4. Tree debris, wood, cardboard and metal debris were noted at the south part of the Site at the end of the driveway. No staining was noted in the area of the old cars, the discarded AST and the debris where the ground surface was exposed, however, it should be noted that due to the presence of snow cover, observations of the ground surface were limited. During the Site redevelopment all debris, the old AST and the old cars has to be removed from the Site and disposed of properly. The observed debris predominantly consisted of the household waste, tree and wood debris, cardboard, construction debris and old furniture. Due to the nature of these type of debris, the likelihood for subsurface impacts due to the storage of the debris is considered to be low. However, if evidence of contamination (staining, odour, sheen, stressed vegetation or discoloration) is observed during the removal of the debris, the old cars and the discarded AST, shallow soil sampling should be completed to confirm the presence/absence of potential subsurface impacts.	
Operations at the Property	No operations are being carried at the Site with the exception of residential related activities associated with the trailers occupied by the former Site owner.	Site observations
Hazardous Materials	No hazardous wastes were observed at the accessible areas of the Site. Given that the Site was used as a farm it is possible that hazardous materials (various lubricants, oils, and fuel) were previously used and were stored in the equipment storage shed that was not accessible during the Site visit.	Site observations, Site Representative and EcoLog ERIS Report
Products Manufactured at the Site	No manufacturing activities have been carried out at the Site.	Site observations, Site Representative and EcoLog ERIS Report
By-Products and Wastes at the Site	No by-products or wastes were observed or reported to be generated at the Site with the exception of the household wastes that were	Site observations

Topic	Observations	Comment / Source
	discarded in the abandoned barn and on the ground surface in the south part of the Site.	
Raw Material Handling and Storage Locations	No raw materials were observed to be stored or handled on-Site.	Site observations
Details of Drums, Totes, and Bins	Approximately 6 x 200 L plastic drums labeled as GNC Frost (propylene glycol) were noted in the south part of the Site along the driveway. The drums appeared to be empty.	Site observations
Oil/Water Separators	None identified or reported.	Site observations
Vehicle and Equipment Maintenance Areas	None identified. However, it should be noted that the equipment storage shed that was not accessible during the Site visit could have been used for some farm equipment maintenance.	Site observations
Spills	None identified in the accessible areas.	Site observations and EcoLog ERIS report
Liquid Discharge Points	None identified in the accessible areas.	Site observations
Hydraulic Lift Equipment	None identified in the accessible areas.	Site observations
Potentially Contaminating Activity	None identified in the accessible areas.	Site observations

The location of the Site features is presented on Figure 2.

5.2.2 Enhanced Investigation Property

The Site has been use for agricultural and residential purposes and no operations other than related to the agricultural and residential land uses have been carried out at the Site. As such, the Site is not considered to be an enhanced investigation property as stipulated in O.Reg. 153/04 (as amended).

5.3 Surrounding Land Use within 250 m of the Site

During the Site visit, a visual reconnaissance of the outdoor operations of the surrounding land within 250 m of the Site was carried out. The visual reconnaissance was conducted from the subject Site and publicly accessible areas to identify land uses that may potentially impact the Site.

Based on visual observations during the Site visit, the adjacent property use is for agricultural, residential and institutional purposes as presented on Figure 2.

North (inferred up gradient)

- Agricultural land followed by residential dwellings.

East (Inferred cross gradient)

- Greenbank Road followed by St. Joseph Catholic High School, green space, agricultural land and a greenhouse; and,

- Residential houses to the northeast.

South (inferred down gradient)

- The Jock River, agricultural land and residential dwellings.

West (inferred cross gradient)

- Agricultural land.

No issues of potential environmental concern were identified associated with the current surrounding land use.

5.4 Written Description of Investigation

At the time of the Site visit on March 10, 2016, the Site was occupied by an abandoned farm, two trailers occupied by the former Site owner (Burnett family) and agricultural fields. The abandoned farm consisted of a residential (farm) house, an equipment storage shed, barns and two silos. During the Site visit no access was provided to the farm house and the equipment storage shed and as such, these structures were not assessed as part of this Phase I ESA. In addition, the ground surface was snow covered which restricted the ground surface observations for potential presence of staining or discoloration. The Site has an approximate area of 15.5 hectares (38.4 acres). Historically the Site has been used for agricultural and residential purposes. At the time of the Site visit, no operations were being carried out with the exception of the residential related activities associated with the two trailers on the Site. The Site is generally flat with a gentle downward slope from east to west and from north to south. A shallow ditch (Burnett Municipal Drain) runs north-south and crosses the middle of the Site. The overall slope of the area is downwards to the south, towards the Jock River located along the south boundary of the Site. The surface water run-off from the central part of the Site appears to be locally towards the Burnett Municipal Drain; drainage from the south portion appears to be towards the Jock River.

The surrounding land use is for agricultural, residential and institutional purposes. The Site is surrounded by agricultural lands to the north and west, the Jock River, residential dwellings and agricultural lands to the south, and Greenbank Road, St. Joseph High School, green spaces and residential dwellings to the east.

At the time of the Site visit, a fill pipe and vent pipe most likely associated with a heating oil AST were noted to extend through the exterior west wall of the residential house. There was no access to the house and as such, no observations were made with respect to the heating oil AST located in the basement. No evidence of spills or leaks was observed on the ground surface at the area of the fill and vent pipes. In addition, an old steel AST labeled as coloured fuel tank was discarded in the south part of the Site, along the driveway. No evidence of staining was noted in the area of the AST, however, the observations were limited due to the presence of thick snow cover on the ground.

No evidence (fill/vent pipes extending through walls or slabs/ground surface, staining or any obvious odours) of former or current presence of USTs was observed. In addition, no evidence of ASTs or USTs was noted on the surrounding lands from publically accessible areas.

No piles of fill material were observed during the Site and no fill is expected to present on the Site based on the findings from the geotechnical investigation recently completed on the Site by Golder. However, various debris including old appliances, two old cars and a RV , tires, rims, construction debris (wood, metal, cardboard), plastic pails and drums were discarded south of the house in the area between the equipment storage shed and

the abandoned barn and along the driveway along the south part of the Site. Household waste, old furniture, construction debris and an old boat were noted in the abandoned barn south of the house. Tree, wood, cardboard and metal debris were also noted in the south part of the Site at the end of the driveway. No staining was noted in the area of the old cars, the discarded AST and the debris where the ground surface was exposed, however, it should be noted that due to the presence of snow cover, the observations of the ground surface were limited.

No railway lines or spurs were present on the Site. Three monitoring wells finished with stick up casing are present on the Site. Two of wells were installed in BH16-101 and BH16-103 during the geotechnical investigation carried out at the Site concurrently with this Phase I ESA and the third well (MW16-2) was installed as part of other project.

A dug water supply well is present at the Site. The water well was used for domestic and livestock water supply and is located north of the house. A number of water supply wells used for domestic and livestock water supply are reportedly located on adjacent lands within 250 m of the Site (based on Ecolog ERIS report).

The surface water run-off from the central part of the Site appears to be locally towards a drainage ditch (Burnett Municipal Drain) that runs across the central part of the Site in north–south direction. Drainage from the southern portion appears to be towards the Jock River.

Based on the observations made during the Site visit on March 10, 2016, no areas of potential environmental concern or potentially contaminating activities were identified at the Site, however, there is some uncertainty associated with these findings due to the following limitations:

1) Presence of snow cover on the Site which restricted the observations for potential evidence of stained soil, discoloration or stressed vegetation in the areas where the debris, old cars and old AST were noted.

2) No access was provided to the residential house or the equipment storage shed.

The following is recommended to be completed during the Site redevelopment:

- All debris, the old AST and the old cars and RV should be removed from the Site and disposed of in accordance with regulations. The observed debris predominantly consisted of the household waste, tree and wood debris, cardboard, construction debris and old furniture. Due to the nature of these type of debris, the likelihood for subsurface impacts due to the storage of the debris is considered to be low. However, if evidence of contamination (staining, odour, sheen, stressed vegetation or discoloration) is observed during the removal of the debris, the old cars and the discarded AST, shallow soil sampling should be completed in the potentially impacted areas to confirm the presence/absence of potential subsurface impacts.

6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Current and Past Uses of the Site

The following table summarizes the property uses of the Site over time:

Year	Name of the Owner	Description of Property Use	Property Use	Other Observations from Aerial photographs, FIPs, etc.
Prior to 2011	Kelvin and Joan Burnett	Agricultural land with a farm house and related farm structures (barns, silos, storage shed) No operations other than agriculture have been carried out at the Site.	Agricultural	The 1947 aerial photograph shows the Site as agricultural land and occupied by a farm house and farm related structures. The subsequent aerial photographs (1953, 1985, 1994 and 2002 and 2014) show the Site still as agricultural land with the farm related structures. The Site Representative indicated that the Site has been used as a farm.
2011 to present	Claridge Homes (South Nepean) Inc.	The Site is occupied by agricultural fields, the farm house and the related farm structures, however, the house and the structures are abandoned. There are two trailers occupied by the former Site owner (Burnett family). No operations have been carried out at the Site other than residential activities associated with the trailers.	Residential	As per above. At the time of the Site visit (March 10, 2016), the Site was occupied by agricultural field, abandoned farm house and related farm structures and two trailers occupied by the former Site owner.

6.2 Potentially Contaminating Activities (PCAs)

Potentially contaminating activities, current or historical, carried out at the Site or in the Phase I ESA Study Area, may trigger a Phase II ESA. Based on the information obtained as part of this Phase I ESA, no potentially contaminating activities have been carried out at on the Site or on the Phase I ESA Study Area. However, there is some uncertainty associated with these findings due to the following limitations:

- The presence of snow cover on the Site restricted the observations for potential evidence of stained soil, discoloration or stressed vegetation in the areas where the debris, old cars and old AST were noted.
- No access was provided to the residential house or the equipment storage shed during the Site visit.

The following is recommended to be completed during the Site redevelopment:

- All debris, the old AST and the old cars and the RV should be removed from the Site and disposed of in accordance with regulations. The observed debris predominantly consisted of the household waste, tree and wood debris, cardboard, construction debris and old furniture. Due to the nature of these type of debris, the likelihood for subsurface impacts due to the storage of the debris is considered to be low. However, if evidence of contamination (staining, odour, sheen, stressed vegetation or discoloration) is observed during the removal of the debris, the old cars and the discarded AST, shallow soil sampling should be completed in the potentially impacted areas to confirm the presence/absence of potential subsurface impacts.

6.3 Areas of Potential Environmental Concern (APECs)

Based on the information obtained as part of this Phase I ESA, no areas of potential environmental concern were identified on the Site.

6.4 Conceptual Site Model

A Conceptual Site Model of the Phase I Study Area (as required by O.Reg. 153/04) is presented in a series of Figures 1 to 8 (Figure 1: Key Plan, Figure 2: Site Plan, Figure 3: Topographic Map, Figure 4: Areas of Natural Significance, Figure 5: Bedrock Geology, Figure 6: Surficial Geology, Figure 7: Trend in Depth to Bedrock, and Figure 8: Physiography Map). The combined set of figures shows:

- Any existing buildings and structures (none on Site);
- Water bodies and areas of natural significance (if present) located in the Phase I Study Area;
- Any drinking water wells on the Phase I Property;
- Roads (including names) within the Phase I Study Area;
- Uses of properties adjacent to the Phase I Property;
- Areas where any PCAs have occurred in the Phase I Study Area, including any storage tanks (if identified); and,
- Areas of potential environmental concern (if identified).

The following describes the Phase I ESA Conceptual Site Model (CSM) based on the information obtained and reviewed as part of this Phase I ESA:

- The Site is occupied by an abandoned farm, two trailers occupied by the former Site owner (Burnett family) and agricultural fields. The abandoned farm consisted of a residential (farm) house, an equipment storage shed, barns and two silos. The Site has an approximate area of 15.5 hectares (38.4 acres). The Site has been developed with the farm house and associated farm structures since prior to 1947 and was used only for agricultural purposes. No operations or activities are currently being carried out at the Site other than residential activities associated with the trailers occupied by the former Site owner;

- The Site is generally flat with a gentle downward slope from east to west and from north to south. A shallow ditch (Burnett Municipal Drain) runs north-south and crosses the middle of the Site. The overall slope of the area is downwards to the south, towards the Jock River located along the south boundary of the Site. The surface water run-off from the central part of the Site appears to be locally towards the Burnett Municipal Drain; drainage from the south portion appears to be towards the Jock River;
- The Jock River is located along the south boundary of the Site. Thus, the Site is located within 30 m of a water body (as per O.reg.153/04);
- Based on the information obtained from the City of Ottawa geo-map, no evaluated wetlands are located on the Site or within the Phase One Study Area. No areas of natural or scientific interest (ANSI) are located on the Site or within 250 m of the Site. At the time of the preparation of this report a response from MNR had not been received. However, a natural environment study is being carried out at the Site as part of the project. The findings of the natural environment study will be presented under a separate cover;
- According to the MOECC water well database in the EcoLog ERIS report and Site observations, water supply well is present on the Site. The water well was used for domestic and livestock supply purposes and is located north of the house. In addition, 17 water supply wells are reportedly present on surrounding lands within 250 m of the Site;
- At the time of the Phase I ESA, the neighbouring properties within the Phase I Study Area were mainly used for agricultural, residential and institutional purposes;
- The subsurface conditions at the Site consists of topsoil, underlain by silty clay over glacial till comprised of silty sand, some gravel, cobbles and boulders. The bedrock at the Site is Oxford formation-dolostone, minor shale and sandstone and the depth to the bedrock is expected to be between 0 to 2 m mbgs at the south part and between 5 to 10 mbgs in the north part. The groundwater level measured at a borehole location on the Site in 2015 as part of the study for the South Nepean Collector project was 0.9 mbgs;
- The inferred groundwater flow direction on the Site is towards the south, towards the Jock River located along the south Site boundary;
- There are no underground services on the Site. As such, there is no potential for underground utilities to affect contaminant distribution and transport (if present); and,
- No PCAs were identified on the Site or on the Phase I ESA Study Area that may have resulted in APECs on the Site, however, there is some uncertainty associated with these findings due to the limitations as outlined in section 6.4.1 below.

6.4.1 Uncertainty and Absence of Information

There were the following material deviations to the Phase I ESA requirements set out in O.Reg. 153/04 (as amended) that would cause uncertainty and absence of information that would affect the validity of the findings of this assessment:

- No access was provided to the residential house and the equipment storage shed located on the Site. Both structures were locked and not accessible during the Site visit.

A vent and fill pipes extending from the exterior west wall of the house were noted during the Site visit. The pipes are most likely associated with a heating oil AST located in the basement of the house. No staining or other evidence of potential spills or leaks were noted on the ground surface at the area of the fill and vent pipes. However, as there was no access to the residential house at the time of the Site visit, it was not possible to observe the condition of the AST, the installation details or any indication of spills or leaks associated with the AST inside the house.

As no access was provided to the equipment storage shed, this structure was not assessed as part of this Phase I ESA.

- Presence of snow cover on the Site restricted the observations for potential evidence of stained soil, discoloration or stressed vegetation.

Various debris including old appliances, two old cars and a RV , old tires, rims, construction debris (wood, metal, cardboard), plastic pails and drums were discarded south of the house in the area between the equipment storage shed and the abandoned barn and along the driveway along the south part of the Site. Tree, wood, cardboard and metal debris were also noted in the south part of the Site at the end of the driveway. In addition, an old steel AST labeled as coloured fuel tank was discarded in the south part of the Site, along the driveway. No staining was noted in the area of the old cars, the discarded AST and the debris where the ground surface was exposed, however, due to the presence of thick snow cover, the observations of the ground surface were very limited.

7.0 CONCLUSIONS

Based on the information collected as part of this Phase I ESA, no PCAs were identified on the Site or in the Phase I ESA Study Area that might have resulted in APECs on the Site. However, there is some uncertainty associated with these findings due to the following limitations:

- The presence of snow cover on the Site restricted the observations for potential evidence of stained soil, discoloration or stressed vegetation in the areas where the debris, old cars and old AST were noted.
- No access was provided to the residential house or the equipment storage shed and as such, potential environmental concerns within these structures could not be not assessed.

In addition, the following building related issues were identified at the Site:

- Based on the year of the house and the farm structures construction (prior to 1947), ACMs (friable and non-friable) may be present in these structures, given that the use of friable ACMs was generally discontinued in the late 1970s/early 1980s. It is understood that the structures will be demolished prior to the Site redevelopment. As such, the suspected ACMs should be sampled in accordance with the O.Reg. 278/05 to confirm the presence/absence of asbestos in these materials. All ACMs should be abated prior to demolition activities.
- Based on the year of the house and the farm structures construction (prior to 1947), lead-containing paints may be present in the buildings. Although the structures were most likely repainted since their construction, it is possible that the original paint layer may be lead-containing. In addition, lead solder may be present on the water pipe joints in the house. Lead related issues should be dealt prior to demolition activities.

7.1 Need for Phase II ESA

Given that no APECs were identified on the Site during the Phase I ESA (pending the limitations as discussed in section 6.4.1 of this report), a Phase II ESA is not recommended to be carried out at the Site at this time. However, the following is recommended to be completed during the Site redevelopment:

- All debris, the old AST and the old cars and the RV discarded in the south part of the Site should be removed from the Site and disposed of in accordance with regulations. The observed debris predominantly consisted of the household waste, tree and wood debris, cardboard, construction debris and old furniture. Due to the nature of these type of debris, the likelihood for subsurface impacts due to the storage of the debris is considered to be low. However, if evidence of contamination (staining, odour, sheen, stressed vegetation or discoloration) is observed during the removal of the debris, the old cars and the discarded AST, shallow soil sampling should be completed in the potentially impacted areas to confirm the presence/absence of potential subsurface impacts.

7.2 Record of Site Condition Based on Phase I Environmental Site Assessment Alone

Considering that the Site has been used for agricultural and residential purposes and is proposed to be developed as a residential subdivision (residential land use), there is no change in the land use from less sensitive to more sensitive. As such, there is no mandatory requirement for filing of a RSC for the Site.

8.0 LIMITATIONS AND USE OF REPORT

This report (the "Report") was prepared for the exclusive use of Claridge Homes (South Nepean) Inc. This report is intended to provide an assessment of the potential environmental conditions of the property located at 3370 Greenbank Road, adjacent to the Jock River in Ottawa, Ontario, known as Burnett Lands. The Report summarizes Golder's review of available data in accordance with the principal components of Ontario Regulation 153/04 *Records of Site Condition*, as amended (RSC Regulations). The Phase I ESA also meets the requirements of the Canadian Standards Association ("CSA") Standard Z768-01, Phase I Environmental Site Assessment (reaffirmed 2012). The Report is based on data and information collected at the time of this Assessment, and must be considered in its entirety. It is based solely on the conditions on the Site encountered at the time of the site visit on March 10, 2016, as reported herein. Except as otherwise may be requested, Golder disclaims any obligation to update this Report for events taking place, or with respect to information that becomes available to Golder after the time during which Golder conducted the work. No soil, water, liquid, gas, product or chemical sampling and analytical testing other than that described herein at or in the vicinity of the Site was conducted as part of this Work.

In evaluating the property, Golder has relied in good faith on information provided by other individuals, companies or government agencies noted in the Report. Golder has assumed that the information provided is factual and accurate and Golder has not independently verified the accuracy or completeness of such information. Golder accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this Report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted. Golder makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to periodic amendment. In addition, regulatory statutes are subject to interpretation and these interpretations may change over time.

The scope and the period of Golder's assessment are described in this Report, and are subject to restrictions, assumptions and limitations.

Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the Site. Conditions may therefore exist which were not detected given the nature of the inquiry Golder was retained to undertake with respect to the Site. Accordingly, additional environmental studies and actions may be required. In addition, it is recognized that the passage of time affects the information provided in the Report. Golder's opinions are based upon information that existed at the time of the writing of the Report. It is understood that the services provided for in the scope of work allowed Golder to form no more than an opinion of the actual conditions at the Site at the time the Site was visited, and cannot be used to assess the effect of any subsequent changes in any laws, regulations, the environmental quality of the Site or its surroundings. Asbestos and mould surveys were not performed. If a service is not expressly indicated, do not assume it has been provided.

Any use which a third party makes of this Report, or any reliance on or decisions to be made based on it, are the sole responsibility of the third parties. Should additional parties require reliance on this Report, written authorization from Golder will be required. Golder disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

9.0 STATEMENT OF COMPLETION

The undersigned confirm that this Phase I Environmental Site Assessment was conducted in a manner consistent with the expected standard of care for the consulting industry in Ontario and meets the requirements for Phase I ESAs as set out in O. Reg. 153/04. The Phase I ESA also meets the requirements of the Canadian Standards Association ("CSA") Standard Z768-01, Phase I Environmental Site Assessment (reaffirmed 2012). The findings and conclusions presented herein are based on our review of relevant and readily available information, as noted in this report.

10.0 QUALIFICATIONS OF THE ASSESSORS

Maria Staneva, M. Eng., P. Eng. – Environmental Engineer

Maria Staneva is a Due Diligence Assessor/Environmental Engineer with Golder Associates in Ottawa. She has a Bachelor degree in civil engineering majored in water and wastewater treatment and a Master's degree in Environmental engineering. She is responsible for project managing and conducting numerous environmental site assessment Phase I, Phase II and Phase III in accordance with the federal and provincial requirements (Reg. 153/04) including conducting contaminated site investigations, interviews, site visits, obtaining and reviewing historical and regulatory records, report writing, project management and proposal preparation. She is involved in developing and managing work programs for Phase II and III ESA including design and implementation of a sampling and analysis plan, identifying the presence/absence and delineation of contamination, results interpretation and report writing, developing remedial action plans and remedial options evaluation, developing Phase I and Phase II ESA conceptual site models in accordance with O.Reg.153/04, and filing RSCs with the MOECC.

Don Plenderleith, M.Sc., P. Eng., PMP, Principal – Senior Reviewer

Mr. Don Plenderleith is an Environmental Engineer, Principal and senior project manager at Golder, with 24 years of experience in conducting Environmental Site Assessment and remediation of contaminated sites. His site experience includes: Phase I and II ESAs and site remediation projects at commercial and industrial properties, military bases, abandoned mine sites, railway yards, navigational sites, correctional facilities and research labs. Mr. Plenderleith is fully familiar with the CSA Standard Z768-01 Phase I ESAs and the Ontario Regulation 153/04, as amended requirements for Phase I ESAs. He is a Qualified Person for Site Assessments under Ontario Regulation 153/04 of Ontario's Environmental Protection Act.

11.0 REFERENCES

The following is a list of persons contacted and references reviewed for the purposes of preparing this report:

Source	Date
Ontario Regulation 153/04 as amended	October 31, 2011
Canadian Standards Association Document Z768-01 (R2012) 'Phase I – Environmental Site Assessments'	November 2001
Map 1506A, *Surficial Geology*, Ottawa, Ontario, Belanger J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open file D3256, 2001	2001
Map 1508A. *Generalized Bedrock Geology*, Ottawa, Ontario, Belanger J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open file D3256, 2001	2001
Golder Associates Ltd. GIS Database (Reference - Digital Basemap Data supplied by DMTI Spatial Inc., Canmap, 2006)	2006
Aerial Photographs - National Air Photo Library, Ottawa and the City of Ottawa geo-map (http://maps.ottawa.ca/geoOttawa/)	1947, 1953, 1985, 1994 and 2002. The City of Ottawa geo-map: 1976, 1991, 1999, 2002, 2005, 2007, 2008, 2011 and 2014
EcoLog ERIS report	February 29, 2016
Street Directories	February 29, 2016
Ontario Ministry of the Environment and Climate Change	March 10, 2016
City of Ottawa	Pending
Ministry of Natural Resources	Pending
Technical Standards and Safety Authority	February 29, 2016
Memorandum entitled *"Natural Environment Constraints - Due Diligence: Nicolls Island Road Parcel A, Riverside South, Ottawa, Ontario"* prepared by Golder for Regional	August 14, 2015

12.0 CLOSURE

We trust that the information presented in this report meets your current requirements. Should you have any questions or concerns, please do not hesitate to contact the undersigned.

GOLDER ASSOCIATES LTD.

Maria Staneva, M.Eng., P.Eng.
Environmental Engineer

Don Plenderleith, M.Sc., P.Eng., PMP, QPESA, QP$_{ESA}$
Principal

MS/DHP/md/ob
\\golder.gds\gal\ottawa\active\2015\3 proj\1523044 claridge burnett lands ottawa\08_reports\2000-phase i\ph. i esa rpt\reg 153 phase i esa, 3370 greenbank, burnett lands final.docx

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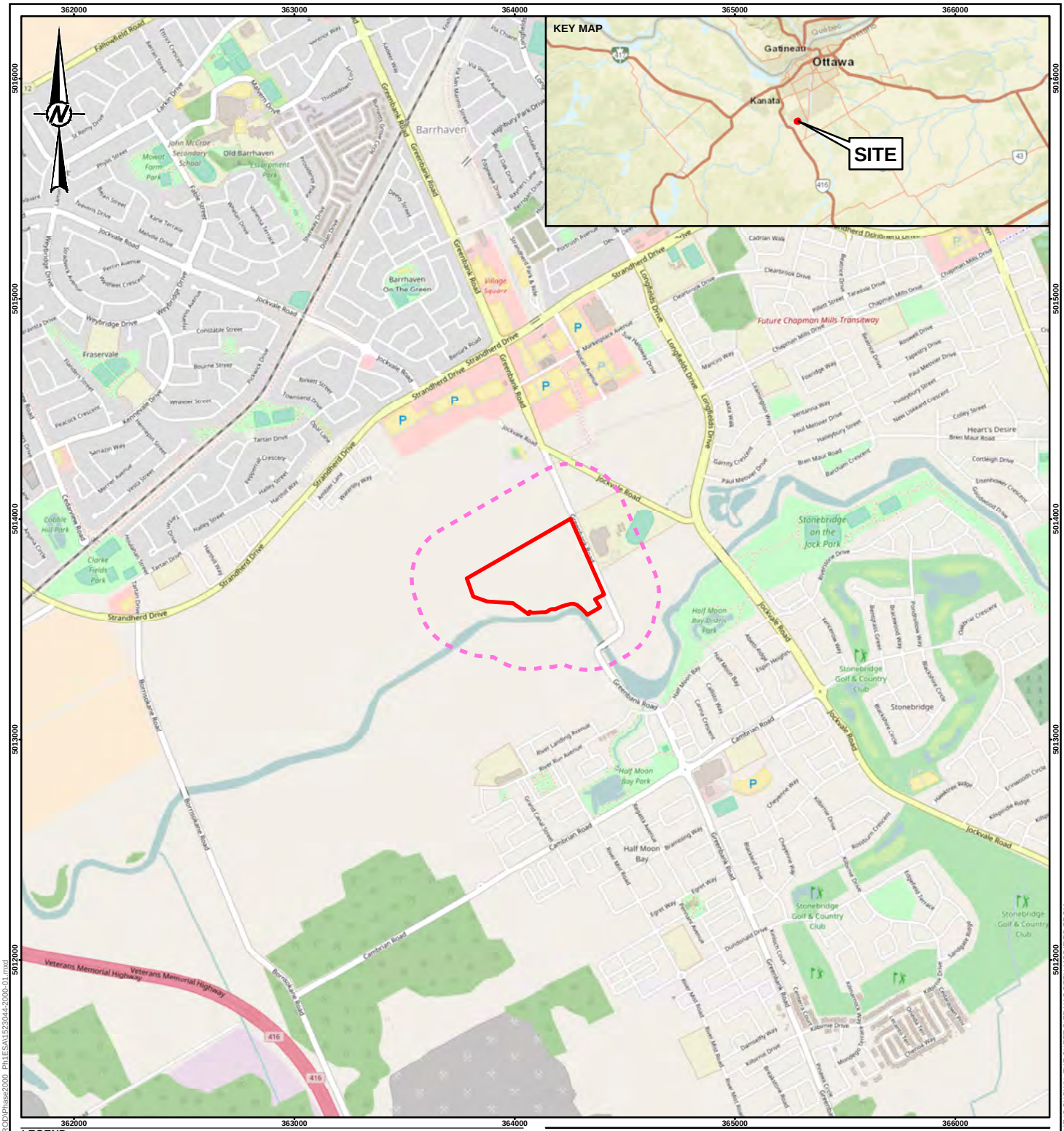

LEGEND

PHASE ONE SITE BOUNDARY

PHASE ONE STUDY AREA

0 250 500 1,000

1:25,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. SERVICE LAYER CREDITS: © OPENSTREETMAP (AND) CONTRIBUTORS, CC-BY-SA SOURCES: ESRI, HERE, DELORME, USGS, INTERMAP, INCREMENT P CORP., NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI (THAILAND), MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

KEY PLAN

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm 0

Path: N:\Active\Spatial IM\Claridge\Homes\Burnett Lands\93 PROJ\1523044 Claridge\40 PROD\Phase2000 PhI ESA\1523044-2000-01.mxd

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- SHALLOW SOIL SAMPLE LOCATION
- GEOTECHNICAL BOREHOLE LOCATION
- ROADWAY
- WATERCOURSE
- WATERBODY

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
CLARIDGE HOMES CORPORATION

PROJECT
PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE
SITE PLAN

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-03-17
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	2

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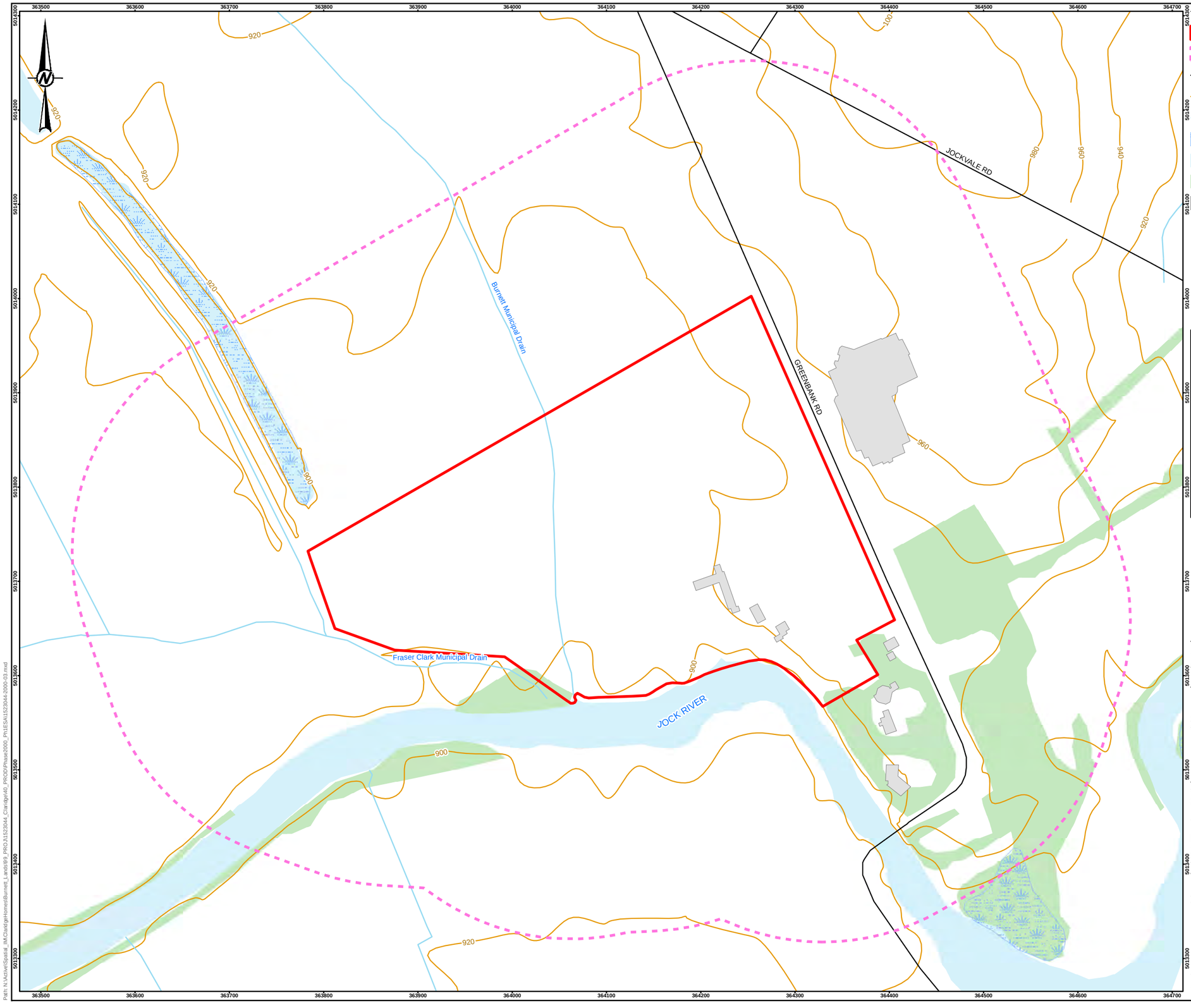

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- ROADWAY
- TOPOGRAPHIC CONTOUR, metres
- WATERCOURSE
- WETLAND
- WATERBODY
- WOODED AREA
- BUILDING FOOTPRINT

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

TOPOGRAPHIC MAP

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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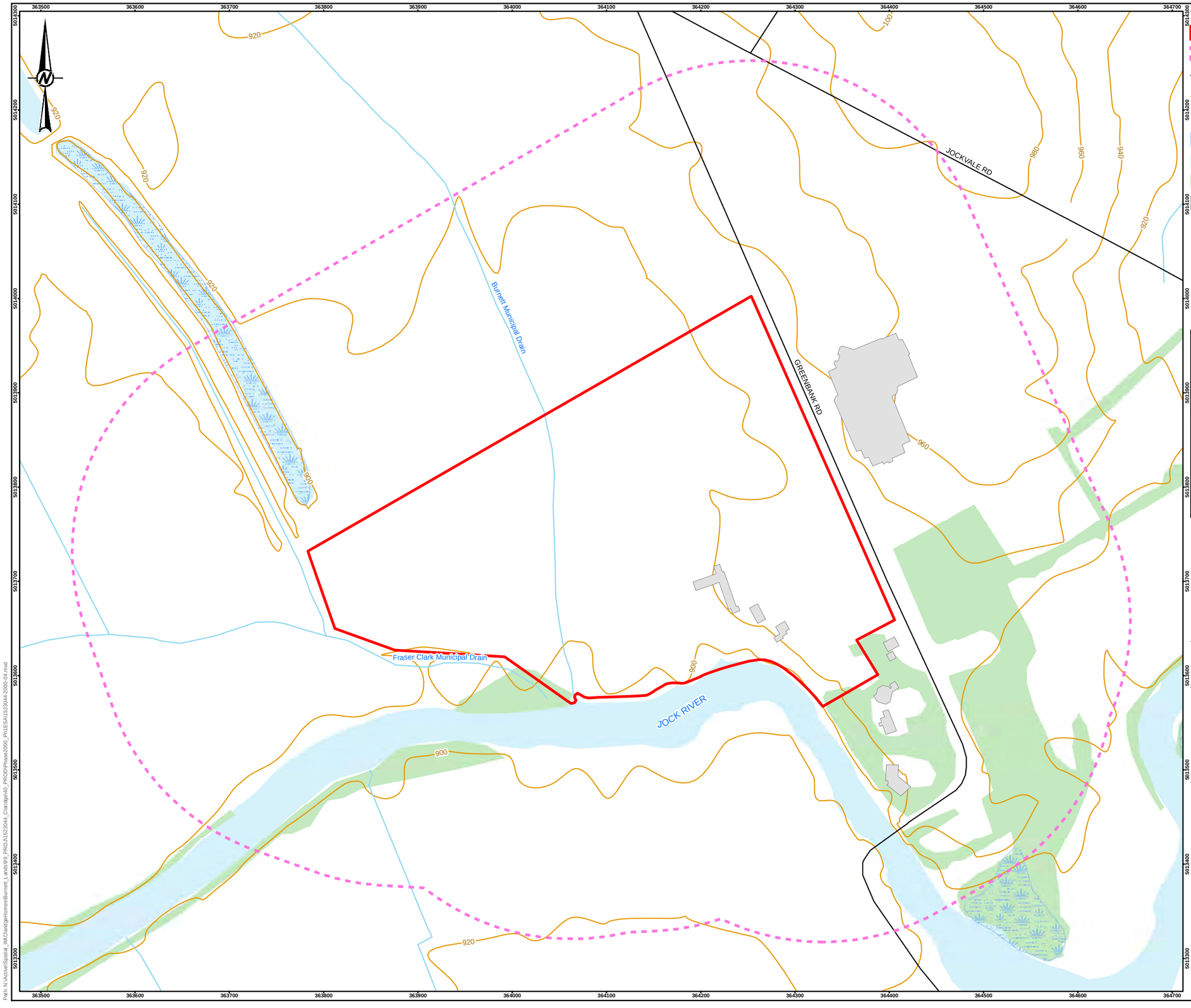

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- ROADWAY
- TOPOGRAPHIC CONTOUR, metres
- WATERCOURSE
- WETLAND
- WATERBODY
- WOODED AREA
- BUILDING FOOTPRINT

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

AREAS OF NATURAL SIGNIFICANCE

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	**4**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 0 25mm

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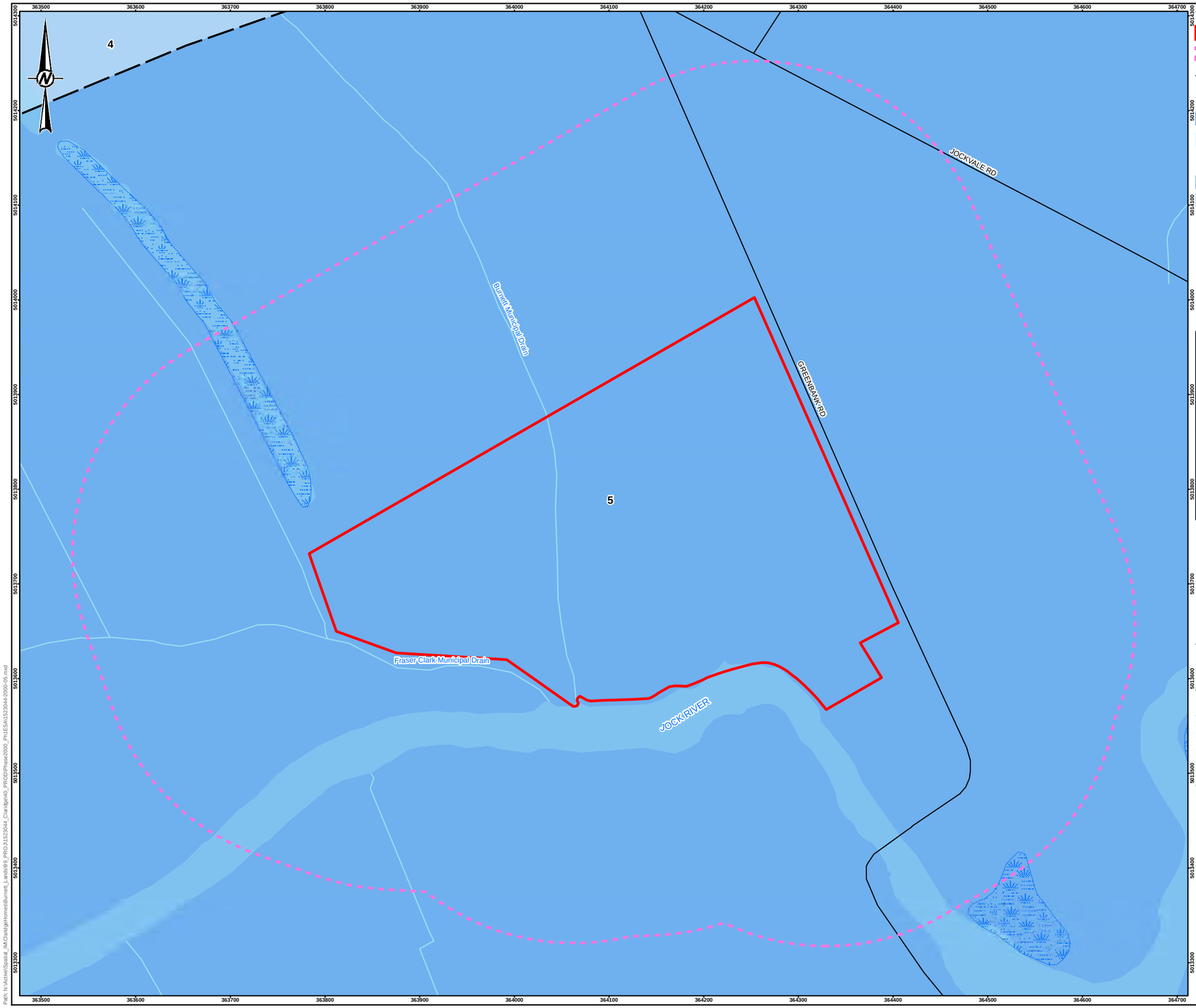

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- ROADWAY
- WATERCOURSE
- WETLAND
- WATERBODY
- FAULT
- 5: OXFORD FORMATION - DOLOSTONE, MINOR SHALE AND SANDSTONE
- 4: MARCH FORMATION - SANDSTONE, DOLOMITIC SANDSTONE, DOLOSTONE

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. **OGS BEDROCK GEOLOGY**
ARMSTRONG, D.K. AND DODGE, J.E.P. 2007. PALEOZOIC GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE--DATA 219
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
CLARIDGE HOMES CORPORATION

PROJECT
PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE
BEDROCK GEOLOGY

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	5

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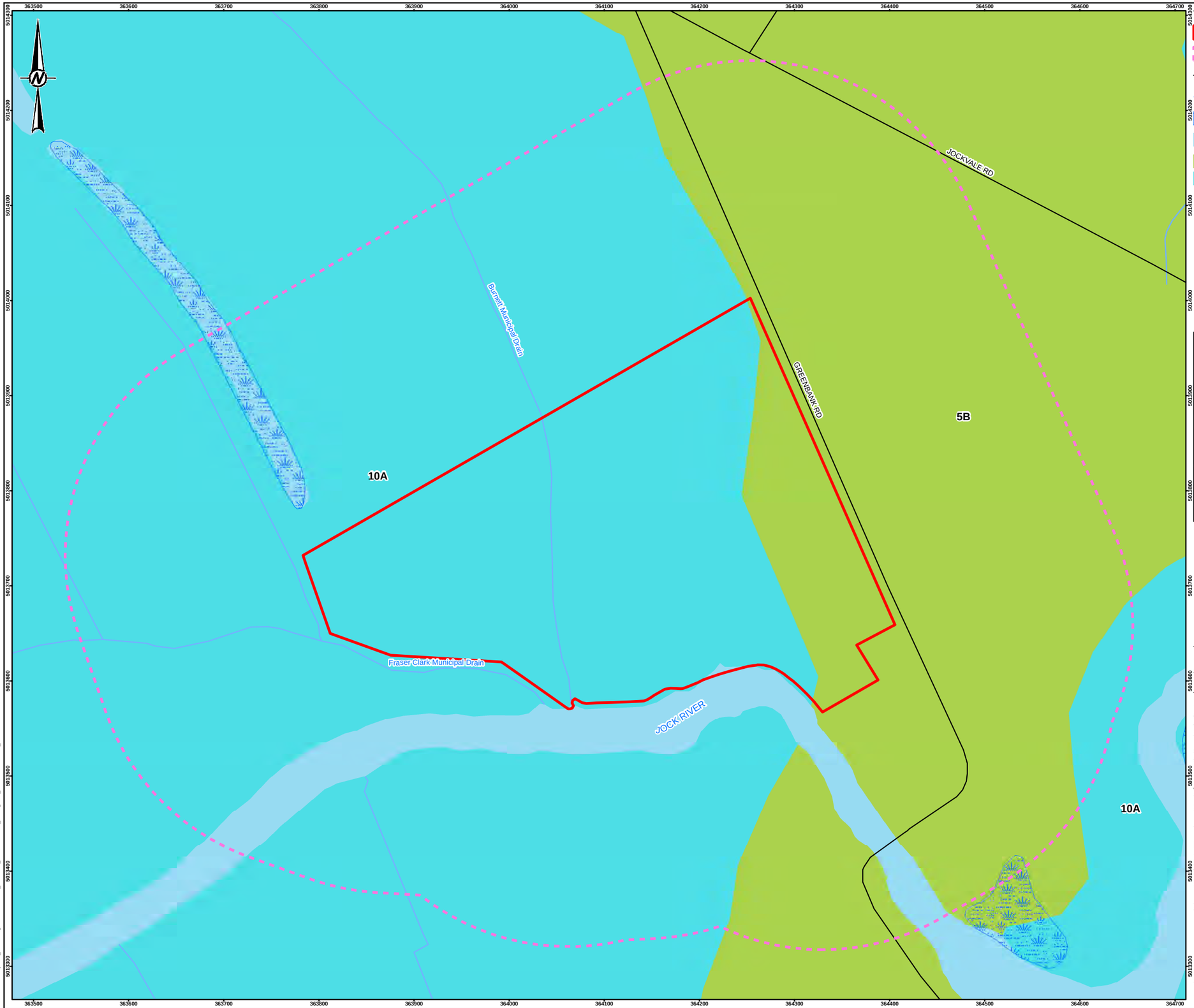

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- ROADWAY
- WATERCOURSE
- WETLAND
- WATERBODY
- 5B: STONE-POOR, CARBONATE-DERIVED SILTY TO SANDY TILL
- 10A: MASSIVE-WELL LAMINATED

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. **OGS SURFICIAL GEOLOGY**
ONTARIO GEOLOGICAL SURVEY 2010. SURFICIAL GEOLOGY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE--DATA 128-REV
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
CLARIDGE HOMES CORPORATION

PROJECT
PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE
SURFICIAL GEOLOGY

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	6

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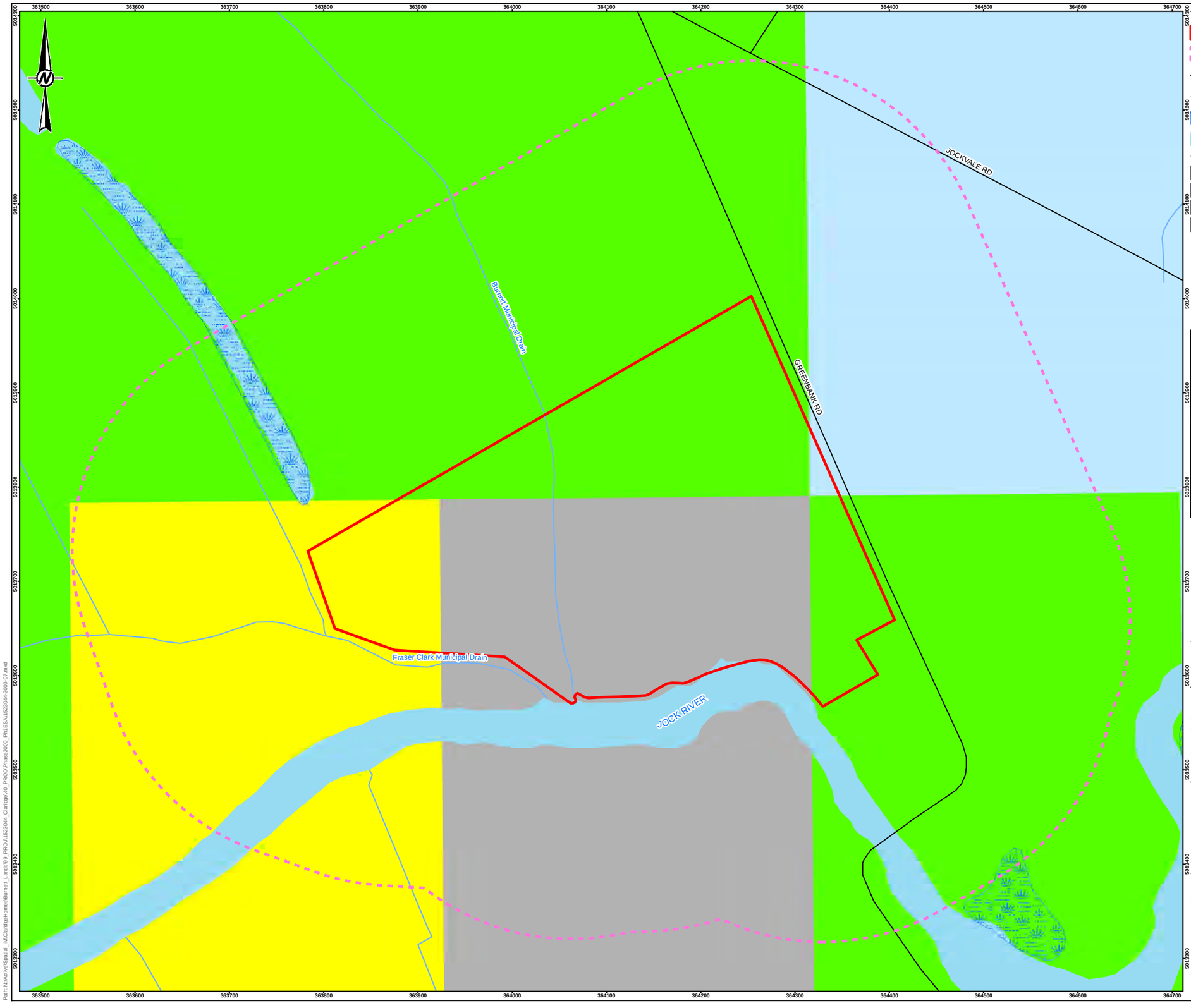

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- ROADWAY
- WATERCOURSE
- WETLAND
- WATERBODY

TREND IN DEPTH TO BEDROCK (METRES)

- >0 - 2
- 2 - 3
- 5 - 10
- 10 - 15

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. **OGS DRIFT THICKNESS**
BEDROCK TOPOGRAPHY AND OVERBURDEN THICKNESS MAPPING, SOUTHERN ONTARIO, ONTARIO GEOLOGICAL SURVEY, MISCELLANEOUS RELEASE - DATA 207
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
CLARIDGE HOMES CORPORATION

PROJECT
PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE
TREND IN DEPTH TO BEDROCK

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	7

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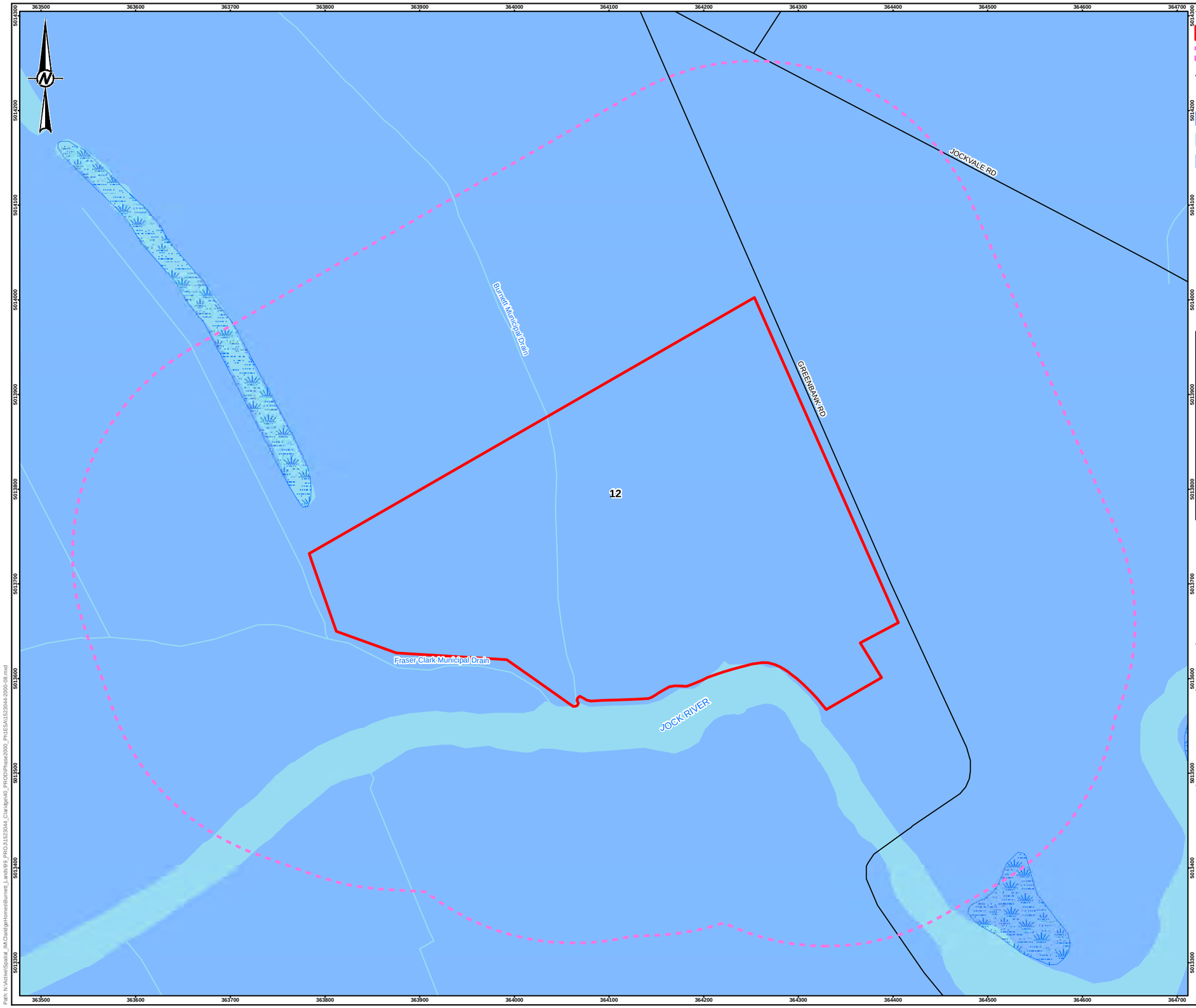

LEGEND

- PHASE ONE SITE BOUNDARY
- PHASE ONE STUDY AREA
- ROADWAY
- WATERCOURSE
- WETLAND
- WATERBODY
- 12: CLAY PLAINS

KEY MAP

0 40 80 160

1:4,000 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. **PHYSIOGRAPHY MAP**
CHAPMAN, L.J. AND PUTNAM, D.F. 2007. PHYSIOGRAPHY OF SOUTHERN ONTARIO; ONTARIO GEOLOGICAL SURVEY, MISCELLANEIOUS RELEASE-DATA 228
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT
CLARIDGE HOMES CORPORATION

PROJECT
PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE
PHYSIOGRAPHY

CONSULTANT
Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	FIGURE
1523044	2000	0	**8**

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:
25mm
0

APPENDIX A

Draft Plan of Survey

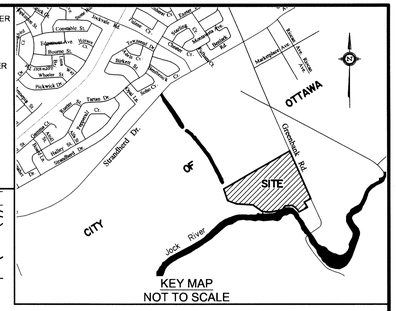
SUBJECT TO THE CONDITIONS, IF ANY, SET FORTH IN OUR LETTER DATED

_____

THIS DRAFT PLAN IS APPROVED BY THE CITY OF OTTAWA UNDER SECTION 51 OF THE PLANNING ACT.
THIS _____ DAY OF _____, 20__ .

_____

DON HERWEYER , MCIP, RPP, MANAGER
DEVELOPMENT REVIEW, SOUTH
PLANNING, INFRASTRUCTURE AND ECONOMIC
DEVELOPMENT DEPARTMENT
CITY OF OTTAWA



KEY MAP
NOT TO SCALE

DRAFT PLAN OF SUBDIVISION OF
PART OF LOT 13
CONCESSION 3 (RIDEAU FRONT)
Geographic Township of Nepean
CITY OF OTTAWA
Prepared by Annis , O'Sullivan , Vollebekk Ltd.

Scale 1 : 1000
40 30 20 10 0 20 40 Metres

Metric
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

SURVEYOR'S CERTIFICATE

I CERTIFY THAT :
The boundaries of the lands to be subdivided and their relationship to adjoining lands have been accurately and correctly shown.

November 14/2016 — Edward M. Lancaster
Date
Edward M. Lancaster
ONTARIO LAND SURVEYOR

OWNER'S CERTIFICATE

This is to certify that we are the owners of the lands to be subdivided and that this plan was prepared in accordance with our instructions.

Nov. 14/16 — Jim Burghout
Date
Jim Burghout
CLARIDGE HOMES (SOUTH NEPEAN) INC.
I have the authority to bind the corporation.

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51-17 OF THE PLANNING ACT

(a) see plan
(b) see plan
(c) see plan
(d) multi-family residential housing, park land, open space
(e) see plan
(f) see plan
(g) see plan
(h) City of Ottawa
(i) see soils report
(j) see plan
(k) sanitary, storm sewers, municipal water, bell, hydro, cable and gas to be available
(l) see plan

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S8
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@aovltd.com
Ontario Land Surveyors

Job No. 16396-15 Claridge PTLT13 C3 RF Np DPS F | B

APPENDIX B

Regulatory Requests and Responses

Ministry of the Environment and Climate Change
City of Ottawa
Ministry of Natural Resources
Technical Standards and Safety Authority

Ministry of the Environment and Climate Change

December 2016
Report No. 1523044 - 2000

FACSIMILE

DATE February 29, 2016 **PROJECT No.** 1523044

TO Ministry of the Environment **FAX No.** 613-521-5437

CC **TOTAL PAGES** 2 (Including cover sheet)

FROM Maria Staneva **EMAIL** mstaneva@golder.com

REQUEST FOR ENVIRONMENTAL INFORMATION FOR A PHASE I ENVIRONMENTAL SITE ASSESSMENT, 3370 GREENBANK ROAD, OTTAWA, ONTARIO

We are in the process of preparing a Phase I Environmental Site Assessment for the site noted above. For your reference we have included a key plan showing the location of the study area.

It is requested that the Ministry provide an Index Review Report with respect to the following:

- Active Orders under the Environmental Protection Act (EPA), the Ontario Water Resources Act (OWRA), and the Pesticides Act (PA); and,
- Approvals under Sections 9 and 39 of the EPA as well as Sections 52 and 53 of the OWRA.

Your usual prompt attention to this matter is appreciated. Should you have any questions please contact our office.

Golder Associates Ltd.

MS

Hard copy to follow by mail: ☐ Yes ☑ No

N:\Active\2015\3 Proj\1523044 Claridge Burnett Lands Ottawa\08_Reports\Ph. I ESA\Reg Requests\Fax-001 MOE Request.docx

Golder Associates Ltd.
1931 Robertson Road, Ontario, Canada K2H 5B7
Tel: +1 (613) 592 9600 Fax: +1 (613) 592 9601 www.golder.com

Ministry of the Environment and Climate Change
Ottawa District Office
2430 Don Reid Drive, Suite 103
Ottawa Ontario
K1H 1E1
613-521-3450 or 1-800-860-2195
Fax: 613-521-5437

Ministère de l'Environnement et de l'Action en matière de changement climatique
Bureau du district d'Ottawa
2430, promenade Don Reid, Unité 103
Ottawa (Ontario)
K1H 1E1
613-521-3450 ou 1-800-860-2195
Téléc. : 613-521-5437

Ontario

OTT File No: **10**

INDEX REVIEW REPORT
COMMERCIAL/INDUSTRIAL/AGRICULTURAL

Attention:	**Maria Staneva**	Your File:	1523044
	Golder Associates	Date Received:	February 29, 2016

Thank you for your inquiry requesting a search of records from the Ministry of the Environment and Climate Change (ministry). The ministry encourages you to use the available on-line resources to access publically-available information which may assist with your inquiry.

PROPERTY OWNER AND LOCATION

Location: Municipality: **Ottawa**

Address: **3370 Greenbank Road**
Lot Concession Township

INDEX OF NAMES FOR ORDERS

We have searched the *Ottawa* District Index Record of Active Orders under the Environmental Protection Act (EPA), Ontario Water Resources Act (OWRA) and the Pesticides Act (PA) issued to:
and the following information has been found:

☒ No Active Orders are outstanding

Please Note: *For information related to any ministry Orders issued to the property in question, please request this information from the property owner. If you would like further information regarding a specific Order issued, please contact the Ottawa District Office.*

Date of Search: March 10, 2016

RECORD OF SITE CONDITION

For information on **Records of Site Condition** filed on the Environmental Site Registry since October 1, 2004, please use the following link:
http://www.ene.gov.on.ca/environment/en/subject/brownfields/STDPROD_075742.html

INDEX REVIEW REPORT
COMMERCIAL/INDUSTRIAL/AGRICULTURAL

INDEX OF NAMES FOR APPROVALS ISSUED SINCE 1999

A search of the Index Record of names of all persons to whom approvals have been issued, maintained by the Director, Approvals Branch and the Regional Director, *Eastern Region*, and the District Manager, *Ottawa District*, under Section 19 EPA and Section 13 OWRA and the following information has been provided :

Type	Number	Issued To	Issue Date
Section 9 EPA *(Air)*			
Section 39 EPA *(Waste Management)*			
Section 52 OWRA *(Water)*			
Section 53 OWRA *(Municipal/Private/ Industrial Sewage)*			
Other			

The **ministry's Access Environment** is an on-line, map-based search tool designed to allow the public, quick and easy access to the ministry approvals and registration information from December 1999 onward. Access Environment currently displays Environmental Compliance Approvals (ECA), Renewable Energy Approvals (REA) and registrations on the Environmental Activity and Sector Registry (EASR). ECAs include all Certificates of Approval (CofAs) previously issued under the Environmental Protection Act (EPA) and approvals previously issued under s.53 of the Ontario Water Resources Act (OWRA). You can access this information from the ministry website or at the following link:
www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action?search=basic&lang=en

Copies of ECAs prior to 1999 can be obtained through a request to the ministry's Information Unit at the Environmental Approvals, Access and Service Integration Branch – the form is available at:
http://www.ontario.ca/environment-and-energy/request-copy-environmental-compliance-approval

Please Note:

1) The information provided above is based solely on the address(es) and name(s) of the present and past owners provided by you.
2) The Index Record of Names to whom approvals have been issued, maintained by the Regional Director and District Manager, has been searched back to 1999.
3) A search of our records does **NOT** indicate whether there are:
   - other uses for which an approval may have been required, **nor**
   - other uses on the property or in the vicinity that may affect the suitability of the property, for the use proposed to be made of it.

   If a comprehensive knowledge of the property and the nearby lands and their environmental condition is required, you must examine them and other relevant records yourself, with the aid of a qualified person, if needed.

☒ No Approvals have been issued.

Date of Search: March 10, 2016

INDEX REVIEW REPORT
COMMERCIAL/INDUSTRIAL/AGRICULTURAL

Additional site information related to the **location of landfill sites** in the province can be found at the following link:

http://www.ontario.ca/environment-and-energy/small-landfill-sites

http://www.ontario.ca/environment-and-energy/map-large-landfill-sites

The **ministry's Hazardous Waste Information Network (HWIN)** can also be accessed to search for information on generators, carriers, and receivers of subject waste in the province at the following link: www.hwin.ca

The **ministry's Environmental Compliance Reports** provide information about contaminant discharges to water and emissions to air that exceed limits found in legislation, environmental approvals, orders and/or policies/guidelines and can be accessed at the following link: http://www.ontario.ca/environment-and-energy/environmental-compliance-reports

Information on **environmental penalties**, which are monetary penalties that can be imposed by the ministry for some industrial spills, can be assessed at the following link: http://www.ontario.ca/government/search-results?query=Environmental+penalties&op=Search

Additional ministry information can be accessed through the **Government of Ontario's Open Data Catalogue**: http://www.ontario.ca/government/open-data-ontario

The ministry also encourages you to consider best practices and standards of care used within the legal community and through your associations as a guide to obtaining information related to specific property for any legal purpose.

We trust this information will help meet your requirements quickly and effectively.

Please advise your colleagues that responses to requests for searches always take some time. As a result the Ministry of the Environment and Climate Change may not be able to meet deadlines imposed by other parties on real estate and other transactions.

Thank you for your inquiry.

Signature:
Contact Name: Johanne Veilleux
Title: Administrative Assistant

Address: Ministry of the Environment and Climate Change
2430 Don Reid Drive, Unit 103
Ottawa, ON K1H 1E1

Phone: (613) 521-3450 Ext 221

Date: March 10, 2016

E&OE

Please Note: *If you would like to receive an email with all the environmental links above, please contact me at johanne.veilleux@ontario.ca and I will be pleased to send them to you.*

City of Ottawa

December 2016
Report No. 1523044 - 2000

Golder Associates

From: Staneva, Maria
Sent: Thursday, March 03, 2016 4:53 PM
To: 'Jim Burghout'
Subject: RE: Reg.153/04 Phase I ESA, Burnett Lands, 3370 Greenbank Rd

Thank you Jim!

Also when you have a chance can you send me the completed forms that I sent to you with the original email (the questionnaire and the property information form).

Regards

Maria

Maria Staneva (M.Eng., P.Eng.) | Environmental Engineer | **Golder Associates Ltd.**
1931 Robertson Road, Ottawa, Ontario, Canada, K2H 5B7 ◄ We Have Moved!
T: +1 (613) 592 9600 | **D:** +1 (613) 592-9600 x4237 | **F:** +1 (613) 592 9601 | **C:** +1 (613) 868-2595 | **E:** Maria_Staneva@golder.com | **www.golder.com**

Work Safe, Home Safe

From: Jim Burghout [mailto:jim.burghout@claridgehomes.com]
Sent: Thursday, March 03, 2016 4:44 PM
To: Staneva, Maria <Maria_Staneva@golder.com>
Subject: Re: Reg.153/04 Phase I ESA, Burnett Lands, 3370 Greenbank Rd

The buildings are not occupied and should be accessible. The exception may be a mobile trailer to the left of the driveway as you go in, which may still be occupied by one of the Burnett family. You can knock on the door and talk to him if you have to - he may or may not be home. The old house and farm buildings should be accessible, although I don't know if the driveway had been plowed

Jim

On Thu, Mar 3, 2016 at 4:26 PM, Staneva, Maria <Maria_Staneva@golder.com> wrote:

> Hi Jim,

I would like to follow up on my email below.

Can you please advise if the buildings on Burnett Lands site are occupied and accessible. I am planning to complete the site visit next week and would like to know if I need to make any arrangements to access the buildings.

Thank you!

Maria

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Work Safe, Home Safe

From: Staneva, Maria
Sent: Monday, February 29, 2016 9:32 AM
To: Jim Burghout (jim.burghout@claridgehomes.com) <jim.burghout@claridgehomes.com>
Subject: Reg.153/04 Phase I ESA, Burnett Lands, 3370 Greenbank Rd

Hi Jim,

We initiated the Phase I ESA work for the Burnett Lands site at 3370 Greenbank Rd.

In this regard can you please complete the attached Ph. I ESA questionnaire and the property location information form and send the completed forms back to me at your earliest convenience.

Also for the Phase I ESA site visit I will need access to the on Site buildings (farm house and associated structures).

Can you please let me know if these buildings are occupied and who I need to contact to arrange access to the buildings?

Thank you!

Maria

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Work Safe, Home Safe

Ministry of Natural Resources

December 2016
Report No. 1523044 - 2000

Golder Associates

From: Staneva, Maria
Sent: Monday, February 29, 2016 9:55 AM
To: Kemptville.Inforequest@ontario.ca
Subject: Phase I ESA, MNR info request, 3370 Greenbank Road, Ottawa, ON
Attachments: MNR InfoRequest March 2016.pdf; site plan.PNG

Hello,

Please find attached our information request for the site located at 3370 Greenbank Road in Ottawa, ON. I also attached an image showing the site boundaries.

If you have any questions, please don't hesitate to contact me.

Thank you!

Maria

Maria Staneva (M.Eng., P.Eng.) | Environmental Engineer | **Golder Associates Ltd.**
1931 Robertson Road, Ottawa, Ontario, Canada, K2H 5B7 ◄ We Have Moved!
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Work Safe, Home Safe

Ministry of Natural Resources

Ontario

Natural. Valued. Protected.

Email to MNR

Natural Areas and Features Information Request Form

Contact Information

Clear Contact

Name: Maria Staneva

Address: 1931 Robertson Road, Ottawa, ON

Phone Number: (613) 592-9600 ☐ Owner ☑ Consultant

E-mail Address: mstaneva@golder.com

*All red fields are manditory

This includes X & Y Coordinates.

Please see page 2 for assistance.

Site Information

Clear Site

Project Name: Phase I ESA, 3370 Greenbank Road, Ottawa

Township: Ottawa Lot: _____ Concession: _____

X: -75.7418 Y: 45.2610 Address: 3370 Greenbank Road, Ottawa, ON

**If more than 1 site, please provide all individual coordinates in an attached spreadsheet

Type of Proposal

Clear Details

☐ Severance / Zoning
☐ Drains / Roads / Culverts
☐ Hydroline clearing
☐ Small Scale Projects (less than 5 hectares)
☐ RE Projects
☐ Large Scale Projects (5 hectares or greater)
☐ Aggregate Project
☑ Other: _____

Attachments

***Please attach a Site Map showing the area of interest

☐ Picture ☑ Map(s) ☐ Engineered Drawings ☐ Other: _____

Request

I would like to request the following information for the property identified above:

-Information on species at risk on the site and within 250 m of the site boundaries and advice for avoiding impacts to any SAR
-Information on and mapping of significant natural areas (NHIC indicates none present) within

To better respond to your request please briefly outline the purpose for which this information is required (e.g. proposed development, lot severance, etc. or attach details):

The request is needed to comply with Ontario Regulation 153/04 (as amended) for a Phase I Environmental Site Assessment carried out for the site located on 370 Greenbank Road in Ottawa, Ontario. Refer to the attached figure for the site location.

Date of works proposed: ____ / _____ / _____

Personal information contained in this form is collected in order to fulfill your request, respond to your inquiries and for other administration purposes. With regard to the personal information it collects, the ministry is bound by privacy protection rules under the Freedom of Information and Protection of Privacy Act and takes all necessary steps to safeguard personal information collected.

Please Note: This request MUST be made by the property owner or by someone acting on their behalf.
Depending on the nature of the request, it may take 6-8 weeks to respond to your inquiry.
If the request does not include the manditory information, it may delay response time.

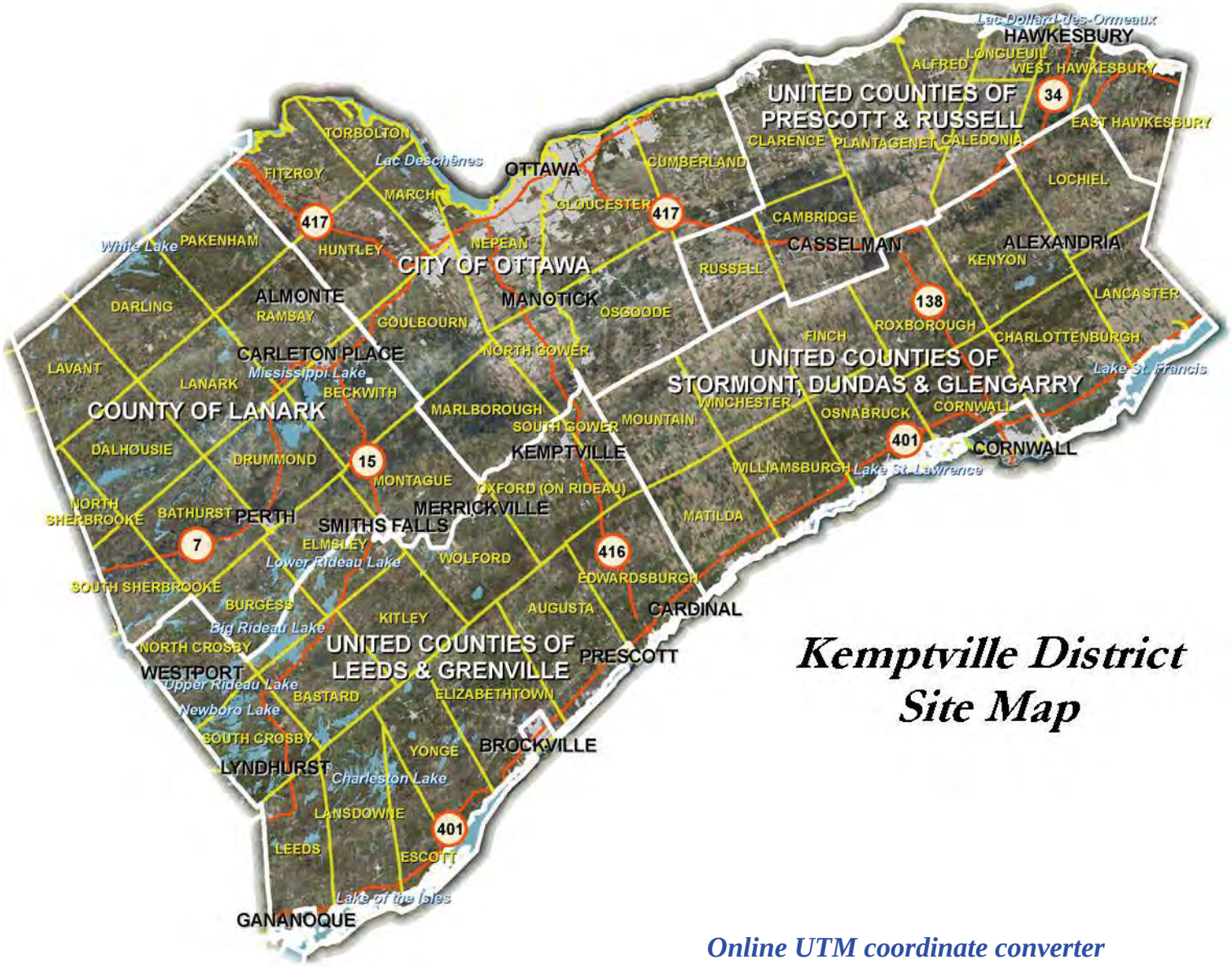
☑ *I have read the above and agree to all Terms and Conditions*

Please forward the completed form to:

Kemptville.Inforequest@Ontario.ca OR **Fax: 613-258-3920**

Attention: Information Requests
10 Campus Drive, Postal Bag 2002
Kemptville, ON K0G 1J0

MNR File Number: _____



Kemptville District Site Map

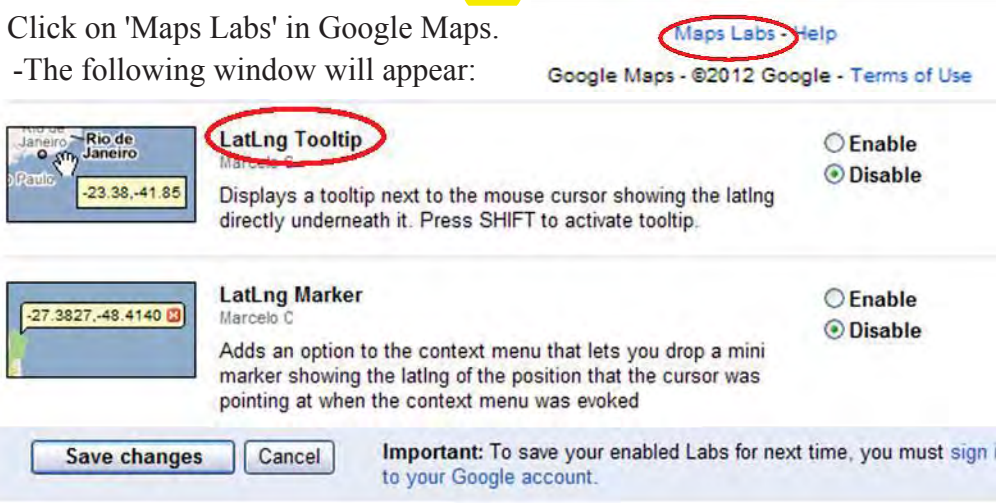
Online UTM coordinate converter

How to get X, Y coordinates from Google Maps (2 options):

1.) Right-click on the map, at the point of interest, and select 'What's here?'.
-The Latitude & Longitude of the mouse click, in decimal degrees, will automatically appear in the Search box.

OR

2.) Click on 'Maps Labs' in Google Maps.
-The following window will appear:



-Enable the LatLng Tooltip and then Save Changes.
-Now every time the **SHIFT** button is pressed in Google Maps, a Tool tip will appear with the Latitude and Longitude of the mouse location in decimal degrees.


Base Maps
ch. Greenbank Rd.
ch. Jockvale Rd.
ch. Jockvale Rd.
crois. Garrity Cres
pass. Half Moon Bay
place Triton Pl
voie Tucana Way

Technical Standards and Safety Authority

From: Prem Lal <plal@tssa.org> on behalf of Public Information Services <publicinformationservices@tssa.org>
Sent: Monday, February 29, 2016 10:12 AM
To: Staneva, Maria
Subject: RE: TSSA request for information, 3370 Greenbank Road

Hi Maria:

Thank you for your inquiry.

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

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

Thank you Maria and you have a great day.

Prem

Public Information Services
Facilities & Business Services
3300 Bloor Street West
Center Tower, 16th Floor
Toronto, Ontario, M8X-2X4
Tel: 1-877-682-8772 Fax: (416) 734-3568 E-mail: publicinformationservices@tssa.org
www.tssa.org

From: Staneva, Maria [mailto:Maria_Staneva@golder.com]
Sent: Monday, February 29, 2016 9:51 AM
To: Public Information Services
Subject: TSSA request for information, 3370 Greenbank Road

Hi Sarah,

Could you please review your records to determine if any bulk fuel underground storage tanks (USTs) were registered on or near 3370 Greenbank Road in Ottawa, ON. Also could you check if there are records of fuel spills, accidents or incidents on these addresses.

3370, 3288, 3333, 3380, 3390, 3293, 3291, 3287 and 3285 Greenbank Road
3232 Jockvale Road

Thank you!

Maria

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Work Safe, Home Safe

APPENDIX C

EcoLog ERIS Report and Street Directories

ENVIRONMENTAL RISK INFORMATION SERVICE

DATABASE REPORT

Project Property:	*Phase I ESA, 3370 Greenbank Road, Ottawa* *3370 Greenbank Rd* *Ottawa ON K2J4H7*
Project No:	*1523044*
Report Type:	*Standard Report*
Order No:	*20160224009*
Requested by:	*Golder Associates Ltd.*
Date Completed:	*February 29, 2016*

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

www.erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:		*Phase I ESA, 3370 Greenbank Road, Ottawa* *3370 Greenbank Rd Ottawa ON K2J4H7*
Project No:		*1523044*
Coordinates:		
	Latitude:	*45.261184*
	Longitude:	*-75.744056*
	UTM Northing:	*5,012,234.51*
	UTM Easting:	*441,624.06*
	UTM Zone:	*UTM Zone 18T*
Elevation:		*299 FT* *91.00 M*

Order Information:

Order No:	*20160224009*
Date Requested:	*February 24, 2016*
Requested by:	*Golder Associates Ltd.*
Report Type:	*Standard Report*

Additional Products:

City Directory Search	*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*	*7*	*7*
CA	***Certificates of Approval***	*Y*	*0*	*0*	*0*
CFOT	***Commercial Fuel Oil Tanks***	*Y*	*0*	*0*	*0*
CHEM	***Chemical Register***	*Y*	*0*	*0*	*0*
COAL	***Inventory of Coal Gasification Plants and Coal Tar Sites***	*Y*	*0*	*0*	*0*
CONV	***Compliance and Convictions***	*Y*	*0*	*0*	*0*
CPU	***Certificates of Property Use***	*Y*	*0*	*0*	*0*
DRL	***Drill Hole Database***	*Y*	*0*	*0*	*0*
EASR	***Environmental Activity and Sector Registry***	*Y*	*0*	*0*	*0*
EBR	***Environmental Registry***	*Y*	*0*	*0*	*0*
ECA	***Environmental Compliance Approval***	*Y*	*0*	*0*	*0*
EEM	***Environmental Effects Monitoring***	*Y*	*0*	*0*	*0*
EHS	***ERIS Historical Searches***	*Y*	*0*	*2*	*2*
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*	*9*	*9*
HINC	***TSSA Historic Incidents***	*Y*	*0*	*0*	*0*
IAFT	***Indian & Northern Affairs Fuel Tanks***	*Y*	*0*	*0*	*0*
INC	***TSSA Incidents***	*Y*	*0*	*0*	*0*
LIMO	***Landfill Inventory Management Ontario***	*Y*	*0*	*0*	*0*
MINE	***Canadian Mine Locations***	*Y*	*0*	*0*	*0*
MNR	***Mineral Occurrences***	*Y*	*0*	*0*	*0*
NATE	***National Analysis of Trends in Emergencies System (NATES)***	*Y*	*0*	*0*	*0*
NCPL	***Non-Compliance Reports***	*Y*	*0*	*0*	*0*
NDFT	***National Defence & Canadian Forces Fuel Tanks***	*Y*	*0*	*0*	*0*

Database	Name	Searched	Project Property	Within 0.25 km	Total
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	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	1	1
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	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	1	17	18
	Total:		1	36	37

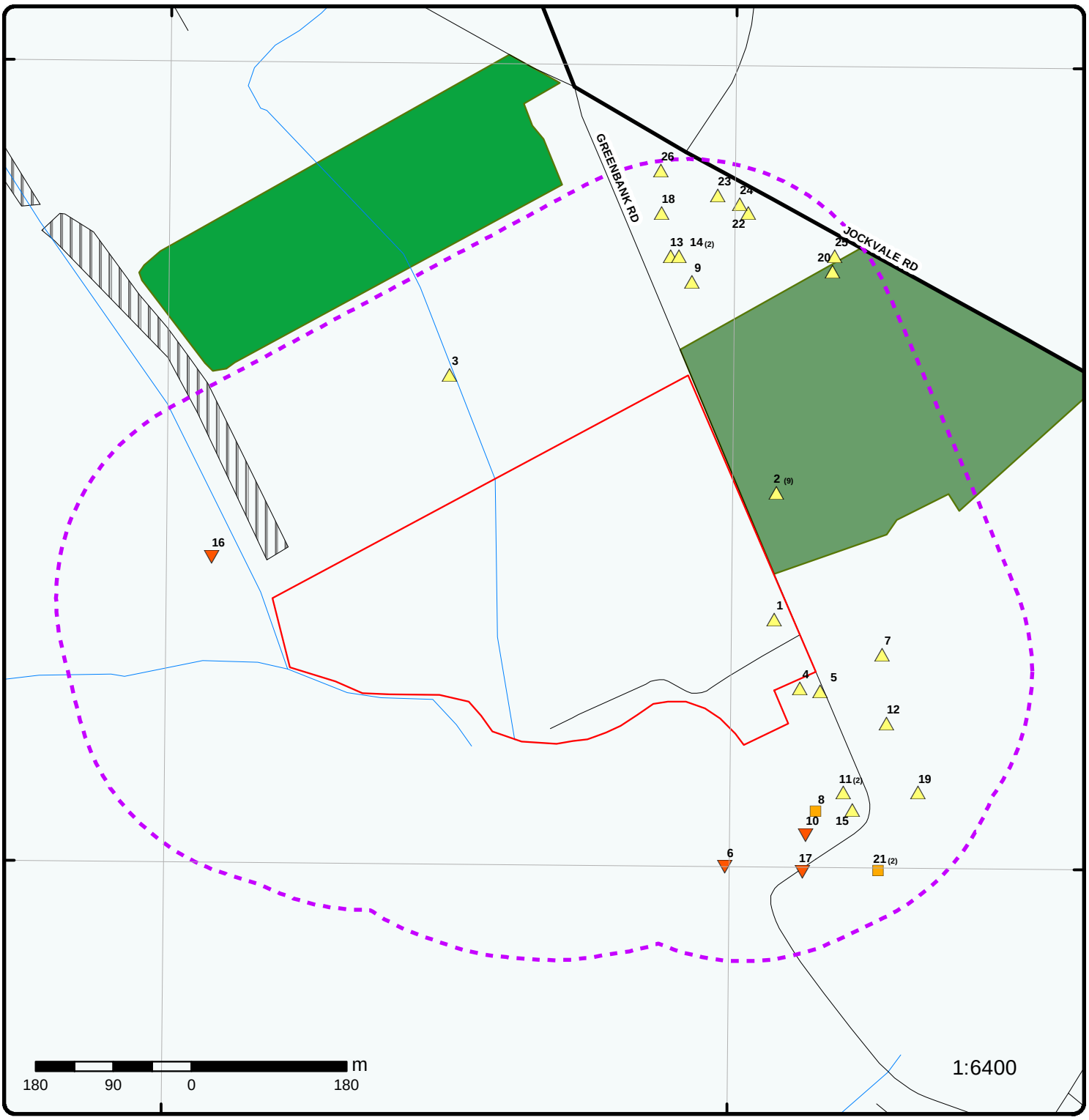
Executive Summary: Site Report Summary - Project Property

DB	Map Key	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
WWIS	1		lot 13 con 3 ON	-/0.0	3.96	21

Executive Summary: Site Report Summary - Surrounding *Properties*

DB	Map Key	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
BORE	4		ON	ESE/10.5	2.74	11
BORE	11		ON	SE/102.0	0.77	11
BORE	14		ON	NNE/138.4	6.00	12
BORE	16		ON	W/85.1	-1.00	12
BORE	20		ON	NE/206.0	9.00	13
BORE	21		ON	SE/198.9	0.00	13
BORE	22		ON	NNE/200.5	8.00	14
EHS	3		3288 Greenbank Rd Nepean ON K2J 4H7	NNW/130.7	1.00	14
EHS	7		Greenbank Road Ottawa ON	ESE/79.0	3.85	14
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	15
GEN	2	Ottawa-Carleton Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	15
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	16
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON	ENE/40.0	5.00	16
GEN	2	Ottawa-Carleton Catholic School Board	St. Joseph High School 3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	17
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	18
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	18
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	19
GEN	2	Ottawa Catholic District School Board	3333 Greenbank Road Nepean ON K2J 4J1	ENE/40.0	5.00	20
SPL	17	PRIVATE OWNER	JOCK RIVER AT GREENBANK RD. MOTOR VEHICLE (OPERATING FLUID) NEPEAN CITY ON	SE/161.6	-1.00	20
WWIS	5		NEPEAN ON	ESE/23.0	2.79	21
WWIS	6		lot 12 con 3 ON	SSE/142.7	-0.40	22

DB	Map Key	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
WWIS	8		lot 12 con 3 NEPEAN ON	SE/104.7	0.00	22
WWIS	9		lot 14 con 2 ON	NNE/108.0	6.00	23
WWIS	10		lot 12 con 3 NEPEAN ON	SE/124.8	-0.69	23
WWIS	11		lot 12 con 3 ON	SE/102.0	0.77	24
WWIS	12		lot 12 con 2 ON	ESE/101.5	2.15	25
WWIS	13		lot 14 con 2 ON	NNE/139.4	6.00	25
WWIS	14		lot 14 con 2 ON	NNE/138.4	6.00	26
WWIS	15		lot 12 con 3 ON	SE/124.0	0.61	26
WWIS	18		lot 14 con 2 ON	NNE/190.3	6.49	27
WWIS	19		lot 12 con 2 OTTAWA ON	ESE/169.9	1.51	28
WWIS	21		lot 12 con 3 ON	SE/198.9	0.00	28
WWIS	23		lot 14 con 2 ON	NNE/210.8	8.00	29
WWIS	24		lot 14 con 2 ON	NNE/206.7	8.01	29
WWIS	25		lot 14 con 2 ON	NE/218.6	9.00	30
WWIS	26		lot 14 con 2 ON	NNE/239.0	7.06	30



Map

Order No: 20160224009

Address: 3370 Greenbank Rd, Ottawa, ON, K2J4H7

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

75°45'W

Aerial

Order No: 20160224009

Address: 3370 Greenbank Rd, Ottawa, ON, K2J4H7

Source: ESRI World Imagery, Updated October 2014

Detail Report

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
BORE	4	1 of 1	ESE/10.5	93.7	ON

Borehole ID:	612013	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	441891	**Northing:**	5012122
Location Accuracy:		**Orig. Ground Elev m:**	93
Elev. Reliability Note:		**DEM Ground Elev m:**	94.1
Total Depth m:	-999	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	
Completion Date:		**Static Water Level:**	.3
Primary Water Use:		**Sec. Water Use:**	

--- Details ---

Stratum ID:	218389813	**Top Depth(m):**	0.0
Bottom Depth(m):	5.8	**Stratum Desc:**	TILL.
+			
Stratum ID:	218389814	**Top Depth(m):**	5.8
Bottom Depth(m):		**Stratum Desc:**	BEDROCK,LIMESTONE. WATER STABLE AT 304.0 FEET.TE,SAND. BLACK. 00080CK. SEISMIC VELOCITY =

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
BORE	11	1 of 2	SE/102.0	91.8	ON

Borehole ID:	612007	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	441941	**Northing:**	5012002
Location Accuracy:		**Orig. Ground Elev m:**	92
Elev. Reliability Note:		**DEM Ground Elev m:**	93.9
Total Depth m:	32.6	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	
Completion Date:	MAY-1969	**Static Water Level:**	-999.9
Primary Water Use:		**Sec. Water Use:**	

--- Details ---

Stratum ID:	218389796	**Top Depth(m):**	0.0
Bottom Depth(m):	2.7	**Stratum Desc:**	CLAY,SAND,BOULDERS.
+			
Stratum ID:	218389797	**Top Depth(m):**	2.7

Bottom Depth(m):	6.7	**Stratum Desc:**	SAND,BOULDERS.
+			
Stratum ID:	218389798	**Top Depth(m):**	6.7
Bottom Depth(m):	8.5	**Stratum Desc:**	SAND.
+			
Stratum ID:	218389799	**Top Depth(m):**	8.5
Bottom Depth(m):	10.1	**Stratum Desc:**	GRAVEL,BOULDERS.
+			
Stratum ID:	218389800	**Top Depth(m):**	10.1
Bottom Depth(m):	32.6	**Stratum Desc:**	LIMESTONE. 00105. WHITE. 00086 = 19500. BEDROCK. SEISMIC VELOCITY = 17000. 200135

BORE 14 ***1 of 2*** ***NNE/138.4*** ***97.0*** ***ON***

Borehole ID:	612038	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	441751	**Northing:**	5012622
Location Accuracy:		**Orig. Ground Elev m:**	96.9
Elev. Reliability Note:		**DEM Ground Elev m:**	96.5
Total Depth m:	27.4	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	
Completion Date:	OCT-1970	**Static Water Level:**	-999.9
Primary Water Use:		**Sec. Water Use:**	

--- Details ---

Stratum ID:	218389883	**Top Depth(m):**	0.0
Bottom Depth(m):	6.1	**Stratum Desc:**	CLAY,BOULDERS. GREY.
+			
Stratum ID:	218389884	**Top Depth(m):**	6.1
Bottom Depth(m):	11.9	**Stratum Desc:**	GRAVEL,BOULDERS. GREY.
+			
Stratum ID:	218389885	**Top Depth(m):**	11.9
Bottom Depth(m):	27.4	**Stratum Desc:**	LIMESTONE. GREY. 00087NE. 0006400122LIMESTONE. 0223BEDROCK. SEISMIC VELOCITY =

BORE 16 ***1 of 1*** ***W/85.1*** ***90.0*** ***ON***

Borehole ID:	800201	**Type:**	Borehole
Use:	Geotechnical/Geological Investigation	**Status:**	
Drill Method:	Hollow stem auger	**UTM Zone:**	18
Easting:	441210.55	**Northing:**	5012274.73
Location Accuracy:		**Orig. Ground Elev m:**	92.1
Elev. Reliability Note:		**DEM Ground Elev m:**	92.2
Total Depth m:	3	**Primary Name:**	BH 38
Township:		**Concession:**	
Lot:		**Municipality:**	

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

Completion Date:	05-DEC-1974	**Static Water Level:**	-999.9
Primary Water Use:		**Sec. Water Use:**	
--- Details ---			
Stratum ID:	218564024	**Top Depth(m):**	0.0
Bottom Depth(m):	0.2	**Stratum Desc:**	Topsoil
+			
Stratum ID:	218564025	**Top Depth(m):**	0.2
Bottom Depth(m):	3.0	**Stratum Desc:**	Grey-Brown Very Stiff Weathered Crust Silty Clay Occasional: Sa very stiff grey brown SILTY CLAY with occasional sand seams (weathered crust)

BORE 20 **1 of 1** **NE/206.0** **100.0** **ON**

Borehole ID:	847727	**Type:**	Borehole
Use:	Geotechnical/Geological Investigation	**Status:**	Decommissioned
Drill Method:	Diamond Drill	**UTM Zone:**	18
Easting:	441928	**Northing:**	5012605
Location Accuracy:		**Orig. Ground Elev m:**	99.1
Elev. Reliability Note:		**DEM Ground Elev m:**	99.4
Total Depth m:	10.8	**Primary Name:**	
Township:	NEPEAN	**Concession:**	CON 2
Lot:	LOT 13	**Municipality:**	
Completion Date:	19-MAY-1971	**Static Water Level:**	4
Primary Water Use:		**Sec. Water Use:**	
--- Details ---			
Stratum ID:	6558704	**Top Depth(m):**	0.0
Bottom Depth(m):	1.1	**Stratum Desc:**	SILTY SAND WITH SOME GREY FILL COMPACT
+			
Stratum ID:	6558705	**Top Depth(m):**	1.1
Bottom Depth(m):	10.8	**Stratum Desc:**	HET MIX OF SILT SAND AND GRAVEL TRACE OF CLAY CLACIAL TILL SAND SEAMS UP TO 1in. THICK BOULDERS UP TO 10' IN SIZE BROWN TO GREY VERY DENSE

BORE 21 **1 of 2** **SE/198.9** **91.0** **ON**

Borehole ID:	612004	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	441981	**Northing:**	5011912
Location Accuracy:		**Orig. Ground Elev m:**	91.4
Elev. Reliability Note:		**DEM Ground Elev m:**	93
Total Depth m:	53.3	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	

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

Completion Date:	OCT-1960	**Static Water Level:**	-999.9
Primary Water Use:		**Sec. Water Use:**	
--- Details ---			
Stratum ID:	218389789	**Top Depth(m):**	0.0
Bottom Depth(m):	9.8	**Stratum Desc:**	CLAY,BOULDERS.
+			
Stratum ID:	218389790	**Top Depth(m):**	9.8
Bottom Depth(m):	53.3	**Stratum Desc:**	LIMESTONE. 00175NDSTONE. 00082STONE,SAND. WHITE. SANDSTONE. WHITE. 00086 = 19500.

BORE 22 **1 of 1** **NNE/200.5** **99.0** **ON**

Borehole ID:	612043	**Type:**	Borehole
Use:		**Status:**	
Drill Method:		**UTM Zone:**	18
Easting:	441831	**Northing:**	5012672
Location Accuracy:		**Orig. Ground Elev m:**	97.5
Elev. Reliability Note:		**DEM Ground Elev m:**	98.8
Total Depth m:	-999	**Primary Name:**	
Township:		**Concession:**	
Lot:		**Municipality:**	
Completion Date:		**Static Water Level:**	9.1
Primary Water Use:		**Sec. Water Use:**	
--- Details ---			
Stratum ID:	218389897	**Top Depth(m):**	0.0
Bottom Depth(m):		**Stratum Desc:**	GRAVEL,BOULDERS. WATER STABLE AT 290.0 FEET.BEDROCK,LIMESTONE. 0. BEDROCK. SEISMIC VE

EHS 3 **1 of 1** **NNW/130.7** **92.0** **3288 Greenbank Rd Nepean ON K2J 4H7**

Order No.:	20111206021
Report Date:	12/14/2011 11:58:24 AM
Report Type:	Custom Report
Search Radius (km):	0.25
Addit. Info Ordered:	Fire Insur. Maps and/or Site Plans;

EHS 7 **1 of 1** **ESE/79.0** **94.8** **Greenbank Road Ottawa ON**

Order No.:	20080208013
Report Date:	2/19/2008
Report Type:	Complete Report
Search Radius (km):	0.25
Addit. Info Ordered:	Title Search

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	2	1 of 9	ENE/40.0	96.0	Ottawa Catholic District School Board 3333 Greenbank Road Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: 2010
SIC Code: 611690
SIC Description: All Other Schools and Instruction

--- Details ---
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	2	2 of 9	ENE/40.0	96.0	Ottawa-Carleton Catholic District School Board 3333 Greenbank Road Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: 03,04,05,06
SIC Code:
SIC Description:

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+

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

Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	2	3 of 9	ENE/40.0	96.0	Ottawa Catholic District School Board 3333 Greenbank Road Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: 07,08
SIC Code: 611690
SIC Description: All Other Schools and Instruction

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	2	4 of 9	ENE/40.0	96.0	Ottawa Catholic District School Board 3333 Greenbank Road Nepean ON

Generator #: ON8832880

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

Approval Yrs: 2013
SIC Code: 611690
SIC Description: ALL OTHER SCHOOLS AND INSTRUCTION

--- Details ---
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
GEN	***2***	***5 of 9***	***ENE/40.0***	***96.0***	***Ottawa-Carleton Catholic School Board*** ***St. Joseph High School 3333 Greenbank Road*** ***Nepean ON K2J 4J1***

Generator #: ON5686001
Approval Yrs: 02,03,04
SIC Code:
SIC Description:

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 243
Waste Description: PCB'S

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

+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

GEN 2 **6 of 9** **ENE/40.0** **96.0**

Ottawa Catholic District School Board
3333 Greenbank Road
Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: 2009
SIC Code: 611690
SIC Description: All Other Schools and Instruction

--- Details ---
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

GEN 2 **7 of 9** **ENE/40.0** **96.0**

Ottawa Catholic District School Board
3333 Greenbank Road
Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: 2012
SIC Code: 611690

SIC Description: All Other Schools and Instruction

--- Details ---

Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

GEN **2** ***8 of 9*** ***ENE/40.0*** ***96.0***

Ottawa Catholic District School Board
3333 Greenbank Road
Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: As of May 2015
SIC Code:
SIC Description:

--- Details ---

Waste Code: 252
Waste Description: Waste crankcase oils and lubricants
+
Waste Code: 145
Waste Description: Wastes from the use of pigments, coatings and paints
+
Waste Code: 263
Waste Description: Misc. waste organic chemicals
+
Waste Code: 148
Waste Description: Misc. wastes and inorganic chemicals
+
Waste Code: 213
Waste Description: Petroleum distillates
+

Waste Code: 251
Waste Description: Waste oils/sludges (petroleum based)
+
Waste Code: 331
Waste Description: Waste compressed gases including cylinders
+
Waste Code: 122
Waste Description: Alkaline slutions - containing other metals and non-metals (not cyanide)
+
Waste Code: 146
Waste Description: Other specified inorganic sludges, slurries or solids
+
Waste Code: 264
Waste Description: Photoprocessing wastes

GEN | 2 | **9 of 9** | **ENE/40.0** | **96.0** | **Ottawa Catholic District School Board**
3333 Greenbank Road
Nepean ON K2J 4J1

Generator #: ON8832880
Approval Yrs: 2011
SIC Code: 611690
SIC Description: All Other Schools and Instruction

--- Details ---
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES

SPL | 17 | **1 of 1** | **SE/161.6** | **90.0** | **PRIVATE OWNER**
JOCK RIVER AT GREENBANK RD.

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
					MOTOR VEHICLE (OPERATING FLUID) NEPEAN CITY ON

Ref NO:	25410
Contaminant Code:	
Contaminant Name:	
Contaminant Quantity:	
Incident Cause:	OTHER TRANSPORTATION ACCIDENT
Incident Dt:	9/16/1989
Incident Reason:	ERROR
Incident Summary:	MOTORIST DROVE CAR INTO JOCK RIVER - 10 L GAS & MOTOR OIL TO RIVER.
MOE Reported Dt:	9/16/1989
Environmental Impact:	
Nature of Impact:	
Receiving Medium:	WATER
SAC Action Class:	
Sector Source Type:	
Site Municipality:	20104

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
WWIS	1	1 of 1	-/0.0	95.0	lot 13 con 3 ON

Well ID:	1506043	**Lot:**	013
Concession:	03	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441860.7	**Northing Nad83:**	5012202
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Livestock	**Construction Date:**	15-FEB-54
Sec. Water Use:	Domestic	**Well Depth:**	68 ft
Pump Rate:	8 GPM	**Static Water Level:**	10 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	94.44	**Elevation Reliability:**	
Depth to Bedrock:	19	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	19 ft	**Original Depth:**	19 ft
Material Colour:		**Material:**	HARDPAN, BOULDERS
+			
Thickness:	49 ft	**Original Depth:**	68 ft
Material Colour:		**Material:**	LIMESTONE, MEDIUM SAND

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
WWIS	5	1 of 1	ESE/23.0	93.8	NEPEAN ON

Well ID:	7165137	**Lot:**	
Concession:		**Concession Name:**	
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441914	**Northing Nad83:**	5012119
Zone:	18	**Utm Reliability:**	margin of error : 10 - 30 m

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

Primary Water Use:	Domestic	**Construction Date:**	28-JUN-11
Sec. Water Use:		**Well Depth:**	m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Alteration
Construction Method:		**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	FRESH
--- Details ---			
Thickness:	m	**Original Depth:**	m
Material Colour:		**Material:**	

WWIS 6 | **1 of 1** | **SSE/142.7** | **90.6** | **lot 12 con 3 ON**

Well ID:	1522107	**Lot:**	012
Concession:	03	**Concession Name:**	CON
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441803.7	**Northing Nad83:**	5011916
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Livestock	**Construction Date:**	16-SEP-87
Sec. Water Use:		**Well Depth:**	65 ft
Pump Rate:	15 GPM	**Static Water Level:**	8 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Air Precussion	**Flowing (y/n):**	N
Elevation (m):	91.56	**Elevation Reliability:**	
Depth to Bedrock:	24	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	24 ft	**Original Depth:**	24 ft
Material Colour:	GREY	**Material:**	CLAY, HARDPAN, STONES
+			
Thickness:	41 ft	**Original Depth:**	65 ft
Material Colour:	GREY	**Material:**	LIMESTONE

WWIS 8 | **1 of 1** | **SE/104.7** | **91.0** | **lot 12 con 3 NEPEAN ON**

Well ID:	7156858	**Lot:**	012
Concession:	03	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441909	**Northing Nad83:**	5011981
Zone:	18	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:	Domestic	**Construction Date:**	02-NOV-10
Sec. Water Use:		**Well Depth:**	220 ft
Pump Rate:	20 GPM	**Static Water Level:**	16 ft
Flow Rate:		**Clear/Cloudy:**	OTHER

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

Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Air Precussion	**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:	Untested	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	33 ft	**Original Depth:**	33 ft
Material Colour:		**Material:**	SAND, BOULDERS
+			
Thickness:	172 ft	**Original Depth:**	205 ft
Material Colour:	GREY	**Material:**	LIMESTONE
+			
Thickness:	15 ft	**Original Depth:**	220 ft
Material Colour:	GREY	**Material:**	SANDSTONE

WWIS	9	**1 of 1**	**NNE/108.0**	**97.0**	**lot 14 con 2 ON**

Well ID:	1505990	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441765.7	**Northing Nad83:**	5012592
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	21-JUL-61
Sec. Water Use:		**Well Depth:**	55 ft
Pump Rate:	6 GPM	**Static Water Level:**	6 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	96.46	**Elevation Reliability:**	
Depth to Bedrock:	22	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	10 ft	**Original Depth:**	10 ft
Material Colour:		**Material:**	CLAY
+			
Thickness:	12 ft	**Original Depth:**	22 ft
Material Colour:		**Material:**	HARDPAN
+			
Thickness:	33 ft	**Original Depth:**	55 ft
Material Colour:		**Material:**	LIMESTONE

WWIS	10	**1 of 1**	**SE/124.8**	**90.3**	**lot 12 con 3 NEPEAN ON**

Well ID:	7156857	**Lot:**	012
Concession:	03	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441897	**Northing Nad83:**	5011953

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

Zone:	18	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:	Domestic	**Construction Date:**	02-NOV-10
Sec. Water Use:		**Well Depth:**	220 ft
Pump Rate:	20 GPM	**Static Water Level:**	18.4 ft
Flow Rate:		**Clear/Cloudy:**	OTHER
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Air Precussion	**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:	Untested	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	33 ft	**Original Depth:**	33 ft
Material Colour:		**Material:**	SAND, BOULDERS
+			
Thickness:	167 ft	**Original Depth:**	200 ft
Material Colour:	GREY	**Material:**	LIMESTONE
+			
Thickness:	20 ft	**Original Depth:**	220 ft
Material Colour:	GREY	**Material:**	SANDSTONE

WWIS	11	**2 of 2**	**SE/102.0**	**91.8**	**lot 12 con 3 ON**

Well ID:	1510111	**Lot:**	012
Concession:	03	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441940.7	**Northing Nad83:**	5012002
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	23-MAY-69
Sec. Water Use:		**Well Depth:**	107 ft
Pump Rate:	15 GPM	**Static Water Level:**	6 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	93.86	**Elevation Reliability:**	
Depth to Bedrock:	33	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	9 ft	**Original Depth:**	9 ft
Material Colour:		**Material:**	CLAY, MEDIUM SAND, BOULDERS
+			
Thickness:	13 ft	**Original Depth:**	22 ft
Material Colour:		**Material:**	MEDIUM SAND, BOULDERS
+			
Thickness:	6 ft	**Original Depth:**	28 ft
Material Colour:		**Material:**	FINE SAND
+			
Thickness:	5 ft	**Original Depth:**	33 ft
Material Colour:		**Material:**	GRAVEL, BOULDERS
+			

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

Thickness:	74 ft	**Original Depth:**	107 ft
Material Colour:		**Material:**	LIMESTONE

WWIS 12 **1 of 1** **ESE/101.5** **93.2** **lot 12 con 2 ON**

Well ID:	1509671	**Lot:**	012
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441990.7	**Northing Nad83:**	5012082
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	15-MAY-68
Sec. Water Use:		**Well Depth:**	169 ft
Pump Rate:	7 GPM	**Static Water Level:**	11 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	93.74	**Elevation Reliability:**	
Depth to Bedrock:	35	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL

--- Details ---

Thickness:	12 ft	**Original Depth:**	12 ft
Material Colour:		**Material:**	CLAY, BOULDERS
+			
Thickness:	14 ft	**Original Depth:**	26 ft
Material Colour:		**Material:**	MEDIUM SAND
+			
Thickness:	7 ft	**Original Depth:**	33 ft
Material Colour:		**Material:**	HARDPAN
+			
Thickness:	2 ft	**Original Depth:**	35 ft
Material Colour:		**Material:**	HARDPAN, BOULDERS
+			
Thickness:	134 ft	**Original Depth:**	169 ft
Material Colour:		**Material:**	LIMESTONE

WWIS 13 **1 of 1** **NNE/139.4** **97.0** **lot 14 con 2 ON**

Well ID:	1505993	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441740.7	**Northing Nad83:**	5012622
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	09-AUG-66
Sec. Water Use:		**Well Depth:**	74 ft
Pump Rate:	5 GPM	**Static Water Level:**	15 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	96.43	**Elevation Reliability:**	

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

Depth to Bedrock:	40	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	18 ft	**Original Depth:**	18 ft
Material Colour:		**Material:**	CLAY, BOULDERS
+			
Thickness:	22 ft	**Original Depth:**	40 ft
Material Colour:		**Material:**	HARDPAN
+			
Thickness:	34 ft	**Original Depth:**	74 ft
Material Colour:		**Material:**	LIMESTONE

WWIS 14 **2 of 2** **NNE/138.4** **97.0** **lot 14 con 2 ON**

Well ID:	1510966	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441750.7	**Northing Nad83:**	5012622
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	21-OCT-70
Sec. Water Use:		**Well Depth:**	90 ft
Pump Rate:	12 GPM	**Static Water Level:**	12 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	96.48	**Elevation Reliability:**	
Depth to Bedrock:	39	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	20 ft	**Original Depth:**	20 ft
Material Colour:	GREY	**Material:**	CLAY, BOULDERS
+			
Thickness:	19 ft	**Original Depth:**	39 ft
Material Colour:	GREY	**Material:**	GRAVEL, BOULDERS
+			
Thickness:	51 ft	**Original Depth:**	90 ft
Material Colour:	GREY	**Material:**	LIMESTONE

WWIS 15 **1 of 1** **SE/124.0** **91.6** **lot 12 con 3 ON**

Well ID:	1510110	**Lot:**	012
Concession:	03	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441950.7	**Northing Nad83:**	5011982
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	26-MAY-69
Sec. Water Use:		**Well Depth:**	103 ft
Pump Rate:	15 GPM	**Static Water Level:**	7 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR

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

Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Rotary (Convent.)	**Flowing (y/n):**	N
Elevation (m):	94.18	**Elevation Reliability:**	
Depth to Bedrock:	37	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH
Thickness:	8 ft	**Original Depth:**	12 ft
Material Colour:	GREY	**Material:**	MEDIUM SAND, BOULDERS
+			
Thickness:	14 ft	**Original Depth:**	26 ft
Material Colour:	GREY	**Material:**	FINE SAND
+			
Thickness:	11 ft	**Original Depth:**	37 ft
Material Colour:		**Material:**	GRAVEL, MEDIUM SAND, BOULDERS
+			
Thickness:	66 ft	**Original Depth:**	103 ft
Material Colour:		**Material:**	LIMESTONE
--- Details ---			
Thickness:	4 ft	**Original Depth:**	4 ft
Material Colour:		**Material:**	CLAY, MEDIUM SAND, BOULDERS
+			

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
WWIS	18	**1 of 1**	**NNE/190.3**	**97.5**	**lot 14 con 2 ON**

Well ID:	1509677	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441730.7	**Northing Nad83:**	5012672
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	22-JUL-68
Sec. Water Use:		**Well Depth:**	97 ft
Pump Rate:	5 GPM	**Static Water Level:**	10 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	96.76	**Elevation Reliability:**	
Depth to Bedrock:	37	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	34 ft	**Original Depth:**	34 ft
Material Colour:		**Material:**	CLAY, BOULDERS
+			
Thickness:	3 ft	**Original Depth:**	37 ft
Material Colour:		**Material:**	HARDPAN
+			
Thickness:	60 ft	**Original Depth:**	97 ft
Material Colour:		**Material:**	LIMESTONE

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
WWIS	19	1 of 1	ESE/169.9	92.5	lot 12 con 2 OTTAWA ON

Well ID:	7152714	**Lot:**	012
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	442403	**Northing Nad83:**	5012344
Zone:	18	**Utm Reliability:**	unknown UTM
Primary Water Use:	Monitoring	**Construction Date:**	16-AUG-10
Sec. Water Use:		**Well Depth:**	6.1 m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Test Hole
Construction Method:	Other Method	**Flowing (y/n):**	
Elevation (m):	92.76	**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	Not stated

--- Details ---

Thickness:	.61 m	**Original Depth:**	.61 m
Material Colour:	BROWN	**Material:**	SAND, TOPSOIL
+			
Thickness:	.61 m	**Original Depth:**	1.22 m
Material Colour:	GREY	**Material:**	SILT, SAND, WATER-BEARING
+			
Thickness:	2.44 m	**Original Depth:**	3.66 m
Material Colour:	BROWN	**Material:**	SAND, GRAVEL, WATER-BEARING
+			
Thickness:	.61 m	**Original Depth:**	4.27 m
Material Colour:	BROWN	**Material:**	SILT, SAND, GRAVEL
+			
Thickness:	1.22 m	**Original Depth:**	5.49 m
Material Colour:	GREY	**Material:**	SAND, SILT, WATER-BEARING
+			
Thickness:	.61 m	**Original Depth:**	6.1 m
Material Colour:	GREY	**Material:**	SILT, , WATER-BEARING

DB	Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site
WWIS	21	2 of 2	SE/198.9	91.0	lot 12 con 3 ON

Well ID:	1506041	**Lot:**	012
Concession:	03	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441980.7	**Northing Nad83:**	5011912
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	22-OCT-60
Sec. Water Use:		**Well Depth:**	175 ft
Pump Rate:	10 GPM	**Static Water Level:**	5 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	92.98	**Elevation Reliability:**	
Depth to Bedrock:	32	**Overburden/Bedroc**	Bedrock

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

		k:	
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	32 ft	**Original Depth:**	32 ft
Material Colour:		**Material:**	CLAY, BOULDERS
+			
Thickness:	143 ft	**Original Depth:**	175 ft
Material Colour:		**Material:**	LIMESTONE

WWIS 23 **1 of 1** **NNE/210.8** **99.0** **lot 14 con 2 ON**

Well ID:	1505992	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441795.7	**Northing Nad83:**	5012692
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	11-APR-63
Sec. Water Use:		**Well Depth:**	45 ft
Pump Rate:	10 GPM	**Static Water Level:**	14 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	98.04	**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	Overburden
Water Type:	FRESH	**Casing Material:**	FRESH
--- Details ---			
Thickness:	25 ft	**Original Depth:**	25 ft
Material Colour:		**Material:**	CLAY
+			
Thickness:	15 ft	**Original Depth:**	40 ft
Material Colour:		**Material:**	BOULDERS, HARDPAN
+			
Thickness:	5 ft	**Original Depth:**	45 ft
Material Colour:		**Material:**	GRAVEL

WWIS 24 **1 of 1** **NNE/206.7** **99.0** **lot 14 con 2 ON**

Well ID:	1510623	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441820.7	**Northing Nad83:**	5012682
Zone:	18	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Domestic	**Construction Date:**	26-MAY-70
Sec. Water Use:		**Well Depth:**	112 ft
Pump Rate:	5 GPM	**Static Water Level:**	6 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Cable Tool	**Flowing (y/n):**	N
Elevation (m):	98.58	**Elevation**	

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

		Reliability:	
Depth to Bedrock:	42	**Overburden/Bedrock:**	Bedrock
Water Type:	FRESH	**Casing Material:**	FRESH, MINERIAL
--- Details ---			
Thickness:	2 ft	**Original Depth:**	2 ft
Material Colour:	BROWN	**Material:**	MEDIUM SAND
+			
Thickness:	28 ft	**Original Depth:**	30 ft
Material Colour:	GREY	**Material:**	CLAY, STONES
+			
Thickness:	12 ft	**Original Depth:**	42 ft
Material Colour:	GREY	**Material:**	HARDPAN
+			
Thickness:	70 ft	**Original Depth:**	112 ft
Material Colour:	GREY	**Material:**	LIMESTONE

WWIS	25	**1 of 1**	**NE/218.6**	**100.0**	**lot 14 con 2 ON**

Well ID:	1505991	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441930.7	**Northing Nad83:**	5012622
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	16-SEP-54
Sec. Water Use:		**Well Depth:**	32 ft
Pump Rate:	20 GPM	**Static Water Level:**	10 ft
Flow Rate:		**Clear/Cloudy:**	CLEAR
Specific Capacity:		**Final Well Status:**	Water Supply
Construction Method:	Diamond	**Flowing (y/n):**	N
Elevation (m):	99.73	**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	Overburden
Water Type:	FRESH	**Casing Material:**	FRESH
--- Details ---			
Thickness:	32 ft	**Original Depth:**	32 ft
Material Colour:		**Material:**	GRAVEL, BOULDERS

WWIS	26	**1 of 1**	**NNE/239.0**	**98.1**	**lot 14 con 2 ON**

Well ID:	1519006	**Lot:**	014
Concession:	02	**Concession Name:**	RF
County:	OTTAWA-CARLETON	**Municipality:**	NEPEAN TOWNSHIP
Easting Nad83:	441729.7	**Northing Nad83:**	5012721
Zone:	18	**Utm Reliability:**	margin of error : 100 m - 300 m
Primary Water Use:	Domestic	**Construction Date:**	14-JUN-84
Sec. Water Use:		**Well Depth:**	75 ft
Pump Rate:	10 GPM	**Static Water Level:**	15 ft
Flow Rate:		**Clear/Cloudy:**	CLOUDY
Specific Capacity:		**Final Well Status:**	Water Supply
Construction	Air Precussion	**Flowing (y/n):**	N

Method:			
Elevation (m):	97.3	***Elevation Reliability:***	
Depth to Bedrock:	36	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH
--- Details ---			
Thickness:	28 ft	***Original Depth:***	28 ft
Material Colour:	GREY	***Material:***	CLAY, STONES
+			
Thickness:	8 ft	***Original Depth:***	36 ft
Material Colour:	GREY	***Material:***	HARDPAN, GRAVEL
+			
Thickness:	39 ft	***Original Depth:***	75 ft
Material Colour:	GREY	***Material:***	LIMESTONE

Unplottable Summary

Total: 42 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	Village Square Mall	Regional Road No. 13	Ottawa ON	
CA	MINISTRY OF THE ENVIR.-GREENBANK RD.	REG. RD. #13/JOCK RIVER/MUD CK	NEPEAN CITY ON	
CA	MONARCH CONSTRUCTION LIMITED	ST.A/JOCKVALE RD/ST.G	NEPEAN CITY ON	
CA	MONARCH CONSTRUCTION LIMITED	ST.A/JOCKVALE RD/ST.G	NEPEAN CITY ON	
CA	NEPEAN CITY	GREENBANK RD./LONGFIELDS DR.	NEPEAN ON	
CA	CITY	GREENBANK RD./EASEMENT	NEPEAN CITY ON	
CA	CITY	GREENBANK RD./EASEMENT	NEPEAN CITY ON	
CA	NEPEAN CITY	GREENBANK RD.	NEPEAN CITY ON	
CA	City of Ottawa	From Marketplace Avenue to Jockvale Rd Nepean	Ottawa ON	
CA	South Nepean High School	Part of Lot 13, Concession 2 Rideau Front	Ottawa ON	
CA	South Nepean High School	Part of Lot 13, Concession 2 Rideau Front	Ottawa ON	
CA	Kinross Court	Part of Lot 13, Concession	Ottawa ON	
CA	ROCKY PANTALONE - WEST END STATION RESTA	PT. LOT 13 & 14 CONC. 2	NEPEAN CITY ON	
CA	City of Ottawa	Lot 13	Ottawa ON	
CA	Hugh Robert Sparks	Lot 12, Conc. 3, March Tp	Ottawa ON	
EBR	Velika Realty Inc.	Lot 12, Concession 3	Ottawa ON	
ECA	City of Ottawa	Jockvale Road	Ottawa ON	

ECA	City of Ottawa	Jockvale Road	Ottawa ON	
ECA	Mattamy (Half Moon Bay 3) Limited	West of Greenbank Road, South of Cambrian Road	Ottawa ON	
ECA	City of Ottawa	Jockvale Road	Ottawa ON	
FST	HYLANDS GOLF CLUB	LOT 13 14 & 15 CON 3	OTTAWA ON	
FST	HYLANDS GOLF CLUB	LOT 13 14 & 15 CON 3	OTTAWA ON	
GEN	NEPEAN HYDRO	BARRHAVEN D.S., GREENBANK ROAD C/O 1970 MERIVALE ROAD	NEPEAN ON	K2C 3G2
GEN	NEPEAN HYDRO 28-588	BARRHAVEN D.S., GREENBANK ROAD C/O 1970 MERIVALE ROAD	NEPEAN ON	K2C 3G2
GEN	IMPERIAL OIL 37-320	LESLIE PARK EAST-GREENBANK RD PL 551284 LT.C NEPEAN C/O 605 INDUSTRIAL AVE.	OTTAWA ON	K1G 3K4
GEN	IMPERIAL OIL	LESLIE PARK EAST-GREENBANK ROAD PLAN 551284, LOT C	NEPEAN ON	
NPCB	ONTARIO HYDRO	TP 2996,LOT 14,15,16 LLSGAR T.S., R.M. OTTAWA-CARLE	OTTAWA ON	
NPCB	ONTARIO HYDRO	LISGAR T.S., R.M. OTTAWA-CARLE; TP 2996,LOT 14,15,	OTTAWA ON	
PTTW	West Carleton Sand & Gravel Inc.	Lots: 11, 12 and 13, Concession: 2	Ottawa ON	
SPL		CATCHBASIN AT GREENBANK AND LISA<UNOFFICIAL>	Ottawa ON	
SPL	Ottawa Catholic School Board<UNOFFICIAL>		Ottawa ON	
SPL	City of Ottawa	Greenbank Rd northbound at Belman Rd (N of Hunt Club)	Ottawa ON	
SPL	Clean Water Works Inc.; City of Ottawa	Greenbank Rd	Ottawa ON	
WWIS		lot 13	ON	
WWIS		lot 12	ON	
WWIS		lot 12 con 2	ON	
WWIS		lot 12 con 2	ON	
WWIS		lot 12	ON	

WWIS	lot 13	ON
WWIS	lot 14	ON
WWIS	lot 14	ON
WWIS	lot 12	ON

Unplottable Report

Database: ***CA*** ***Site:*** ***Village Square Mall***
Regional Road No. 13 Ottawa ON

Certificate #:	7752-4VBMMJ
Application Year:	01
Issue Date:	4/2/01
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	The Village Square Mall (Barrhaven) Inc.
Client Address:	17 Fitzgerald Road
Client City:	Nepean
Client Postal Code:	K2H 9G1
Project Description:	Storm and sanitary sewers to be constructed on Greenbank Road
Contaminants:	
Emission Control:	

Database: ***CA*** ***Site:*** ***MINISTRY OF THE ENVIR.-GREENBANK RD.***
REG. RD. #13/JOCK RIVER/MUD CK NEPEAN CITY ON

Certificate #:	7-0930-92-
Application Year:	92
Issue Date:	11/25/1992
Approval Type:	Municipal water
Status:	Revised
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Database: ***CA*** ***Site:*** ***MONARCH CONSTRUCTION LIMITED***
ST.A/JOCKVALE RD/ST.G NEPEAN CITY ON

Certificate #:	7-0816-99-
Application Year:	99
Issue Date:	10/13/1999
Approval Type:	Municipal water
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	

Project Description:
Contaminants:
Emission Control:

Database: ***CA*** ***Site:*** ***MONARCH CONSTRUCTION LIMITED***
ST.A/JOCKVALE RD/ST.G NEPEAN CITY ON

Certificate #: 3-1197-99-
Application Year: 99
Issue Date: 10/13/1999
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: ***CA*** ***Site:*** ***NEPEAN CITY***
GREENBANK RD./LONGFIELDS DR. NEPEAN ON

Certificate #: 3-1119-98-
Application Year: 98
Issue Date: 8/18/1998
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: ***CA*** ***Site:*** ***CITY***
GREENBANK RD./EASEMENT NEPEAN CITY ON

Certificate #: 3-0235-85-006
Application Year: 85
Issue Date: 4/2/85
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: ***CA***

Site: ***CITY***
GREENBANK RD./EASEMENT NEPEAN CITY ON

Certificate #: 3-0207-85-006
Application Year: 85
Issue Date: 3/21/85
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: ***CA***

Site: ***NEPEAN CITY***
GREENBANK RD. NEPEAN CITY ON

Certificate #: 3-1646-88-
Application Year: 88
Issue Date: 9/15/1988
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: ***CA***

Site: ***City of Ottawa***
From Marketplace Avenue to Jockvale Rd Nepean Ottawa ON

Certificate #: 6620-7U9KG8
Application Year: 2009
Issue Date: 7/24/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: ***CA*** ***Site:*** ***South Nepean High School***
Part of Lot 13, Concession 2 Rideau Front Ottawa ON

Certificate #:	5530-56PKWF
Application Year:	02
Issue Date:	3/8/02
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Ottawa carleton Catholic School Board
Client Address:	1224 Main St.
Client City:	Stittsville
Client Postal Code:	K2S 1B2
Project Description:	Sanitary sewer collection system, sewage pumping station, sanitary forcemain and sanitary sewer construction
Contaminants:	
Emission Control:	

Database: ***CA*** ***Site:*** ***South Nepean High School***
Part of Lot 13, Concession 2 Rideau Front Ottawa ON

Certificate #:	2054-57GJUQ
Application Year:	02
Issue Date:	2/20/02
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Ottawa carleton Catholic School Board
Client Address:	1224 Main St.
Client City:	Stittsville
Client Postal Code:	K2S 1B2
Project Description:	On-site storm drainage system with an off-site drainage swale forming a stormwater management system.
Contaminants:	
Emission Control:	

Database: ***CA*** ***Site:*** ***Kinross Court***
Part of Lot 13, Concession Ottawa ON

Certificate #:	0660-53CRDY
Application Year:	01
Issue Date:	10/11/01
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Tenth Line Development Inc.
Client Address:	210 Gladstone Avenue, Suite 2001
Client City:	Ottawa
Client Postal Code:	K2P 0Y6
Project Description:	Storm sewer construction.
Contaminants:	
Emission Control:	

Database: CA **Site:** ROCKY PANTALONE - WEST END STATION RESTA
PT. LOT 13 & 14 CONC. 2 NEPEAN CITY ON

Certificate #: 8-4088-96-
Application Year: 96
Issue Date: 4/10/1996
Approval Type: Industrial air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: KITCHEN EXHAUST FOR RESTAURANT
Contaminants:
Emission Control:

Database: CA **Site:** City of Ottawa
Lot 13 Ottawa ON

Certificate #: 3399-6BVHAA
Application Year: 2005
Issue Date: 6/10/2005
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: CA **Site:** Hugh Robert Sparks
Lot 12, Conc. 3, March Tp Ottawa ON

Certificate #: 7694-6AHJ4J
Application Year: 2005
Issue Date: 3/17/2005
Approval Type: Waste Management Systems
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Database: EBR **Site:** Velika Realty Inc.
Lot 12, Concession 3 Ottawa ON

Year:	2013
EBR Registry No.:	012-0726
Ministry Ref. No.:	MNR INST 71/13
Type:	Instrument Decision
Instrument Type:	(ESA s.17(2) (c)) - Permit for activities with conditions to achieve overall benefit to the species
Proposal Date:	December 27, 2013
Location:	Lot 12, Concession 3, Geographic Township of Osgoode South West side of Stage Coach Road, between Apple Orchard and Herberts Corners Roads south of Greely. Municipal address is 1934 Stage Coach Road. CITY OF OTTAWA
Proponent Address:	275 Slater Street, Ottawa Ontario, Canada K1P 5H9

Database: ***ECA*** ***Site:*** ***City of Ottawa***
Jockvale Road Ottawa ON

CofA Number:	1355-8UBRGV
Date:	5/24/2012
Status:	Approved
Project Type:	Municipal and Private Sewage

Database: ***ECA*** ***Site:*** ***City of Ottawa***
Jockvale Road Ottawa ON

CofA Number:	1216-8Y2SKS
Date:	9/18/2012
Status:	Approved
Project Type:	Municipal and Private Sewage

Database: ***ECA*** ***Site:*** ***Mattamy (Half Moon Bay 3) Limited***
West of Greenbank Road, South of Cambrian Road Ottawa ON

CofA Number:	1400-8Y3RNK
Date:	9/18/2012
Status:	Approved
Project Type:	Municipal and Private Sewage

Database: ***ECA*** ***Site:*** ***City of Ottawa***
Jockvale Road Ottawa ON

CofA Number:	7270-8TXKR2
Date:	5/4/2012
Status:	Approved
Project Type:	Municipal and Private Sewage

Database: ***FST*** ***Site:*** ***HYLANDS GOLF CLUB***
LOT 13 14 & 15 CON 3 OTTAWA ON

Instance Number:	10904186
Cont Name:	

Instance Type: FS Liquid Fuel Tank
Fuel Type: Gasoline
Status: Active
Capacity: 10000
Tank Material: Steel
Corrosion Protection: Impressed Current
Tank Type: Single Wall UST
Install Year: 1990
Parent Facility Type: Fuels Safety Private Fuel Outlet - Self Serve
Facility Type: FS Liquid Fuel Tank

Database: ***FST***

Site: ***HYLANDS GOLF CLUB***
LOT 13 14 & 15 CON 3 OTTAWA ON

Instance Number: 10904209
Cont Name:
Instance Type: FS Liquid Fuel Tank
Fuel Type: Diesel
Status: Active
Capacity: 4540
Tank Material: Steel
Corrosion Protection: Impressed Current
Tank Type: Single Wall UST
Install Year: 1990
Parent Facility Type: Fuels Safety Private Fuel Outlet - Self Serve
Facility Type: FS Liquid Fuel Tank

Database: ***GEN***

Site: ***NEPEAN HYDRO***
BARRHAVEN D.S., GREENBANK ROAD C/O 1970 MERIVALE ROAD NEPEAN ON K2C 3G2

Generator #: ON0453105
Approval Yrs: 89,90
SIC Code: 4911
SIC Description: ELECT. POWER SYS.

--- Details ---
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Database: ***GEN***

Site: ***NEPEAN HYDRO 28-588***
BARRHAVEN D.S., GREENBANK ROAD C/O 1970 MERIVALE ROAD NEPEAN ON K2C 3G2

Generator #: ON0453105
Approval Yrs: 92,93,94,95,96,97,98
SIC Code: 4911
SIC Description: ELECT. POWER SYS.

--- Details ---
Waste Code: 122

Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Database: ***GEN*** ***Site:*** ***IMPERIAL OIL 37-320***
LESLIE PARK EAST-GREENBANK RD PL 551284 LT.C NEPEAN C/O 605 INDUSTRIAL AVE. OTTAWA ON K1G 3K4

Generator #: ON1315711
Approval Yrs: 94,95,96
SIC Code: 5111
SIC Description: PETROLEUM PROD., WH.

--- Details ---
Waste Code: 221
Waste Description: LIGHT FUELS

Database: ***GEN*** ***Site:*** ***IMPERIAL OIL***
LESLIE PARK EAST-GREENBANK ROAD PLAN 551284, LOT C NEPEAN ON

Generator #: ON1315711
Approval Yrs: 92,93,97,98,99,00,01
SIC Code: 5111
SIC Description: PETROLEUM PROD., WH.

--- Details ---
Waste Code: 221
Waste Description: LIGHT FUELS

Database: ***NPCB*** ***Site:*** ***ONTARIO HYDRO***
TP 2996,LOT 14,15,16 LLSGAR T.S., R.M. OTTAWA-CARLE OTTAWA ON

Company Code: O0902
Transaction Date: 5/31/1988
Inspection Date:
Industry: UTILITY
Site Status:

Database: ***NPCB*** ***Site:*** ***ONTARIO HYDRO***
LISGAR T.S., R.M. OTTAWA-CARLE; TP 2996,LOT 14,15, OTTAWA ON

Company Code: O0902
Transaction Date: 5/31/1988
Inspection Date:
Industry: Utility
Site Status:

Database: ***PTTW*** ***Site:*** ***West Carleton Sand & Gravel Inc.***
Lots: 11, 12 and 13, Concession: 2 Ottawa ON

Year:	2012
EBR Registry No.:	011-6934
Ministry Ref. No.:	1801-8WPNLY
Type:	Instrument Proposal
Instrument Type:	(OWRA s. 34) - Permit to take water
Proposal Date:	August 13, 2012
Location:	Lots: 11, 12 and 13, Concession: 2 Geo. Twp. of Nepean, Geographic Township: NEPEAN, Ottawa
Proponent Address:	3725 Carp Road Post Office Box Delivery 264 Carp Ontario Canada K0A 1L0

Database: ***SPL*** ***Site:***
CATCHBASIN AT GREENBANK AND LISA<UNOFFICIAL> Ottawa ON

Ref NO:	1858-5NAD2C
Contaminant Code:	24
Contaminant Name:	ETHYLENE GLYCOL (ANTIFREEZE)
Contaminant Quantity:	10 L
Incident Cause:	
Incident Dt:	6/7/2003
Incident Reason:	
Incident Summary:	OC Transpo-10 L Antifreeze to Catchbasin
MOE Reported Dt:	6/7/2003
Environmental Impact:	Not Anticipated
Nature of Impact:	
Receiving Medium:	Water
SAC Action Class:	
Sector Source Type:	
Site Municipality:	Ottawa

Database: ***SPL*** ***Site:*** ***Ottawa Catholic School Board<UNOFFICIAL>***
Ottawa ON

Ref NO:	5176-9L2PEZ
Contaminant Code:	13
Contaminant Name:	DIESEL FUEL
Contaminant Quantity:	0 other - see incident description
Incident Cause:	Leak/Break
Incident Dt:	2014/06/13
Incident Reason:	Unknown / N/A
Incident Summary:	Ottawa Catholic School Board: diesel spill
MOE Reported Dt:	2014/06/13
Environmental Impact:	Confirmed
Nature of Impact:	Soil Contamination; Surface Water Pollution
Receiving Medium:	
SAC Action Class:	Land Spills
Sector Source Type:	Motor Vehicle
Site Municipality:	Ottawa

Database: ***SPL*** ***Site:*** ***City of Ottawa***
Greenbank Rd northbound at Belman Rd (N of Hunt Club) Ottawa ON

Ref NO:	8317-8PB698
Contaminant Code:	27
Contaminant Name:	COOLANT (N.O.S.)
Contaminant Quantity:	40 L

Incident Cause:	
Incident Dt:	12/6/2011
Incident Reason:	
Incident Summary:	OC Transpo- coolant to CB
MOE Reported Dt:	12/6/2011
Environmental Impact:	Not Anticipated
Nature of Impact:	
Receiving Medium:	Sewage - Municipal/Private and Commercial
SAC Action Class:	Land Spills
Sector Source Type:	
Site Municipality:	Ottawa

Database: ***SPL*** ***Site:*** ***Clean Water Works Inc.; City of Ottawa Greenbank Rd Ottawa ON***

Ref NO:	8678-9X4KTE
Contaminant Code:	27
Contaminant Name:	OIL ADDITIVES
Contaminant Quantity:	2000 L
Incident Cause:	Unknown / N/A
Incident Dt:	6/2/2015
Incident Reason:	Unknown / N/A
Incident Summary:	2000L oily substance in excavated pit
MOE Reported Dt:	6/2/2015
Environmental Impact:	
Nature of Impact:	Land
Receiving Medium:	
SAC Action Class:	Land Spills
Sector Source Type:	
Site Municipality:	Ottawa

Database: ***WWIS*** ***Site:*** ***lot 13 ON***

Well ID:	1517753	***Lot:***	013
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	23-FEB-82
Sec. Water Use:		***Well Depth:***	175 ft
Pump Rate:	25 GPM	***Static Water Level:***	50 ft
Flow Rate:		***Clear/Cloudy:***	CLEAR
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Air Precussion	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	75	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH, MINERIAL

--- Details ---

Thickness:	5 ft	***Original Depth:***	5 ft
Material Colour:	RED	***Material:***	SAND
+			
Thickness:	50 ft	***Original Depth:***	55 ft

Material Colour:	BROWN	***Material:***	SAND
+			
Thickness:	20 ft	***Original Depth:***	75 ft
Material Colour:	GREY	***Material:***	SAND
+			
Thickness:	100 ft	***Original Depth:***	175 ft
Material Colour:	GREY	***Material:***	SANDSTONE

Database: ***WWIS*** ***Site:***

lot 12 ON

Well ID:	1520054	***Lot:***	012
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	08-JUL-85
Sec. Water Use:		***Well Depth:***	75 ft
Pump Rate:	50 GPM	***Static Water Level:***	0 ft
Flow Rate:		***Clear/Cloudy:***	CLEAR
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Rotary (Air)	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	60	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH

--- Details ---

Thickness:	1 ft	***Original Depth:***	1 ft
Material Colour:	BROWN	***Material:***	FILL, LOOSE, PACKED
+			
Thickness:	1 ft	***Original Depth:***	2 ft
Material Colour:	BROWN	***Material:***	SILT, SAND, PACKED
+			
Thickness:	12 ft	***Original Depth:***	14 ft
Material Colour:	BROWN	***Material:***	CLAY, PACKED
+			
Thickness:	46 ft	***Original Depth:***	60 ft
Material Colour:	GREY	***Material:***	CLAY, BOULDERS, CEMENTED
+			
Thickness:	8 ft	***Original Depth:***	68 ft
Material Colour:	GREY	***Material:***	ROCK, GRAVEL, FRACTURED
+			
Thickness:	7 ft	***Original Depth:***	75 ft
Material Colour:	GREY	***Material:***	LIMESTONE, ROCK, HARD

Database: ***WWIS*** ***Site:***

lot 12 con 2 ON

Well ID:	1531208	***Lot:***	012
Concession:	02	***Concession Name:***	CON
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	08-JUN-00
Sec. Water Use:		***Well Depth:***	130 ft
Pump Rate:	10 GPM	***Static Water Level:***	20 ft

Flow Rate:		***Clear/Cloudy:***	CLOUDY
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Rotary (Air)	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:		***Overburden/Bedrock:***	Unknown type above a bedrock layer
Water Type:	Not stated	***Casing Material:***	MINERIAL

--- Details ---

Thickness:	60 ft	***Original Depth:***	60 ft
Material Colour:		***Material:***	UNKNOWN TYPE
+			
Thickness:	70 ft	***Original Depth:***	130 ft
Material Colour:	GREY	***Material:***	LIMESTONE

Database: ***WWIS*** ***Site:***

lot 12 con 2 ON

Well ID:	1531209	***Lot:***	012
Concession:	02	***Concession Name:***	CON
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	08-JUN-00
Sec. Water Use:		***Well Depth:***	
Pump Rate:	10 GPM	***Static Water Level:***	23 ft
Flow Rate:		***Clear/Cloudy:***	CLOUDY
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Rotary (Air)	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:		***Overburden/Bedrock:***	No formation data
Water Type:		***Casing Material:***	

Database: ***WWIS*** ***Site:***

lot 12 ON

Well ID:	1523196	***Lot:***	012
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:		***Construction Date:***	15-JUL-88
Sec. Water Use:		***Well Depth:***	78 ft
Pump Rate:	20 GPM	***Static Water Level:***	8 ft
Flow Rate:		***Clear/Cloudy:***	CLEAR
Specific Capacity:		***Final Well Status:***	
Construction Method:	Air Precussion	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	8	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH, MINERIAL

--- Details ---

Thickness:	8 ft	***Original Depth:***	8 ft
Material Colour:	BROWN	***Material:***	CLAY, FILL, PACKED
+			
Thickness:	70 ft	***Original Depth:***	78 ft
Material Colour:	GREY	***Material:***	LIMESTONE, SANDSTONE, HARD

Database: ***WWIS*** ***Site:***

lot 13 ON

Well ID:	1520666	***Lot:***	013
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	OTTAWA CITY
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	17-JUL-86
Sec. Water Use:		***Well Depth:***	75 ft
Pump Rate:	20 GPM	***Static Water Level:***	1 ft
Flow Rate:		***Clear/Cloudy:***	
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Cable Tool	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	0	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH

--- Details ---

Thickness:	75 ft	***Original Depth:***	75 ft
Material Colour:	GREY	***Material:***	LIMESTONE

Database: ***WWIS*** ***Site:***

lot 14 ON

Well ID:	1524159	***Lot:***	014
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	27-OCT-89
Sec. Water Use:		***Well Depth:***	100 ft
Pump Rate:	50 GPM	***Static Water Level:***	8 ft
Flow Rate:		***Clear/Cloudy:***	CLEAR
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Air Precussion	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	85	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH, MINERIAL

--- Details ---

Thickness:	45 ft	***Original Depth:***	45 ft
Material Colour:	GREY	***Material:***	CLAY
+			
Thickness:	40 ft	***Original Depth:***	85 ft
Material Colour:	GREY	***Material:***	HARDPAN, GRAVEL
+			
Thickness:	15 ft	***Original Depth:***	100 ft

Material Colour:	GREY	***Material:***	LIMESTONE

Database: ***WWIS*** ***Site:***

lot 14 ON

Well ID:	1525694	***Lot:***	014
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	NEPEAN TOWNSHIP
Easting Nad83:		***Northing Nad83:***	
Zone:	18	***Utm Reliability:***	unknown UTM
Primary Water Use:	Domestic	***Construction Date:***	14-MAY-91
Sec. Water Use:		***Well Depth:***	83 ft
Pump Rate:	40 GPM	***Static Water Level:***	5 ft
Flow Rate:		***Clear/Cloudy:***	CLOUDY
Specific Capacity:		***Final Well Status:***	Water Supply
Construction Method:	Air Precussion	***Flowing (y/n):***	N
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:	51	***Overburden/Bedrock:***	Bedrock
Water Type:	FRESH	***Casing Material:***	FRESH, MINERIAL

--- Details ---

Thickness:	15 ft	***Original Depth:***	15 ft
Material Colour:	GREY	***Material:***	CLAY
+			
Thickness:	36 ft	***Original Depth:***	51 ft
Material Colour:	GREY	***Material:***	CLAY, HARDPAN, STONES
+			
Thickness:	32 ft	***Original Depth:***	83 ft
Material Colour:	GREY	***Material:***	LIMESTONE

Database: ***WWIS*** ***Site:***

lot 12 ON

Well ID:	1535508	***Lot:***	012
Concession:		***Concession Name:***	
County:	OTTAWA-CARLETON	***Municipality:***	OTTAWA CITY
Easting Nad83:		***Northing Nad83:***	
Zone:		***Utm Reliability:***	
Primary Water Use:		***Construction Date:***	10-MAY-05
Sec. Water Use:		***Well Depth:***	
Pump Rate:		***Static Water Level:***	
Flow Rate:		***Clear/Cloudy:***	
Specific Capacity:		***Final Well Status:***	
Construction Method:	Other Method	***Flowing (y/n):***	
Elevation (m):		***Elevation Reliability:***	
Depth to Bedrock:		***Overburden/Bedrock:***	No formation data
Water Type:		***Casing Material:***	

Appendix: Database Descriptions

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

Abandoned Aggregate Inventory: Provincial AAGR

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

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

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

Government Publication Date: Up to Mar 2015

Abandoned Mine Information System: Provincial AMIS

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

Government Publication Date: 1800-Oct 2014

Anderson's Waste Disposal Sites: Private ANDR

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

Government Publication Date: 1860s-Present

Automobile Wrecking & Supplies: Private AUWR

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

Government Publication Date: 2001-Jul 2014

Borehole: Provincial BORE

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

Government Publication Date: 1875-Jul 2014

Certificates of Approval: Provincial CA

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

Government Publication Date: 1985-Oct 30, 2011*

Commercial Fuel Oil Tanks: Provincial CFOT

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

Government Publication Date: 1948-Dec 2015

Chemical Register: Private CHEM

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

Government Publication Date: 1992, 1999-Jul 2014

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

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

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions: Provincial CONV

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

Government Publication Date: 1989-Feb 2014

Certificates of Property Use: Provincial CPU

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

Government Publication Date: 1994-Jan 2016

Drill Hole Database: Provincial DRL

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

Government Publication Date: 1886-Jun 2014

Environmental Activity and Sector Registry: Provincial EASR

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

Government Publication Date: Oct 31 2011-Oct 2015

Environmental Registry: Provincial EBR

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

Government Publication Date: 1994-Jan 2016

Environmental Compliance Approval: Provincial ECA

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

Government Publication Date: Oct 31, 2011-Jun 2015

Environmental Effects Monitoring: Federal EEM

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

Government Publication Date: 1992-2007*

ERIS Historical Searches: Private EHS

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

Government Publication Date: 1999-Aug 2014

Environmental Issues Inventory System: Federal EIIS

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

Government Publication Date: 1992-2001*

Emergency Management Historical Event: Provincial EMHE

The Emergency Management Historical Event data class will store the locations of historical occurrences of emergency events. Events captured will include those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance.

Government Publication Date: May 31, 2014

List of TSSA Expired Facilities: Provincial EXP

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

Government Publication Date: Current to Nov 2015

Federal Convictions: Federal FCON

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

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal FCS

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

Government Publication Date: June 2000-Oct 2015

Fisheries & Oceans Fuel Tanks: Federal FOFT

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

Government Publication Date: 1964-Sept 2003

Fuel Storage Tank: Provincial FST

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

Government Publication Date: 2010-Nov 2015

Fuel Storage Tank - Historic: Provincial FSTH

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

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

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

Government Publication Date: 1986-May 2015

TSSA Historic Incidents: Provincial HINC

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

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

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

Government Publication Date: 1950-Aug 2003*

TSSA Incidents: Provincial INC

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

Government Publication Date: June 2009 - Nov 2015

Landfill Inventory Management Ontario: Provincial LIMO

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

Government Publication Date: 2012

Canadian Mine Locations: Private MINE

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

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

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

Government Publication Date: 1846-Apr 2013

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

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

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

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

Government Publication Date: 1994-2013

National Defence & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defence 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 Defence & Canadian Forces Spills: Federal NDSP

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

Government Publication Date: Mar 1999-Aug 2010

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

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

Government Publication Date: 2001-Apr 2007*

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

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

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

Government Publication Date: 1993-2013

Oil and Gas Wells: Private OGW

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

Government Publication Date: 1988-2015

Ontario Oil and Gas Wells: Provincial OOGW

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

Government Publication Date: 1800-Aug 2015

Inventory of PCB Storage Sites: Provincial OPCB

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

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

Orders: Provincial ORD

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

Government Publication Date: 1994-Jan 2016

Canadian Pulp and Paper: Private PAP

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

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

Parks Canada Fuel Storage Tanks: Federal PCFT

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

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

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

Government Publication Date: 1988-Jun 2013

TSSA Pipeline Incidents: Provincial PINC

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

Government Publication Date: June 2009-2014

Private and Retail Fuel Storage Tanks: Provincial PRT

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

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

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

Government Publication Date: 1994-Jan 2016

Ontario Regulation 347 Waste Receivers Summary: Provincial REC

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

Government Publication Date: 1986-2013

Record of Site Condition: Provincial RSC

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

RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-Jan 2016

Retail Fuel Storage Tanks: Private RST

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

Government Publication Date: 1999-Jul 2014

Scott's Manufacturing Directory: Private SCT

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

Government Publication Date: 1992-Mar 2011*

Ontario Spills: Provincial SPL

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

Government Publication Date: 1988-Jun 2015

Wastewater Discharger Registration Database: Provincial SRDS

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

Government Publication Date: 1990-2013

Anderson's Storage Tanks: Private TANK

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

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks: Federal TCFT

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

Government Publication Date: 1970-Mar 2007

TSSA Variances for Abandonment of Underground Storage Tanks: Provincial VAR

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

Government Publication Date: Current to Nov 2015

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

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

Government Publication Date: 1970-Jun 2015

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

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

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

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

Government Publication Date: 1955-Mar 2014

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

ENVIRONMENTAL RISK INFORMATION SERVICE

Head Office: 80 Valleybrook Dr, Toronto, ON M3B 2S9
Physical Address: 38 Lesmill Rd, Toronto, ON M3B 2T5
Phone: 416-510-5204 • Fax: 416-510-5133
info@erisinfo.com • www.erisinfo.com

City Directory Information Source
Vernon's Ottawa, Ontario City Directory

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 2011	
Site Listing:	-Burnett K
Adjacent Properties:	
3285 Greenbank Road	-Res (1 tenant)
3287 Greenbank Road	-Res (1 tenant)
3288 Greenbank Road	-Res (1 tenant)
3291 Greenbank Road	-Res (1 tenant)
3293 Greenbank Road	-Res (1 tenant)
3333 Greenbank Road	-Compass Group Canada Ltd

	-Ottawa Catholic School Board
3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Res (1 tenant)
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 2004/05	
Site Listing:	-Burnett Kelvin J -Burnett D & S
Adjacent Properties:	
3285 Greenbank Road	-Res (1 tenant)
3287 Greenbank Road	-Res (1 tenant)
3288 Greenbank Road	-Address Not Listed

3291 Greenbank Road	-Res (1 tenant)
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Compass Group Canada Ltd -Ottawa Carleton Catholic School Board
3380 Greenbank Road	-Res (1 tenant)
3390 Greenbank Road	-Res (1 tenant)
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1999/2000	
Site Listing:	-Burnett Kelvin J -Burnett D & S
Adjacent Properties:	
3285 Greenbank Road	-Res (1 tenant)

3287 Greenbank Road	-Res (1 tenant)
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Res (1 tenant)
3293 Greenbank Road	-Res (1 tenant)
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Res (1 tenant)
3390 Greenbank Road	-Res (1 tenant)
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1995/96	
Site Listing:	-Burnett Kelvin J

Adjacent Properties:	
3285 Greenbank Road	-Res (1 tenant)
3287 Greenbank Road	-Res (1 tenant)
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Res (1 tenant)
3293 Greenbank Road	-Res (1 tenant)
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Res (1 tenant)
3390 Greenbank Road	-Res (1 tenant)
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1990	

Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Address Not Listed
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	

Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1984	
Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Address Not Listed
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1980	
Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Address Not Listed

3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1975	
Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Address Not Listed

3390 Greenbank Road	-Address Not Listed
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1970	
Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Address Not Listed

3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Address Not Listed
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1965	
Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed
3293 Greenbank Road	-Address Not Listed

3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Address Not Listed
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

PROJECT NUMBER: 20160224009	
Site Address:	3370 Greenbank Road, Ottawa, Ontario
Year: 1960	
Site Listing:	-Address Not Listed
Adjacent Properties:	
3285 Greenbank Road	-Address Not Listed
3287 Greenbank Road	-Address Not Listed
3288 Greenbank Road	-Address Not Listed
3291 Greenbank Road	-Address Not Listed

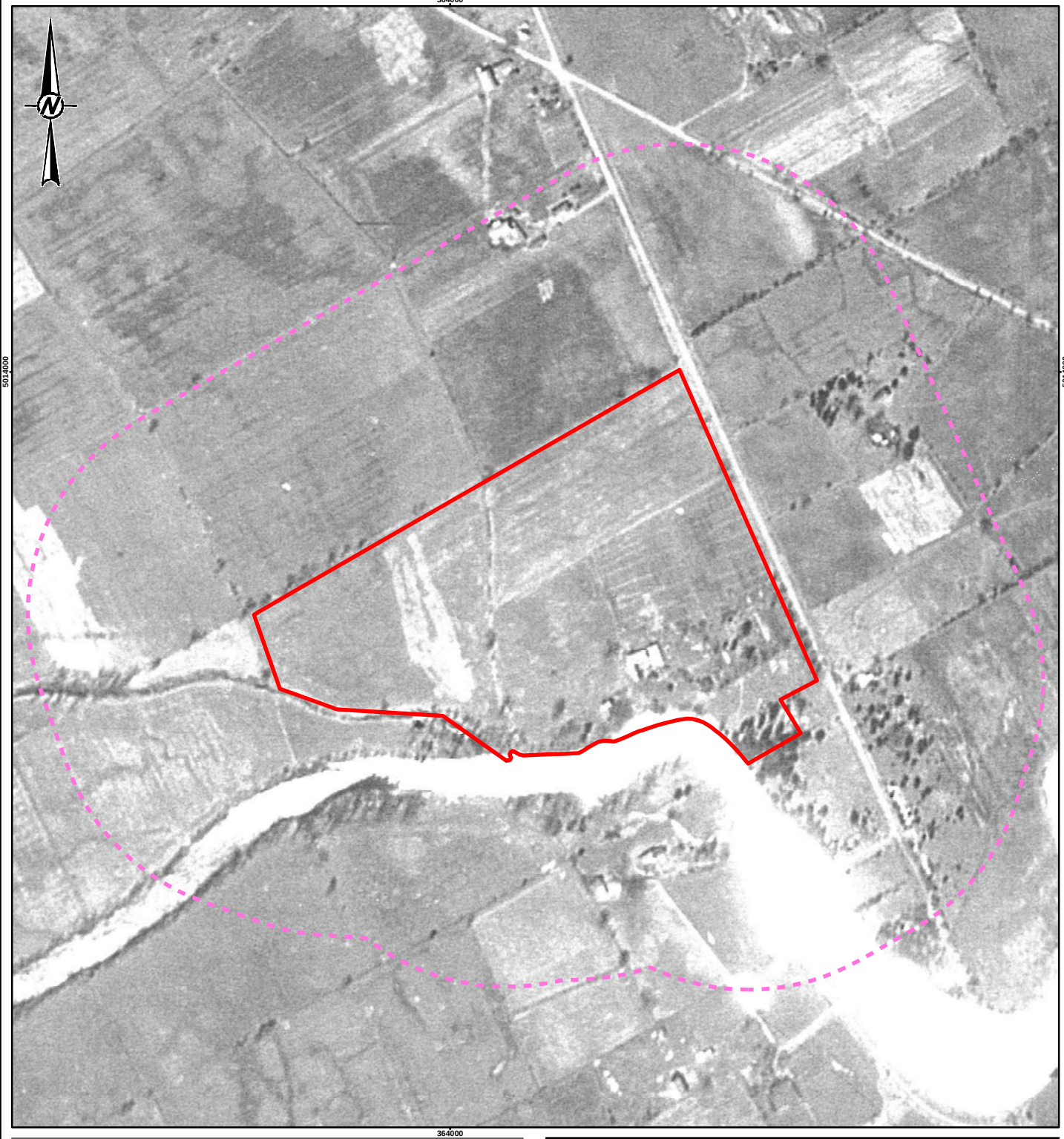
3293 Greenbank Road	-Address Not Listed
3333 Greenbank Road	-Address Not Listed
3380 Greenbank Road	-Address Not Listed
3390 Greenbank Road	-Address Not Listed
3232 Jockvale Road	-Address Not Listed
3240 Jockvale Road	-Address Not Listed

-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

APPENDIX D

Aerial Photographs



LEGEND

PHASE ONE SITE BOUNDARY

PHASE ONE STUDY AREA

0 62.5 125 250

1:6,200 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. 1947 AIR PHOTO, NAPL, A10910-157.
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

1947 AIR PHOTO

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

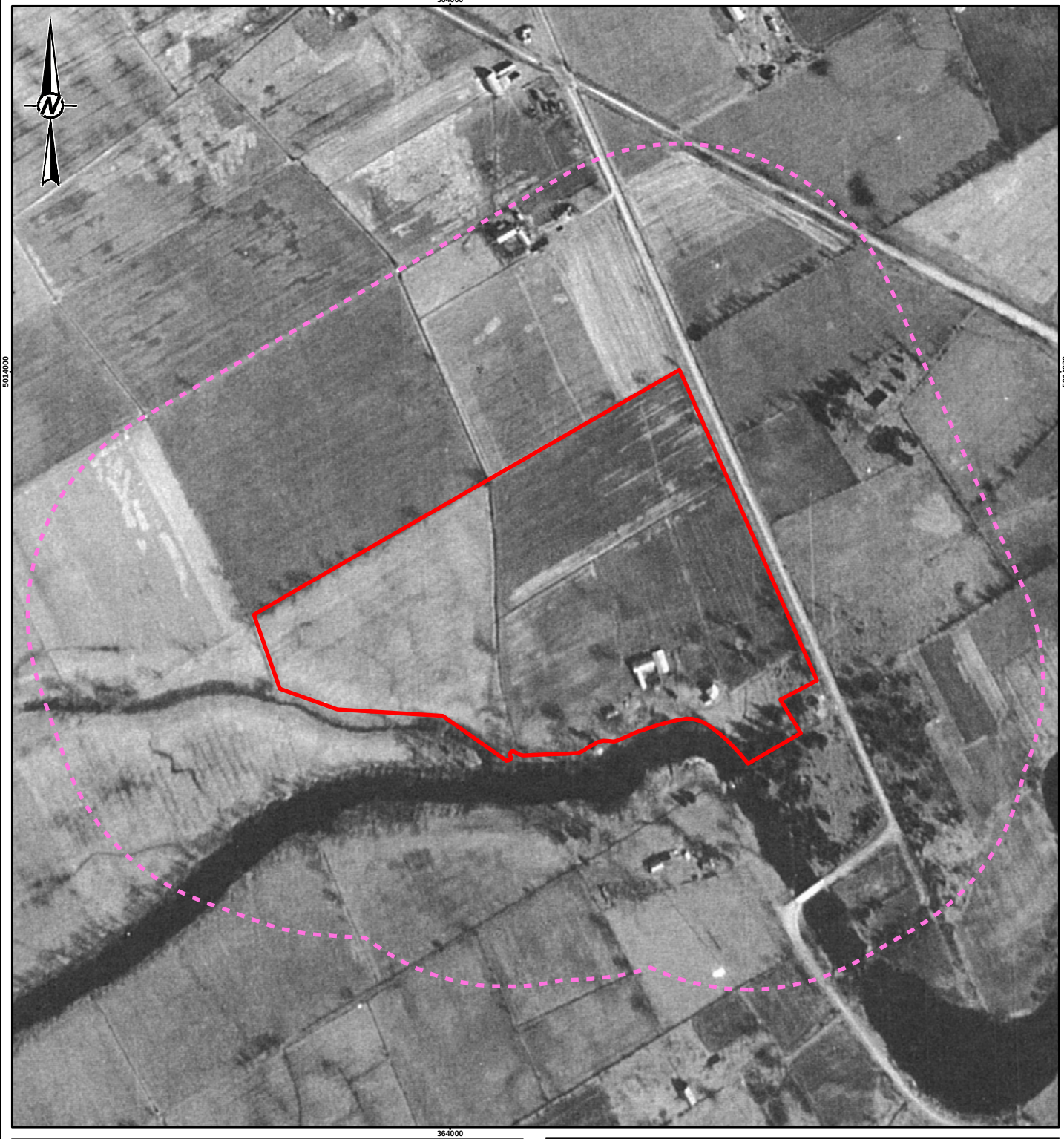
PROJECT NO.	PHASE	REV.	APPENDIX
1523044	2000	0	**D-1**

Path: N:\Active\Spatial IM\Claridge\Homes\Burnett Lands\93 PROJ\1523044 Claridge\40 PROD\Phase2000 Ph1ESA\1523044-2000-AppD-01.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:

25mm

0



LEGEND

PHASE ONE SITE BOUNDARY

PHASE ONE STUDY AREA

0 62.5 125 250

1:6,200 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. 1953 AIR PHOTO, NAPL, A13637-46.
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

1953 AIR PHOTO

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	APPENDIX
1523044	2000	0	**D-2**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm 0

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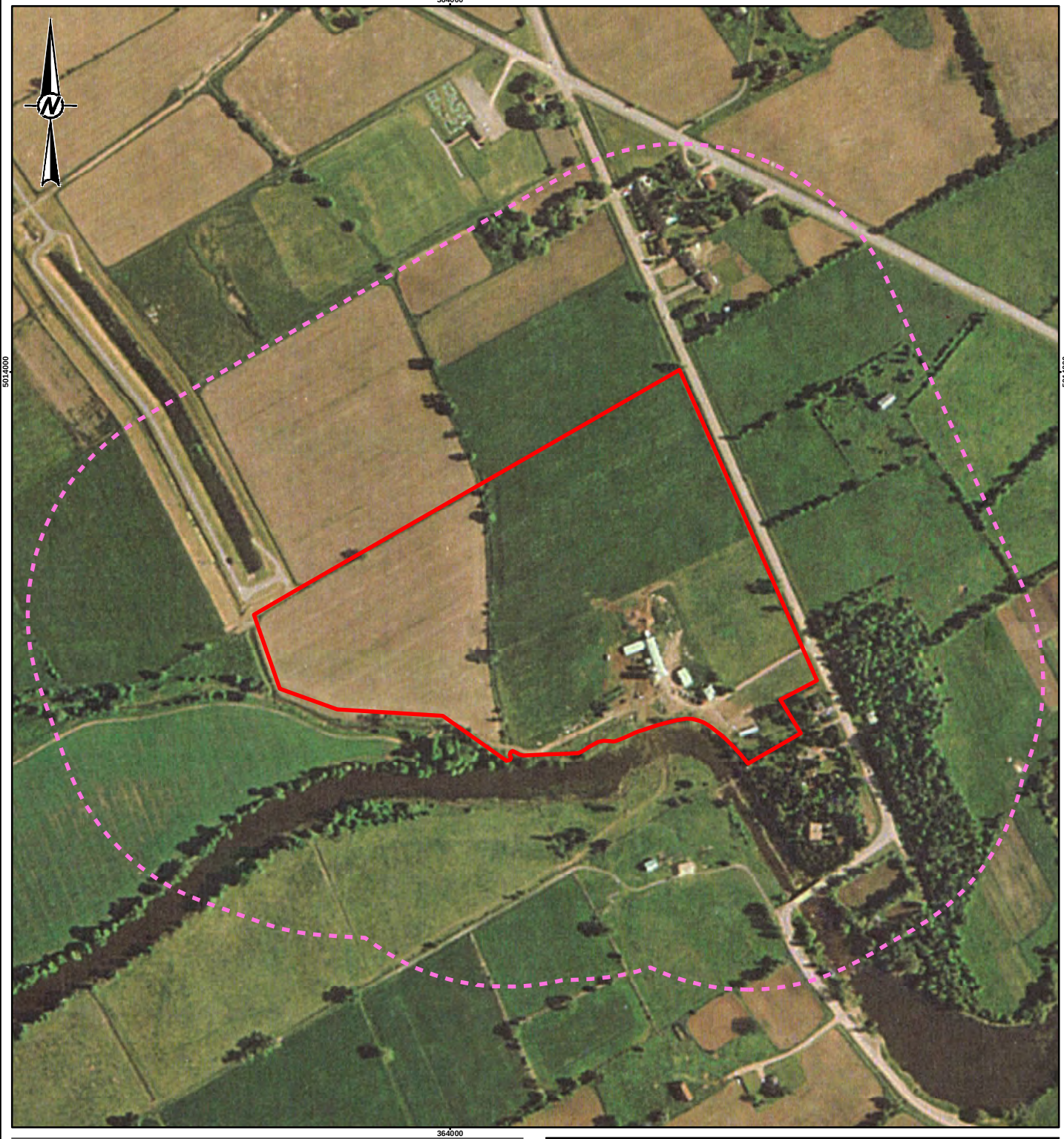

LEGEND

PHASE ONE SITE BOUNDARY

PHASE ONE STUDY AREA

0 62.5 125 250

1:6,200 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. 1985 AIR PHOTO, NAPL, A31399-38.
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

1985 AIR PHOTO

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	APPENDIX
1523044	2000	0	**D-3**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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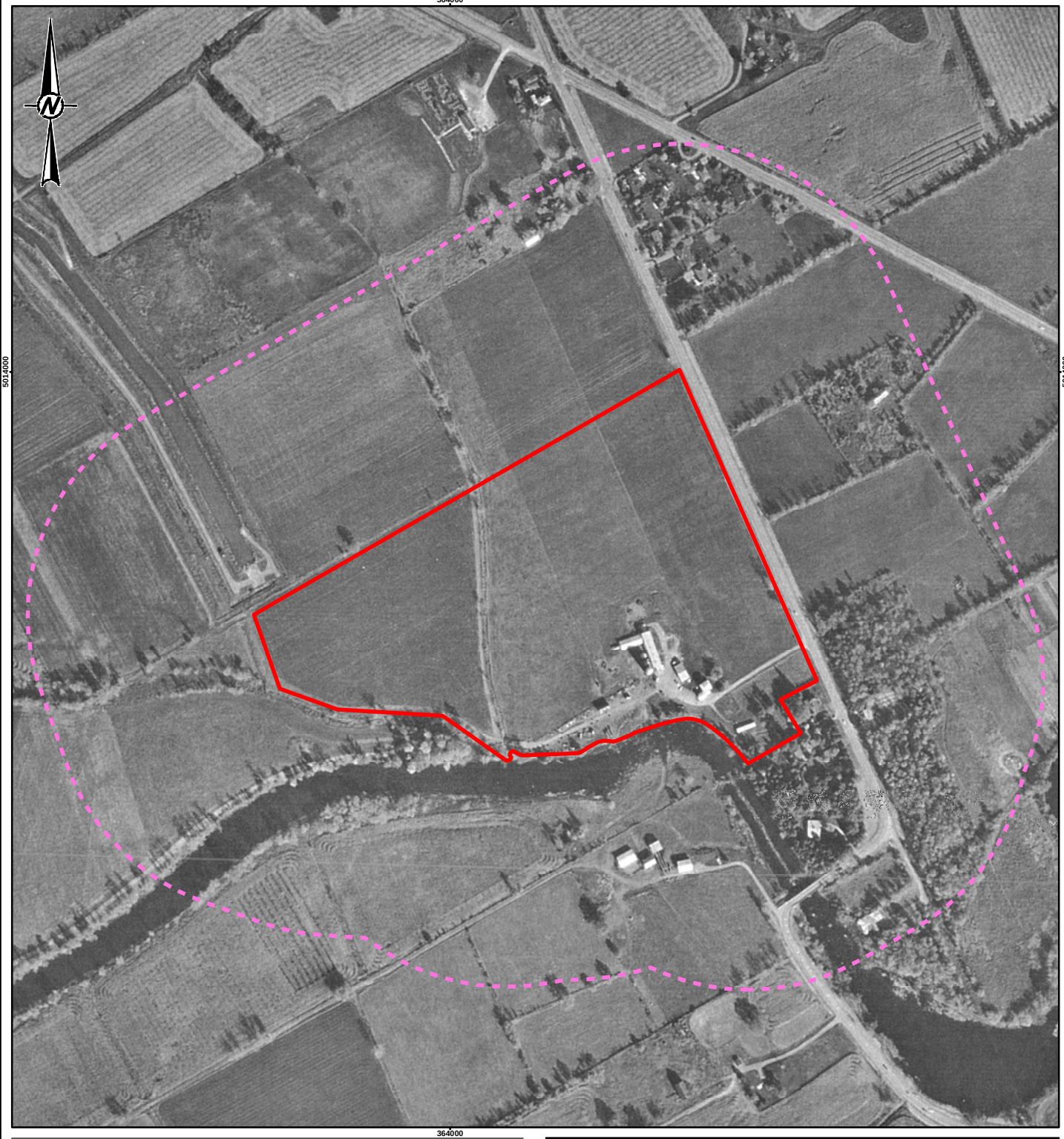


LEGEND

PHASE ONE SITE BOUNDARY

PHASE ONE STUDY AREA

0 62.5 125 250

1:6,200 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. 1994 AIR PHOTO, NAPL, A28149-91.
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

1994 AIR PHOTO

CONSULTANT

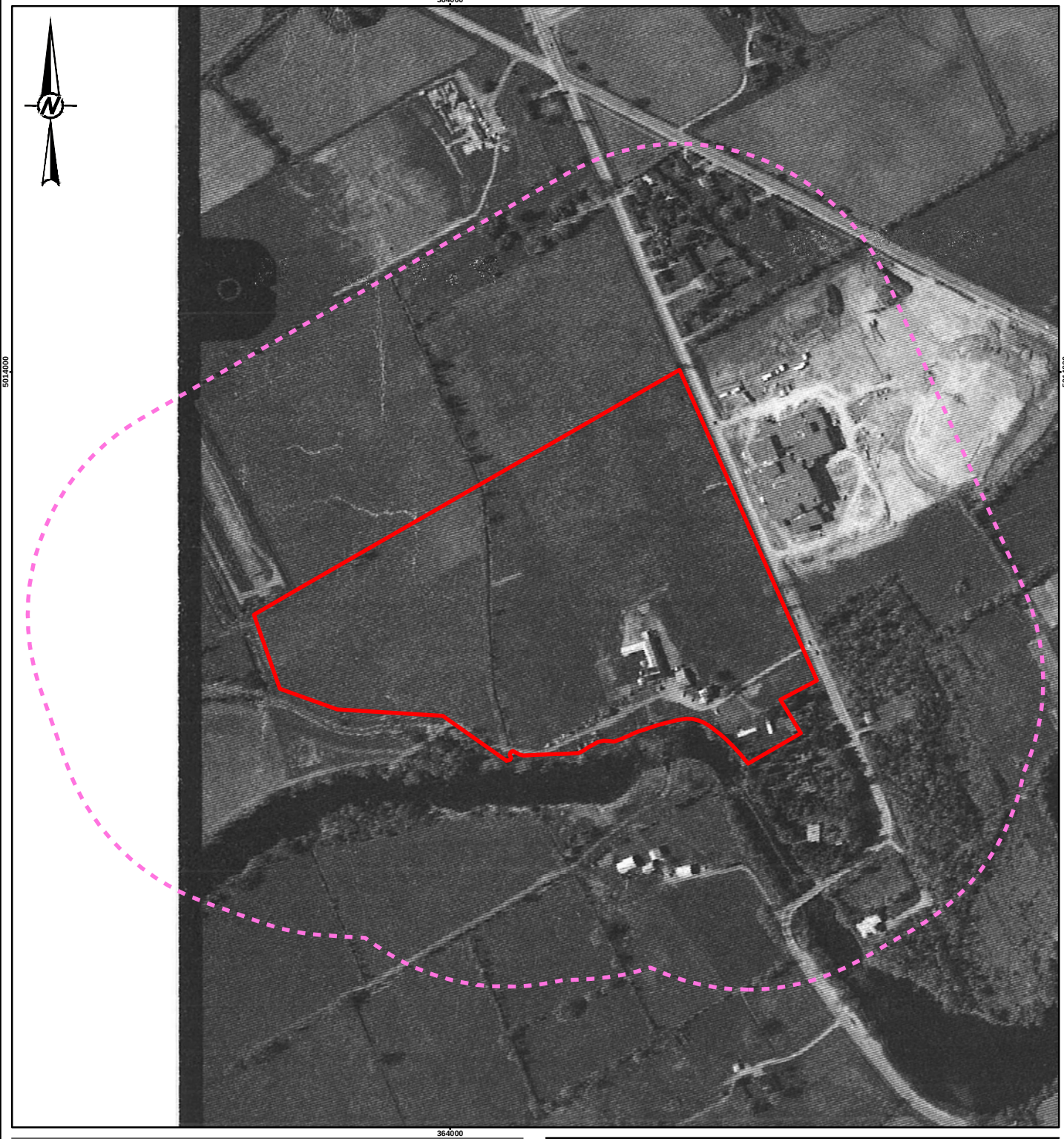
Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	APPENDIX
1523044	2000	0	**D-4**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm 0

Path: N:\Active\Spatial IM\Claridge\Homes\Burnett Lands\93 PROJ\1523044 Claridge\40 PROD\Phase2000 Ph1ESA\1523044-2000-AppD-04.mxd



LEGEND

PHASE ONE SITE BOUNDARY

PHASE ONE STUDY AREA

0 62.5 125 250

1:6,200 METRES

NOTE(S)

1. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING GOLDER ASSOCIATES LTD. REPORT NO. 1523044-2000.

REFERENCE(S)

1. 2002 AIR PHOTO, NAPL, A31833-2.
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: MTM ZONE 9 VERTICAL DATUM: CGVD28

CLIENT

CLARIDGE HOMES CORPORATION

PROJECT

PHASE I ESA, 3370 GREENBANK ROAD, BURNETT LANDS, OTTAWA, ONTARIO

TITLE

2002 AIR PHOTO

CONSULTANT

Golder Associates

YYYY-MM-DD	2016-03-11
DESIGNED	----
PREPARED	BR
REVIEWED	MS
APPROVED	DHP

PROJECT NO.	PHASE	REV.	APPENDIX
1523044	2000	0	**D-5**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:

25mm

0

Path: N:\Active\Spatial IM\Claridge\Homes\Burnett Lands\89 PROJ\1523044 Claridge\40 PROD\Phase2000 Ph1ESA\1523044-2000-AppD-05.mxd

APPENDIX E

Site Photographs

Photograph 1: View of the Site entrance from Greenbank Road looking west.

Photograph 2: View of the east part of the Site occupied by agricultural fields along Greenbank Road Site looking northwest.

Photograph 3: View of the two trailers located on the Site looking south.

Photograph 4: View of the adjacent residential properties south of the Site looking south.

Photograph 5: View of the adjacent lands east of the Site across Greenbank Road (St. Joseph Secondary School), looking north.

Photograph 6: Close view of one of the trailers on the Site occupied by the former Site owner (Burnett family).

Photograph 7: View of the northeast part of the Site looking east.

Photograph 8: View of the equipment storage shed located on the Site which was not accessible at the time of the Site visit.

Photograph 9: View of one of the barns on the Site looking northwest.

Photograph 10: View of fill and vent pipes on the west wall of the house that are most likely associated with a heating oil aboveground storage tank (AST) located in the basement of the house (not accessible at the time of the Site visit).

Photograph 11: View of the dug water well located north of the house looking north.

Photograph 12: View of the west side of the house and the driveway along the south boundary of the Site looking southeast.

Photograph 13: View of equipment storage shed, the house and the old RV looking east.

Photograph 14: View of the silos, the barn and some the debris (appliances and wood debris) observed in the barn area looking west.

Photograph 15: View of the south side of the Site along the Jock River. One of the monitoring wells installed on the Site (16-2) is visible on this photograph.

Photograph 16: View of the southwest part of the Site occupied by agricultural fields looking southwest.

Photograph 17: View of the silos and one of the barns looking northeast.

Photograph 18: View of the interior of one of the barns.

Photograph 19: View of the various debris mainly old furniture and construction debris in one of the barns.

Photograph 20: Another view of the debris observed in one of the barns.

Photograph 21: View of the debris outside of the equipment storage shed.

Photograph 22: View of the old RV and debris in the area between the house and the barns (west of the house).

Photograph 23: View of the plastic drum labeled as GNC Frost (propylene glycol) observed on the south part of the Site.

Photograph 24: View of the old discarded AST noted in the south part of the Site.

Photograph 25: View of the old cars observed in the south part of the Site.

Photograph 26: View of the plastic drums, wooden skids and plastic pail debris noted in the south part of the Site.

Photograph 27: View of the tree, wood and cardboard debris observed at the south part of the Site.

Photograph 28: View of the farm buildings looking northeast.

APPENDIX F

Soil Table of Results for Free Cyanide and Laboratory Certificate of Analysis

Sample Location	Units	MDL	Regulation (1)	BH16-101 (A)		BH16-102 (B)		BH16-104(D)		BH16-105(E)		BH16-106(F)	
Parameter/Sample ID				**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**	**SA1**	**SA2**
Sample depth, mbgs				**0-0.15 (topsoil)**	**0.61-0.76**	**0.08-0.15 (topsoil)**	**(0.30-0.38)**	**0-0.30 (topsoil)**	**0.46-0.61**	**0.08-0.15 (topsoil)**	**(0.30-0.38)**	**0.08-0.15 (topsoil)**	**(0.30-0.38)**
Sample Date (m/d/y)			**Reg 153/04 (2011)-Table 8 Residential/Industrial, Potable**	**2/23/2016**	**2/23/2016**	**2/22/2016**	**2/22/2016**	**2/23/2016**	**2/23/2016**	**2/22/2016**	**2/22/2016**	**2/18/2016**	**2/18/2016**
Physical Characteristics													
% Solids	% by Wt.	0.1	NV	52.6	79.4	54.5	77.9	53.1	52.3	57.1	77.7	68.0	70.3
General Inorganics													
Cyanide, free	ug/g dry	0.03	0.051 ug/g dry	**ND (0.12)**	ND (0.03)	**ND (0.12)**	ND (0.03)	**ND (0.12)**	ND (0.03)	**ND (0.12)**	ND (0.03)	**ND (0.12)**	ND (0.03)

Notes:

mbgs-metres below ground surface

1. Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, MOECC Table 8 Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition

ND-not detected above the method detection limit

shaded and bold-indicates MDL above MOECC Table 8 Standards

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1-800-749-1947
www.paracellabs.com

Certificate of Analysis

Golder Associates Ltd. (Ottawa)

1931 Robertson Rd.
Ottawa, ON K2H 5B7
Attn: Maria Staneva

Client PO:
Project: 1523044
Custody: 26316

Report Date: 2-Mar-2016
Order Date: 25-Feb-2016

Order #: 1609333

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
1609333-01	BH16-101(A) SA1
1609333-02	BH16-102(B) SA1
1609333-03	BH16-105(E) SA1
1609333-04	BH16-104(D) SA1
1609333-05	BH16-106(F) SA1

Approved By:

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis

Report Date: 02-Mar-2016

Client: **Golder Associates Ltd. (Ottawa)**

Order Date:25-Feb-2016

Client PO:

Project Description: 1523044

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Cyanide, free	MOE E3015 - Auto Colour, water extraction	27-Feb-16	1-Mar-16
Solids, %	Gravimetric, calculation	27-Feb-16	27-Feb-16

Certificate of Analysis

Report Date: 02-Mar-2016

Client: **Golder Associates Ltd. (Ottawa)**

Order Date:25-Feb-2016

Client PO:

Project Description: 1523044

	Client ID:	BH16-101(A) SA1	BH16-102(B) SA1	BH16-105(E) SA1	BH16-104(D) SA1
	Sample Date:	23-Feb-16	22-Feb-16	22-Feb-16	23-Feb-16
	Sample ID:	1609333-01	1609333-02	1609333-03	1609333-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	52.6	54.5	57.1	53.1
General Inorganics					
Cyanide, free	0.03 ug/g dry	<0.12 [1]	<0.12 [1]	<0.12 [1]	<0.12 [1]

	Client ID:	BH16-106(F) SA1	-	-	-
	Sample Date:	18-Feb-16	-	-	-
	Sample ID:	1609333-05	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	68.0	-	-	-
General Inorganics					
Cyanide, free	0.03 ug/g dry	<0.12 [1]	-	-	-

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	ND	0.03	ug/g						

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	ND	0.12	ug/g dry	ND				35	GEN09
Physical Characteristics									
% Solids	82.5	0.1	% by Wt.	81.4			1.3	25	

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	0.286	0.03	ug/g	ND	95.2	70-130			

Qualifier Notes:

Sample Qualifiers :

1 : Elevated detection limits due to the nature of the sample matrix.

QC Qualifiers :

GEN09 : Elevated detection limits due to the nature of the sample matrix.

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

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300-2319 St. Laurent Blvd.
Ottawa, Ontario K1G 4J8
p: 1-800-749-1947
e: paracel@paracellabs.com
www.paracellabs.com

Chain of Custody
(Lab Use Only)
№ 26316

Page ___ of ___

Client Name: Golder Associates Ltd.	Project Reference: 1523044	TAT: [✓] Regular [ ] 3 Day [ ] 2 Day [ ] 1 Day
Contact Name: Maria Stanova	Quote #	
Address: 1931 Robertson Rd.	PO #	Date Required:
Telephone: 613 592 9600 ext. 4237	Email Address: mstanova@golder.com	

Criteria: [✓] O. Reg. 153/04 (As Amended) Table 9 [ ] RSC Filing [ ] O. Reg. 558/00 [ ] PWQO [ ] CCME [ ] SUB (Storm) [ ] SUB (Sanitary) Municipality: _____ [ ] Other: _____

Matrix Type: **S** (Soil/Sed.) **GW** (Ground Water) **SW** (Surface Water) **SS** (Storm/Sanitary Sewer) **P** (Paint) **A** (Air) **O** (Other)

Required Analyses

Paracel Order Number: 1609333

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken Date	Sample Taken Time	Free Cyanide										
1	BH16-101(A) SA1	S			Febr. 23/2016		✓					250mL					
2	BH16-102(B) SA1	↓			Febr. 22/2016		✓					↓					
3	BH16-105(E) SA1				Febr. 22/2016		✓										
4	BH16-104(D) SA1				Febr. 23, 2016		✓										
5	BH16-106(F) SA1	↓			Febr. 18, 2016		✓										
6	BH16-103(C) SA1	on hold															
7	BH16-107(G) SA1	on hold										↓					
8																	
9																	
10																	

Comments:

Method of Delivery: Swift

Relinquished By (Sign):	Received by Driver/Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Maria Stanova	Date/Time:	Date/Time: Feb 25/16 3:45	Date/Time: Feb 25/16 4:21
Date/Time: Febr. 25/2016	Temperature: ___ °C	Temperature: 7.0 °C	pH Verified [✗] By: NA

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Certificate of Analysis

Golder Associates Ltd. (Ottawa)

1931 Robertson Rd.
Ottawa, ON K2H 5B7
Attn: Keith Holmes

Client PO: Burnett Lauces
Project: 1523044
Custody: 26326

Report Date: 16-Mar-2016
Order Date: 10-Mar-2016

Order #: 1611333

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
1611333-01	BH16-102 (B) SA2
1611333-02	BH16-106 (F) SA2
1611333-03	BH16-101 (A) SA2
1611333-04	BH16-105 (E) SA2
1611333-05	BH16-104 (D) SA2

Approved By:

Mark Foto, M.Sc.
Lab Supervisor

Certificate of Analysis
Report Date: 16-Mar-2016
Client: **Golder Associates Ltd. (Ottawa)**
Order Date:10-Mar-2016
Client PO: Burnett Lauces
Project Description: 1523044

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Cyanide, free	MOE E3015 - Auto Colour, water extraction	14-Mar-16	16-Mar-16
Solids, %	Gravimetric, calculation	15-Mar-16	15-Mar-16

Certificate of Analysis

Report Date: 16-Mar-2016

Client: **Golder Associates Ltd. (Ottawa)**

Order Date:10-Mar-2016

Client PO: Burnett Lauces

Project Description: 1523044

	Client ID:	BH16-102 (B) SA2	BH16-106 (F) SA2	BH16-101 (A) SA2	BH16-105 (E) SA2
	Sample Date:	22-Feb-16	18-Feb-16	23-Feb-16	22-Feb-16
	Sample ID:	1611333-01	1611333-02	1611333-03	1611333-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	77.9	70.3	79.4	77.7
General Inorganics					
Cyanide, free	0.03 ug/g dry	<0.03 [1]	<0.03 [1]	<0.03 [1]	<0.03 [1]

	Client ID:	BH16-104 (D) SA2	-	-	-
	Sample Date:	23-Feb-16	-	-	-
	Sample ID:	1611333-05	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	52.3	-	-	-
General Inorganics					
Cyanide, free	0.03 ug/g dry	<0.03 [1]	-	-	-

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	ND	0.03	ug/g						

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	ND	0.03	ug/g dry	ND				35	
Physical Characteristics									
% Solids	90.3	0.1	% by Wt.	90.4			0.2	25	

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	0.264	0.03	ug/g	ND	87.9	70-130			

Qualifier Notes:

Login Qualifiers :

Sample - One or more parameter received past hold time -
Applies to samples: BH16-102 (B) SA2, BH16-106 (F) SA2, BH16-101 (A) SA2, BH16-105 (E) SA2, BH16-104 (D) SA2

Sample Qualifiers :

1 : Holding time had been exceeded upon sample receipt.

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

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Head Office
300-2319 St. Laurent Blvd.
Ottawa, Ontario K1G 4J8
p: 1-800-749-1947
e: paracel@paracellabs.com
www.paracellabs.com

Chain of Custody
(Lab Use Only)
№ 26326

Page 1 of 1

Client Name: Golder Associates	Project Reference: 1523044	TAT: [X] Regular [ ] 3 Day
Contact Name: Maria Stanwa, Keith Hobbs	Quote # Burnett Lands	[ ] 2 Day [ ] 1 Day
Address:	PO #	
Telephone: 6135929600	Email Address:	Date Required:

Criteria: [X] O. Reg. 153/04 (As Amended) Table 8 [ ] RSC Filing [ ] O. Reg. 558/00 [ ] PWQO [ ] CCME [ ] SUB (Storm) [ ] SUB (Sanitary) Municipality: _____ [ ] Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Paracel Order Number: 1611330 1611333

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken Date	Sample Taken Time	Required Analyses: Free Cyanide									
1	BH16-103(C) SA2	S		1	Febr. 19		on hold						250mL			
2	BH16-102(B) SA2	✓		1	Febr. 22		✓						↓			
3	BH16-106(F) SA2	✓		1	Febr. 18		✓									
4	BH16-101(A) SA2	✓		1	Febr. 23		✓									
5	BH16-105(E) SA2	✓		1	Febr. 22		✓									
6	BH16-104(D) SA2	✓		1	Febr. 23		✓									
7	BH16-107(G) SA2	✓		1	Febr. 18		on hold						↓			
8																
9							Proceed regardless of holding times as per Maria-RS									
10																

Comments: No dilution please Left message for Keith in regards to holding times. -RS.

Method of Delivery: Walk-in

Relinquished By (Sign):	Received by Driver/Depot:	Received at Lab:	Verified By:
Relinquished By (Print):	Date/Time: Mar. 10/2016 2:15pm	Date/Time: Mar 10/16 5:10	Date/Time: Mar 14/16 9:44
Date/Time: March 11/2016 2:30pm	Temperature: 3.5 °C	Temperature: 8.7 °C	pH Verified [X] By: N/A

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Africa	+ 27 11 254 4800
Asia	+ 86 21 6258 5522
Australasia	+ 61 3 8862 3500
Europe	+ 44 1628 851851
North America	+ 1 800 275 3281
South America	+ 56 2 2616 2000

solutions@golder.com
www.golder.com

Golder Associates Ltd.
1931 Robertson Road
Ottawa, Ontario, K2H 5B7
Canada
T: +1 (613) 592 9600

Golder Associates