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Phase I Environmental Site Assessment

Vacant Land
807 – 825 Montreal Road
Ottawa, Ontario

Prepared For

Darwin Group Ottawa

Paterson Group Inc.

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June 23, 2015

Report: PE3563-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Darwin Group Ottawa to conduct a Phase I Environmental Site Assessment (ESA) for vacant parcels of land addressed 807, 811, 817 and 825 Montreal Road, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

According to the historical research, the subject site was vacant prior to the development of three (3) residential dwellings in the 1950's. Neighbouring properties were developed in the early 1950's with residential, commercial and institutional buildings. The residential dwelling located at 817 Montreal Road was demolished circa 2012-2013 while the residential dwellings located at 807 and 811 Montreal Road were demolished circa 2014-2015. No historic potentially contaminating activities were identified on the subject site. None of the identified historic PCAs on properties within the Phase I study area are considered to be areas of potential environmental concern (APECs) to the subject land.

Following the historical research, a site inspection was conducted of the subject site and Phase I ESA study area. The subject land is currently vacant and covered with grass and mature trees. Two (2) existing potentially contaminating activities (PCAs) were identified in the Phase I – ESA study area but are not considered to be APECs to the subject land.

Conclusion

The results of the historical research, personal interviews, and the site inspection did not identify any potential environmental concerns with respect to the subject site. **In our opinion, a Phase II Environmental Site Assessment is not required for the property.**

1.0 INTRODUCTION

At the request of Darwin Group Ottawa, Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I – ESA) for four (4) vacant parcels of land addressed 807, 811, 817 and 825 Montreal Road, in the City of Ottawa, Ontario. The purpose of this Phase I – ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I – ESA by Mr. Anthony Nicolini, of Darwin Group Ottawa, whose office is located at 183 Michael Cowpland Drive, Ottawa, Ontario. Mr. Nicolini can be reached by telephone at (613) 224-6200.

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

This Phase I-ESA report has been prepared in general accordance with Ontario Regulation 153/04 as amended by O.Reg. 269/11 (Environmental Protection Act), and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

2.0 PHASE I PROPERTY INFORMATION

Address:	807, 811, 817 and 825 Montreal Road, City of Ottawa, Ontario
Legal Description:	Part of Lot 11, 12 and 13, Registered Plan 486, City of Ottawa.
Property Identification Number:	04275-0009, 04275-0010, 04275-0011 and 04275-0070.
Location:	The subject site is located on the north side of Montreal Road, east of the Den Haag Drive intersection, in the City of Ottawa, Ontario. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	45° 26' 45" N, 75° 38' 02" W.

Site Description:

Configuration:	Irregular.
Zoning:	R1 – Residential First Density. R4 – Residential Fourth Density.
Current Use:	Undeveloped.
Services:	The subject site is located in an area with a mixture of private water wells and municipal services.

3.0 SCOPE OF INVESTIGATION

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

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

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

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

First Developed Use Determination

According to the aerial photographs and documents reviewed the subject site was vacant prior to being developed with three (3) residential dwellings in the 1950's. The dwelling addressed 817 Montreal Road was demolished in 2012-2013 while the dwellings addressed 807 and 811 Montreal Road were demolished in 2014-2015.

Fire Insurance Plans

Fire Insurance Plans (FIPs) from 1956 were reviewed for the area of the subject property. The FIPs do not cover the subject site but do identify two (2) retail fuel outlets, each with two (2) underground storage tanks (USTs), located on the northwest and northeast corners of the Montreal Road and Codd's Road intersection. The retail fuel outlets addressed 865 and 875 Montreal Road are located 115 meters and 175 meters to the east, respectively, from the subject site.

City of Ottawa Street Directories

City directories at the National Archives were reviewed in approximate 10 year intervals from 1956 to 2011 as part of the Phase I ESA. The subject site was first listed in 1956. Based on the available information, the subject site and adjacent properties have been used for residential purposes since their development.

The properties addressed 865 and 875 Montreal Road were listed as retail fuel outlets between 1963 and 1987. The property addressed 865 Montreal Road has since been listed as an automobile service garage while 875 Montreal Road has since been listed as a used car dealership. No significant concerns were noted with the remaining neighbouring properties in the City directories reviewed.

Off-site potentially contaminating land uses identified by the City directories research are either located a significant distance from the subject site or are located down-gradient or cross-gradient, and are not considered to have impacted the subject site.

Chain of Title

A title search is being conducted for the PINs constituting the subject property by Read Abstracts Limited. At the time of issuance of this report, the title search had not been received. A copy of the title search will be forwarded to the client should it contain any pertinent information.

Previous Engineering Reports

Paterson has conducted a number of environmental site assessments and geotechnical investigations in the vicinity of the subject site, including a geotechnical investigation on the subject property. These reports were reviewed as part of this assessment. The reports did not identify any areas of potential environmental concern for the subject site.

Current Plan of Survey

A plan of survey was reviewed as part of this assessment. The plan shows the subject site in its current configuration with the proposed building.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on May 25, 2015. The subject site and adjacent properties were not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

A search of national PCB waste storage sites was conducted. No PCB waste storage sites are located within the Phase I study area.

Ontario Ministry of Environment and Climate Change (MOECC) Instruments

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOECC issued instruments for the site. No records were available for the subject site.

MOECC Coal Gasification Plant Inventory

The Ontario Ministry of Environment document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. No coal gasification plants were identified within the Phase I study area.

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. No incident reports were available for the subject site.

MOECC Waste Management Records

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. No waste management records were available for the subject site.

MOECC Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions that have been submitted to the MOE. No MOECC submission records were available for the subject site.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. One (1) Record of Site Condition (RSC) was filed for the property addressed 800 Montreal Road located 115 meters to the south of the subject site. This RSC was filed in January 2010 and indicates that impacted soil was removed and groundwater pumped and treated on-site. According to the RSC, no soil was removed from within three (3) meters of the property boundary.

MOECC Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. No active or closed waste disposal sites or any of the other listed sites were identified in the vicinity of the subject site.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on May 26, 2015. The response from MNR indicated that there were no recorded natural features or areas of natural significance within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on May 26, 2015 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. The response from the TSSA indicated that no records were found in the TSSA database for the subject site or adjacent properties. A copy of the TSSA correspondence is included in Appendix 2.

City of Ottawa Landfill Document

The document entitled "Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa", was reviewed. No landfill sites were identified within the Phase I study area.

City of Ottawa Historical Land Use Inventory (HLUI)

A requisition form was sent to the City of Ottawa on June 2, 2015 to request information from the City's Historical Land Use Inventory (HLUI) database for the subject property. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. The review period dates back to the first available air photos for the site. Based on the review, the following observations have been made:

- | | |
|------|---|
| 1945 | The subject site and neighbouring properties are vacant and treed. A quarry is visible to the east of the subject site along Montreal Road. |
| 1955 | The subject site and neighbouring properties to the north of Montreal Road are used for residential purposes. The subject site is occupied by three (3) residential dwellings. |
| 1973 | No significant changes have been made to the subject site. A residential apartment building is being developed at 860 Blackthorne Avenue, 60 meters to the east of the subject site. Commercial and office buildings have been developed to the east and west along Montreal Road. A small quarry pit is visible approximately 120 meters to the northwest. |
| 1984 | No significant changes have been made to the subject site or neighbouring properties. |
| 1993 | No significant changes have been made to the subject site or neighbouring properties. |
| 1997 | No significant changes have been made to the subject site or neighbouring properties. |

2014 (City of Ottawa website) The residential dwelling addressed 817 Montreal Road has been demolished. The adjacent property to the west of the subject site has been redeveloped with three (3) residential buildings. A portion of the building addressed 800 Montreal Road, located to the south, has been demolished and redeveloped with a residential apartment building.

Laser copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the regional topography in the general area of the site slopes downward towards the south. According to the maps, the nearest water body is the Ottawa River located 2 km to the north. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: “The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets.” The subject site is located in the Central St. Lawrence Lowland, which is generally less than 150 m above sea level.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of limestone of the Bobcaygeon Formation. Overburden soils are shown as Paleozoic bedrock with a drift thickness on the order of 0 to 1 meters.

Water Well Records

A search of the MOECC’s online water well records database was completed on May 26, 2015, for all drilled wells within 250 m of the subject site. The search returned thirty-one (31) well records within the Phase I study area.

The records refer to drinking water wells advanced on the subject site and nearby properties between 1951 and 1968 and to groundwater monitoring wells from 2005 to 2012. The groundwater monitoring wells are located 125m across Montreal Road to the southwest at 800 Montreal Road and 140 Den Haag Drive, and 175 meters to the east at the former retail fuel outlet addressed 875 Montreal Road.

One (1) well record was for a drinking water well advanced in 2013 on a property addressed 4 Fairhaven Way located 65 meters to the north of the subject site. It is our understanding that the residential dwellings to the north are serviced with private water wells.

Water Bodies and Areas of Natural Significance

The Ottawa River located 2 km to the north of the subject site is the closest water body. No areas of natural significance are known to exist within the Phase I study area.

5.0 INTERVIEWS

Mr. Anthony Nicolini, the representative for the current property owner, was interviewed as part of the assessment. Mr. Nicolini was not aware of any environmental concerns with respect to the subject site.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted in the morning of May 26, 2015. Xavier Redhead from the Environmental Department of Paterson Group conducted the site visit. Access was provided to the entire subject site. In addition to the site, the uses of neighbouring properties within the Phase I study area were also assessed at the time of the site assessment.

6.2 Specific Observations at Phase I Property

Buildings and Structures

There are currently no buildings on the subject property.

Underground Utilities

Underground service locates were completed for the subject site in May 2015. No services were noted to be present on the subject property. The utilities were all located within three (3) meters of the curb along Montreal Road.

Storage Tanks

No aboveground storage tanks (ASTs) or evidence of underground storage tanks (USTs), or evidence of other fuel or chemical storage was observed on the subject site.

Water Source

The residential properties located to the north are serviced by private water wells. It is our understanding that the proposed development will be serviced by the municipal water system.

Unidentified Substances

There were no unidentified substances on the exterior of the subject property at the time of this assessment.

Groundwater Monitoring Wells

No groundwater monitoring wells or potable water wells was observed on the subject site at the time of the assessment.

Sewage Works

Surrounding properties are serviced by the City of Ottawa sewer system.

Waste Storage and Disposal

The subject site is vacant and does currently generate any waste.

Railway Lines

There are no existing railway lines within the Phase I study area.

Ozone Depleting Substances (ODSs)

No potential sources of ODSs were observed on site during the assessment.

Site Features

The subject land is vacant and covered with grass. The northern portion of the subject site is covered with mature trees and bedrock outcrops. The site slopes downward to the south toward Montreal Road. Drainage consists of infiltration.

Potentially Contaminating Activities (PCA)

The site visit did not identify any Potentially Contaminating Activities at the subject site.

Neighbouring Properties

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection. Land use adjacent to the subject site was as follows:

- North - Residential dwellings, followed by Fairhaven Way;
- South - Montreal Road, followed by the construction of a multi-storey building;
- East - Residential dwellings, followed by a residential apartment building;
- West - Residential buildings, followed by an electrical substation.

The current use of the neighbouring properties is not considered to pose an environmental concern to the subject site. Current land use in the Phase I study area is illustrated on Drawing: PE3563-2 – Surrounding Land Use Plan in the Figures section of this report, following the text.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The following table indicates the current and past uses of the site as well as any associated potentially contaminating activities dating back to the first developed use of the site (if present).

Table 1 - Land Use History			
Time Period	Land Use	Potentially Contaminating Activities	Potential Environmental Concerns
807 Montreal Road			
1945 (earliest air photo reviewed)	Undeveloped (Vacant)	None	No
1955-2014	Residential Dwelling	None	No
2015-Present	Vacant	None	No
811 Montreal Road			
1945 (earliest air photo reviewed)	Undeveloped (Vacant)	None	No
1955 -2014	Residential Dwelling	None	No
2015-Present	Vacant	None	No
817 Montreal Road			
1945 (earliest air photo reviewed)	Undeveloped (Vacant)	None	No
1955-2012	Residential Dwelling	None	No
2013-Present	Vacant	None	No
825 Montreal Road			
1945 (earliest air photo reviewed)-Present	Undeveloped (Vacant)	None	No

Potentially Contaminating Activities (PCAs)

The following Potentially Contaminating Activities were identified within the Phase I study area:

- Item 28, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Gasoline and Associated Products Storage in Fixed Tanks” – this PCA was identified based on the former retail fuel outlets located 115 meters and 175 meters to the east of the subject site.
- Item 18, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Electricity Generation, Transformation and Power Stations” – this PCA was identified based on the electrical substation located 45 m to the west (789 Montreal Road).
- Item 52, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: “Storage, maintenance, fuelling and repair of equipment and vehicles” – this PCA was identified based on the automobile service centre located 115 meters to the east of the subject site.

Based on the separating distances, the former retail fuel outlets, existing automobile service garage and electrical substation are not considered to be Areas of Potential Environmental Concern (APEC) for the subject site.

The Potentially Contaminating Activities within the Phase I study area are shown on Drawing PE3563-2 - Surrounding Land Use Plan.

Areas of Potential Environmental Concern (APECs)

As discussed above, there are no PCAs that are considered to be areas of potential environmental concern for the subject property.

Contaminants of Potential Concern

No Contaminants of Potential Concern (CPC) were identified, since no APEC's were on the subject site.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, drift thickness in the area of the subject site is estimated to be on the order of 0 to 1 m. Overburden soils are shown as Paleozoic bedrock.

Contaminants of Potential Concern

As per Section 7.1 of the report, no Contaminants of Potential Concern (CPCs) were identified on the subject site.

Existing Buildings and Structures

There are no buildings currently located on the subject site.

Water Bodies

The Ottawa River located 2 km to the north of the subject site, is the closest water body.

Areas of Natural Significance

No areas of natural significance were identified on the site or in the Phase I study area.

Drinking Water Wells

There is a record of existing private water wells within Phase I study area, located to the north of the subject site.

Neighbouring Land Use

Neighbouring land use in the Phase I study area is residential and commercial. No concerns were identified with the current neighbouring land use.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, the existing automobile service station and electrical substation identified within the Phase I study area do not represent areas of potential environmental concern for the subject site.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that the three (3) PCAs identified within the Phase I study area are not considered APECs. The Potentially Contaminating Activities were confirmed by a variety of independent sources, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSIONS

Conclusion

The results of the historical research, personal interviews, and the site inspection did not identify any areas of potential environmental concern with respect to the subject site. **In our opinion, a Phase II Environmental Site Assessment is not required for the property.**

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04 as amended by O.Reg. 269/11, and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

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

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

Paterson Group Inc.



Xavier Redhead, B.Eng.



Mark S. D'Arcy, P.Eng.



Report Distribution:

- Darwin Group Ottawa (6 copies)
- Paterson Group (1 copy)

10.0 REFERENCES

Federal Records

Air photos at the Energy Mines and Resources Air Photo Library.
National Archives.
Maps and photographs (Geological Survey of Canada surficial and subsurface mapping).
Natural Resources Canada – The Atlas of Canada.
Environment Canada, National Pollutant Release Inventory.
PCB Waste Storage Site Inventory.

Provincial Records

MOE Freedom of Information and Privacy Office.
MOE Municipal Coal Gasification Plant Site Inventory, 1991.
MOE document titled “Waste Disposal Site Inventory in Ontario”.
MOE Brownfields Environmental Site Registry.
Office of Technical Standards and Safety Authority, Fuels Safety Branch.
MNR Areas of Natural Significance.
MOE Water Well Inventory.
Chapman, L.J., and Putnam, D.F., 1984: ‘The Physiography of Southern Ontario, Third Edition’, Ontario Geological Survey Special Volume 2.

Municipal Records

City of Ottawa Document “Old Landfill Management Strategy, Phase I - Identification of Sites.”, prepared by Golder Associates, 2004.
Intera Technologies Limited Report “Mapping and Assessment of Former Industrial Sites, City of Ottawa”, 1988.
The City of Ottawa eMap website.
City of Ottawa Historical Land Use Inventory (HLUI) Database

Local Information Sources

Plan of Survey, Fairhall, Moffatt and Woodland Limited (2014).
Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE3563-1 – SITE PLAN

DRAWING PE3563-2 – SURROUNDING LAND USE PLAN

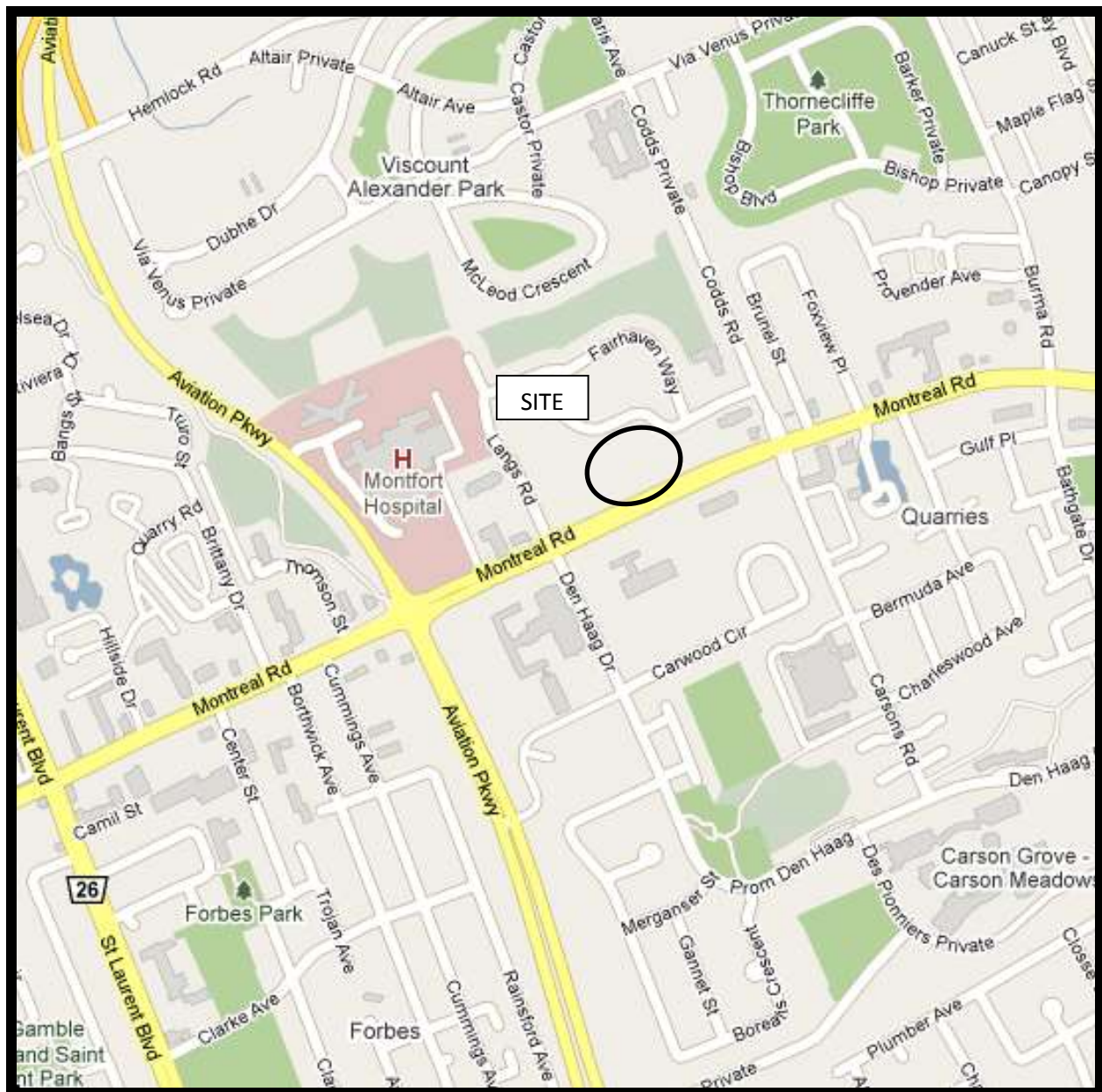


FIGURE 1
KEY PLAN

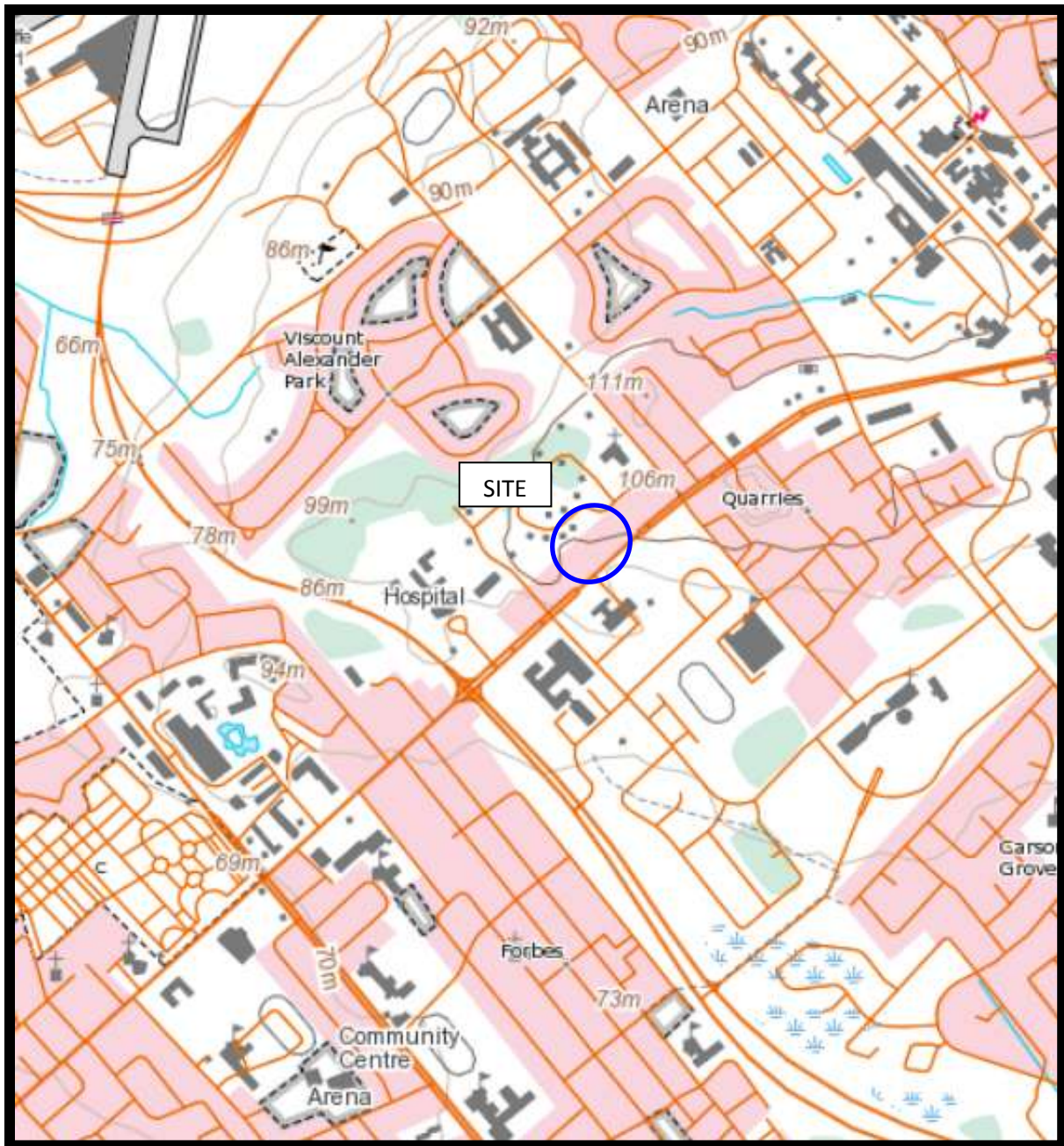
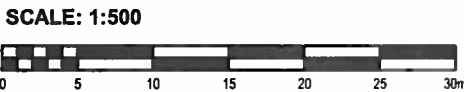
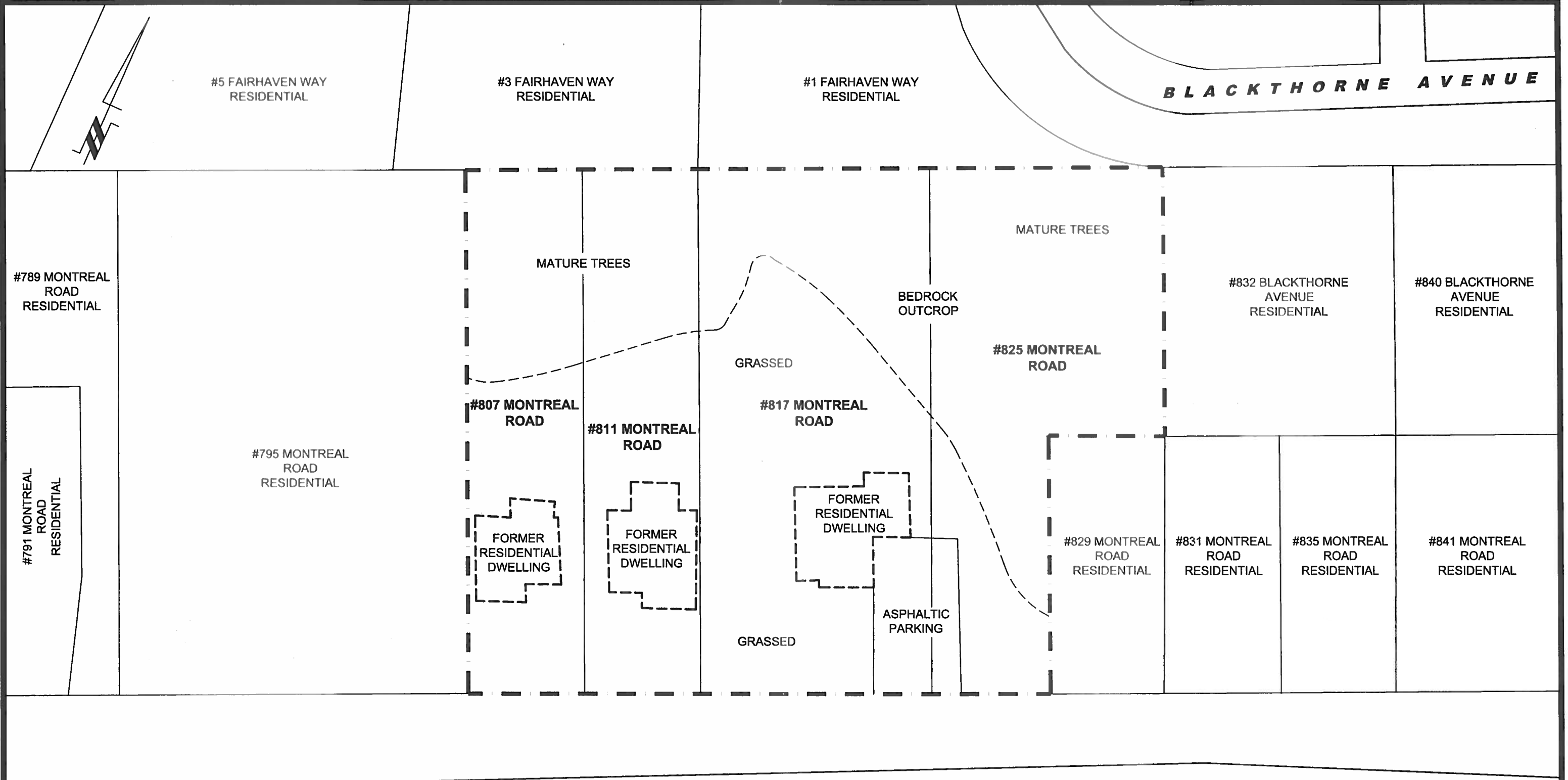


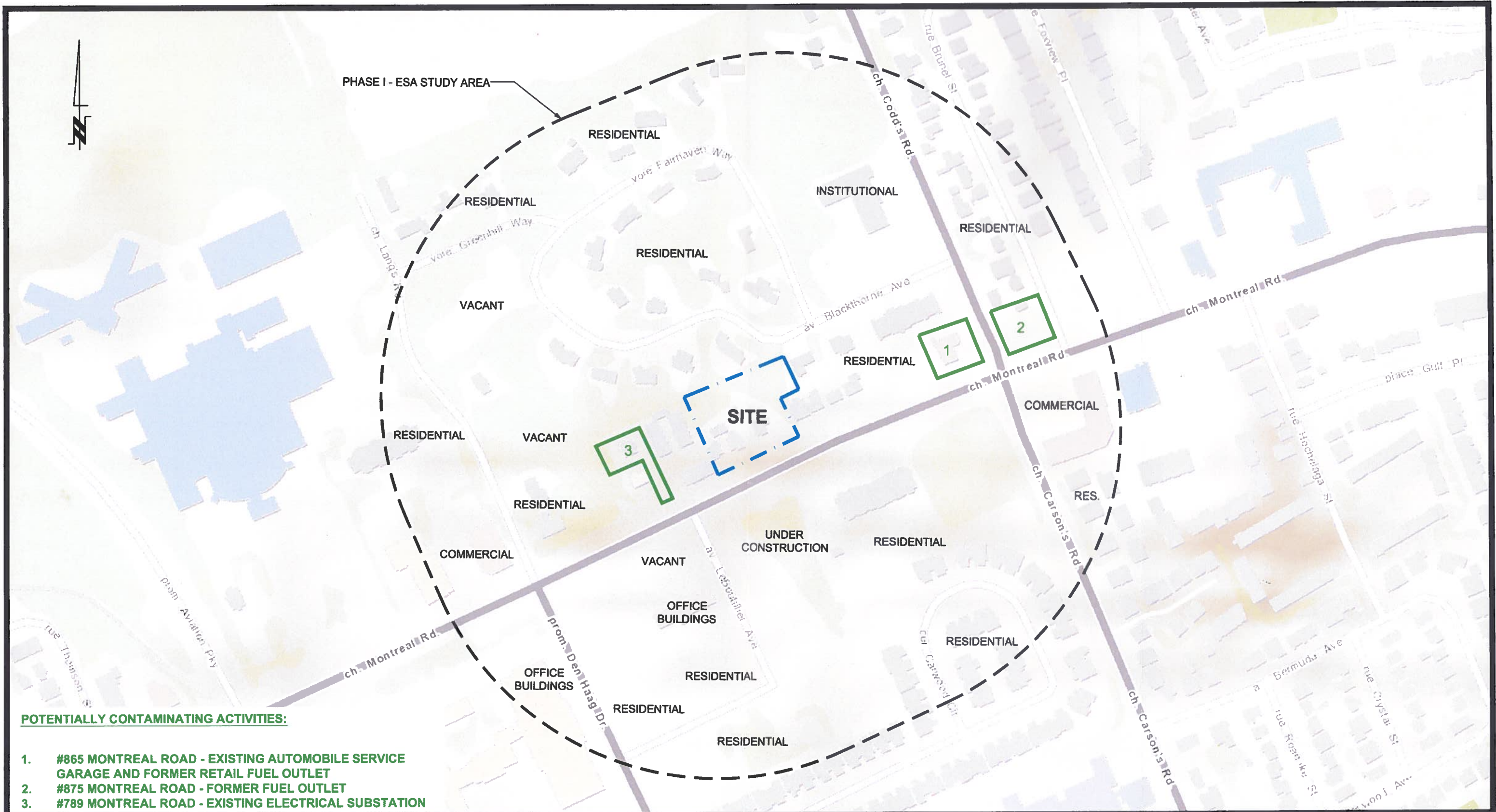
FIGURE 2
TOPOGRAPHIC MAP



MONTREAL ROAD

<div>patersongroup</div> <div>consulting engineers</div> <div>154 Colonnade Road South Ottawa, Ontario K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344</div>					DARWIN GROUP OTTAWA PHASE I - ENVIRONMENTAL SITE ASSESSMENT 807, 811, 817 & 825 MONTREAL ROAD	Scale:	1:500	Date:	06/2015		
						OTTAWA, Title:	Drawn by:	CPB	Report No.:	PE3563-1	
							Checked by:	XR	Drawing No.:	PE3563-1	
							Approved by:	MSD			
							SITE PLAN				
	NO.	REVISIONS	DATE	INITIAL							

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POTENTIALLY CONTAMINATING ACTIVITIES:

- 1. #865 MONTREAL ROAD - EXISTING AUTOMOBILE SERVICE GARAGE AND FORMER RETAIL FUEL OUTLET
- 2. #875 MONTREAL ROAD - FORMER FUEL OUTLET
- 3. #789 MONTREAL ROAD - EXISTING ELECTRICAL SUBSTATION

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NO.	REVISIONS	DATE	INITIAL

DARWIN GROUP OTTAWA
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
807, 811, 817 & 825 MONTREAL ROAD
OTTAWA, ONTARIO
Title: **SURROUNDING LAND USE PLAN**

Scale:	1:3000	Date:	06/2015
Drawn by:	CPB	Report No.:	PE3563-1
Checked by:	XR	Drawing No.:	PE3563-2
Approved by:	MSD		

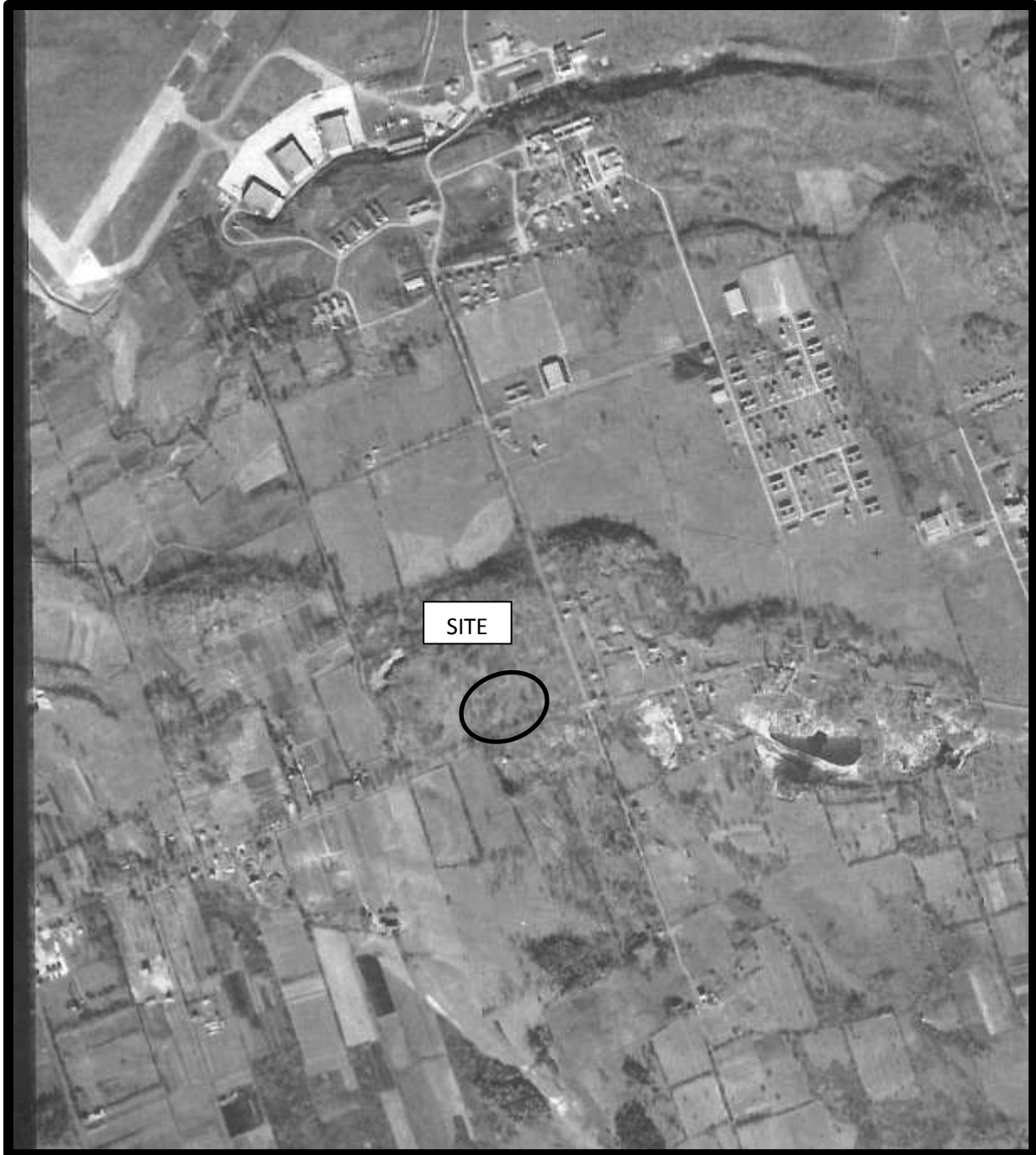
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APPENDIX 1

CURRENT PLAN OF SURVEY

AERIAL PHOTOGRAPHS

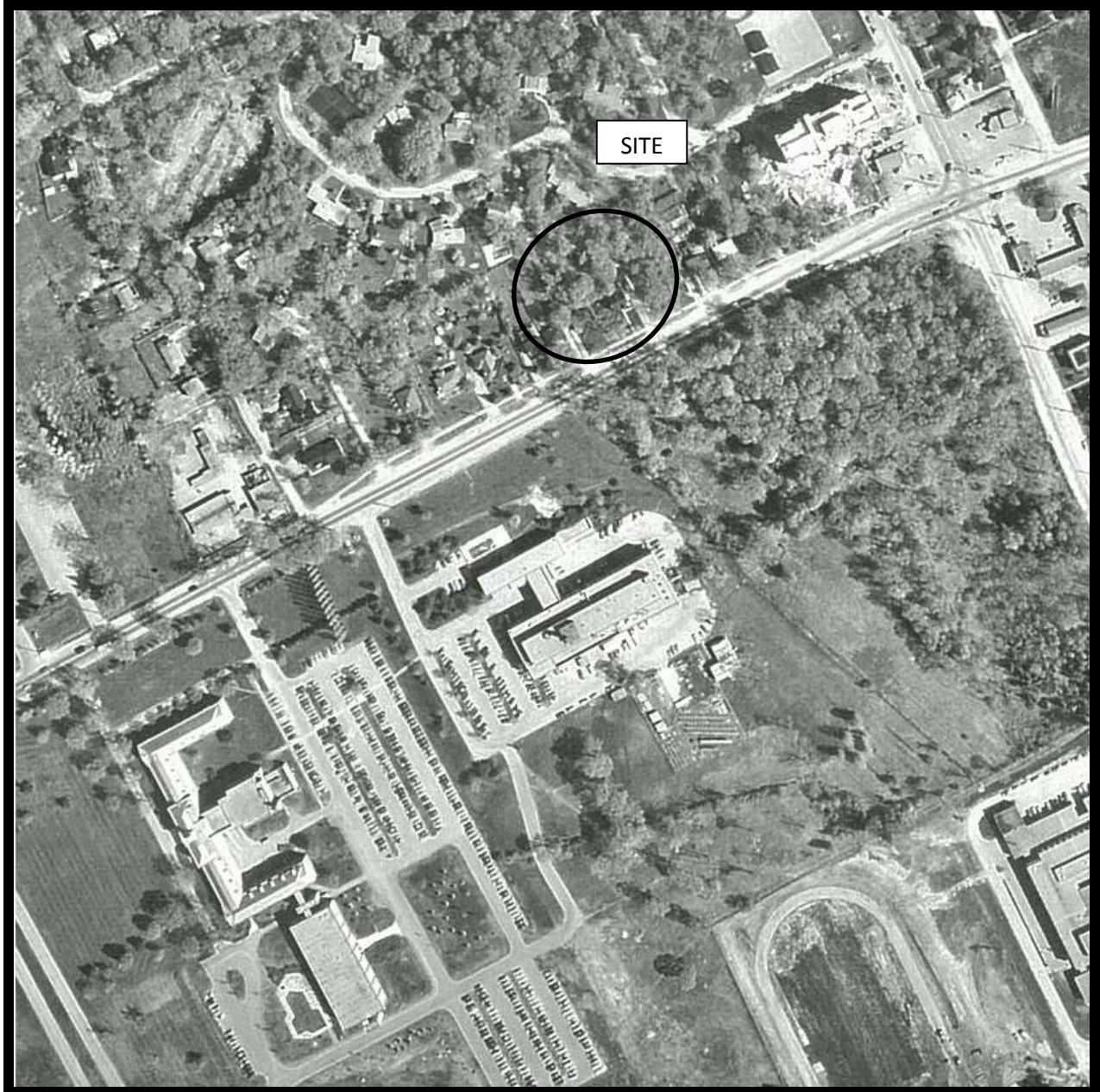
SITE PHOTOGRAPHS



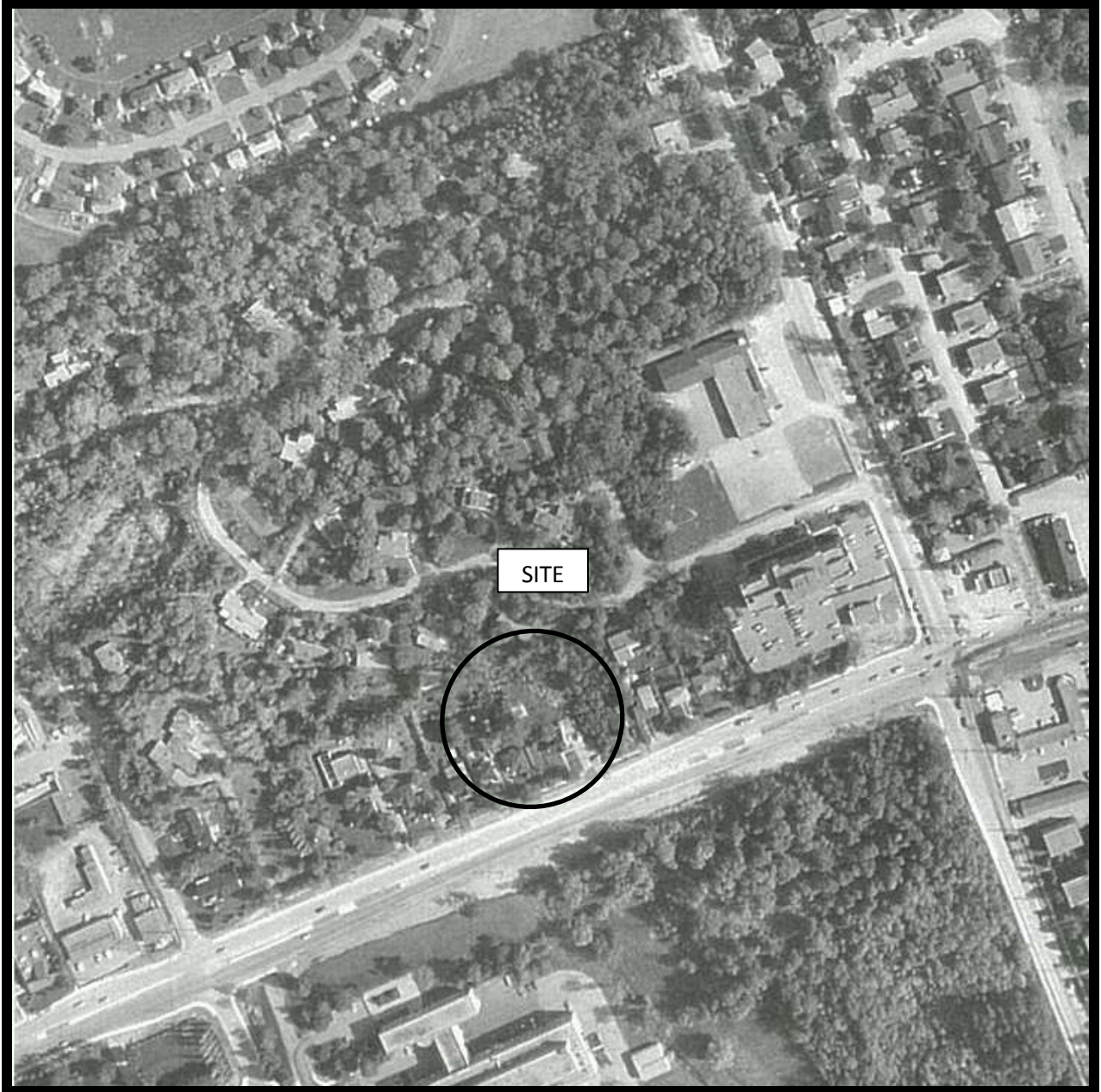
AERIAL PHOTOGRAPH
1945



AERIAL PHOTOGRAPH
1955



AERIAL PHOTOGRAPH
1973



AERIAL PHOTOGRAPH
1984



AERIAL PHOTOGRAPH
1993



AERIAL PHOTOGRAPH
1997

Site Photographs

PE3563

807 – 825 Montreal Road, Ottawa, Ontario

May 26, 2015



Photograph 1: View of the driveway of the former residential dwelling addressed 817 Montreal Road, facing southeast.



Photograph 2: View across the subject site, facing west.

Site Photographs

PE3563

807 – 825 Montreal Road, Ottawa, Ontario

May 26, 2015



Photograph 3: View across the subject site from the wooded area, facing southwest.



Photograph 4: View of the former driveway for 807 and 811 Montreal Road, facing south.

Site Photographs

PE3563

807 – 825 Montreal Road, Ottawa, Ontario

May 26, 2015



Photograph 5: Stone retaining wall located at the back of the property, facing north.



Photograph 6: View across the wooded area of the property, facing west.

APPENDIX 2

MOE FREEDOM OF INFORMATION REQUEST RESPONSE

TSSA CORRESPONDENCE

CITY OF OTTAWA HLUI SEARCH REQUEST

MOE WELL RECORDS

**Ministry of the Environment
and Climate Change**

Freedom of Information and
Protection of Privacy Office

12th Floor
40 St. Clair Avenue West
Toronto ON M4V 1M2
Tel: (416) 314-4075
Fax: (416) 314-4285

**Ministère de l'Environnement et de
l'Action en matière de changement
climatique**

Bureau de l'accès à l'information et
de la protection de la vie privée

12^e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél. : (416) 314-4075
Téléc.: (416) 314-4285



June 19, 2015

Xavier Redhead
Paterson Group Inc.
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Xavier Redhead:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2015-03146, Your Reference PE3563

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 807, 811, 817, & 825 Montreal Rd, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Approvals Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, no records were located responsive to your request. To provide you with this response and in accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, the fee owed is \$30.00 for 1 hour of search time @ \$30.00 per hour. **We have applied the \$30.00 for this request from your initial payment. This file is now closed.**

You may request a review of my decision by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, ON M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a \$25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Daniel Demanuele at (416) 212-3183 or daniel.demanuele@ontario.ca.

Yours truly,

for Heidi Ritscher
FOI Manager

Xavier Redhead

From: plal@tssa.org on behalf of Public Information Services [publicinformationservices@tssa.org]
Sent: May-26-15 1:50 PM
To: Xavier Redhead
Subject: Re: 807-825 Montreal Road

Hi Xavier:

Thank you for your inquiry.

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

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

Thank you and have a great day!

Prem
Public Information Services

"Putting Public Safety First"

Technical Standards and Safety Authority
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4

Toll-Free: 1-877-682-8772
Email: publicinformationservices@tssa.org
Web Site: www.tssa.org

On Tue, May 26, 2015 at 12:36 PM, Xavier Redhead <XRedhead@patersongroup.ca> wrote:

Good afternoon,

Could you please complete a search of your records for underground/aboveground storage tanks, historical spills or other infractions for the following addresses for properties located in Ottawa, Ontario.

789, 791, 795, 800, 807, 811, 817, 825, 829 Montreal Road

832 Blackthorne Avenue

Thank you,

Xavier

patersongroup

solution oriented engineering

154 Colonnade Road South

Ottawa, Ontario, K2E 7J5

Tel: [\(613\) 226-7381 Ext. 232](tel:(613)226-7381)

Fax: [\(613\) 226-6344](tel:(613)226-6344)

Email: xredhead@patersongroup.ca

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



DISCLAIMER

For use with HLUI Database

CITY OF OTTAWA ("the City") is the owner of the HISTORICAL LAND USE INVENTORY ("HLUI"), a database of information on the type and location of land uses within the geographic area of Ottawa, which had or have the potential to cause contamination in soil, groundwater or surface water.

The City, in providing information from the HLUI, to Paterson Group Inc. ("the Requester") does so only under the following conditions and understanding:

1. This is a free service offered by the City.
2. The information which is contained in the HLUI has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.
3. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information provided by the City to the Requester is provided on the assumption that it will not be relied upon by any person whatsoever. The City denies all liability to any such persons attempting to rely on any information provided from the HLUI database.
4. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
5. Copyright is reserved to the City.
6. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
7. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
8. All information collected under this request and all records provided in response to this request are subject to the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c. M.56, as amended.

Signed: _____

Xavier Redhead

Per: Xavier Redhead, B.Eng.

(Please print name)

Title: Environmental Assessor

Company: Paterson Group Inc.

Dated: _____

June 2, 2015



INFORMAL REQUEST FOR INFORMATION PROCESS
CONFIDENTIAL

File No.: PE3563

Request for Information

(Informal Request)*

1. REQUESTER INFORMATION

- a) Name of Requester: Xavier Redhead
- b) Address of Requester: 154 Colonnade Road South, Ottawa, Ontario, K2E 7J5
- c) Telephone Number: 613-226-7381
- d) Site Address: Lot- 807, 811, 817 & 825 Concession: _____
Street: Montreal Road City/Town: Ottawa
Postal Code: _____
- e) Legal Plan Attached: Yes () No (X)
- f) Site Owners: Darwin Group Ottawa
- g) Adjacent Property Owners: _____
- h) Date of Ownership: _____
Previous Owner(s): _____
- i) Type of Site: (x) vacant, () residential, () commercial,
() other (specify) _____
- j) Requestors relationship to Site: Environmental Site Assessor
- k) Date of Previous Request: n/a
- l) Date of Previous ESA: n/a
- m) Information Requested: Environmental Records (violations, sewer use
infractions, spills or leaks, waste disposal sites...) and HLUI database for historical land
use in the area of the site.

2. CONFIDENTIALITY

- a) Consent Required: (x) Owner () Tenant () Purchaser () Legal**
- b) Consent Obtained: (x) Owner () Tenant () Purchaser () Legal**

*Will not be processed as a request for information pursuant to MFIPPA.

**(Consent letters must contain the information required, give authorization to requestor, and be dated and signed)

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

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

www.patersongroup.ca

June 1, 2015
File: PE3563-HLUI

City of Ottawa
110 Laurier Avenue W
Ottawa, Ontario
K1P 1J1

Subject: **Authorization Letter, HLUI Search
Phase I-Environmental Site Assessment
807, 811, 817 & 825 Montreal Road
Ottawa, Ontario**

Dear Sir or Madame,

Please consider this letter as confirmation that Paterson Group has been retained by the property owner to conduct a Phase I-Environmental Site Assessment at the aforementioned property.

With this letter, the property owner authorizes the City of Ottawa and other regulatory bodies to release, to Paterson Group, information requested for the purpose of completing an environmental assessment of the property.

Name of Company/Property Owner:

DARWIN GROUP OTTAWA

Name of Representative

ANTHONY NICOLINI

Authorization of Representative

Anthony Nicolini

Date

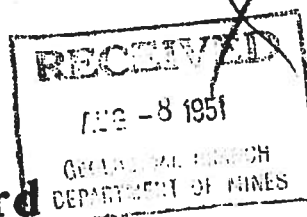
JUNE 2, 2015

MONTREAL RM

UTM 18 R 450370
Elev. 19 R 03210
Basin 25



15 No 8528



The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

Location or City *Ottawa*
Town or City *Ottawa*
Date Completed *7/5/51* (day) (month) (year) Cost of Well (excluding pump) *100.00*

Pipe and Casing Record

Casing diameter(s) *6 in*
Length(s) of casing(s) *18*
Type of screen
Length of screen
Distance from top of screen to ground level
Is well a gravel-wall type?

Pumping Test

Date
Static level *15*
Pumping level *24*
Pumping rate
Duration of test
Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral) *fresh*
Quality (hard, soft, contains iron, sulphur, etc.)
Appearance (clear, cloudy, coloured) *clear*
For what purpose(s) is the water to be used? *house*
How far is well from possible source of contamination?
What is the source of contamination?
Enclose a copy of any mineral analysis that has been made of water.

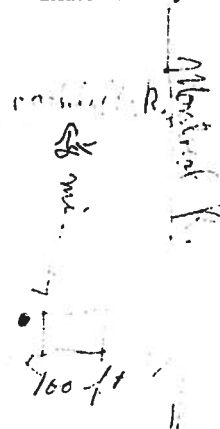
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
<i>75</i>		<i>60</i>

Well Log

Overburden and Bedrock Record	From 0 ft.	To ...ft.
<i>Clay</i>	<i>1</i>	<i>9</i>
	<i>9</i>	<i>13</i>
	<i>13</i>	<i>25</i>

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside?
Drilling Firm *John J. McLaughlin*
Address *100 St. Lawrence St.*
Name of Driller *John J. McLaughlin* Address *100 St. Lawrence St.*
Date *7/5/51* Licence Number *100*

Faerhaven Way

Montreal Road
~~Rockcliffe Rd~~

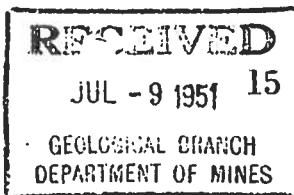
Montrose Rd

UIM 1/18/2 451014810

19R 5103215410N

Elev. 91R 0131210

Basin 25



The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

Saskatoon Township, Village, Town or City *Ottawa*
[Redacted] Town or City *Ottawa*
Date Completed *Dec 20 1951* Cost of Well (excluding pump) *25.00*
(day) (month) (year)

Pipe and Casing Record	Pumping Test
Casing diameter(s) <i>6 in.</i>	Date <i>Dec 20 1951</i>
Length(s) of casing(s) <i>17 ft</i>	Static level <i>35 ft</i>
Type of screen	Pumping level <i>41 ft</i>
Length of screen	Pumping rate <i>2.5 m</i>
Distance from top of screen to ground level	Duration of test
Is well a gravel-wall type?	Distance from cylinder or bowls to ground level

Water Record		Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Kind (fresh or mineral) <i>fresh</i>	Quality (hard, soft, contains iron, sulphur, etc.) <i>hard</i>			
Appearance (clear, cloudy, coloured) <i>clear</i>	For what purpose(s) is the water to be used? <i>house</i>	<i>60</i>	<i>hard</i>	<i>25</i>
How far is well from possible source of contamination?				
What is the source of contamination?				
Enclose a copy of any mineral analysis that has been made of water				

Well Log			Location of Well
Overburden and Bedrock Record	From	To	
	0 ft.	...ft.	<p>In diagram below show distances of well from road and lot line. Indicate north by arrow.</p>
<i>Gravel</i>	<i>1</i>	<i>2</i>	
<i>White limestone</i>	<i>2</i>	<i>90</i>	

Situation: Is well on upland, in valley, or on hillside?
Drilling Firm *G. S. MULLIGAN*
Address *John S. Mulligan*
Name of Driller *John S. Mulligan* Address
Date *Dec 20 1951* Licence Number

Signature of Licensee

18 450340

15 5032580

Nov. 4 0320

Dec 3 1968



CODED

Fairhaven

Water management in Ontario

31659

1509904

The Ontario Water Resources Commission Act

WATER WELL RECORD

DIVISION OF
WATER RESOURCES

DEC 3 1968

OTTAWA
ONTARIO WATER
RESOURCES COMMISSION

County or District Carleton

Township, Village, Town or City

Con. Lot

Date completed 19th

November 1968

Address 17 Fairhaven Way, Ottawa 7, Ont.

Casing and Screen Record

Inside diameter of casing 6 3/16
Total length of casing 88
Type of screen -
Length of screen -
Depth to top of screen -
Diameter of finished hole 6

Pumping Test

Static level 145
Test-pumping rate 40 GPH XXX
Pumping level 175
Duration of test pumping 1 hr.
Water clear or cloudy at end of test clear
Recommended pumping rate 1 G.P.M.
with pump setting of 200 feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
<u>limestone</u>	<u>0</u>	<u>365</u>	<u>340</u>	<u>fresh</u>

For what purpose(s) is the water to be used? house

Is well on upland, in valley, or on hillside? hillside

Drilling or Boring Firm

J.B. DUFRESNE & CO. LIMITED

Address 1014 Maitland Ave.,

Ottawa 5, Ont.

Licence Number 2999

Name of Driller or Borer R. Laniel

Address 6 Bellevue Cr. - Lucerne, Que.

Date November 19th 1968

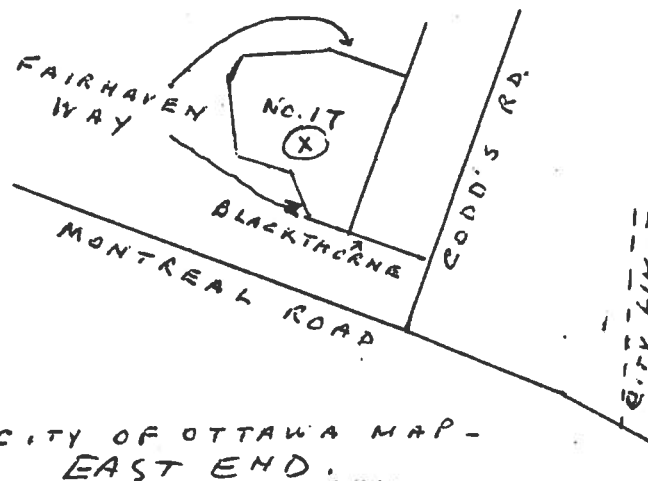
R. Laniel
(Signature of Licensed Drilling or Boring Contractor)
for: J.B. Dufresne & Co. Limited

Form 7

OWRC COPY

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Basin 215 11/18



The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

Case, for

in Village, Town or City Ottawa
Manitoba

Town or City).....

38. Her heaven was

Date Completed.. October 15, 1932 Cost of Well (excluding pump).....
(day) (month) (year)

Pipe and Casing Record

Pumping Test

Casing diameter(s) 6 inches	Date Oct 16
Length(s) of casing(s) 2.5 feet	Static level 2.5 feet
Type of screen	Pumping level 7.0 feet
Length of screen	Pumping rate 3.00 gallons hour
Distance from top of screen to ground level	Duration of test 2.5 hours
Is well a gravel-wall type? wall type	Distance from cylinder or bowls to ground level

Water Record

Kind (fresh or mineral).....	fresh	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur, etc.).....	hard			
Appearance (clear, cloudy, coloured).....	clear	6 d	hard	4 d
For what purpose(s) is the water to be used?.....	drinking	8 d		
		135 feet		
How far is well from possible source of contamination?.....	none			
What is the source of contamination?.....	septic Tank			
Enclose a copy of any mineral analysis that has been made of water.....				

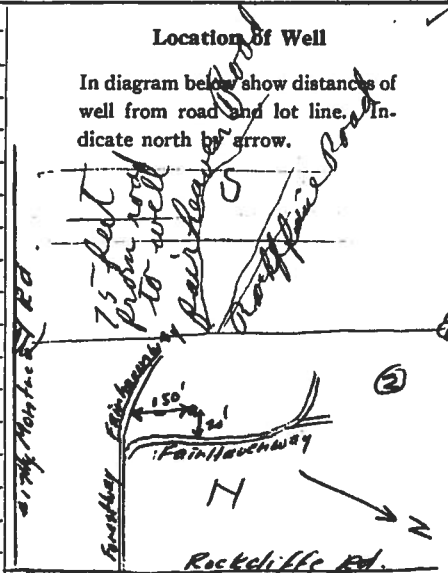
Well Log

Overburden and Bedrock Record

[illegible]

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Situation: Is well on upland, in valley, or on hillside? *On hill*
 Drilling Firm. *Gordon McElligan*
 Address. *4 S. S. McLean St. Hawa, Ont*
 Name of Driller. *E. Smith* Address. *S. S. McLean St*
 Date. *November 16 1952* Licence Number. *507*
 Signature of Licensee *E. Smith*

Form 5

FORM 5

Fairhaven Way

1182 141510151515

151R 15101312151610N

Elev. 142 0131315

Basin 1215



The Well Drillers Act

Department of Mines, Province of Ontario

15 No 9820

RECEIVED

OCT 21

GEOLOGICAL BRANCH
DEPARTMENT OF MINES

Water Well Record

County or District *Ottawa City* Con. *1* Lot *1* Pt. Lot *1*

Acres *1.1*

including pump) *1.1*

Pipe and Casing Record

Pumping Test

Casing diameter(s) <i>6 in</i>	Date <i>10/21/50</i>
Length(s) of casing(s) <i>12 ft</i>	Developed Capacity <i>1.2</i>
Length of screen <i>12 ft</i>	Duration of Test <i>1.2</i>
Type of screen <i>4 in</i>	Pumping Rate <i>3.75</i>
Type of pump <i>4 in</i>	Drawdown <i>4.5 ft</i>
Capacity of pump <i>4 in</i>	Static level of completed well <i>6.5 ft</i>
Depth of pump setting <i>4 in</i>	Is well a gravel-wall type? <i>No</i>

Water Record

Kind (fresh or mineral) <i>Fresh</i>	Depth(s) to Water Horizon(s) <i>100 ft</i>	Kind of Water <i>Hard</i>	No. of Feet Water Rises <i>2</i>
Quality (hard, soft, contains iron, sulphur etc.) <i>Hard</i>			
Appearance (clear, cloudy, coloured) <i>Clear</i>	<i>100 ft</i>	<i>Hard</i>	<i>2</i>
For what purpose(s) is the water to be used? <i>Household</i>	<i>100 ft</i>	<i>Hard</i>	<i>2</i>
How far is well from possible source of contamination? <i>?</i>	<i>100 ft</i>	<i>Hard</i>	<i>2</i>
What is source of contamination? <i>?</i>	<i>100 ft</i>	<i>Hard</i>	<i>2</i>
Enclose a copy of any mineral analysis that has been made of water <i>?</i>	<i>100 ft</i>	<i>Hard</i>	<i>2</i>

Well Log

Drift and Bedrock Record

From To
0 ft.ft.

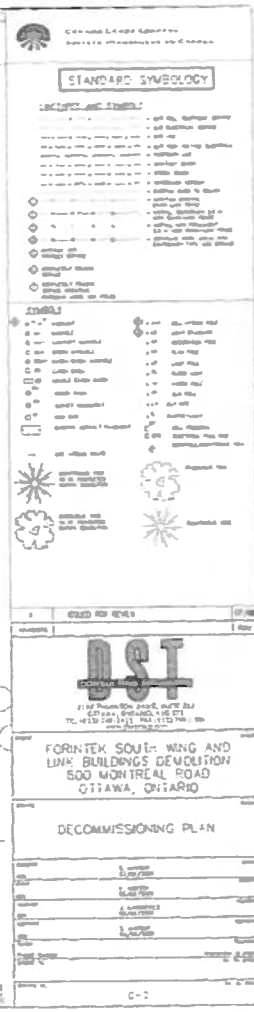
Top soil	1	2
Gravel	2	3
Clay	3	4
Bedrock	4	5
	5	6
	6	7
	7	8
	8	9
	9	10
	10	11
	11	12
	12	13
	13	14
	14	15
	15	16
	16	17
	17	18
	18	19
	19	20

Location of Well

In diagram below show distances of well from road and lot line

Diagram showing well location relative to road and lot line. Includes handwritten notes: National Highway, 150 ft, at South East Cor., Ottawa.

Situation: Is well on upland, in valley, or on hillside? *Upland*
 Drilling Firm *Glenn S. Mulligan*
 Address *1000 R.R. 1*
 Recorded by *Glenn S. Mulligan* Address *1000 R.R. 1*
 Date *Oct 22/50* Licence Number *1000 R.R. 1*





Ministry of
the Environment

Well Tag **A 068574** Well Tag No.
A068574

Cluster Well Information for Cluster Well Construction
Regulation 903 Ontario Water Resources Act

Page 1 of 1

Property Owner's Information

First Name **Canada Lands Company** Last Name **CLL Ltd.** Mailing Address (Street No./Name, RR) **Bldg. 164 CFB Rockcliffe** Municipality **Ottawa**
Province **ON** a Code **K1A0K2** E-mail Address Telephone No. (inc. area code) **613919181791710**

Cluster Well Information

Address of Well Location (Street Number/Name, RR) Lot Concession Township County/District/Municipality
City/Town/Village Province **Ontario** Postal Code GPS Unit Make Model Unit Mode of Operation ☐ Undifferentiated ☐ Averaged
☐ Differentiated, specify:

Signature of Technician/Contractor **Bruce Downing** Date (yyyy/mm/dd) **2008/05/17**

Well # on Sketch	Zone	UTM Coordinates Easting Northing	Full Depth of Hole (metres)	Hole Diameter (cm)	Method of Construction	Casing Material	Casing Length (metres)	Screen Interval (metres) From To	Annular Space Sealant Used	Static Water Level (metres)	Abandonment Sealant Used	Comments	Date of Completion (yyyy/mm/dd)
#7		184504335032470	3.6	20	HSA	PVC	1.3	1.3 3.6					2008/05/20
#9		Interior M.W.'s	2.8		Hand Auger		1.2	1.2 2.8					2008/05/21
#10		Interior M.W.	0.86				No installation					Auger refusal on bedrock	2008/05/21
#11		Interior M.W.	1.0				"	"				" " " "	2008/05/21
#12		Interior M.W.	1.5				1.0	1.0 1.5				" " " "	2008/05/21

Well Contractor and Well Technician Information

Business Name of Well Contractor **George Downing Estate Drilling Ltd** Business Address (Street Number/Name, RR) **410 Rue Principale Grenville Junda Rouge QC** Municipality Province **QC**
Postal Code **J0V1B0** Business Telephone No. (inc. area code) **8192426469** Well Contractor's Licence No. **1844** Business E-mail Address **downing@xplornet.com**
Name of Well Technician (First Name, Last Name) **Bruce Downing** Well Technician's Licence No. **2173** Date Submitted (yyyy/mm/dd) **2008/06/17** Signature of Technician **Bruce Downing**

Date 1st Well in Cluster Constructed (yyyy/mm/dd) **2008/05/20** Date Last Well in Cluster Constructed (yyyy/mm/dd) **2008/05/21**
Ministry Use Only
Date Received (yyyy/mm/dd) **SEP 29 2008** Date Inspected (yyyy/mm/dd)
Audit No. **C 02390** Remarks **M01416**

UTM 1112 415012102

5R 5101312141010N

Elev. 612 013010

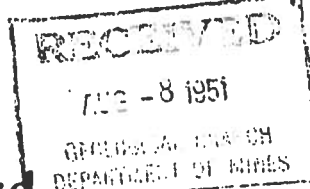
Basin 215



ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

15 No 822



Water Well Record

County or Territorial District Carleton Place City OttawaTown or City ShawvilleRoad Highway 104Date Completed Aug 17 (day) (month) (year) Cost of well (excluding pump) 11.00

Pipe and Casing Record

Pumping Test

Casing diameter(s) <u>5 in.</u>	Date <u>Aug 17</u>
Length(s) of casing(s) <u>17 ft.</u>	Static level <u>8</u>
Type of screen <u>1/2 in.</u>	Pumping level <u>1.5</u>
Length of screen <u>17 ft.</u>	Pumping rate <u>1.5</u>
Distance from top of screen to ground level <u>17 ft.</u>	Duration of test <u>1.5</u>
Is well a gravel-wall type? <u>No</u>	Distance from cylinder or bowls to ground level <u>17 ft.</u>

Water Record

Kind (fresh or mineral) <u>fresh</u>	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur, etc.) <u>hard</u>			
Appearance (clear, cloudy, coloured) <u>clear</u>			
For what purpose(s) is the water to be used? <u>household</u>	<u>5.5</u>	<u>no</u>	<u>1.5</u>
How far is well from possible source of contamination? <u>1/2 mi.</u>			
What is the source of contamination? <u>road</u>			
Enclose a copy of any mineral analysis that has been made of water.			

Well Log

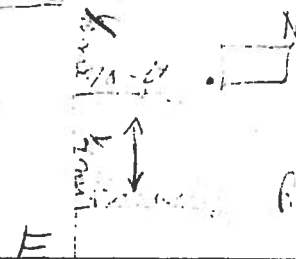
Overburden and Bedrock Record	From	To
	0 ft.	...ft.
<u>Loam</u>	<u>1</u>	<u>2</u>
<u>Blue shale</u>	<u>2</u>	<u>6</u>
<u>Dark grey shale</u>	<u>6</u>	<u>6.5</u>

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.

W

Road

Situation: Is well on upland, in valley, or on hillside? UplandDrilling Firm John J. McLaughlinAddress 1000 St. Lawrence St.Name of Driller John J. McLaughlin Address 1000 St. Lawrence St.Date Aug 17 Licence Number 11.00

Master Well Owner's and Land Owner's Information

First Name: Canada Lands Company, Last Name: Limited, E-mail Address:
Mailing Address (Street Number/Name): 819 164 CFB Rockcliffe, Municipality: Ottawa, Province: ON, Postal Code: K1A0K2, Telephone No. (inc. area code): 1399777

Location and Construction of the Master Well in the Cluster

Address of Well Location (Street Number/Name, R/R): 800 Montreal Road, Township: , Lot: , Concession: , City/Town/Village: Ottawa, Province: Ontario, Postal Code: , UTM Coordinates: Zone: 18, Easting: 504085, Northing: 032467, GPS Unit Make: Garmin, Model: Etrex, Mode of Operation: Undifferentiated, specify: , Differentiated, specify: ,

Overburden and Bedrock Materials (see instructions on the back of this form)				
General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From To
	Asphalt surface			0 0.1
Brown	Fill	Sand + Gravel		0.1 1.3
Brown	Sand + silt			1.3 1.8
Grey	Clay + silt			1.8 3.4
Black	Weathered bedrock shale			3.4 4.0
Grey	Sand, silt + clay trace black shale			4.0 4.6

Hole Details		
Depth (Metres)	Diameter (Centimetres)	
From To		
0 4.6	20	

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

Method of Construction: ☐ Cable Tool, ☐ Air Percussion, ☐ Digging,
☐ Rotary (Conventional), ☐ Diamond, ☐ Boring,
☐ Rotary (Reverse), ☐ Jetting, ☐ Other, specify: HSA,
☐ Rotary (Air), ☐ Driving

Status of Well: ☒ Test Hole, ☐ Abandoned, insufficient supply,
☐ Replacement Well, ☐ Abandoned, poor water quality,
☐ Dewatering Well, ☐ Other, specify: ,
☐ Alteration (Construction), ☐ Abandoned, other, specify:

No Casing and Screen Used: ☐ Yes, ☒ No, Static Water Level Test: 11.7 Metres

Construction Details		
Inside Diameter (Centimetres)	Material (steel, plastic, fiberglass, concrete, galvanized)	Well Thickness (Cubic Metres)
5.1	PVC	Sched 40
Depth (Metres)	From	To
	0	4.6

Screen: ☐ Galvanized, ☐ Steel, ☐ Fiberglass, ☐ Concrete, ☒ Plastic,
Outside Diameter (Centimetres): 5.8, Slot No.: 10

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

Annular Space/Abandonment Sealing Record		
Depth Set at (Metres) From To	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)
0 1.3	Bentonite	75 Kgs

Monitoring well: 2008/05/20

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.):
Total Wells in Cluster: 1, Please indicate Number of Cluster Well Information Log Sheets Submitted: 1,
Total Wells on this Property: unknown

Location of Well Cluster: Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.
☒ Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Well Contractor and Well Technician Information:
Business Name of Well Contractor: George Downing Estate Drilling, Well Contractor's Licence No.: 1181414,
Business Address (Street No./Name, Number, R/R): 410 Rue Principale, Municipality: Grenville,
Province: QC, Postal Code: J0V1B0, Business E-mail Address: downinge.xplornet.com,
Business Telephone No. (inc. area code): 819 242 4469, Name of Well Technician (Last Name, First Name): Downing, Bruce,
Well Technician's Licence No.: 2173, Signature of Technician: [Signature], Date Submitted (yyyy/mm/dd): 2008/06/17

Ministry Use Only:
Audit No.: M 01416, Well Contractor No.: ,
Date Received (yyyy/mm/dd): SEP 29 2008, Date of Inspection (yyyy/mm/dd): ,
Remarks: C02390

C-1844
M0146
C0390 A 0685742 2000

DEN HAAG DRIVE

FORINTEK ADMINISTRATION BUILDING

GARAGE

BOILER BASEMENT

STORAGE SHED TO BE DEMOLISHED

SERVICE TUNNEL TO BE BUILT

SERVICE PREVIOUSLY CAPTURED BY ENBRIDGE

STANDARD SYMBOLS

FORINTEK SOUTH WING AND LINK BUILDINGS DEMOLITION
500 MONTREAL ROAD
OTTAWA, ONTARIO
DECOMMISSIONING PLAN
C-2

[illegible][illegible]

Four diagrams of different types of flowers are shown, each with a label and a description:

- Sunflower**: A large flower with a dark brown center and yellow petals. The label says "Sunflower" and the description says "A large flower with a dark brown center and yellow petals."
- Daisy**: A flower with a white center and white petals. The label says "Daisy" and the description says "A flower with a white center and white petals."
- Tulip**: A flower with a red center and red petals. The label says "Tulip" and the description says "A flower with a red center and red petals."
- Carnation**: A flower with a white center and white petals. The label says "Carnation" and the description says "A flower with a white center and white petals."

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FORNTEX SOUTH WING AND
LINK BUILDINGS DEMOLITION
500 MONTREAL ROAD
OTTAWA, ONTARIO

DECOMMISSIONING PLAN

1. 10/10/2000

1999

472

Age Group	Percentage of Respondents
18-24	65
25-34	75
35-44	80
45-54	85
55-64	90
65+	95

C-2



Well Record for Well Cluster - Part 2 of 3
Land Owner Consent

This form is to be completed by the person who constructs or abandons test holes or dewatering wells that form all or part of a well cluster. If this form is being used to report any well abandonment, these wells must have been previously reported as part of a single well cluster.

Note: For well cluster records, only the owners of the land on which the wells are situated are to give written consent. If the well purchaser (e.g. a consultant who hires the driller) is not the owner of the land, then the well purchaser cannot sign the consent form.

By signing this form, land owners are providing consent to use one well record to report a well cluster of test holes or dewatering wells in accordance with section 16.4 of Regulation 903 made under the *Ontario Water Resources Act*.

This completed **Well Record for Well Cluster Part 2 - Land Owner Consent** must be attached to Parts 1 and 3.

* Please PRINT if completing by hand.

Well Tag Number: # A124903

"Well Record for Well Cluster" Audit Number: # C16380

Well # on Detailed Drawing	Property Location Description	Land Owner's Name	Signature of Land Owner	Date Signed, (yyyy/mm/dd)
# 1-4	140 Den Haag RD OTTAWA ON	CITY OF OTTAWA	[REDACTED]	2012 03 29
	C-7085 C16380			



Ontario

Ministry of
the Environment

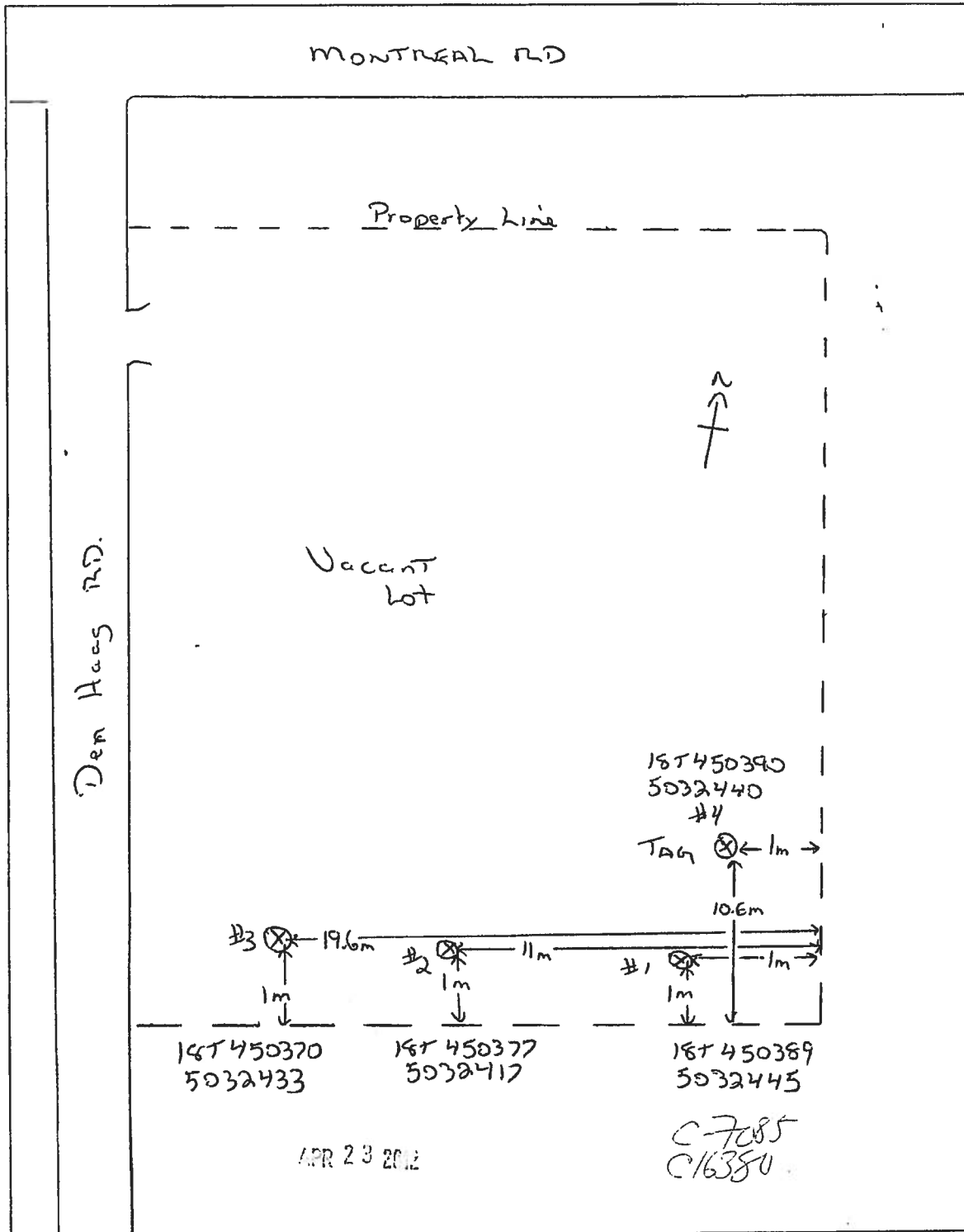
Well Record for Well Cluster - Part 3 of 3 Detailed Drawing of All Well Locations

Note: This Well Record for Well Cluster Part 3 - Detailed Drawing of all Well Locations, must be attached to Parts 1 and 2. The drawing must include all property boundaries, an arrow indicating the North direction, all named roads and sufficient measurements to locate all wells in the cluster in relation to fixed points. The drawing must show the location of each well and each well must be numbered on the drawing to match number used for that well on the Well Record for Well Cluster Parts 1 and 2. The well with the well tag must be clearly identified on the Drawing.

UTM coordinates should appear beside each well, if space permits. Additional comments on wells can be included on the drawing

Well Tag Number: # A124903

"Well Record for Well Cluster" Form Audit Number: # C16380



Ministry of
the Environment

Well: A 029522 (number below)

A029522

Well Record
Regulation 903 Ontario Water Resources Act

page 1 of 2

Instructions for Completing Form

- For use in the Province of Ontario only. This document is a permanent legal document. Please retain for future reference.
- All Sections must be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- All metre measurements shall be reported to 1/10th of a metre.
- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information

Ministry Use Only									
MUN						CON			LOT

RR#/Street Number/Name 875 Montreal Road + Codd's Road	City/Town/Village Ottawa	Site/Compartment/Block/Tract etc.
GPS Reading NAD 83 118 450655 5032701	Unit Make/Model	Mode of Operation: <input type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
Brown	Gravel (crushed stone)		5 Monitoring wells installed as a cluster	0	0.05
Grey	Limestone		Typical Installation	0.5	1
				1	4.9

Hole Diameter			Construction Record				Test of Well Yield					
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
0	4.9	20	50 mm	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Schedule 40	0.05	1	Pump intake set at - (metres)	1	1		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Pumping rate - (litres/min)	2	2		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Duration of pumping hrs + min	3	3		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Final water level and of pumping metres	4	4		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Recommended pump type. <input type="checkbox"/> Shallow <input type="checkbox"/> Deep	5	5		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Recommended pump depth. metres	10	10		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				Recommended pump rate. (litres/min)	15	15		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				If flowing give rate - (litres/min)	20	20		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				If pumping discontinued, give reason.	25	25		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					30	30		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					40	40		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					50	50		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					60	60		

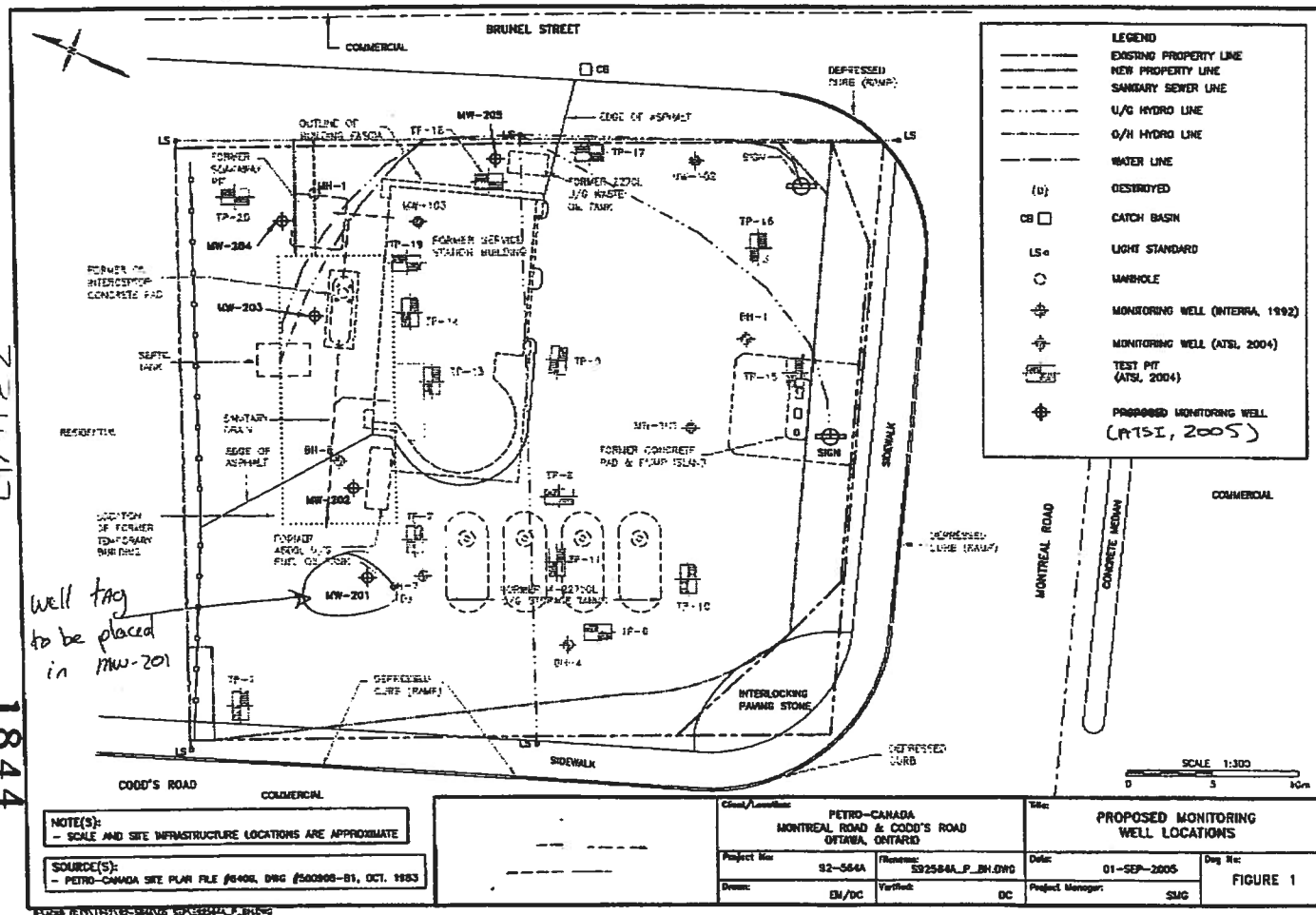
Plugging and Sealing Record				Location of Well	
Depth set at - Metres From	Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
0.05	1	Bentonite	20 kg	Please see attached site plan	

Method of Construction			
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (conventional)	<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving	
Water Use			
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	SAMPLE
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	
Final Status of Well			
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input type="checkbox"/> Abandoned, (Other)
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	
Well Contractor/Technician Information			
Name of Well Contractor	Well Contractor's Licence No.		
George Downing Estate Drilling Ltd	1844		
Business Address (street name, number, city etc.)			
410 Main St Grenville Sur la Ronge Qc J0V 1B0			
Name of Well Technician (last name, first name)	Well Technician's Licence No.		
Downing, Bruce	12173		
Signature of Well Contractor	Date Submitted		
x [Signature]	2005 11/05		
Ministry Use Only			
Date Source	Contractor		
	1844		
Date Received	Date of Inspection		
OCT 12 2005			
Remarks	Well Record Number		

OCT 12 2005

Z 31047

1844



UTM 1182 450118 15E5R 50132 5010 10N

The Ontario Water Resources Commission Act

Elev. 42 031010**WATER WELL RECORD**

GROUND WATER BRANCH

15 No 8435
DEC 7 1962ONTARIO WATER
RESOURCES COMMISSIONBasin 25 1 CHATHAM
County or District

Township, Village, Town or City

Con. Lot

Date completed

15
(day)OCT
month1962
year

ESS

LANGS ROAD**Casing and Screen Record**

Inside diameter of casing 6 INCH
 Total length of casing 20 FEET
 Type of screen NONE
 Length of screen NONE
 Depth to top of screen 6 INCH
 Diameter of finished hole 6 INCH

Pumping Test

Static level 30 FEET
 Test-pumping rate 4 G.P.M.
 Pumping level 180
 Duration of test pumping 2 HOURS
 Water clear or cloudy at end of test CLEAR
 Recommended pumping rate 4 G.P.M.
 with pump setting of 180 feet below ground surface

Well Log**Water Record****Overburden and Bedrock Record**

	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
<u>BROKEN LIMESTONE</u>	<u>0</u>	<u>12</u>		
<u>SOLID LIMESTONE</u>	<u>12</u>	<u>192</u>	<u>150</u>	<u>FRESH</u>
			<u>192</u>	<u>"</u>

For what purpose(s) is the water to be used?

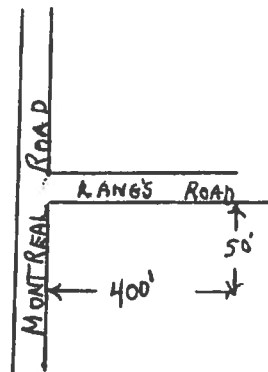
HOUSE HOLDIs well on upland, in valley, or on hillside? HILLSIDEDrilling or Boring Firm MOLLOUGHNEYAddress 51 McEWEN AVEOTTAWALicence Number 619Name of Driller or Borer F FLEURYAddress 1156 SHILKINGTON AVEDate 15 OCT 1962

(Signature of Licensed Drilling or Boring Contractor)

Form 7 10M-62-1152

OWRC COPY**Location of Well**

In diagram below show distances of well from road and lot line. Indicate north by arrow.

LANGS RD

Canson's Road

Master Well Owner's and Land Owner's Information

First Name: Canada Lands Company LLC Limited
Last Name: Bldg. 164 CFB Rockcliffe
Municipality: Ottawa
Province: ON
Postal Code: K1H1A0K2
Telephone No. (inc. area code): 39987970

Location and Construction of the Master Well in the Cluster
Address of Well Location (Street Number/Name, RR): 800 Montreal Road
City/Town/Village: Ottawa
Province: Ontario
Postal Code: K1H1A0K2

UTM Coordinates: Zone: 18N, Easting: 518145, Northing: 5040851932467
GPS Unit Make: Garmin
Model: Etrex
Mode of Operation: ☐ Undifferentiated, ☒ Averaged

Overburden and Bedrock Materials (see instructions on the back of this form)					Hole Details	
General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From To	From To	Diameter (Centimetres)
	Asphalt surface			0 0.1	0 4.6	20
	Brown Fill	Sand + Gravel		0.1 1.3		
	Brown Sand + silt			1.3 1.8		
	Grey Clay + silt			1.8 3.4		
	Black Weathered bedrock-shale			3.4 4.0		
	Grey Sand, silt + Clay trace black shale			4.0 4.6		

Construction Details				Screen	
Inside Diameter (Centimetres)	Material (steel plastic, fibreglass, concrete, galvanized)	Well Thickness (mm)	Depth (Metres) From To	Galvanized Steel Fibreglass Concrete Plastic	Slot No.
5.1	PVC	Sched 40	0 4.6		10

Annular Space/Abandonment Sealing Record			
Depth Set at (Metres) From To	Type of Sealant Used (Material and Type)	Volume Used (Cubic Metres)	
0 1.3	Bentonite	25 kgs.	

Well Contractor and Well Technician Information
Business Name of Well Contractor: George Downing Estate Drilling
Well Contractor's Licence No.: 1181414
Business Address (Street No./Name, number, RR): 410 Rue Principale Grenville Sur la Rouge
Municipality: QC
Province: QC
Postal Code: J0V1B0
Business E-mail Address: downinge.xplornet.com
Bus. Telephone No. (inc. area code): 8192426469
Name of Well Technician (Last Name, First Name): Downing Bruce
Well Technician's Licence No.: 21173
Signature of Technician: [Signature]
Date Submitted (yyyy/mm/dd): 2008/06/17

EHMW #8

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

Method of Construction
☐ Cable Tool ☐ Air Percussion ☐ Digging
☐ Rotary (Conventional) ☐ Diamond ☐ Boring
☐ Rotary (Reverse) ☐ Jetting ☐ Other, specify
☐ Rotary (Air) ☐ Driving HSA

Status of Well
☒ Test Hole ☐ Abandoned, Insufficient Supply
☐ Replacement Well ☐ Abandoned, Poor Water Quality
☐ Dewatering Well ☐ Other, specify
☐ Alteration (Construction) ☐ Abandoned, other, specify

No Casing and Screen Used ☒ Yes ☐ No
Open Hole ☐ Yes ☒ No
Static Water Level Test 11.71 Metres

Screen
Galvanized Steel Fibreglass Concrete Plastic
Outside Diameter (Centimetres) 5.8 Slot No. 10

Water Details
Water found at Depth: 0 Metres Kind of Water: Fresh Salty Sulphur Minerals
Water found at Depth: 0 Metres Kind of Water: Fresh Salty Sulphur Minerals
Water found at Depth: 0 Metres Kind of Water: Fresh Salty Sulphur Minerals

Monitoring well 2008/05/20

Cluster Information (Please also fill out the additional Cluster Well Information for Well Construction for each parcel of land and cluster.)
Total Wells in Cluster: 1
Please indicate Number of Cluster Well Information Log Sheets Submitted: 1
Total Wells on this Property: 1

Location of Well Cluster
Detailed Map must be provided as an attachment no larger than legal size (8.5" x 14"). Sketches are not allowed.
☒ Check box to confirm detailed map is provided as per Section 11.1 (3)

Consent to release additional information concerning the cluster to the Director upon request

Audit No. M 01416
Date Received (yyyy/mm/dd) SEP 29 2008
Date of Inspection (yyyy/mm/dd)
Remarks C02390

Well ID

Well ID Number: 7213938
 Well Audit Number: Z182558
 Well Tag Number: A089803

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

Well Location

Address of Well Location	4 FAIRHAVEN WAY
Township	OTTAWA CITY
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 450412.00 Northing: 5032772.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
	SAND	STNS	PCKD	0 ft	6 ft
	LMSN			6 ft	180 ft

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 ft	22 ft	HIGH EARLY CEMENT/ BENTONITE SLURRY	

Method of Construction & Well Use

Method of Construction	Well Use
Rotary (Convent.)	Domestic

Status of Well

Water Supply

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
6.125 inch	STEEL	-2 ft	22 ft

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
------------------	----------	------------	----------

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 3749

Results of Well Yield Testing

After test of well yield, water was	CLEAR
If pumping discontinued, give reason	
Pump intake set at	160 ft
Pumping Rate	5 GPM
Duration of Pumping	1 h 0 m
Final water level	59 ft
If flowing give rate	
Recommended pump depth	160 ft
Recommended pump rate	5 GPM
Well Production	
Disinfected?	Y

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL	31 ft		
1	31 ft	1	59 ft
2	32 ft	2	58 ft
3	33 ft	3	56 ft
4	35 ft	4	55 ft
5	37 ft	5	54 ft
10	41 ft	10	50 ft
15	49 ft	15	47 ft
20	53 ft	20	42 ft
25	59 ft	25	36 ft
30	59 ft	30	31 ft
40	59 ft	40	31 ft
45		45	
50	59 ft	50	31 ft
60	59 ft	60	31 ft

Water Details

Water Found at Depth	Kind
130 ft	Fresh
160 ft	Fresh

Hole Diameter

Depth From	Depth To	Diameter
0 ft	22 ft	10.625 inch
22 ft	180 ft	6.125 inch

Audit Number: Z182558

Date Well Completed: December 11, 2013

Date Well Record Received by MOE: January 02, 2014

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

POSITION

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

EDUCATION

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

MEMBERSHIPS

Ottawa Geotechnical Group
Professional Engineers of Ontario
Consulting Engineers of Ontario

EXPERIENCE

1991 to Present

Paterson Group Inc.

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

SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island
Rideau Centre Expansion project - Ottawa
Agricultural Supply Facilities - Eastern Ontario
Laboratory Facility – Edmonton (Alberta)
Ottawa International Airport - Contaminant Migration Study - Ottawa
Investigation and Remediation – Cotton Mill Redevelopment, Cornwall
Billings Hurdman Interconnect - Ottawa
Bank Street Reconstruction - Ottawa
Environmental Review – Various Laboratories across Canada - CFIA
Dwyer Hill Training Centre – Ottawa
Nortel Networks Environmental Monitoring - Carling Campus – Ottawa
Remediation Program - Block D Lands – Kingston
Investigation of former landfill sites – City of Ottawa
Record of Site Condition for Railway Lands – North Bay
Assessment and Remediation - North Bay Airport
Commercial Properties – Guelph and Brampton
Brownfields Remediation – Alcan Site - Kingston
PWGSC Building – 90 Elgin Street - Ottawa
Remediation Program - Ottawa Train Yards
MHLH Facility – CFB Petawawa
Ottawa Congress Centre
Lansdowne Park Redevelopment - Ottawa

**Environmental
Engineering**

**Geotechnical
Engineering**

**Materials Testing
Quality Control**

Building Science

Hydrogeology

**Archaeological
Services**