Candec Engineering Consultants Inc.
consulting engineers and environmental scientists

Report of the
Phase One Environmental Site Assessment
Of 5219 Upper Middle Road
Burlington, Ontario

Prepared for:
Bloomfield Homes

Acting on instructions from
Mr. Selva Chelliah

Our Reference Number 17-1521
January 22, 2018

25 West Beaver Road, Unit 11, Richmond Hil, Ontario L4B 1K2 Phone: (905) 707-9272 Fax: (905) 707-9273

EXECUTIVE SUMMARY

Candec Engineering Consultants Inc. (herein after referred to as Candec) has carried out a phase one environmental assessment of the property located at 5219 Upper Middle Road, Burlington, Ontario

The assessment was carried out determine whether the past use of the property had created a condition on the property that might pose a health hazard to humans or pose a significant risk to the environment or which might not comply with the criteria for soil and ground water as stipulated by the Ontario Ministry of the Environment and Climate Change (MOECC).

The protocols governing the execution of phase one environmental site assessments are detailed in. As such this assessment has been conducted in accordance with the Ontario Regulation 153/04.

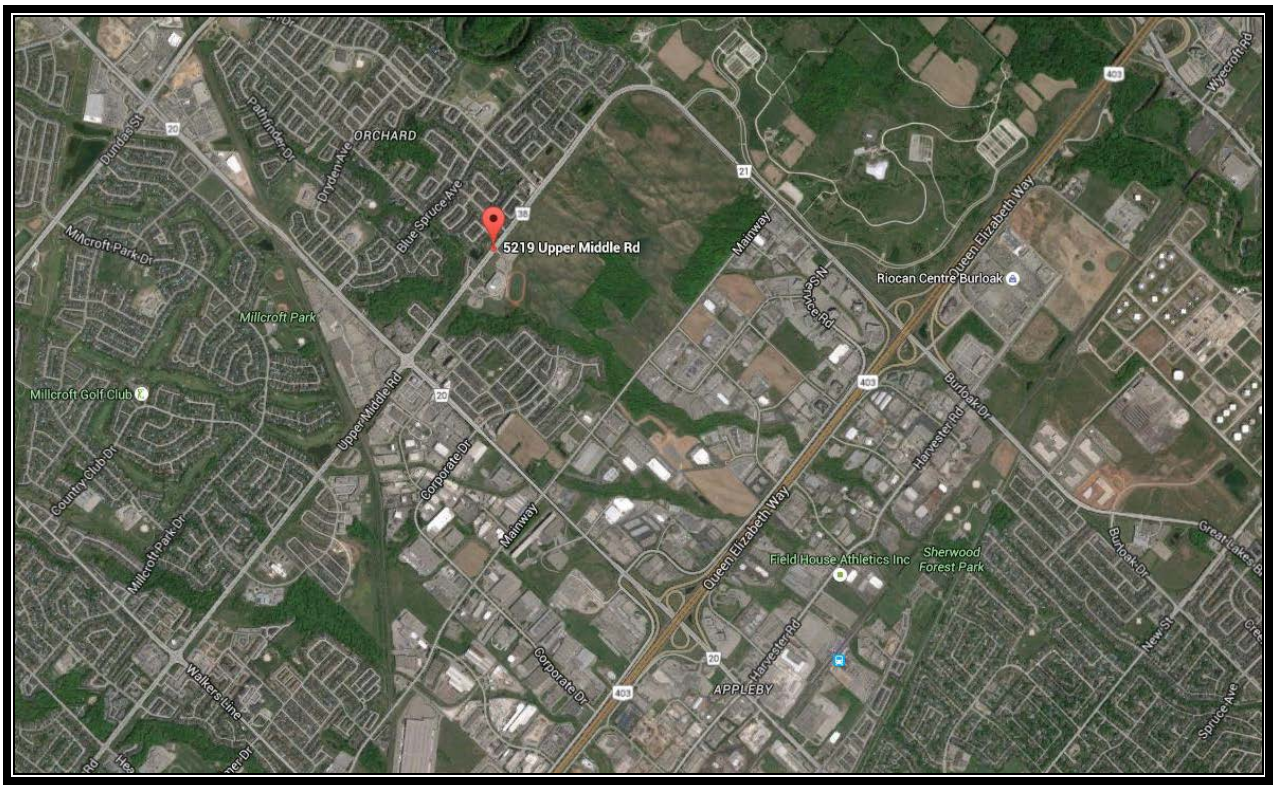
In general, the property appears clean and well maintained. Candec did not observe any surface staining to suggest that a potentially harmful liquid has been spilled. There are no radioactive materials on site and no evidence of the presence of it was noted that would require licensing by the Atomic Energy Control Board. There are no explosives at the site. There was no evidence that a UST or AST had ever been at the property.

A study area extending 250m beyond the boundaries of the property was selected. Large swaths of the lands surrounding the phase 1 ESA property are all developed; they are used almost exclusively for residential purposes. There is a public school and a few consumer retail commercial shops in the area as well.

The historical and anecdotal data collected by Candec revealed that the property has only ever been used for residential purposes. It was also determined that the historical and current uses of the vicinal properties had a low risk of causing adverse impacts to the soil and groundwater conditions at the subject property.

Based on the data that has been collated, it has been concluded that there is unlikely to be a condition on the subject property that constitutes a significant environmental liability. It has also been concluded that a phase two assessment of the property is not necessary at this time.

This assessment and the resulting report have been executed by personnel with Candec Engineering Consultants Inc. who are qualified environmental engineers, and who possess the expertise to carry out the scope of work that was requested on this occasion. The assessment was directed and reviewed by a ‘qualified person’ as designated by the MOECC. We warrant that it has been executed in a manner that is consistent with the standards of the industry.



Property Location Aerial Photograph (a)



Property Location Aerial Photograph (b)

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Candec Engineering Consultants Inc.
consulting engineers and environmental scientists

January 22, 2018

Bloomfield Homes
30 Pennsylvania Avenue, Unit No. 1
Concord, Ontario
L4K 4A5

Attention: Mr. Selva Chelliah

Re: 5219 Upper Middle Road, Burlington, Ontario
Our Reference Number: 17-1521

Dear Sir;

1.0 INTRODUCTION

In accordance with your instructions, **Candec Engineering Consultants Limited** (Candec) has performed an assessment of the property located at 5219 Upper Middle Road.

1.1 Phase One Property Information

The municipal address that has been applied to the property is as follows;

5219 Upper Middle Road, Burlington, Ontario L7L 0J1

It is legally described as follows;

Part of Lot 4, Concession 1, South of Dundas Street; as in 646694; T/W 646694, City of Burlington

PIN: 07184 - 0009 (LT)

A plan of survey describing the boundaries of the property is included with this report

as Appendix F.

It has an area of approximately 1.25acres, with an approximate 120m frontage on Upper Middle Road. Authorization to proceed with the assessment was given by Mr. Selva Chelliah, the authorized representative of the owner of the property, with offices located at 30 Pennsylvania Avenue, Unit 1, Concord, Ontario, L4K 4A5.

2.0 SCOPE OF INVESTIGATION

The protocols governing the execution of phase one environmental site assessments are detailed in Ontario Regulation 153/04. As such this assessment has been conducted in accordance with the Regulation. It is understood that plans are being drafted to redevelop the property for use as a small residential subdivision.

The assessment that has been carried out is intended to determine whether the past or current use of the subject property or any of the properties within the study area is likely to have created a condition on the portion of the subject property.

This assessment constitutes a phase one environmental site assessment, in which the components of a phase one assessment has been carried out in order to identify any potentially contaminating activities on the subject property and any such activities within the study area that have the likelihood of adversely impacting the subject property.

3.0 RECORDS REVIEW

3.1 General

3.1.1 Phase One Study Area Determination

A phase one study area, having a radius of 250m beyond the boundaries of the phase one property, was selected. The land usages further to the north, south, east and west are the same as is included in the study area that has been selected. None of the properties immediately beyond have activities that would warrant their inclusion in the study area. Therefore, there is no reasonable basis on which conclude that a larger study area is warranted.

3.1.2 First Developed Use Determination

The approach that has been adopted in determining the date or period in which the property was first developed for use assumes that a developable use pertains to the construction or erection of structures and the alteration of the ground surface that will permit the property to be used as a residence or for some commercial or industrial enterprise. In this regard, non-descript agricultural utilization is not considered a use for which the property has been developed.

There is a residential dwelling located on the property. The documents that have been collated and reviewed for the purposes of this assessment reveal that the property was developed between 1974 and 1988 for residential use. Its use has remained unchanged since that time.

3.1.3 Fire Insurance Plans

Fire insurance plans were not available for the area in which the subject property is located.

3.1.4 Chain of Title

The currently registered owner is Laura Ann Reid, who acquired the complete ownership on August 12, 2015 from the Stojanovich Family. A complete chain of title is presented in table 1.

Ownership of the property was deemed to be of no significance in relation to the purpose of the assessment given that the property has never been developed previously other than its current use as a homestead for residential purposes.

As such, we are of the opinion that the information that has been collated and reviewed as part of the assessment process, is adequate to satisfy the purpose of the assessment in relation to environmental impact, given that historical property ownership and uses have been established from other sources of information which are presented in this report.

3.1.5 Environmental & Related Reports

It is our understanding that an environmental site assessment of the property was never carried out previously. As such, an environmental site assessment report was not reviewed.

A geotechnical investigation was carried out previously. The field work was comprised of five boreholes that were drilled to depths that ranged to 6.0m.

Apart from a surface layer of top soil, no fill material was encountered in any of the boreholes. The undisturbed soil strata are situated immediately below this surface.

The uppermost stratum of soil profile below the top soil is comprised of approximately 900mm of reddish clayey sandy silt loam over native clayey sandy silt.

Weathered shale was encountered at approximately 3.0m depth in all the boreholes and extends beyond the depth at which boreholes were terminated. All boreholes remained open and dry; no ground water was observed in any of the boreholes at the end of the drilling work.

The insitu moisture content of the sandy silt soil generally was between 9% and 12%.

A groundwater table was not encountered in the boreholes. However, there were water bearing lenses encountered at depths that ranged from 3.1m to 3.8m below the ground surface. This tended to coincide with the interface between the mineral soil and the shale bedrock.

3.2 Environmental Information Sources

In order to compile the land use history and the development of the neighbouring sites, several sources of information were investigated. These sources and the information that was collated are summarized below.

3.2.1 Public Records

A Freedom of Information request was submitted to the MOE. The request was made in relation to any environmental concerns regarding the subject property for all years for which their records are available. The response that was received informed that they had no records pertaining to the subject property based on the search parameters that were provided.

A request was submitted to the Technical Standards and Safety Authority to review their data base for any information relating to the subject property. The response that was received informed that they had not records pertaining to the subject property.

In addition, information in a series of databases and publications were reviewed. The results are summarized below.

(a) PCB Storage Sites

Neither the National nor Provincial PCB registries list the subject property as a site for the storage of polychlorinated biphenyls.

(b) The MOE Waste Disposal Site Inventory (1991)

The MOE did not list the subject property as being an active or closed waste disposal site, and there are no such waste disposal sites identified within a 250m radius of the subject.

(c) Inventory of Coal Gasification Plant Waste Sites in Ontario (1987)

The available records do not list the subject property as the site of a former coal gasification plant.

(d) MOE Database of Registered Waste Generators (1996)

The MOE does not list the subject property as a registered generator of subject waste pursuant to Ontario Regulation 347. The Corpus Christi Secondary School to the south and downgradient of the subject property is listed as such. It is not expected that the wastes that are generated there will have any impact on the soil and ground water conditions at the subject property.

(e) Certificates of Approval (Air)

A certificate of approval for discharge into the air has never been issued to the subject property.

(f) Fuel Storage Tanks

A fuel storage tank has not been known to be present on the subject property. None of the properties that border the subject property has a fuel storage tank either.

(g) Scott's Manufacturing Directory

This database does not list the property as the location of a manufacturing enterprise. In addition, there are no such enterprises on the properties within the 250m radius study area.

(h) Spills

There have been no spills at the subject property.

3.3 Physical Setting Sources

The land use history of the subject property and surrounding properties was reviewed in the previous phase one ESA report. The following comments are supplemental to the relevant section of that report.

3.3.1 Aerial Photographs – 1934, 1974, 1988 & 2004

Aerial photographs dating back to 1934 were available for review. They reveal that there has only been a residential dwelling on the subject property. Areas surrounding it have either been undeveloped, used for residential purposes or institutional purposes.

3.3.2 Topography, Hydrology, Geology

A 1985 topographic map for was reviewed. The local topography appears to slope downward to the south and west on the phase one ESA property. Globally, the ground surface also appears to slope downward to the south and west of the phase one ESA property. This reflects the conditions that have been observed at the subject property and its vicinity recently. There are no bodies of water at the subject property. However, The Bronte River is located approximately 1km to the north, and there is a storm water management pond on the adjacent property to the south

Hydraulically, it is expected that the groundwater regime will slope downward to the south. Given that the soil appears to predominantly fine grained and cohesive, it is expected that vertical and horizontal permeability and percolation rates will be relatively low, likely less than $1x10^{-6}$ cm/sec.

The geology of the subject property is expected to be characterized by Halton Till (Ontario – Erie Lobe). This deposit is predominantly a silt and silty clay matrix. The soil matrix is underlain by Upper Ordovician shale, limestone, dolostone and siltstone of the Queenston Formation. Bedrock is expected to be located at a depth of approximately 6m to 10m below the ground surface.

3.3.3 Fill Materials

There was no visible indication that fill materials were placed on the property to achieve the topography that currently exists. No noticeable grade changes were recorded during the site reconnaissance. As such it appears unlikely that any fill has been imported to the property. A geotechnical investigation that was carried out at the property did not reveal the presence of fill strata.

3.3.4 Water Bodies and Areas of Natural Significance

The property is in a highly developed are of the City of Burlington. Bronte Creek is located to the north and Lake Ontario is located to the south of the subject property, both sufficiently far away such that there are unlikely to be proximity restrictions placed on the development construction.

3.3.5 Well Records

The data contained in the WWIS reveals that there was a domestic water supply well located in the north central region of the property. However, these records also reveal that the well is no longer in use and has probably been abandoned. During the site visit made to the property there no visible evidence that the well was still functional. There are two other wells within 250m of the property. Neither of these is used to supplement the potable water supply for the municipality or region governments.

3.4 Site Operating Records

The property has only ever been used for residential purposes. Given that it was never used for a commercial or industrial enterprise, no records regarding such operations were available for review as part of this assessment.

4.0 INTERVIEWS

At the time of the site visit, no occupant of the property was present to be interviewed although the property did appear to be occupied

A telephone interview was conducted with Mr. Selva Chelliah, a representative of the owner. He informed that he was unaware of any condition on site or off site that was of environmental significance.

Mr. Scott Gowan of the City of Burlington was interviewed, and while he had no direct knowledge of the history of the subject property or the area in which it was located, he provided some historical aerial photographs from which some historical land use information and landform data were extracted. He also informed that the area in which the property is located has always been zoned for residential purposes.

5.0 SITE RECONNAISSANCE

5.1 General Requirements

A site reconnaissance was conducted of the subject property by Messrs. Bernard Moore and Amir Molavi of Candec Engineering Consultants Inc. The weather was moderate, overcast and windy on the first occasion and overcast and cold on the latter.

5.2 Specific Observations

There is a house and a detached garage on the property; the exterior ground surface is covered with sod, trees and architecturally appointed vegetation. Asphalt concrete pavements afford access for vehicular traffic.

The property was examined for visual or olfactory indications of potential issues of

environmental concern.

No air exhaust stacks are situated on the property. There was no accumulated water on the property. There was no visible or olfactory evidence that the ground surface had been adversely impacted by waste water discharges in the past.

No staining or markings were observed on the ground surface that suggested there had been a spill on a liquid that had the potential to impact the environment adversely.

No activities were occurring at the subject property or in the immediate vicinity of the property at the time of the site inspection that was likely to generate significant volumes of dust. No dust plumes were noted for the duration of the time spent on site during the site visit.

No visible evidence was noted that suggests that an underground storage tank is present on the property. An aboveground storage tank is not present in the basement of the house or in the detached garage. No infrastructure was observed that suggested an underground or above-ground storage tank for fuel had been previously located in either of these two buildings.

The property is not being used for any of the activities described in Clause 32(1)(b) of the Regulation. Consequently, it is not considered an 'enhanced investigation property' based on current utilization.

5.3 Written description of investigations outside the phase one property

The property and the entire phase one study area is in a highly developed area of the City of Burlington that is not known to be or designated as being environmentally or ecologically sensitive. There is a storm water retention pond immediately to the south of the property which may result in some restriction being placed on development construction activity at the property.

The phase one study area was reconnoitered to identify and examine the nature of the activities being conducted at the various premises that were located within it. These observations were supplemented with the data extracted from the data bases that were accessed.

Apart from a catholic school, all the properties in the phase one study area that are developed are used for residential purposes. The Corpus Christi Catholic Secondary School is located on the east side of Upper Middle Road, opposite the subject property.

6.0 REVIEW AND EVALUATION OF INFORMATION

6.1 Current and Past Use

The subject property was first developed in mid- to late 1900s. The house and detached garage that were built at the time are in existence currently. The use of the property then and now remains residential. The property is part of a residential area that is referred to as the Orchard that is bound by Upper Middle Road on the south, Bronte Park on the east, Appleby Road, on the West and Dundas Street on the north. As such it sits at the extreme south end of this area.

The area received its name reference from the fact that since the early 1900s, several family farms existed throughout the area, most fronting on Dundas Street, producing vegetable and fruit, specifically apples. The subject area was one of the last family farms to be used for apples; this usage ended in early 1970s in the lead up to Burlington receiving its charter to become a city in the late 1970s.

Given this timeframe, it is not expected that pesticides will be an issue of concern because large-scale mechanized agriculture, supported by the use of environmentally harmful pesticides had not yet been introduced to farming operations there.

6.2 Potentially Contaminating Activities

The data that has been collated reveals no evidence to suggest that any contaminating or potentially contaminating activities have been carried out at the subject property or on any of the neighbouring properties.

None of the activities that have been carried out on the surrounding properties appear likely to adversely impact the subject property.

6.3 Areas of Potential Environmental Concern (APEC)

The information that forms the basis for this conclusion is contained in the documents obtained from the EcoLog ERIS report and are also based on observations made during a reconnaissance of the properties within the phase one study area by Candec personnel and anecdotal information collated during interviews that were conducted by Candec personnel.

On the basis of this revelation, it is concluded that there are no areas of potential environmental concern on the subject property.

6.4 Conceptual Site Model *(refer to figure in the appendices)*

A phase one study area, centred at the subject property, and having a radius of 250m beyond its borders was selected. Areal groundwater flow is expected to be to the south and south east. Most of the properties within the study area are used for residential purposes. There is a storm water management pond on the adjacent property to the south.

There are buried services on the property relating to the connections for sanitary sewerage (possibly a leaching bed and septic tank) and potable water supply. These connections are likely to the north and east respectively and are not considered worthy of concern relating to potential avenues for contaminant migration. There is a storm water management storage pond on the neighbouring property to the south, and the Bronte River is located approximately 1km to the north of the property.

A series of five boreholes were drilled during the course of a geotechnical investigation that was carried out recently on the property. The soil profile within a depth of 6m is comprised of reddish clayey sandy silt loam over undisturbed clayey sandy silt.

Weathered shale was encountered at approximately 3.0m depth in all the boreholes and extends beyond the depth at which boreholes were terminated. All boreholes remained open and dry; no ground water was observed in any of the boreholes at the end of the drilling work.

The insitu moisture content of the sandy silt soil generally was between 9% and 12%.

A groundwater table was not encountered in the boreholes. However, there were water bearing lenses encountered at depths that ranged from 3.1m to 3.8m below the ground surface. This tended to coincide with the interface between the mineral soil and the shale bedrock

None of the samples exhibited any physical evidence of the presence of chemical contamination

7.0 CONCUSION - ENVIRONMENTAL ASSESSMENT

Based on the data that was collated, the following is known:

- There are no underground or above-ground storage tanks at the property;
- The property has only ever been used for residential purposes, and does not appear to have been used for any purpose could have a significantly adverse impact on the subsoil conditions at the subject property;
- No environmental site assessments have been carried out previously on the subject property;
- No potentially contaminating activities (PCAs) were known to ever be carried out on the property;
- None of the properties in the 250m radius study area has been used in a manner that would create areas of potential environmental concern (APEC) on the phase one property;
- All the neighbouring properties and most of the properties within a 250m study area have only been used for residential purposes;
- The subject property, or none of the properties within the study area, is listed as generators of registered waste.

Given these considerations, it is concluded that there is no basis for conducting a phase two assessment, and it is expected that the soil and ground water conditions will comply with the residential and land use criteria set out in Table 3 of *Soil, Groundwater and Sediment for Use under Part XVI of the Environmental Protection Act*.

This report may be used to support the preparation and filing of a record of site condition.

8.0 QUALIFICATIONS

This assessment and the resulting report have been executed by personnel with Candec Engineering Consultants Inc. who are qualified environmental engineers, and who possess the expertise to carry out the scope of work that was requested on this occasion. We warrant that it has been executed in a manner that is consistent with the standards of the industry.

The data collation, site inspections and interviews were conducted by Mr. Bernard F. Moore, P. Eng., who possesses thirty-one years of experience in the execution of environmental site assessments.

The assessment was directed and reviewed by Mr. Bernard Moore, P. Eng., a ‘qualified person’ as designated by the MOECC to perform phase 1 and 2 ESAs as well as risk

assessments. He possesses a graduate degree in engineering. He has performed or supervised the performance of over 2500 environmental site assessments and risk assessments.

9.0 GENERAL CONSIDERATIONS AND LIMITATIONS

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:

   (a) The Scope of Services;
   (b) Time and Budgetary limitations as described in our Contract; and,
   (c) The Limitations stated herein.

2. No other warranties or representatives, either expressed or implied are made as to the professional services provided under the terms of our Contract, or the conclusions presented.

3. The conclusions presented in this report were based, in part, on visual observations of the site and the attendant structures. Our conclusions cannot and are not extended to include those portions of the site or structures which were not reasonably available, in Candec Engineering Consultants Inc.'s opinion, for direct observation.

4. The environmental conditions at the site were assessed, within the limitations set out above, having due regard for applicable environmental applications as of the date of the inspection. A review of compliance by past owners or occupants of the site with any applicable local, provincial, or federal by-laws, orders-in-council, legislative enactments, and regulations was not performed.

5. The site history research included obtaining information from third parties and employees or agents of the owner. No attempt has been made to verify the accuracy of any information provided, unless specifically noted in our report.

6. Where testing was performed, it was carried out in accordance with the terms of our contract providing for testing. Other substances, or different quantities of substances for, may be present on site and may be revealed by different or other testing not provided for in our contract.

7. Because of the limitations referred to above, different environmental conditions from those stated in our report may exist. Should such difference conditions be

encountered, Candec Engineering Consultants Inc. must be notified in order that we may determine if modifications to the conclusions in the report are necessary.

8. The utilization of Candec Engineering Consultants Inc.'s services during the implementation of any remedial measures will allow Candec Engineering Consultants Inc. to observe compliance with the conclusions and recommendations contained in the report. Candec Engineering Consultants Inc.'s involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.

9. This report is for the sole use of First Urban Developments Inc., its barristers and solicitors unless expressly stated otherwise in the report or contract. Any use which any other third party makes of the report, in whole or in part, or any reliance thereon or decisions made based on any information or conclusions in the report is the sole responsibility of such third party. Candec Engineering Consultants Inc. accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or decisions made in reliance on the report or anything set out therein.

10. The discussions and recommendations presented in this report are intended for the sole guidance of the client named along with their architectural and structural design consultants. It should not be relied upon for any other purpose. Unauthorised parties who use this report do so totally at their own risk.

11. The fact that localised variations in the subsurface conditions may be present between and beyond the boreholes and that those conditions may be significantly different from the general description provided for design purposes should be understood. This applies particularly to the thickness and consistency of the soil strata. Contractors should make their own interpretation of the factual borehole and sample test results detailed in this report or contact us for assistance, and should draw their own conclusions as to the effect of subsurface conditions on work below ground level.

12. It is strongly urged that Candec be contacted to provide assistance in the interpretation of the borehole records by anyone undertaking work on or below the ground surface at this site prior to this work being carried out.

13. This report is not to be given to any third party for any purpose whatsoever without the written permission of Candec Engineering Consultants Inc.

Yours truly,
CANDEC ENGINEERING CONSULTANTS INC.

LICENSED PROFESSIONAL ENGINEER
BERNARD MOORE
PROVINCE OF ONTARIO

Bernard Moore, P. Eng., M. Eng.
Principal

References:

1. Ontario Regulation 153/04; Soil, Groundwater and Sediment for Use under Part XVI of the Environmental Protection Act.

2. Ontario Regulation 511/09; made under the Environmental Protection Act, amending O. Reg. 153/04 (Records of Site Condition – Part XV.1 of the Act).

3. Handbook of PCB in Electrical Equipment; Ministry of the Environment; 1984.

4. Ontario Regulation 278/05 made under the Occupational Health and Safety Act; Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations.

5. Map 2544, Bedrock Geology of Southern Ontario, Southern Sheet; Ministry of Northern Development and Mines.

6. Map 2556, Quaternary Geology of Ontario, Southern Sheet; Ministry of Northern Development and Mines.

7. Ontario Geological Survey Preliminary Map P. 2204, Geological Series, Quaternary Geology, Toronto and Surrounding Area; Ministry of Natural Resources.

8. Report of the Geotechnical Investigation of the property at 5219 Upper Middle Road, Burlington, Ontario; prepared by Candec Engineering Consultants Inc.; dated April 28, 2017

Table 1
TABLE OF CURRENT AND PAST USES OF THE PHASE ONE PROPERTY

Part of Lot 4, Concession 1, South of Dundas Street; as in 646694; T/W 646694, City of Burlington

PIN: 07184 - 0009 (LT)
Address: 5219 Upper Middle Road, Burlington, Ontario

YEAR	NAME OF OWNER	DESCRIPTION OF PROPERTY USE	PROPERTY USE	OTHER OBSERVATIONS (AERIAL PHOTOS, FIP, DIRECTORIES ETC.)
Prior to 1816	The Crown	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1816	Christopher Teiple	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1818	John Fluelling	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1833	Benjamin Schauk	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1835	George Coon	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1846	Benjamin Schauk	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1847	Henry Harrison	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1849	Charles Harrison	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1886	John Emerson	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1912	Thomas & James Emerson	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1928	Florence Barker	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing
1951	Beatrice Mabel Brown	Unattended & unused greenbelt lands	Agricultural or other Use	Land titles, no directory listing, 1934 AP show the property vacant

1986	Leona & Roy Stojanovich	Utilization as a homestead with house and detached garage present	Residential use	Land titles, 1974 AP show house present on-site in current location, directory listing
2015	Leona Stojanovich & Laura Reid	Utilization as a homestead with house and detached garage present	Residential use	Land titles, 1974, 1988, 2004 APs show house present on-site in current location, Directory listing
2017	Upper Middle Road Enclave Inc.	Utilization as a homestead with house and detached garage present	Residential use	Land titles, 1974, 1988, 2004 APs show house present on-site in current location



Note: All properties in the study area are used for residential purposes except one that is the location of secondary school

Candec Engineering Consultants Inc.
consulting engineers and environmental scientists

Conceptial Site Plan – Phase One Environmental Site Assessment
5219 Upper Middle Road, Burligton. Ontario

Scale: 1:20,000	**Date:** December 4, 2017	**Figure No.:** CSP -1

Appendix A

Photos



Photo No. 1: Panorama of the front of the property



Photo No. 2: Western end of the property and the area to the west; storm water retention pond.

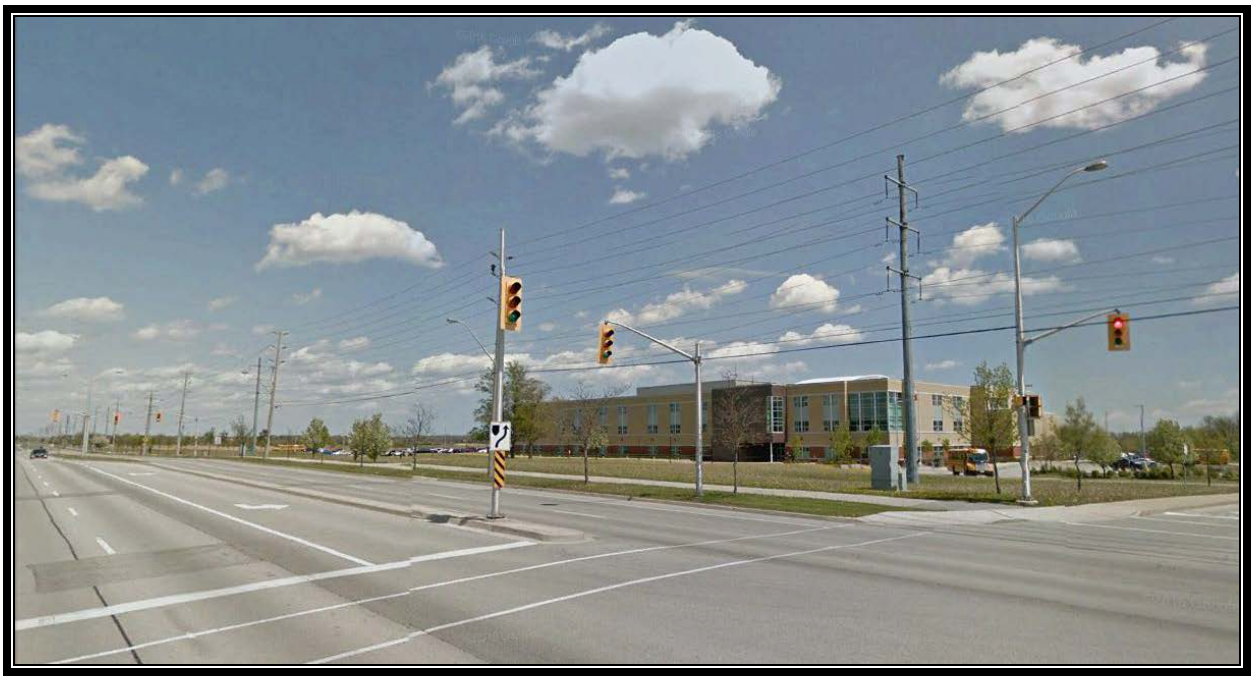


Photo No. 3: School to the east along with undeveloped lands to the south and east

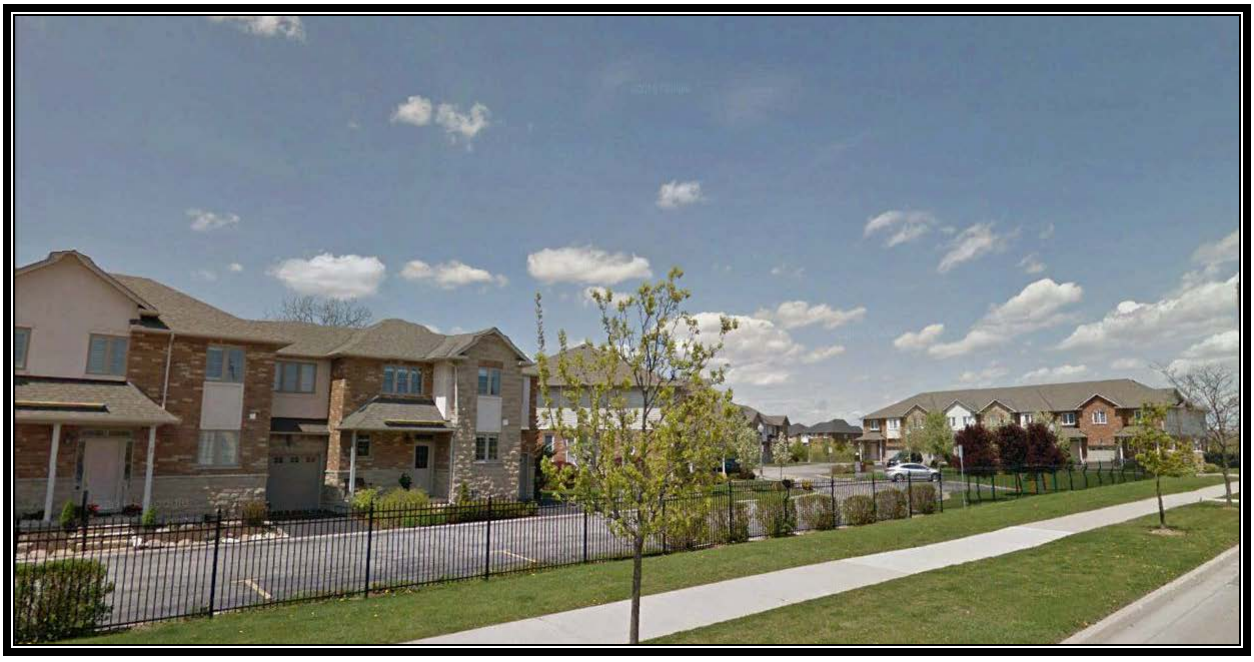


Photo No. 4: Residential subdivisions to the west and north



Photo No. 5: Heating Infrastructure in the basement



Photo No. 6: Hot Water Heater and connected piping

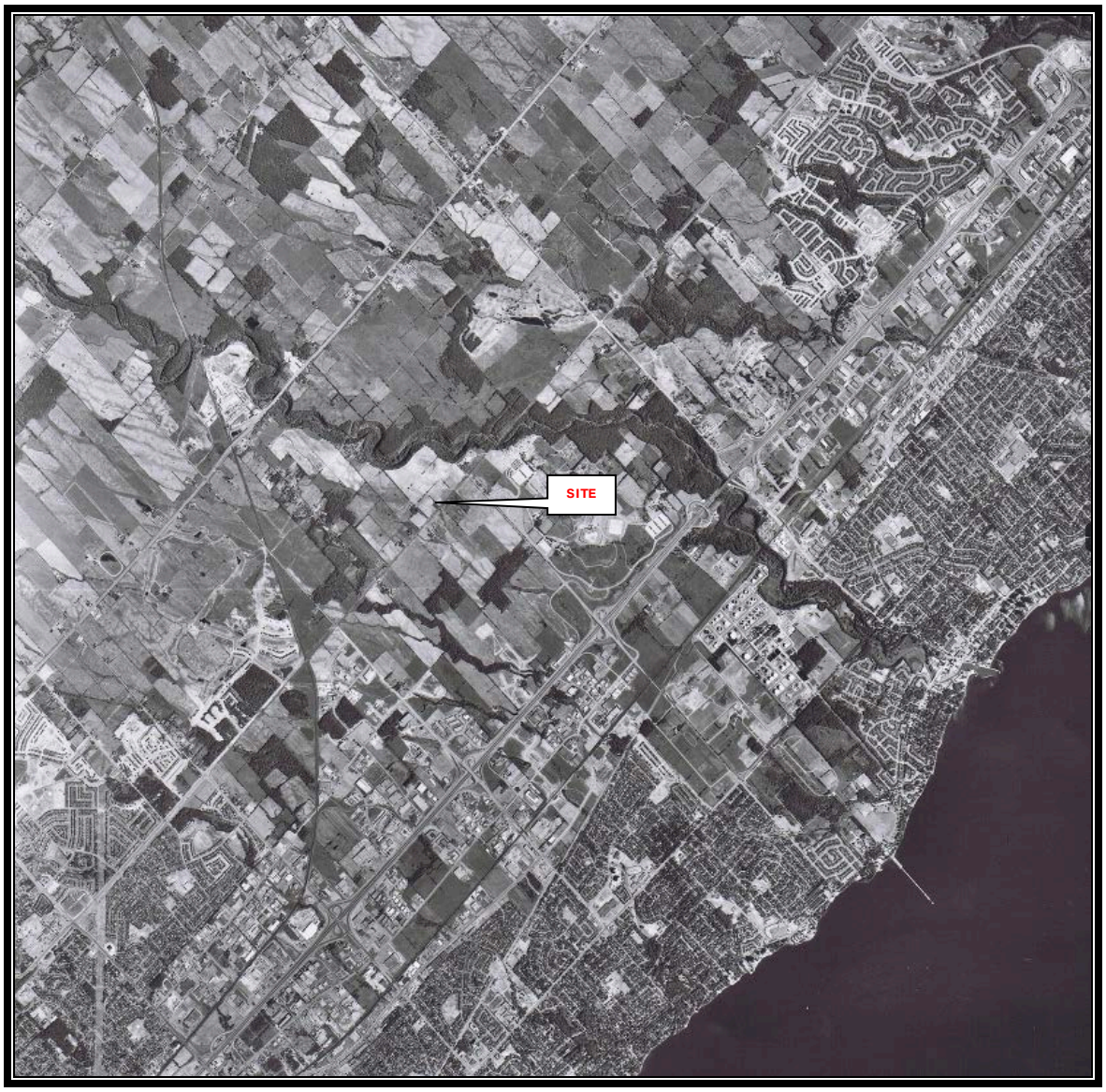
Appendix B

Aerial Photographs
(1974, 1988 & 2004)



2004 Aerial Photograph

5219 Upper Middle Road, Burlington, Ontario
Candec Engineering Consultants Inc.
January 16, 2018



1988 Aerial Photograph



1974 Aerial Photograph

Appendix C

Property Title

PROPERTY DESCRIPTION: PT LT 4 , CON 1 SOUTH OF DUNDAS STREET , AS IN 646694; T/W 646694; CITY OF BURLINGTON

PROPERTY REMARKS:

ESTATE/QUALIFIER:
FEE SIMPLE
LT CONVERSION QUALIFIED

RECENTLY:
FIRST CONVERSION FROM BOOK

PIN CREATION DATE:
1996/05/27

OWNERS' NAMES
REID, LAURA ANN

CAPACITY SHARE

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
EFFECTIVE 2000/07/29 THE NOTATION OF THE "BLOCK IMPLEMENTATION DATE" OF 1996/05/27 ON THIS PIN						
WAS REPLACED WITH THE "PIN CREATION DATE" OF 1996/05/27						
*** PRINTOUT INCLUDES ALL DOCUMENT TYPES AND DELETED INSTRUMENTS SINCE: 1996/05/24 ***						
***SUBJECT, ON FIRST REGISTRATION UNDER THE LAND TITLES ACT, TO:*						
*** SUBSECTION 44(1) OF THE LAND TITLES ACT, EXCEPT PARAGRAPH 11, PARAGRAPH 14, PROVINCIAL SUCCESSION DUTIES **						
*** AND ESCHEATS OR FORFEITURE TO THE CROWN.*						
*** THE RIGHTS OF ANY PERSON WHO WOULD, BUT FOR THE LAND TITLES ACT, BE ENTITLED TO THE LAND OR ANY PART OF*						
*** IT THROUGH LENGTH OF ADVERSE POSSESSION, PRESCRIPTION, MISDESCRIPTION OR BOUNDARIES SETTLED BY*						
*** CONVENTION.*						
*** ANY LEASE TO WHICH THE SUBSECTION 70(2) OF THE REGISTRY ACT APPLIES.*						
***DATE OF CONVERSION TO LAND TITLES: 1996/05/27 ***						
119980	1961/01/25	BYLAW				C
646694	1986/08/01	TRANSFER		*** COMPLETELY DELETED ***	STOJANOVICH, LEONA HELEN STOJANOVICH, ROY	
744042	1990/05/15	AGREEMENT			THE CORPORATION OF THE CITY OF BURLINGTON	C
774233	1991/10/30	CHARGE		*** COMPLETELY DELETED ***	THE BANK OF NOVA SCOTIA	
H710777	1997/11/18	CHARGE		*** COMPLETELY DELETED *** STOJANOVICH, LEONA HELEN	BANK OF MONTREAL	

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

REG. NUM.	DATE	INSTRUMENT TYPE	AMOUNT	PARTIES FROM	PARTIES TO	CERT/ CHKD
				STOJANOVICH, ROY		
H715865	1997/12/18	DISCH OF CHARGE		*** COMPLETELY DELETED *** THE BANK OF NOVA SCOTIA		
	REMARKS: RE: 774233					
20R14043	2001/04/09	PLAN REFERENCE				C
HR448663	2006/01/23	CHARGE		*** COMPLETELY DELETED *** STOJANOVICH, LEONA HELEN STOJANOVICH, ROY	BANK OF MONTREAL	
HR742140	2009/03/31	DISCH OF CHARGE		*** COMPLETELY DELETED *** BANK OF MONTREAL		
	REMARKS: RE: H710777					
HR895390	2010/12/08	CHARGE		*** COMPLETELY DELETED *** STOJANOVICH, LEONA HELEN STOJANOVICH, ROY	BANK OF MONTREAL	
HR914273	2011/03/16	DISCH OF CHARGE		*** COMPLETELY DELETED *** BANK OF MONTREAL		
	REMARKS: HR448663.					
HR975554	2011/11/14	APL OF SURV-LAND		*** COMPLETELY DELETED *** STOJANOVICH, ROY	STOJANOVICH, LEONA HELEN	
HR1241932	2015/01/19	TRANSFER	$2	STOJANOVICH, LEONA HELEN	STOJANOVICH, LEONA HELEN REID, LAURA ANN	C
HR1289284	2015/08/10	DISCH OF CHARGE		*** COMPLETELY DELETED *** BANK OF MONTREAL		
	REMARKS: HR895390.					
HR1290057	2015/08/12	APL OF SURV-LAND		STOJANOVICH, LEONA HELEN	REID, LAURA ANN	C

Appendix D

Freedom of Information Request Form

Ontario Ministry of the Environment

Freedom of Information Request

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

Requester Data	For Ministry Use Only
Name, Company Name, Mailing Address and Email Address of Requester Bernard Moore Candec Engineering Consultants Inc. 11-25 West Beaver Creek Road Richmond Hill, Ont. L4B 1K2 **Email address:** Candecon@aol.com	FOI Request No. / Date Request Received Fee Paid ☐ ACCT ☐ CHQ ☐ VISA/MC ☐ CASH
Telephone/Fax Nos. Tel. 9057079272 Fax 9057079273 Your Project/Reference No. 17-1521 Signature/Print /Name of Requester Bernard Moore	☐ CNR ☐ ER ☐ NOR ☐ SWR ☐ WCR ☐ SAC ☐ IEB ☐ EAA ☐ EMR ☐ SWA

Request Parameters

Municipal Address / Lot, Concession, Geographic Township **(Municipal address essential for cities, towns or regions)** 5211 Upper Middle Road, Burlington, Ont.

Present Property Owner(s) and Date(s) of Ownership

Previous Property Owner(s) and Date(s) of Ownership

Present/Previous Tenant(s),(if applicable)

Search Parameters *Files older than 2 years may require $60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.*	**Specify Year(s) Requested**
Environmental concerns (General correspondence, occurrence reports, abatement)	All Years
Orders	All Years
Spills	All Years
Investigations/prosecutions ➤ Owner **AND** tenant information must be provided	
Waste Generator number/classes	All Years

Certificates of Approval ➤ Proponent information must be provided

1985 and prior records are searched manually. **Search fees in excess of $300.00** could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). **If supporting documents are also required, mark SD box** and specify type e.g. maps, plans, reports, etc.

	SD	**Specify Year(s) Requested**
air - *emissions*		All Years
water - *mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)*		
sewage - *sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations*		
waste water - *industrial discharges*		All Years
waste sites - *disposal, landfill sites, transfer stations, processing sites, incinerator* sites		All Years
waste systems - *PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste*		All Years
pesticides - *licenses*		

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

Appendix E

EcoLog ERIS Report

ENVIRONMENTAL RISK INFORMATION SERVICES

DATABASE REPORT

Project Property:	*First Urban* *5219 Uppre Middle Road* *Burlington ON*
Project No:	
Report Type:	*Standard Express Report*
Order No:	*20161003125*
Requested by:	*Manning-Moore Associates Llc*
Date Completed:	*October 3, 2016*

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

www.erisinfo.com

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Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

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

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Executive Summary

Property Information:

Project Property:		*First Urban* *5219 Uppre Middle Road Burlington ON*
Project No:		
Coordinates:		
	Latitude:	*43.399504*
	Longitude:	*-79.784462*
	UTM Northing:	*4,805,898.01*
	UTM Easting:	*598,432.60*
	UTM Zone:	*UTM Zone 17T*
Elevation:		*466 FT* *142.00 M*

Order Information:

Order No:	*20161003125*
Date Requested:	*October 3, 2016*
Requested by:	*Manning-Moore Associates Llc*
Report Type:	*Standard Express Report*

Historical/Products:

Aerial Photographs	*National Collection - Digital (PDF)*

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	Total
AAGR	*Abandoned Aggregate Inventory*	Y	0	0	0
AGR	*Aggregate Inventory*	Y	0	0	0
AMIS	*Abandoned Mine Information System*	Y	0	0	0
ANDR	*Anderson's Waste Disposal Sites*	Y	0	0	0
AUWR	*Automobile Wrecking & Supplies*	Y	0	0	0
BORE	*Borehole*	Y	0	0	0
CA	*Certificates of Approval*	Y	0	2	2
CFOT	*Commercial Fuel Oil Tanks*	Y	0	0	0
CHEM	*Chemical Register*	Y	0	0	0
COAL	*Inventory of Coal Gasification Plants and Coal Tar Sites*	Y	0	0	0
CONV	*Compliance and Convictions*	Y	0	0	0
CPU	*Certificates of Property Use*	Y	0	0	0
DRL	*Drill Hole Database*	Y	0	0	0
EASR	*Environmental Activity and Sector Registry*	Y	0	0	0
EBR	*Environmental Registry*	Y	0	0	0
ECA	*Environmental Compliance Approval*	Y	0	0	0
EEM	*Environmental Effects Monitoring*	Y	0	0	0
EHS	*ERIS Historical Searches*	Y	0	0	0
EIIS	*Environmental Issues Inventory System*	Y	0	0	0
EMHE	*Emergency Management Historical Event*	Y	0	0	0
EXP	*List of TSSA Expired Facilities*	Y	0	0	0
FCON	*Federal Convictions*	Y	0	0	0
FCS	*Contaminated Sites on Federal Land*	Y	0	0	0
FOFT	*Fisheries & Oceans Fuel Tanks*	Y	0	0	0
FST	*Fuel Storage Tank*	Y	0	0	0
FSTH	*Fuel Storage Tank - Historic*	Y	0	0	0
GEN	*Ontario Regulation 347 Waste Generators Summary*	Y	0	6	6
GHG	*Greenhouse Gas Emissions from Large Facilities*	Y	0	0	0
HINC	*TSSA Historic Incidents*	Y	0	0	0
IAFT	*Indian & Northern Affairs Fuel Tanks*	Y	0	0	0
INC	*TSSA Incidents*	Y	0	0	0
LIMO	*Landfill Inventory Management Ontario*	Y	0	0	0
MINE	*Canadian Mine Locations*	Y	0	0	0
MNR	*Mineral Occurrences*	Y	0	0	0
NATE	*National Analysis of Trends in Emergencies System (NATES)*	Y	0	0	0
NCPL	*Non-Compliance Reports*	Y	0	0	0

Database	Name	Searched	Project Property	Within 0.25 km	Total
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEBW	National Energy Board Wells	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	0	0
OGW	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	TSSA Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPL	Ontario Spills	Y	0	0	0
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	TSSA Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	3	3
	Total:	0	11	11	

Executive Summary: Site Report Summary - Project Property

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

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

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
1	WWIS		lot 4 con 1 ON	NW/91.8	1.58	11
2	CA	R.M. OF HALTON	ORCHARD RD./UPPER MIDDLE RD. BURLINGTON CITY ON	SSW/146.5	-1.00	12
2	CA		Upper Middle Road and Orchard Road Burlington ON	SSW/146.5	-1.00	12
3	WWIS		lot 5 con 1 ON	WSW/183.9	-1.54	12
4	WWIS		lot 4 con 1 ON	WNW/189.4	1.00	13
5	GEN	Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S/194.5	-2.00	14
5	GEN	Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S/194.5	-2.00	14
5	GEN	Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S/194.5	-2.00	15
5	GEN	Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S/194.5	-2.00	15
5	GEN	Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S/194.5	-2.00	15
6	GEN	Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON	SSW/231.9	-1.28	16

Executive Summary: Summary By Data Source

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 2 CA site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	Address	Direction	Distance (m)	Map Key
	Upper Middle Road and Orchard Road Burlington ON	SSW	146.51	2
R.M. OF HALTON	ORCHARD RD./UPPER MIDDLE RD. BURLINGTON CITY ON	SSW	146.51	2

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-May 2015 has found that there are 6 GEN site(s) within approximately 0.25 kilometers of the project property.

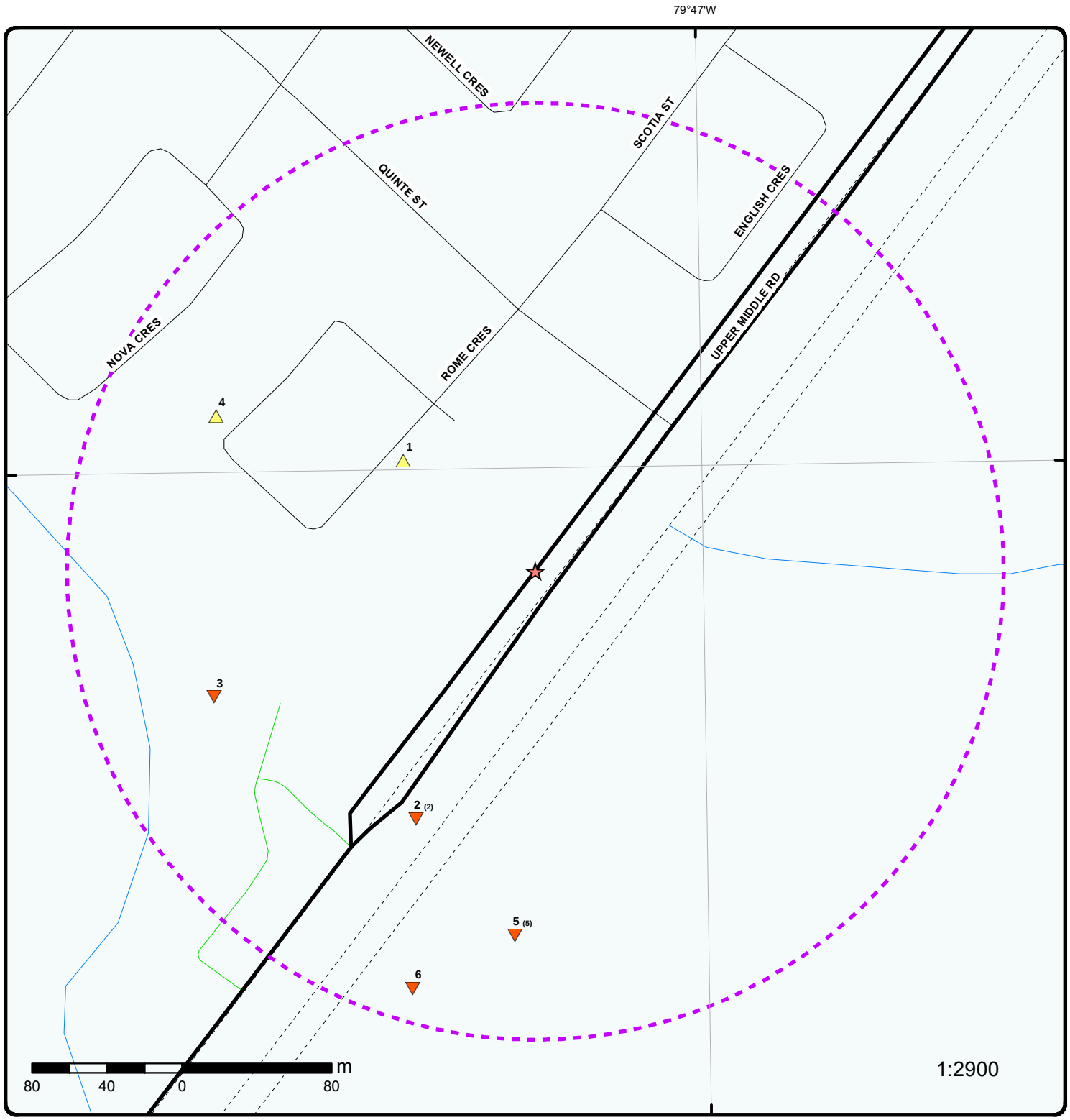
Lower Elevation	Address	Direction	Distance (m)	Map Key
Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S	194.48	5
Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S	194.48	5
Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S	194.48	5
Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S	194.48	5
Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON L7L 0E5	S	194.48	5
Corpus Christi Secondary School	5150 Upper Middle Rd. Burlington ON	SSW	231.90	6

WWIS - Water Well Information System

A search of the WWIS database, dated Jun 30, 2016 has found that there are 3 WWIS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	Direction	Distance (m)	Map Key
	lot 4 con 1 ON	NW	91.77	1
	lot 4 con 1 ON	WNW	189.44	4

Lower Elevation	Address	Direction	Distance (m)	Map Key
	lot 5 con 1 ON	WSW	183.94	3



Map

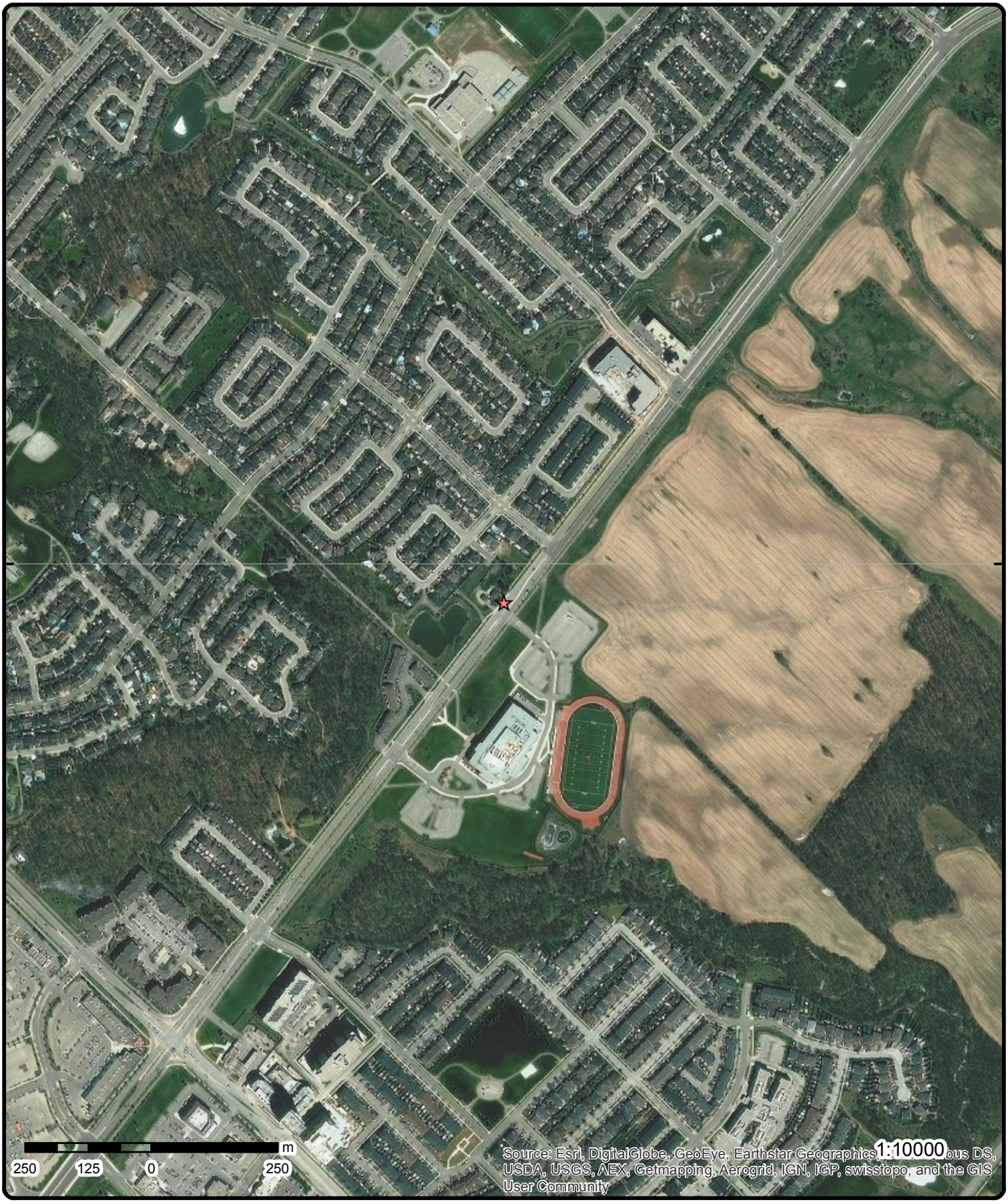
Address: 5219 Uppre Middle Road, Burlington, ON CA
Order No: 20161003125

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

- 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
- Pipelines and Transmission
- National Park
- Provincial or Territorial Park
- Other Park
- Golf Course or Driving Range
- Park or Sports Field
- Other Recreation Area

Source: © 2015 DMTI Spatial Inc.

© Ecolog ERIS Ltd



Aerial

Order No: 20161003125

Address: 5219 Uppre Middle Road, Burlington, ON CA

Source: ESRI World Imagery

© Ecolog ERIS Ltd

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
1	1 of 1	NW/91.8	143.6	lot 4 con 1 ON	WWIS

Well ID:	2809655	**Lot:**	004
Construction Date:		**Concession:**	01
Primary Water Use:	Not Used	**Concession Name:**	DS S
Sec. Water Use:		**Easting NAD83:**	
Final Well Status:	Abandoned-Other	**Northing NAD83:**	
Specific Capacity:		**Zone:**	
Municipality:	BURLINGTON CITY	**UTM Reliability:**	
County:	HALTON		

Bore Hole Information

--	--
Bore Hole ID:	10531828
DP2BR:	
Code OB:	_
Code OB Description:	No formation data
Open Hole:	
Date Completed:	31-JUL-02
Remarks:	
Zone:	17
East 83:	598362.3
North 83:	4805957
UTMRC:	5
UTMRC Description:	margin of error : 100 m - 300 m
Location Method:	gis
Org CS:	
Elevation:	142.81
Elevrc:	
Elevrc Description:	
Location Source Date:	
Source Revision Comment:	
Improvement Location Source:	
Improvement Location Method:	
Supplier Comment:	
Spatial Status:	
--	--

Method of Construction & Well Use

--	--
Method Construction ID:	962809655
Method Construction Code:	A
Method Construction:	Digging
Other Method Construction:	
--	--

Pipe Information

--	--
Pipe ID:	11080398
Casing Number:	1
Comment:	
Alt Name:	
--	--

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
2	1 of 2	SSW/146.5	141.0	R.M. OF HALTON ORCHARD RD./UPPER MIDDLE RD. BURLINGTON CITY ON	CA

Certificate #: 7-0732-97-
Application Year: 97
Issue Date: 8/5/1997
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
2	2 of 2	SSW/146.5	141.0	Upper Middle Road and Orchard Road Burlington ON	CA

Certificate #: 1934-5CRR5Z
Application Year: 02
Issue Date: 8/7/02
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name: 783880 Ontario Limited
Client Address: 427 Montmorency Court
Client City: Hamilton
Client Postal Code: L8K 6K8
Project Description: This application is for the construction of sanitary sewers and appurtenances on Upper Middle Road.
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
3	1 of 1	WSW/183.9	140.5	lot 5 con 1 ON	WWIS

Well ID: 2809604
Construction Date:
Primary Water Use:
Sec. Water Use:
Final Well Status: Abandoned-Other
Specific Capacity:
Municipality: BURLINGTON CITY
County: HALTON

Lot: 005
Concession: 01
Concession Name: DS S
Easting NAD83:
Northing NAD83:
Zone:
UTM Reliability:

Bore Hole Information

-- --
Bore Hole ID: 10531777
DP2BR:
Code OB: _
Code OB Description: No formation data
Open Hole:
Date Completed: 10-JUN-02
Remarks:
Zone: 17
East 83: 598261.3
North 83: 4805831
UTMRC: 5
UTMRC Description: margin of error : 100 m - 300 m
Location Method: gis
Org CS:

Elevation:	140.06
Elevrc:	
Elevrc Description:	
Location Source Date:	
Source Revision Comment:	
Improvement Location Source:	
Improvement Location Method:	
Supplier Comment:	
Spatial Status:	
--	--
Method of Construction & Well Use	
--	--
Method Construction ID:	962809604
Method Construction Code:	0
Method Construction:	Not Known
Other Method Construction:	
--	--
Pipe Information	
--	--
Pipe ID:	11080347
Casing Number:	1
Comment:	
Alt Name:	
--	--

4 **1 of 1** **WNW/189.4** **143.0** **lot 4 con 1 ON** **WWIS**

Well ID:	2809656	**Lot:**	004
Construction Date:		**Concession:**	01
Primary Water Use:	Not Used	**Concession Name:**	DS S
Sec. Water Use:		**Easting NAD83:**	
Final Well Status:	Abandoned-Other	**Northing NAD83:**	
Specific Capacity:		**Zone:**	
Municipality:	BURLINGTON CITY	**UTM Reliability:**	
County:	HALTON		

Bore Hole Information	
--	--
Bore Hole ID:	10531829
DP2BR:	
Code OB:	_
Code OB Description:	No formation data
Open Hole:	
Date Completed:	31-JUL-02
Remarks:	
Zone:	17
East 83:	598262.3
North 83:	4805981
UTMRC:	5
UTMRC Description:	margin of error : 100 m - 300 m
Location Method:	gis
Org CS:	
Elevation:	143.13
Elevrc:	
Elevrc Description:	
Location Source Date:	
Source Revision Comment:	
Improvement Location Source:	
Improvement Location Method:	
Supplier Comment:	
Spatial Status:	
--	--
Method of Construction & Well	

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

Use	
--	--
Method Construction ID:	962809656
Method Construction Code:	A
Method Construction:	Digging
Other Method Construction:	
--	--
Pipe Information	
--	--
Pipe ID:	11080399
Casing Number:	1
Comment:	
Alt Name:	
--	--

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
5	1 of 5	S/194.5	140.0	**Corpus Christi Secondary School** **5150 Upper Middle Rd.** **Burlington ON L7L 0E5**	GEN

Generator #:	ON9435473
Approval Yrs:	As of May 2015
SIC Code:	
SIC Description:	
--- Details ---	
Waste Code:	121
Waste Description:	Alkaline slutions - containing heavy metals
+	
Waste Code:	263
Waste Description:	Misc. waste organic chemicals
+	
Waste Code:	251
Waste Description:	Waste oils/sludges (petroleum based)
+	
Waste Code:	252
Waste Description:	Waste crankcase oils and lubricants
+	
Waste Code:	212
Waste Description:	Aliphatic solvents and residues
+	
Waste Code:	148
Waste Description:	Misc. wastes and inorganic chemicals

Map Key	Number of Records	Direction/ Distance (m)	Elevation (m)	Site	DB
5	2 of 5	S/194.5	140.0	**Corpus Christi Secondary School** **5150 Upper Middle Rd.** **Burlington ON L7L 0E5**	GEN

Generator #:	ON9435473
Approval Yrs:	2009
SIC Code:	611110
SIC Description:	Elementary and Secondary Schools
--- Details ---	
Waste Code:	121
Waste Description:	ALKALINE WASTES - HEAVY METALS
+	
Waste Code:	148
Waste Description:	INORGANIC LABORATORY CHEMICALS
+	
Waste Code:	212
Waste Description:	ALIPHATIC SOLVENTS
+	
Waste Code:	251
Waste Description:	OIL SKIMMINGS & SLUDGES
+	

Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

---

5 **3 of 5** **S/194.5** **140.0** **Corpus Christi Secondary School** **GEN**
5150 Upper Middle Rd.
Burlington ON L7L 0E5

Generator #: ON9435473
Approval Yrs: 2010
SIC Code: 611110
SIC Description: Elementary and Secondary Schools

--- Details ---
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 121
Waste Description: ALKALINE WASTES - HEAVY METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 212
Waste Description: ALIPHATIC SOLVENTS

---

5 **4 of 5** **S/194.5** **140.0** **Corpus Christi Secondary School** **GEN**
5150 Upper Middle Rd.
Burlington ON L7L 0E5

Generator #: ON9435473
Approval Yrs: 2011
SIC Code: 611110
SIC Description: Elementary and Secondary Schools

--- Details ---
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 121
Waste Description: ALKALINE WASTES - HEAVY METALS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 212
Waste Description: ALIPHATIC SOLVENTS

---

5 **5 of 5** **S/194.5** **140.0** **Corpus Christi Secondary School** **GEN**
5150 Upper Middle Rd.
Burlington ON L7L 0E5

Generator #: ON9435473
Approval Yrs: 2012
SIC Code: 611110
SIC Description: Elementary and Secondary Schools

--- Details ---
Waste Code: 252

Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 121
Waste Description: ALKALINE WASTES - HEAVY METALS
+
Waste Code: 212
Waste Description: ALIPHATIC SOLVENTS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

---

6 | ***1 of 1*** | ***SSW/231.9*** | ***140.7*** | ***Corpus Christi Secondary School***
5150 Upper Middle Rd.
Burlington ON | ***GEN***

Generator #: ON9435473
Approval Yrs: 2013
SIC Code: 611110
SIC Description: ELEMENTARY AND SECONDARY SCHOOLS

--- Details ---
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 121
Waste Description: ALKALINE WASTES - HEAVY METALS
+
Waste Code: 212
Waste Description: ALIPHATIC SOLVENTS

Unplottable Summary

Total: 64 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	MATTAMY HOMES LTD.	UPPER MIDDLE RD.N.,PT.LOTS 1&2	BURLINGTON CITY ON	
CA	ROCCA GROUP INC. TANSLEY TOWNHOUSE	UPPER MIDDLE RD.	BURLINGTON CITY ON	
CA	DECARLO CUSTOM HOMES LTD.-LOT 11/CONC. 1	UPPER MIDDLE ROAD	BURLINGTON CITY ON	
CA	BURLINGTON CITY	BLANCHARD DR./UPPER MIDDLE RD.	BURLINGTON CITY ON	
CA	R.M. OF HALTON	UPPER MIDDLE RD.	OAKVILLE TOWN ON	
CA	R.M. OF HALTON UPPER MIDDLE RD.	UPPER MIDDLE RD.	OAKVILLE TOWN ON	
CA	R. M. OF HALTON	UPPER MIDDLE RD.	OAKVILLE TOWN ON	
CA	ROCCA GROUP INC. TANSLEY TOWNHOUSES	UPPER MIDDLE RD.	BURLINGTON CITY ON	
CA	MONARCH CONSTRUCTION LTD. MILLCROFT PH.I	ROAD A UPPER MIDDLE RD. PART 1	BURLINGTON CITY ON	
CA	The Regional Municipality of Halton	Upper Middle Road	Oakville ON	
CA	REG.MUN.OF HALTON	UPPER MIDDLE RD. EASMENT	OAKVILLE ON	
CA	R.M. OF HALTON	UPPER MIDDLE RD. RESERVOIR/PS	OAKVILLE TOWN ON	
CA	STAN VINE CONSTRUCTION TRAFALGAR RD.	RIVER OAKS BLVD. UPPER MIDDLE	OAKVILLE TOWN ON	
CA	N.H.D. DEVELOPMENTS LTD.C/O SORBARA GRP.	UPPER MIDDLE RD. PHASE I	OAKVILLE TOWN ON	
CA	The Regional Municipality of Halton	Upper Middle Road	Oakville ON	
CA	R.M. OF HALTON PHASE 1	UPPER MIDDLE RD.	OAKVILLE TOWN ON	
CA	R.M. OF HALTON	BRONTE RD/REBECCA ST/U.MID.RD.	OAKVILLE TOWN ON	
CA		Sutton Drive from Mainway to Upper Middle Road	Burlington ON	

CA	MONARCH CONSTRUCTION LIMITED	RING RD./UPPER MIDDLE RD.	BURLINGTON CITY ON
CA	R.M. OF HALTON	UPPER MIDDLE RD.	OAKVILLE TOWN ON
CA	R.M. OF HALTON PR-973 WALKER'S LINE	UPPER MIDDLE ROAD	BURLINGTON CITY ON
CA	R.M. OF HALTON	UPPER MIDDLE RD.RESERVOIR & PS	OAKVILLE TOWN ON
CA	R.M. OF HALTON, PUBLIC WORKS DEPT.	UPPER MIDDLE RD. RES. & P.S.	OAKVILLE TOWN ON
CA	CENTRAL CANADA GROCERS INC.	UPPER MIDDLE RD.	BURLINGTON ON
CA	City of Burlington	Upper Middle Rd	Burlington ON
CA	N.H.D. DEVELOP.LTD.C/O THE SORBARA GROUP	UPPER MIDDLE RD. PHASE I	OAKVILLE TOWN ON
CA	BURLINGTON CITY	BLANCHARD DR./UPPER MIDDLE RD.	BURLINGTON CITY ON
CA	R.M. OF HALTON	UPPER MIDDLE RD./W. O'CONNELL	BURLINGTON CITY ON
CA	MATTAMY HOMES LTD.	ORCHARD PH.9/UPPER MIDDLE RD.	BURLINGTON CITY ON
CA	OKINS LEIPCIGER CUPLINSKAS ETC.	UPPER MIDDLE RD.	OAKVILLE ON
CA	R.M. OF HALTON	UPPER MIDDLE ROAD	BURLINGTON CITY ON
CA	710473 ONTARIO LIMITED	INTERNAL RD. UPPER MIDDLE RD.	OAKVILLE TOWN ON
CA	DECARLO CUSTOM HOLES LTD.-LOT 11/CONC.1	UPPER MIDDLE ROAD	BURLINGTON CITY ON
CA	R.M. OF HALTON	UPPER MIDDLE RD.	BURLINGTON CITY ON
CA	MATTAMY HOMES LTD.	ORCHARD PH.9/UPPER MIDDLE RD.	BURLINGTON CITY ON
CA	REG.MUN.OF HALTON	UPPER MIDDLE RD. EASMENT	OAKVILLE ON
CA	REG.MUNIC.OF HALTON	UPPER MIDDLE RD.	OAKVILLE ON
CA	City of Burlington	Upper Middle Road and Ironstone Drive	Burlington ON
CA	Bronte Creek Community Limited	North of Upper Middle Road, West of Bronte Road	Oakville ON
CA	The Regional Municipality of Halton	Bronte Rd Road allowance, from the North Service Road to Upper Middle Road	Oakville ON

CA	REG. MUN. OF HALTON	UPPER MIDDLE RD.	BURLINGTON ON	
CA		Upper Middle Road	Oakville ON	
ECA	The Regional Municipality of Halton	Ninth Line between Upper Middle Road and Dundas St and Upper Middle Road between Joshua's Creek Drive and Highway 403	Oakville ON	
ECA	1371975 Ontario Inc.	Upper Middle Road Part of Lot 32, Concession 1	Town of Oakville ON	
ECA	Upper Middle Road GP Inc.	Upper Middle Road, Part of Lot 6, Concession 2	Oakville ON	
GEN	ANIMAL HOSPITAL OF RIVER OAKS	CHG UPPER MIDDLE ROAD WEST	OAKVILLE ON	L6H 1M2
HINC		4300 UPPER MIDDLE ROAD [AT RAILWAY CROSSING]	OAKVILLE ON	
INC		UPPER MIDDLE ROAD [ON THE NORTH SIDE], WEST OF BRONTE ROAD, OAKVILLE	ON	
PINC		UPPER MIDDLE & NINTH LINE, OAKVILLE	ON	
SPL	TRANSPORT TRUCK	NORTH SERVICE ROAD NEAR UPPER MIDDLE MOTOR VEHICLE (OPERATING FLUID)	OAKVILLE TOWN ON	
SPL	City of Burlingon<UNOFFICIAL>	Upper Middle Road and Cavendish<UNOFFICIAL>	Burlington ON	
SPL	NORTH AMERICAN HARD CHROME INC	IN DITCH BETWEEN NORTH AMERICAN HARD CHROME & ALLIED SIGNALS OAKVILLE PLANT 1490 SPEARS RD., UNIT 8	OAKVILLE TOWN ON	
SPL	RETAIL STORE	IN MORRISON CREEK EAST AT CATHLEEN CRES. FROM BEHIND 1011 UPPER MIDDLE RD (N.O.S.)	OAKVILLE TOWN ON	
SPL	PHILIP ENVIRONMENTAL INC.	WILLIAM O'CONNER BLVD & UPPER MIDDLE RD MOTOR VEHICLE (OPERATING FLUID)	BURLINGTON CITY ON	
SPL	BFI WASTE SYSTEMS	UPPER MIDDLE RD EAST OF DUNCASTER ON THE SOUTH SIDE MOTOR VEHICLE (OPERATING FLUID)	BURLINGTON CITY ON	
SPL	CONSTRUCTION SITE	UPPER MIDDLE ROAD BETWEEN MILLCROFT WAY & WALKERS LINE. LIQUID STORAGE TANK	BURLINGTON CITY ON	
SPL	Meneses Transport<UNOFFICIAL>	UPPER MIDDLE ROAD, EAST OF FORD DR<UNOFFICIAL>	Oakville ON	
SPL	OAKVILLE HYDRO	GLEN ABBEY GOLFCOURSE, NEAR UPPER MIDDLE RD. TRANSFORMER	OAKVILLE TOWN ON	
SPL	Burlington Hydro<UNOFFICIAL>	BURLINGTON HYDRO, VAULT ON UPPER MIDDLE BETWEEN BRANT & GUELPH LINES<UNOFFICIAL>	Burlington ON	
SPL	The Regional Municipality of Halton	Underneath Upper Middle Road near Nayagawa	Oakville ON	

SPL	TRANSPORT TRUCK	UPPER MIDDLE ROAD, BETWEEN 8TH AND 9TH LINE TRANSPORT TRUCK (CARGO)	OAKVILLE TOWN ON
SPL		Ruffett Drive off of Sutton Drive(north of Upper Middle)	Burlington ON
SPL	Prime Rose Contracting<UNOFFICIAL>	South of Upper Middle on Ford Dive	Oakville ON
SPL		Upper Middle Rd east of Walkers Line	Burlington ON

Unplottable Report

Site: ***MATTAMY HOMES LTD.***
UPPER MIDDLE RD.N.,PT.LOTS 1&2 BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-0910-99-
Application Year: 99
Issue Date: 9/14/1999
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***ROCCA GROUP INC. TANSLEY TOWNHOUSE***
UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-1693-88-
Application Year: 88
Issue Date: 10/24/1988
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***DECARLO CUSTOM HOMES LTD.-LOT 11/CONC. 1***
UPPER MIDDLE ROAD BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-1676-90-
Application Year: 90
Issue Date: 11/15/1990
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BURLINGTON CITY***
BLANCHARD DR./UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0994-94-

Application Year: 94
Issue Date: 10/19/1994
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-1839-87-
Application Year: 87
Issue Date: 12/18/1987
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON UPPER MIDDLE RD.***
UPPER MIDDLE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-0739-88-
Application Year: 88
Issue Date: 5/8/1989
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R. M. OF HALTON***
UPPER MIDDLE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-0098-86-
Application Year: 86
Issue Date: 3/3/1986
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***ROCCA GROUP INC. TANSLEY TOWNHOUSES***
UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1993-88-
Application Year: 88
Issue Date: 10/24/1988
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MONARCH CONSTRUCTION LTD. MILLCROFT PH.I***
ROAD A UPPER MIDDLE RD. PART 1 BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1056-86-
Application Year: 86
Issue Date: 7/28/1986
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Regional Municipality of Halton***
Upper Middle Road Oakville ON

Database: ***CA***

Certificate #: 6468-5FTQ82
Application Year: 2002
Issue Date: 11/15/2002
Approval Type: Municipal and Private Sewage Works
Status: Revoked and/or Replaced
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***REG.MUN.OF HALTON***
UPPER MIDDLE RD. EASMENT OAKVILLE ON

Database: ***CA***

Certificate #: 7-0149-85-006
Application Year: 85
Issue Date: 3/21/85
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:

Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE RD. RESERVOIR/PS OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-0158-97-
Application Year: 97
Issue Date: 10/22/1997
Approval Type: Municipal water
Status: Revised
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***STAN VINE CONSTRUCTION TRAFALGAR RD.***
RIVER OAKS BLVD. UPPER MIDDLE OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-2222-88-
Application Year: 88
Issue Date: 11/21/1988
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***N.H.D. DEVELOPMENTS LTD.C/O SORBARA GRP.***
UPPER MIDDLE RD. PHASE I OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-0266-86-
Application Year: 86
Issue Date: 3/14/1986
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Regional Municipality of Halton***
Upper Middle Road Oakville ON

Database: ***CA***

Certificate #: 7133-5J222P
Application Year: 2003

Issue Date: 2/6/2003
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON PHASE 1***
UPPER MIDDLE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-1397-89-
Application Year: 89
Issue Date: 7/27/1989
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
BRONTE RD/REBECCA ST/U.MID.RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-0179-97-
Application Year: 97
Issue Date: 3/21/1997
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site:
Sutton Drive from Mainway to Upper Middle Road Burlington ON

Database: ***CA***

Certificate #: 1714-4H7QNE
Application Year: 00
Issue Date: 3/9/00
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name: Corporation of the Regional Municipality of Halton
Client Address: 1151 Bronte Road
Client City: Oakville
Client Postal Code: L6M 3L1
Project Description: This application is for the installation of sanitary sewers on future Sutton Drive from Mainway to Upper Middle Road
Contaminants:
Emission Control:

Site: ***MONARCH CONSTRUCTION LIMITED***
RING RD./UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1278-95-
Application Year: 95
Issue Date: 9/18/1995
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 7-1228-86-
Application Year: 86
Issue Date: 10/22/1986
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON PR-973 WALKER'S LINE***
UPPER MIDDLE ROAD BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0784-86-
Application Year: 86
Issue Date: 7/25/1986
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE RD.RESERVOIR & PS OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 8-3120-97-
Application Year: 97
Issue Date: 3/17/1997
Approval Type: Industrial air
Status: Approved
Application Type:
Client Name:
Client Address:

Client City:
Client Postal Code:
Project Description: 30KW EMERGENCY GEN-SET FOR RES. & P.S.
Contaminants: Nitrogen Oxides
Emission Control:

Site: ***R.M. OF HALTON, PUBLIC WORKS DEPT.***
UPPER MIDDLE RD. RES. & P.S. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 8-3263-99-
Application Year: 99
Issue Date: 9/9/1999
Approval Type: Industrial air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: 1500KW EMERGENCY GENSET FOR RESERVOIR/PS
Contaminants:
Emission Control:

Site: ***CENTRAL CANADA GROCERS INC.***
UPPER MIDDLE RD. BURLINGTON ON

Database: ***CA***

Certificate #: 3-0944-85-006
Application Year: 85
Issue Date: 8/14/85
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***City of Burlington***
Upper Middle Rd Burlington ON

Database: ***CA***

Certificate #: 0986-7D5HWL
Application Year: 2008
Issue Date: 3/28/2008
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:

Site: ***N.H.D. DEVELOP.LTD.C/O THE SORBARA GROUP***
UPPER MIDDLE RD. PHASE I OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-0229-86-
Application Year: 86

Issue Date: 3/14/1986
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***BURLINGTON CITY***
BLANCHARD DR./UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1317-94-
Application Year: 94
Issue Date: 10/19/1994
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE RD./W. O'CONNELL BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-0619-93-
Application Year: 93
Issue Date: 6/21/1993
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MATTAMY HOMES LTD.***
ORCHARD PH.9/UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-0832-99-
Application Year: 99
Issue Date: 7/22/1999
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***OKINS LEIPCIGER CUPLINSKAS ETC.***
UPPER MIDDLE RD. OAKVILLE ON

Database: ***CA***

Certificate #: 3-0840-85-006
Application Year: 85
Issue Date: 8/13/85
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE ROAD BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-1271-87-
Application Year: 87
Issue Date: 7/18/1987
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***710473 ONTARIO LIMITED***
INTERNAL RD. UPPER MIDDLE RD. OAKVILLE TOWN ON

Database: ***CA***

Certificate #: 3-1492-87-
Application Year: 87
Issue Date: 9/4/1987
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***DECARLO CUSTOM HOLES LTD.-LOT 11/CONC.1***
UPPER MIDDLE ROAD BURLINGTON CITY ON

Database: ***CA***

Certificate #: 3-2172-90-
Application Year: 90
Issue Date: 1/2/1991
Approval Type: Municipal sewage
Status: Cancelled
Application Type:
Client Name:
Client Address:
Client City:

Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***R.M. OF HALTON***
UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0131-87-
Application Year: 87
Issue Date: 3/4/1987
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MATTAMY HOMES LTD.***
ORCHARD PH.9/UPPER MIDDLE RD. BURLINGTON CITY ON

Database: ***CA***

Certificate #: 7-0572-99-
Application Year: 99
Issue Date: 7/22/1999
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***REG.MUN.OF HALTON***
UPPER MIDDLE RD. EASMENT OAKVILLE ON

Database: ***CA***

Certificate #: 7-0149-85-006
Application Year: 85
Issue Date: 3/21/85
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***REG.MUNIC.OF HALTON***
UPPER MIDDLE RD. OAKVILLE ON

Database: ***CA***

Certificate #: 7-0856-85-006
Application Year: 85
Issue Date: 10/4/85

Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***City of Burlington***
Upper Middle Road and Ironstone Drive Burlington ON

Database: ***CA***

Certificate #: 1985-7A4L2K
Application Year: 2008
Issue Date: 1/2/2008
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:

Site: ***Bronte Creek Community Limited***
North of Upper Middle Road, West of Bronte Road Oakville ON

Database: ***CA***

Certificate #: 6467-87YL55
Application Year: 2010
Issue Date: 8/24/2010
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:

Site: ***The Regional Municipality of Halton***
Bronte Rd Road allowance, from the North Service Road to Upper Middle Road Oakville ON

Database: ***CA***

Certificate #: 9185-875P4X
Application Year: 2010
Issue Date: 7/22/2010
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:

Site: ***REG. MUN. OF HALTON***
UPPER MIDDLE RD. BURLINGTON ON

Database: ***CA***

Certificate #:	7-0247-85-006
Application Year:	85
Issue Date:	4/30/85
Approval Type:	Municipal water
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site:
Upper Middle Road Oakville ON

Database: ***CA***

Certificate #:	4302-4MLKTG
Application Year:	00
Issue Date:	7/31/00
Approval Type:	Municipal & Private sewage
Status:	Approved
Application Type:	New Certificate of Approval
Client Name:	Corporation of the Town of Oakville
Client Address:	1225 Trafalgar Road, P.O. Box 310 Station Main
Client City:	Oakville
Client Postal Code:	L6J 5A6
Project Description:	Road reconstuction and installation of storm sewers and catch basins on Upper Middle Road from Fourth Line to 250m west of Postmaster Drive and Third Line from Glen Abbey Gate to Sandpiper Road.
Contaminants:	
Emission Control:	

Site: ***The Regional Municipality of Halton***
Ninth Line between Upper Middle Road and Dundas St and Upper Middle Road between Joshua's Creek Drive and Highway 403 Oakville ON

Database: ***ECA***

Record Type:	
PDF URL:	
Full Address:	
CofA Number:	9291-96GKJR
Date:	11-APR-13
Status:	Approved
Project Type:	Municipal and Private Sewage

Site: ***1371975 Ontario Inc.***
Upper Middle Road Part of Lot 32, Concession 1 Town of Oakville ON

Database: ***ECA***

Record Type:	
PDF URL:	
Full Address:	Upper Middle Road Part of Lot 32, Concession 1 Town of Oakville, Regional Municipality ofaH lton
CofA Number:	6594-9LGL47
Date:	7/8/14
Status:	Approved
Project Type:	Municipal and Private Sewage

Site: ***Upper Middle Road GP Inc.***
Upper Middle Road, Part of Lot 6, Concession 2 Oakville ON

Database: ***ECA***

Record Type:

PDF URL:
Full Address: Upper Middle Road GP Inc. Subdivision 24T-12002 Block 5 Part of Lot 6, Concession 2 SDS Town of Oakville, Regional Municipality ofalton
CofA Number: 3865-9TCPKJ
Date: 3/19/15
Status: Approved
Project Type: Municipal and Private Sewage Works

Site: ***ANIMAL HOSPITAL OF RIVER OAKS***
CHG UPPER MIDDLE ROAD WEST OAKVILLE ON L6H 1M2

Database: ***GEN***

Generator #: ON1964800
Approval Yrs: 96,97,98
SIC Code: 0211
SIC Description: VETERINARY SERVICE

--- Details ---
Waste Code: 264
Waste Description: PHOTOPROCESSING WASTES

Site:
4300 UPPER MIDDLE ROAD [AT RAILWAY CROSSING] OAKVILLE ON

Database: ***HINC***

External File Num: FS INC 0905-02775
Date of Occurrence: 5/13/2009
Fuel Occurrence Type: Pipeline Strike
Fuel Type Involved: Natural Gas
Status Desc: Completed - Causal Analysis(End)
Job Type Desc: Incident/Near-Miss Occurrence (FS)
Oper. Type Involved: Construction Site (pipeline strike)
Service Interruptions: Yes
Property Damage: No
Fuel Life Cycle Stage: Transmission, Distribution and Transportation
Root Cause: Root Cause: Equipment/Material/Component:No Procedures:No Maintenance:No Design:No Training:No Management:No Human Factors:Yes
Reported Details:
Fuel Category: Gaseous Fuel
Occurrence Type: Incident
Affiliation: Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)
County Name: Halton
Approx. Quant. Rel:
Nearby body of water:
Enter Drainage Syst.:
Approx. Quant. Unit:
Environmental Impact:

Site:
UPPER MIDDLE ROAD [ON THE NORTH SIDE], WEST OF BRONTE ROAD, OAKVILLE ON

Database: ***INC***

Incident ID: 2288438
Incident Number: 137610
Attribute Category: FS-Near Miss
Status Code: Causal Analysis Complete
Incident Location: UPPER MIDDLE ROAD [ON THE NORTH SIDE], WEST OF BRONTE ROAD, OAKVILLE - PIPELINE HIT [NEAR-MISS]
Drainage System:
Sub Surface Contam.:
Aff. Prop. Use Water:
Contam. Migrated:
Contact Natural Env.:
Near Body of Water:
Approx. Quant. Rel.:
Equipment Model:
Serial No:
Residential App. Type:

Commercial App. Type:
Industrial App. Type:
Institutional App. Type:
Venting Type:
Vent Connector Mater.:
Vent Chimney Mater.:
Notes:
Pipeline Type: Transmission Pipeline
Pipeline Involved: Transmission pipeline
Pipe Material:
Depth Ground Cover:
Regulator Location:
Regulator Type:
Operation Pressure:
Occurence Narrative: Excavation within the safety zone of an Enbridge Oil Pipeline.
Liquid Prop Make:
Liquid Prop Model:
Liquid Prop Serial No:
Equipment Type:
Cylinder Capacity:
Cylinder Capac. Units:
Cylinder Material Type:
Tank Capacity:
Tank Material Type:
Tank Storage Type:
Tank Location Type:
Pump Flow Rate Capac.:
Liquid Prop Notes:

Site:
UPPER MIDDLE & NINTH LINE, OAKVILLE ON

Database:
PINC

Incident ID:
Tank Status: RC Established
Attribute Category: FS-Perform P-line Inc Invest
Task Number: 5210089
Type: FS-Pipeline Incident
Incident Number: 1494350
Status Code: Pipeline Damage Reason Est
Summary: UPPER MIDDLE & NINTH LINE, OAKVILLE - PIPELINE HIT - 12"
Spills Action Centre:
Reported By: Nick Klip - Union Gas
Affiliation:
Method Details: E-mail
Fuel Category: Natural Gas
Fuel Occurrence Type:
Date of Occurrence:
Occurrence Start Date: 2014/10/06
Health Impact:
Occurrence Desc:
Environment Impact:
Property Damage: Yes
Service Interupt:
Fuel Type:
Enforce Policy: Yes
Operation Type:
Damage Reason: Excavation practices not sufficient
Public Relation:
Pipeline System:
Pipeline Type:
Depth:
Pipe Material:
Regualtor Location:
PSIG:
Regulator Type:
Notes:

Site: ***TRANSPORT TRUCK***
NORTH SERVICE ROAD NEAR UPPER MIDDLE MOTOR VEHICLE (OPERATING FLUID) OAKVILLE TOWN ON

Database: ***SPL***

Ref NO:	99105
Contaminant Code:	
Contaminant Name:	
Contaminant Quantity:	
Incident Cause:	OTHER CONTAINER LEAK
Incident Dt:	4/25/1994
Incident Reason:	ERROR
Incident Summary:	DEDICATED SYSTEMS LTD: 400 L DIESEL FUEL TO LAND& DITCH FROM SADDLE TANK
MOE Reported Dt:	4/25/1994
Environmental Impact:	POSSIBLE
Nature of Impact:	Water course or lake
Receiving Medium:	LAND / WATER
SAC Action Class:	
Sector Source Type:	
Site Municipality:	14403

Site: ***City of Burlingon<UNOFFICIAL>***
Upper Middle Road and Cavendish<UNOFFICIAL> Burlington ON

Database: ***SPL***

Ref NO:	1825-6G3366
Contaminant Code:	
Contaminant Name:	ENGINE OIL
Contaminant Quantity:	
Incident Cause:	Other Transport Accident
Incident Dt:	9/8/2005
Incident Reason:	
Incident Summary:	Upper Middle Rd. Burlington- oil spill CB
MOE Reported Dt:	9/8/2005
Environmental Impact:	Possible
Nature of Impact:	Surface Water Pollution
Receiving Medium:	Water
SAC Action Class:	Spills to Watercourses
Sector Source Type:	Other Motor Vehicle
Site Municipality:	Burlington

Site: ***NORTH AMERICAN HARD CHROME INC***
IN DITCH BETWEEN NORTH AMERICAN HARD CHROME & ALLIED SIGNALS OAKVILLE PLANT
1490 SPEARS RD., UNIT 8 OAKVILLE TOWN ON

Database: ***SPL***

Ref NO:	142920
Contaminant Code:	
Contaminant Name:	
Contaminant Quantity:	
Incident Cause:	CONTAINER OVERFLOW
Incident Dt:	7/1/1997
Incident Reason:	ERROR
Incident Summary:	NORTH AMERICAN HARDCHROME- WATER/CHROME TO LAND AND DITCH.
MOE Reported Dt:	7/2/1997
Environmental Impact:	CONFIRMED
Nature of Impact:	Water course or lake
Receiving Medium:	LAND / WATER
SAC Action Class:	
Sector Source Type:	
Site Municipality:	14403

Site: ***RETAIL STORE***
IN MORRISON CREEK EAST AT CATHLEEN CRES. FROM BEHIND 1011 UPPER MIDDLE RD (N.O.S.) OAKVILLE TOWN ON

Database: ***SPL***

Ref NO:	118047

Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: OTHER CONTAINER LEAK
Incident Dt: 9/3/1995
Incident Reason: NEGLIGENCE (APPARENT)
Incident Summary: ULTRA FOOD & DRUG STORE - FOOD WASTE TO GROUND & CRK. FROM COMPACTOR.
MOE Reported Dt: 9/3/1995
Environmental Impact: CONFIRMED
Nature of Impact: Water course or lake
Receiving Medium: LAND / WATER
SAC Action Class:
Sector Source Type:
Site Municipality: 14403

Site: ***PHILIP ENVIRONMENTAL INC.***
WILLIAM O'CONNER BLVD & UPPER MIDDLE RD MOTOR VEHICLE (OPERATING FLUID) BURLINGTON CITY ON

Database: ***SPL***

Ref NO: 97749
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: PIPE/HOSE LEAK
Incident Dt: 3/24/1994
Incident Reason: EQUIPMENT FAILURE
Incident Summary: PHILIPS ENVIRONMENTAL: 75-100 L HYDRAULIC OIL TO RD FROM GARBAGE TRUCK.
MOE Reported Dt: 3/24/1994
Environmental Impact: NOT ANTICIPATED
Nature of Impact:
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Site Municipality: 14101

Site: ***BFI WASTE SYSTEMS***
UPPER MIDDLE RD EAST OF DUNCASTER ON THE SOUTH SIDE MOTOR VEHICLE (OPERATING FLUID) BURLINGTON CITY ON

Database: ***SPL***

Ref NO: 115069
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: PIPE/HOSE LEAK
Incident Dt: 6/29/1995
Incident Reason: OVERSTRESS/OVERPRESSURE
Incident Summary: BFI: 50 L HYDRAULIC OIL TO ROAD, 10 L TO CB FROM TRUCK. CLEANUP CONTRACTED
MOE Reported Dt: 6/29/1995
Environmental Impact: NOT ANTICIPATED
Nature of Impact:
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Site Municipality: 14101

Site: ***CONSTRUCTION SITE***
UPPER MIDDLE ROAD BETWEEN MILLCROFT WAY & WALKERS LINE. LIQUID STORAGE TANK BURLINGTON CITY ON

Database: ***SPL***

Ref NO: 75883
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: PIPE/HOSE LEAK
Incident Dt: 9/7/1992

Incident Reason: UNKNOWN
Incident Summary: CONSTRUCTION SITE-450 L DIESEL FUEL TO GRND FROM TANK,WORKS ONSITE.
MOE Reported Dt: 9/7/1992
Environmental Impact: POSSIBLE
Nature of Impact: Soil contamination
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Site Municipality: 14101

Site: ***Meneses Transport<UNOFFICIAL>*** ***Database:*** ***SPL***
UPPER MIDDLE ROAD, EAST OF FORD DR<UNOFFICIAL> Oakville ON

Ref NO: 1534-5NVUE9
Contaminant Code: 13
Contaminant Name: DIESEL FUEL
Contaminant Quantity: 100 L
Incident Cause:
Incident Dt: 6/26/2003
Incident Reason:
Incident Summary: Meneses Transport-100L diesel to rd, cleaning
MOE Reported Dt: 6/26/2003
Environmental Impact: Possible
Nature of Impact: Soil Contamination
Receiving Medium: Land
SAC Action Class:
Sector Source Type:
Site Municipality: Oakville

Site: ***OAKVILLE HYDRO*** ***Database:*** ***SPL***
GLEN ABBEY GOLFCOURSE, NEAR UPPER MIDDLE RD. TRANSFORMER OAKVILLE TOWN ON

Ref NO: 105081
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: COOLING SYSTEM LEAK
Incident Dt: 9/11/1994
Incident Reason: FIRE/EXPLOSION
Incident Summary: OAKVILLE HYDRO.: 90 L OILFROM POLE TRANSFORMER TO GROUND, NOT CLEANED UP.
MOE Reported Dt: 9/11/1994
Environmental Impact: CONFIRMED
Nature of Impact: Soil contamination
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Site Municipality: 14403

Site: ***Burlington Hydro<UNOFFICIAL>*** ***Database:*** ***SPL***
BURLINGTON HYDRO, VAULT ON UPPER MIDDLE BETWEEN BRANT & GUELPH LINES<UNOFFICIAL> Burlington ON

Ref NO: 3401-5ZLNKT
Contaminant Code:
Contaminant Name: OIL/WATER MIX
Contaminant Quantity:
Incident Cause: Other Discharges
Incident Dt: 6/3/2004
Incident Reason: Negligence (Apparent) - Caused by lack of diligence
Incident Summary: Burlington Hydro: 800 gal oily water from vault
MOE Reported Dt: 6/3/2004
Environmental Impact: Possible
Nature of Impact: Soil Contamination
Receiving Medium: Land

SAC Action Class: Spill to Land
Sector Source Type: Other
Site Municipality: Burlington

Site: ***The Regional Municipality of Halton***
Underneath Upper Middle Road near Nayagawa Oakville ON

Database: ***SPL***

Ref NO: 2270-7R2W4Y
Contaminant Code:
Contaminant Name: SEWAGE,RAW UNCHLORINATED
Contaminant Quantity:
Incident Cause: Other Discharges
Incident Dt:
Incident Reason:
Incident Summary: Upper Middle Rd: Raw sewage to the gnd from broken forcemain
MOE Reported Dt: 4/12/2009
Environmental Impact: Confirmed
Nature of Impact: Soil Contamination
Receiving Medium:
SAC Action Class: Land Spills
Sector Source Type:
Site Municipality: Oakville

Site: ***TRANSPORT TRUCK***
UPPER MIDDLE ROAD, BETWEEN 8TH AND 9TH LINE TRANSPORT TRUCK (CARGO) OAKVILLE TOWN ON

Database: ***SPL***

Ref NO: 100656
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: OTHER CONTAINER LEAK
Incident Dt: 6/1/1994
Incident Reason: ADVERSE ROAD CONDITION
Incident Summary: GRAND & TOY: DIESEL FUEL SPILLED ON ROAD
MOE Reported Dt: 6/1/1994
Environmental Impact: NOT ANTICIPATED
Nature of Impact:
Receiving Medium: LAND
SAC Action Class:
Sector Source Type:
Site Municipality: 14403

Site:
Ruffett Drive off of Sutton Drive(north of Upper Middle) Burlington ON

Database: ***SPL***

Ref NO: 3658-6E9NY3
Contaminant Code:
Contaminant Name:
Contaminant Quantity:
Incident Cause: Other Discharges
Incident Dt: 7/13/2005
Incident Reason: Unknown - Reason not determined
Incident Summary: Bulrington: Ukn subs. in Retention Pond
MOE Reported Dt: 7/13/2005
Environmental Impact: Possible
Nature of Impact: Surface Water Pollution
Receiving Medium: Water
SAC Action Class: Spills to Land
Sector Source Type: Unknown
Site Municipality: Burlington

Site: ***Prime Rose Contracting<UNOFFICIAL>***

Database:

South of Upper Middle on Ford Dive Oakville ON

SPL

Ref NO:	6836-95ZSBC
Contaminant Code:	43
Contaminant Name:	SEDIMENT(SUSPENDED SOLIDS/ SAND/ SILT)
Contaminant Quantity:	0 No Set Limit
Incident Cause:	Overflow/Surcharge
Incident Dt:	21-MAR-13
Incident Reason:	Unknown / N/A
Incident Summary:	Prime Rose Contracting: Sediment to Joshua Creek
MOE Reported Dt:	21-MAR-13
Environmental Impact:	Confirmed
Nature of Impact:	Other Impact(s); Soil Contamination; Surface Water Pollution
Receiving Medium:	
SAC Action Class:	Watercourse Spills
Sector Source Type:	Drilling Operation
Site Municipality:	Oakville

Site:

Database:

SPL

Upper Middle Rd east of Walkers Line Burlington ON

Ref NO:	6122-7JMRSX
Contaminant Code:	98
Contaminant Name:	UNKNOWN
Contaminant Quantity:	
Incident Cause:	
Incident Dt:	
Incident Reason:	
Incident Summary:	Milky white material in Creek
MOE Reported Dt:	9/19/2008
Environmental Impact:	Confirmed
Nature of Impact:	Surface Water Pollution
Receiving Medium:	
SAC Action Class:	Watercourse Spills
Sector Source Type:	Other
Site Municipality:	Burlington

Appendix: Database Descriptions

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

Abandoned Aggregate Inventory: Provincial AAGR

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

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

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

Government Publication Date: Up to Mar 2015

Abandoned Mine Information System: Provincial AMIS

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

Government Publication Date: 1800-Oct 2014

Anderson's Waste Disposal Sites: Private ANDR

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

Government Publication Date: 1860s-Present

Automobile Wrecking & Supplies: Private AUWR

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

Government Publication Date: Oct 31, 2015

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: Aug 31, 2016

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: Oct 31, 2015

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: Jul 31, 2016

Environmental Registry: Provincial EBR

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

Government Publication Date: 1994-Jan 2016

Environmental Compliance Approval: Provincial ECA

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

Government Publication Date: Jul 31, 2016

Environmental Effects Monitoring: Federal EEM

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

Government Publication Date: 1992-2007*

ERIS Historical Searches: Private EHS

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

Government Publication Date: 1999-Aug 2014

Environmental Issues Inventory System: Federal EIIS

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

Government Publication Date: 1992-2001*

Emergency Management Historical Event: Provincial EMHE

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

Government Publication Date: May 31, 2014

List of TSSA Expired Facilities: Provincial EXP

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

Government Publication Date: Aug 31, 2016

Federal Convictions: Federal FCON

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

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal FCS

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

Government Publication Date: June 2000-Oct 2015

Fisheries & Oceans Fuel Tanks: Federal FOFT

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

Government Publication Date: 1964-Sept 2003

Fuel Storage Tank: Provincial FST

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

Government Publication Date: Aug 31, 2016

Fuel Storage Tank - Historic: Provincial FSTH

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

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

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

Government Publication Date: 1986-May 2015

Greenhouse Gas Emissions from Large Facilities: Federal GHG

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

Government Publication Date: Dec 31, 2013

TSSA Historic Incidents: Provincial HINC

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

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

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

Government Publication Date: 1950-Aug 2003*

TSSA Incidents: Provincial INC

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

Government Publication Date: Aug 31, 2016

Landfill Inventory Management Ontario: Provincial LIMO

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

Government Publication Date: Dec 31, 2013

Canadian Mine Locations: Private MINE

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

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

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

Government Publication Date: 1846-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: Dec 31, 2014

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

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

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

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

Government Publication Date: Mar 1999-Aug 2010

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

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

Government Publication Date: 2001-Apr 2007*

National Energy Board Wells: Federal NEBW

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

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES): Federal NEES

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

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

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

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

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

Government Publication Date: Dec 31, 2014

Oil and Gas Wells: Private OGW

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

Government Publication Date: 1988-2015

Ontario Oil and Gas Wells: Provincial OOGW

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

Government Publication Date: 1800-Aug 2015

Inventory of PCB Storage Sites: Provincial OPCB

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

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

Orders: Provincial ORD

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

Government Publication Date: 1994-Jan 2016

Canadian Pulp and Paper: Private PAP

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

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

Parks Canada Fuel Storage Tanks: Federal PCFT

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

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

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

Government Publication Date: 1988-Jun 2013

TSSA Pipeline Incidents: Provincial PINC

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

Government Publication Date: Aug 31, 2016

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: Oct 31, 2015

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-Jan 2016

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: Aug 31, 2016

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: Jul 31, 2016

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

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

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

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

Government Publication Date: Jun 30, 2016

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

Appendix F

Survey

SKETCH SHOWING TOPOGRAPHY OF

No. 5219 UPPERMIDDLE ROAD
CITY OF BURLINGTON
REGIONAL MUNICIPALITY OF HALTON

SCALE 1 : 200

5 0 5 10 metres

© J.D. BARNES LIMITED

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

NOTES
BOUNDARY INFORMATION HAS BEEN COMPILED FROM AVAILABLE SURVEY RECORDS.

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR 0.999702.

CAUTION
THIS IS NOT A PLAN OF SURVEY, AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES

ELEVATION NOTE
ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO CANADIAN GEODETIC VERTICAL DATUM, 1978, AND ARE DERIVED FROM THE CITY OF BURLINGTON BENCH MARKS. No.482 HAVING A PUBLISHED ELEVATION OF 143.042m. AND No. 481 HAVING A PUBLISHED ELEVATION OF 139.273m

LOCAL BENCHMARK
LOCAL BENCHMARK No. 1 CUT CROSS ON CONCRETE SIDEWALK ON THE NORTH SIDE UPPERMIDDLE ROAD, SOUTH WEST OF GRAVEL DRIVEWAY FOR HOUSE No. 5219, OPPOSITE FIRE HYDRANT.
ELEVATION = 141.11m

LOCAL BENCHMARK No. 2 CUT CROSS ON CONCRETE SIDEWALK ON THE NORTH SIDE OF UPPERMIDDLE ROAD OPPOSITE THE PRODUCTION OF THE CHAINLINK FENCE ALONG SOUTHWEST BOUNDARY OF BLOCK 262
ELEVATION = 141.19m.

LEGEND
CB	DENOTES DOUBLE CATCHBASIN
CB	DENOTES CATCHBASIN
CB	DENOTES SINGLE CATCHBASIN
MH	DENOTES MANHOLE
SAN MH	DENOTES SANITARY MANHOLE
HP	DENOTES HYDRO POLE
LS	DENOTES LIGHT STANDARD
PED	DENOTES TELEPHONE PEDESTAL
H	DENOTES FIRE HYDRANT
WK	DENOTES WATER KEY
WV	DENOTES WATER VALVE
0.25 DIA	DENOTES CONIFEROUS TREE DIA=DENOTES DIAMETER OF TRUNK IN METRES
0.25 DIA	DENOTES DECIDUOUS TREE DIA=DENOTES DIAMETER OF TRUNK IN METRES
	DENOTES SHRUB

NOTES
PRIMARY CONTOURS ARE AT 0.50 INTERVALS.
SECONDARY CONTOURS ARE AT 0.25 INTERVALS.

BEFORE DIGGING, UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY THE RESPECTIVE AGENCIES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT LOCAL BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THE RELATIVE ELEVATIONS AGREE WITH THE INFORMATION SHOWN ON THIS PLAN.

CURB ELEVATIONS ARE TAKEN FROM TOP OF CURB

FIELD WORK COMPLETED FEBRUARY 16, 2017.

J.D.BARNES LIMITED SURVEYING MAPPING GIS
LAND INFORMATION SPECIALISTS
401 WHEELABRATOR WAY, SUITE A, MILTON, ON L9T 3C1
T: (905) 875-9955 F: (905) 875-9956 www.jdbarnes.com

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PLOTTED: 3/1/2017

Appendix G

Geotechnical Report

Candec Engineering Consultants Inc.
consulting engineers and environmental scientists

Report
of the
Geotechnical Investigation
for
5219 Upper Middle Road
Burlington, Ontario

Prepared for
Bloomfield homes

Acting on instructions received from Mr. Selva Chelliah

Our Reference number 17-1521
April 28, 2017

25 West Beaver Creek Road, Unit 11, Richmond Hill, Ontario, L4B 1K2 Phone: (905) 707-9272 Fax: (905) 707-9273

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Appendix

A Borehole Location Plan and Borehole Records

Candec Engineering Consultants Inc.
consulting engineers and environmental scientists

April 28, 2017

Bloomfield Homes
30 Pennsylvania Avenue, Unit No. 1
Concord, Ontario
L4K 4A5

Attention: Mr. Selva Chelliah

Re: 5219 Upper Middle Road, Burlington, Ontario
Our Reference Number: 17-1521

Dear Sir;

1.0 INTRODUCTION

Candec Engineering Consultants Inc. (Candec) has carried out a geotechnical investigation of the above referenced property that is proposed as the site of a new residential development.

The purpose of the investigation was to evaluate the subsoil conditions and to provide recommendations pertaining to the geotechnical aspects of the building comprising the current phase of the development. It is assumed that the design will comply with the applicable codes and standards.

No portion of this report should be used as a separate entity. It should be clearly understood that the report is written to be read in its entirety.

2.0 FIELD AND LABORATORY WORK

The fieldwork was comprised of five boreholes which were drilled to depths that ranged to 6.0m below the existing ground surface where hard mudstone tending to weathered shale was contacted.

The boreholes were advanced using continuous flight augers. The subsurface strata were sampled at regular intervals of depth using a split-spoon sampler and following the procedure detailed in the ASTM standard specification D1586 for the Standard Penetration Test.

Water level observations were made in each monitoring well after completion of installation and 24-hours after the well was developed.

A summary of the results of the field tests is detailed on the borehole records included with this report as appendix B.

A pocket penetrometer was used on the soil strata that were exposed in each test hole in order to estimate the unconfined compressive strength of the soil.

A non-repetitive plate load test was carried out, following the procedure set out in ASTM standard D1196/1196M-12 – "*Standard Test Method for Non-Repetitive Static Plate Load Test of Soils and Flexible Pavements*". The test was carried out on the soil layer at a depth of 450mm below the existing ground surface.

A percolation test was carried out on site following the procedure set out in the ASTM Standard D3385-09: *"Standard Test Method for Infiltration Rate of Soil in Field Using Double Ring Infiltrometer".*

3.0 SITE GEOLOGY

The geology of the subject property is characterized by glacial lake deposits. These are Lake Iroquois deposited sands and silty sands. The soil matrix is underlain by Upper Ordovician shale, limestone, dolostone and siltstone of the Queenston Formation.

4.0 SUBSURFACE CONDITIONS

4.1 Subsoil

Apart from a surface layer of top soil, no fill material was encountered in any of the boreholes. The undisturbed soil strata are situated immediately below this surface.

The uppermost stratum of soil profile below the top soil is comprised of approximately 900mm of reddish clayey sandy silt loam over native clayey sandy silt.

Weathered shale was encountered at approximately 3.0m depth in all the boreholes and extends beyond the depth at which boreholes were terminated. All boreholes remained open and dry; no ground water was observed in any of the boreholes at the end of the drilling work.

The insitu moisture content of the sandy silt soil generally was between 9% and 12%.

4.2 Ground water

A groundwater table was not encountered in the boreholes. However, there were water bearing lenses encountered at depths that ranged from 3.1m to 3.8m below the ground surface. This tended to coincide with the interface between the mineral soil and the shale bedrock

5.0 GEOTECHNICAL DISCUSSIONS

5.1 Bearing Capacity, Foundations and Settlement

A combination of spread and strip footings can be used to support the footings for the building. It is anticipated that the footings will be founded on shale. It is estimated that the intact shale located at depths of 6m and greater will have ULS and SLS capacities of 5,000KPa and 3500KPa respectively.

The estimated bearing capacity of native soil at the depth of 1.2m below the ground surface is estimated to be 600Kpa ULS and 400KPa SLS.

The estimated maximum total settlement for these footings is 25mm, and the estimated maximum differential settlement relative to the spread and strip footings is 15mm.

The bases of the foundation excavations must be inspected by a geotechnical engineer in accordance with the stipulations in the Ontario Building Code to confirm the bearing capacity of the subsoil.

The clean on-site soil can be used as engineering fill. It should be compacted to 100% of the standard Proctor maximum dry density. The bearing capacity that will be attained is 150Kpa.

5.2 Slab-On-Grade

Slab-on-grade construction may be employed at this site. The slabs on grade will be founded on the loamy mineral soil after it has been proof compacted.

It is recommended that the slab-on-grade should be constructed on a layer of 19mm clean crushed stone that is at least 150mm thick.

5.3 Excavation and Backfill

Excavation of the soil overburden at this site will be achieved easily using a crawler excavator. The same equipment should can excavate the shale if this is necessary to achieve the desired foundation horizons, but with a pneumatic ripper attachment will be needed to dislodge any limestone inclusion that might be encountered.

The on-site soil overburden soil can be used as fill. It should be noted that it is fine grained, and it will be difficult to achieve satisfactory levels of compaction in the event its moisture content exceeds its optimum value by more than 3 percentage points. Either a sheepsfoot or a smooth drum roller non-vibratory can be used to compact the soil for best results to be achieved.

The soil is silty and as such it may become dilatant and loose its strength when saturated and agitated. It also contains a significant proportion of fine sand that will make it especially frost susceptible. In the latter regard, adequate soil cover must be provided for footings that are founded in mineral soil.

5.4 Drainage & Infiltration Considerations

Ground water was not encountered in the boreholes. Therefore, it is not expected that dewatering, except as may be needed to address concurrent precipitation, will have to be carried out during construction provided the excavations do not extend below a depth of 5m.

The exterior ground surface should be graded to channel surface run off water away from the buildings and away from locations in which this water could drain under the asphalt concrete pavements.

Based on the particle size gradations, the permeability of the on-site soils ranges from 6 x 10^{-3} cm/sec to 1 x 10^{-5} cm/sec.

The percolation testing that was carried out at a depth of 1.0m below the ground surface reveal the soil to have a water infiltration rate of 17.5min/in.

The upper 1.2m of the soil profile at this site is considered suitable for on-site infiltration or percolation as a means of storm water disposal.

5.5 Frost and Erosion Potential

The most of the near surface onsite material is fine grained and moderately cohesive. As such it is considered moderately susceptible to erosion by wind or surface runoff. Therefore, precautions should be taken to prevent such erosion and soil particle transportation from the site. This can be achieved by using standard silt fencing and geotextiles, as well as surface grade controls.

The soils at this site are not considered highly frost susceptible. The ground water table is not within the uppermost 2m of the soil profile where it is expected that the footings will be founded. Therefore, there is a low possibility of adfreezing or frost heaving occurring.

Therefore, no special measures need to be taken in this regard. However, footings must be placed no higher than 1.5m below the ground surface to provide the requisite frost protection.

If it is necessary to place the foundations at a shallower depth than is needed for adequate soil cover, Styrofoam insulation can be placed over the area of the footing and extended outward at least 1.0m from the edges of the footings. The recommended equivalence is 25mm of insulation for each 300mm of soil cover.

If there will be a slab on grade in an area that will be unheated and it will serve the dual purpose of a footing for a column of wall (thickened), Styrofoam insulation should also be provided using the same equivalency stated in the previous paragraph.

5.6 Earthquake Considerations

The subsoil profile at the property is comprised predominantly of shale bedrock and hard till.

Therefore, the site classification for seismic site response is ‘B’, and should be used in

relation to the earthquake resistant design aspect of the buildings.

5.7 Earth Pressure Considerations

It has been estimated that the soil has an angle of internal friction of 30° and cohesion of 10Kpa.

The retaining walls and the subsurface walls of the structures should be designed to resist an earth pressure, 'p', at any depth, 'h', evaluated using the expression:

$$P = K_A (\gamma h + q)$$

where K_A = 0.33, is the estimated applicable earth pressure coefficient;

γ = 19.6 kN/m^3 (125 lb/ft^3), the average unit weight of the soil behind the wall;

q = is an allowance for surface surcharge, if any.

It is assumed that the backfill adjacent to the walls will be freely draining material so as to prevent the build up of pore pressure behind the wall. This is an OBC requirement.

In the event a retaining wall that is to be built will be embedded to an extent that passive earth pressures will be exerted, a passive earth pressure coefficient of K_p equal to 3.0 should be used.

The ‘at rest’ condition would be represented by the coefficient K_o which has been estimated to have a value of 1.0.

5.8 Sewer and Watermain Construction

Standard granular materials, such as MTO designated HL6 gravel, may be used as the bedding for the sewer and water service pipes. Although it is not essential, some consideration could be given to placing a geotextile separation sheet between the bedding and the subsoil in order to prevent migration of ‘fines’ into the granular material over time and thereby diminishing its effectiveness

5.9 Portland Cement & Asphalt Concrete Pavements

Most of the soil that comprises the subgrade and the near-surface soil profile has a

moist to dry hard insitu consistency. The following modulii of subgrade reaction were estimated from the standard penetration test N-values that were registered during the drilling and sampling program;

Depth (mm)	**K (Mpa/m)**
300	17.0 - 23.0
450	19.0 - 37.0

Prior to pavement construction, all deleterious materials (topsoil) that are encountered must be stripped from the areas in which a pavement is to be constructed.

All deleterious materials that are encountered must be stripped from the areas in which an asphalt concrete pavement is to be constructed on the native soil profile or on engineered fill.

The exposed subgrade should be subjected to proof rolling (4 to 6 passes by a large non-vibratory roller) in the presence of a geotechnical engineer. It should also be compacted to a minimum of 98% of the SPMDD.

The paved roadways should be shaped and crowned to provide drainage. Provided this will be done, and all excavations for the sewer and buried utilities are backfilled and compacted to a dense state, the minimum pavement thicknesses detailed in the table below are recommended.

The asphalt concrete cover may be made up of a base coat comprised of HL-8 asphalt concrete covered with a 50mm thick surface course of HL-3 asphalt concrete where the total thickness is to be greater than 50mm.

The materials comprising the base and sub-base courses should be compacted to a minimum 100% of their standard Proctor density. The materials comprising the asphalt concrete courses should be compacted to a minimum 96% of their Marshall density.

The pavement surfaces should be sloped to channel surface runoff water to strategically placed catchbasins that should be connected to the storm sewer system. Some consideration should be given to placing 100mm or 150mm high strip drains (for example Terradrain made by Terrafix Geosynthetics Inc.) behind the concrete curbs to prevent the accumulation of water behind the curbs and under the pavement. These drains should also be connected to the sewer system.

It is recommended that the concrete curbs that are slated for construction on the native

soil profile should be cast directly on the subsoil and not on the granular course to prevent water from the landscaped areas migrating under the pavement.

Recommended Minimum Asphalt Pavement Thickness

Description	Car Parking Areas (Light Duty)	Driveways (Heavy Duty)	Materials
Asphalt Cover	50mm	100mm	Hot mix asphalt
Base Course	200mm	150mm	19mm crushed limestone or Granular "A"
Sub-base Course	-	300mm	Granular "B"

6.0 LIMITATIONS

The report is limited in scope to those items specifically referenced in the text. No other testing and design calculations have been performed except as specifically reported.

The data we have collated and the opinions we have formed after reviewing this information should not be construed as a guarantee but only a guide to probable expectations. Conditions that exist but are not recorded herein were not apparent given the level of study authorised.

The discussions and recommendations presented in this report are intended for the sole guidance of the client named along with their architectural and structural design consultants. It should not be relied upon for any other purpose. Unauthorised parties who use this report do so totally at their own risk.

The information on which the recommendations stated herein are based is subject to confirmation by engineering personnel from Candec at the time of construction.

The fact that localised variations in the subsurface conditions may be present between and beyond the boreholes and that those conditions may be significantly different from the general description provided for design purposes should be understood. This applies particularly to the thickness and consistency of the soil strata. Contractors should make their own interpretation of the factual borehole and sample test results detailed in this report or contact us for assistance, and should draw their own conclusions as to the

effect of subsurface conditions on work below ground level.

It is strongly urged that Candec be contacted to provide assistance in the interpretation of the borehole records by anyone undertaking work on or below the ground surface at this site prior to this work being carried out.

7.0 CLOSURE

The report that has been prepared is predicated on our understanding of the proposed plan of development. In the event the plan is changed it may be necessary to review and revise some of the recommendations we have set out herein. In addition, it is essential that you communicate any alternative design schemes that you are contemplating so that we can give our opinion on the geotechnical implications.

We trust that this report satisfies your requirements. Please do not hesitate to call us in the event we can be of further service.

Yours truly,
CANDEC ENGINEERING CONSULTANTS INC.

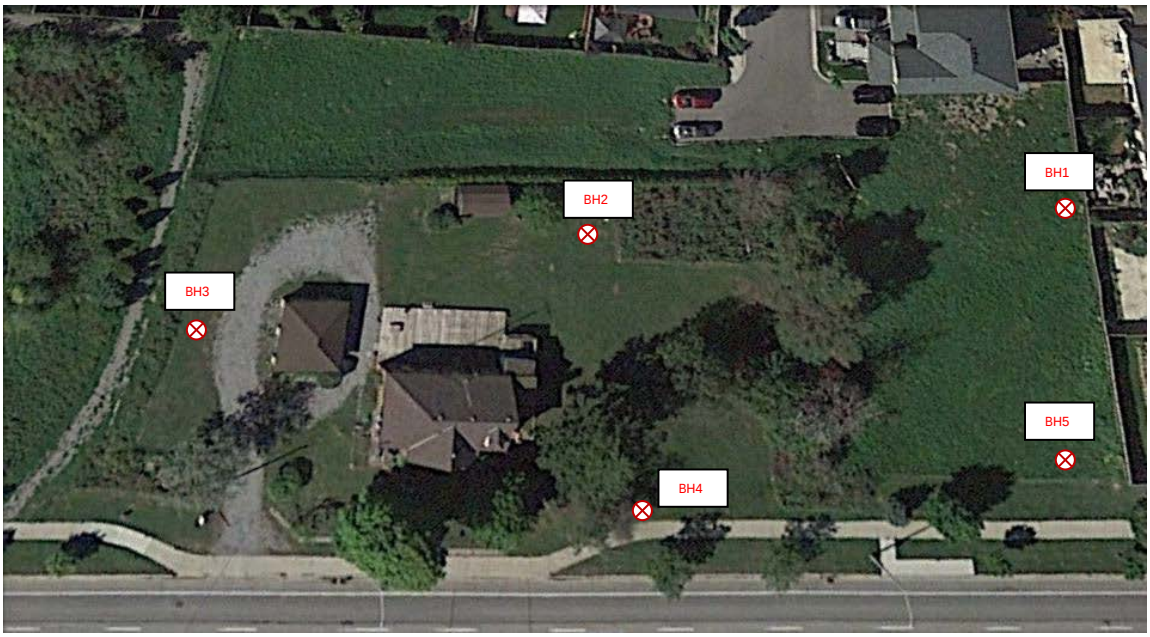


Bernard Moore, P. Eng., M. Eng.
Principal

BFM/ :\Bloomfield@5219uppermiddle\geo rpt-Apr28.doc

Appendix A

Borehole Location Plan & Borehole Records



Borehole Location Plan

Candec Engineering Consultants Inc.

Consulting Engineers and Environmental Scientists

PRPJECT NO. 17-1521
BOREHOLE NO. BH1
PREPARED BY GN
DATE April 26, 2017

CLIENT Bloomfield Homes

PROJECT 5219 Upper Middle Road

LOCATION Oakville, Ontario. Canada

REFER TO DRAWING NO. 1 FOR BOREHOLE LOCATION

AUGER SAMPLE
51mm O.D. SPLIT SPOON
51mm O.D. SHELBY TUBE
51mm O.D. DIA CON
PUSHED P
VANE TEST & SENSITIVITY +(S)

LL & PL ol
LAB VANE t
POCKET PEN K
MOISTURE CONTENT o
SOIL GASES x

ELEV. DEPTH	SOIL DESCRIPTION	SAMPLE	Penetration blows per 300mm (20 40 60 80 100)	MOISTURE CONTENT (5 10 15 20 25)	% RETD.	WELL
0.0m	100mm - silty loam Topsoil					
	Brown to red Sandy Silt		23			
1.20m	Reddish brown Clayey Sandy Silt Dry					
1.80m	Red Clayey Sandy Silt Dry		42			
			65			
	(Weathered shale from here)		Refusal			
			Refusal			
4.95m	End of Borehole - intact shale bedrock Borehole remained open and dry					

Candec Engineering Consultants Inc.

Consulting Engineers and Environmental Scientists

PRPJECT NO. 17-1521
BOREHOLE NO. BH-2
PREPARED BY GN
DATE April 26, 2017

CLIENT Bloomfield Homes
PROJECT 5219 Upper Middle Road
LOCATION Oakville, Ontario, Canada

REFER TO DRAWING NO. 1 FOR BOREHOLE LOCATION

AUGER SAMPLE
51mm O.D. SPLIT SPOON
51mm O.D. SHELBY TUBE
51mm O.D. DIA CON
PUSHED P
VANE TEST & SENSITIVITY +(S)
LL & PL o
LAB VANE t
POCKET PEN K
MOISTURE CONTENT o
SOIL GASES x

ELEV. DEPTH	SOIL DESCRIPTION	SAMPLE	Penetration blows per 300mm (20 40 60 80 100)	MOISTURE CONTENT (5 10 15 20 25)	% RETD.	WELL
0.0m	150mm Silty Loam Topsoil		11			
	Brown sandy SILT with some clay		11			
1.50m	Rediish Brown Sandy Silt w/ clay		28			
			50			
3.60m	Red grey Sandy Silt w/ weathered shale		Refusal			
6.00m	Red Shale Bedrock - intact		Refusal			
6.45m	End of Borehole Borehole remained dry & open after completion					

25 West Beaver Creek Road, Unit 11, Richmond Hill, Ontario L4B 1K2 Phone: (905)707-9272 Fax (905)707-9273
Candec Consultants Limited must be contacted for assistance in the interpretation of the information in this borehole record.

Candec Engineering Consultants Inc.

Consulting Engineers and Environmental Scientists

PRPJECT NO. 17-1521
BOREHOLE NO. BH-3
PREPARED BY GN
DATE April 26, 2017

CLIENT Bloomfield Homes

PROJECT 5219 Upper Middle Road

LOCATION Oakville, Ontario, Canada

REFER TO DRAWING NO. 1 FOR BOREHOLE LOCATION

AUGER SAMPLE
51mm O.D. SPLIT SPOON
51mm O.D. SHELBY TUBE
51mm O.D. DIA CON
PUSHED P
VANE TEST & SENSITIVITY +(S)

LL & PL o
LAB VANE t
POCKET PEN K
MOISTURE CONTENT o
SOIL GASES x

ELEV. DEPTH	SOIL DESCRIPTION	SAMPLE	Penetration blows per 300mm (20 40 60 80 100)	MOISTURE CONTENT (5 10 15 20 25)	% RETD.	WELL
0.0m	150mm - Silty Loam Topsoil		10			
	Brown Sandy Silt w/ clay		32			
	(intermittent shale inclusions encountered here)		51			
2.90m	Red Clayey Sandy Silt w/ weathered shale		80			
			Refusal			
6.00m	Red Shale Bedrock - intact		Refusal			
6.45m	End of Borehole Borehole remained dry & open after completion					

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Candec Engineering Consultants Inc.

Consulting Engineers and Environmental Scientists

PRPJECT NO. 17-1521
BOREHOLE NO. BH4
PREPARED BY GN
DATE April 26, 2017

CLIENT Bloomfield Homes

PROJECT 5219 Upper Middle Road

LOCATION Oakville, Ontario, Canada

REFER TO DRAWING NO. 1 FOR BOREHOLE LOCATION

AUGER SAMPLE
51mm O.D. SPLIT SPOON
51mm O.D. SHELBY TUBE
51mm O.D. DIA CON
PUSHED P
VANE TEST & SENSITIVITY +(S)

LL & PL o
LAB VANE t
POCKET PEN K
MOISTURE CONTENT o
SOIL GASES x

ELEV. DEPTH	SOIL DESCRIPTION	SAMPLE	Penetration blows per 300mm (20 40 60 80 100)	MOISTURE CONTENT (5 10 15 20 25)	% RETD.	WELL
0.0m	150mm - Silty Loam Topsoil		18			
	Brown to red Sandy Silt					
			32			
1.50m			49			
	Red Brown Sandy Silt w/ clay					
			56			
	(Red weathered shale from here)		Refusal			
			Refusal			
4.95m	End of Borehole					
	Refusal on intact shale bedrock					

25 West Beaver Creek Road, Unit 11, Richmond Hill, Ontario L4B 1K2 Phone: (905)707-9272 Fax (905)707-9273
Candec Consultants Limited must be contacted for assistance in the interpretation of the information in this borehole record.

Candec Engineering Consultants Inc.

Consulting Engineers and Environmental Scientists

PRPJECT NO. 17-1521
BOREHOLE NO. BH5
PREPARED BY GN
DATE April 26, 2017

CLIENT Bloomfield Homes

PROJECT 5219 Upper Middle Road

LOCATION Oakville, Ontario. Canada

REFER TO DRAWING NO. 1 FOR BOREHOLE LOCATION

AUGER SAMPLE
51mm O.D. SPLIT SPOON
51mm O.D. SHELBY TUBE
51mm O.D. DIA CON
PUSHED P
VANE TEST & SENSITIVITY +(S)

LL & PL ol
LAB VANE t
POCKET PEN K
MOISTURE CONTENT o
SOIL GASES x

ELEV. DEPTH	SOIL DESCRIPTION	SAMPLE	Penetration blows per 300mm (20 40 60 80 100)	MOISTURE CONTENT (5 10 15 20 25)	% RETD.	WELL
0.0m	120mm - silty loam Topsoil		12			
	Brown to red Sandy Silt					
			26			
1.20m	Reddish brown Clayey Sandy Silt Dry					
			45			
1.80m	Red Clayey Sandy Silt Dry					
			70			
	(Weathered shale from here)					
			Refusal			
			Refusal			
4.95m	End of Borehole - intact shale bedrock Borehole remained open and dry					

25 West Beaver Creek Road, Unit 11, Richmond Hill, Ontario L4B 1K2 Phone: (905)707-9272 Fax (905)707-9273
Candec Consultants Limited must be contacted for assistance in the interpretation of the information in this borehole record.