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Phase I-Environmental Site Assessment

1950 Scott Street, 312 and 314 Clifton Road
Ottawa, Ontario

Prepared For
EBC Inc.

April 5, 2018
Report: PE4239-1

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EXECUTIVE SUMMARY

Assessment

A Phase I-Environmental Site Assessment (ESA) was carried out for the properties addressed as 1950 Scott Street, 312 and 314 Clifton Road, in the City of Ottawa, Ontario. The purpose of the Phase I-ESA was to research the past and current use of the site and study area and to identify environmental concerns with the potential to have impacted the subject property.

Based on the available historical information sources, the Phase I Property was first developed for residential purposes as early as 1928. An office building, associated with the Independent Coal and Lumber Company located further north of Scott Street, was constructed on the northern portion of the Phase I Property (1950 Scott Street) as early as 1953. The southern portion of the Phase I Property was developed with an additional residential dwelling in the 1960's.

The adjacent properties to the west and southwest were originally vacant, followed by use for commercial purposes. The property to the east, across Clifton Road, has been occupied by a transformer sub-station since as early as 1957. As noted above, the land further to the north, across Scott Street, was used for industrial purposes (including a Canadian Pacific Rail line), while properties to the south have historically been used for residential purposes.

Paterson is in the process of filing a record of site condition (RSC) in the MOECC's Environmental Site Registry for the residential redevelopment of the adjacent property to the west, and was previously responsible for the filing of an RSC for the residential property to the southwest. Based on information in our files, these properties are not considered to represent areas of potential environmental concern on the Phase I Property.

Based on recent groundwater levels obtained from monitoring wells installed on the Phase I Property for geotechnical purposes, the groundwater flow beneath the site is considered to be in a northwesterly direction. While the Hydro transformer sub-station is considered to be a PCA, it is not considered to represent an APEC on the Phase I Property based on the nature of its operation and the separation distance of approximately 30m across Clifton Road in combination with its cross-gradient orientation with respect to the subject land.

Historical PCAs further west and north of the Phase I Property are not considered to result in APECs on the subject land based on their separation distances and/or orientations with respect to the Phase I Property.

Following the historical review, a site visit was conducted. Based on the findings of the site visit, no on-site PCAs were identified. At the time of the site visit, the current use of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. No off-site PCAs with the potential to impact the Phase I Property were identified at the time of the site visit.

Based on the findings of the Phase I-ESA, it is our opinion that **a Phase II-ESA is not required for the Phase I Property.**

Recommendations

Based on the ages of the subject structures (1920's through 1960's) potentially asbestos containing materials (ACMs) observed at the time of the site visit include, vinyl floor tiles, hard plaster, decorative and stipple plasters, acoustic ceiling tiles, drywall joint compound and exterior parging. Based on dates of construction, lead-based paints (LBPs) may be present within the structures on older or original painted surfaces beneath newer paints. All building materials and painted surfaces were observed to be in good condition at the time of the site visit and the potential for ACMs and LBPs is not considered to represent an immediate concern.

It is our understanding that the subject structures will be demolished in conjunction with future redevelopment. Prior to any demolition activities, a designated substance survey (DSS) must be conducted for the existing structures, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

It is recommended that the monitoring wells installed for geotechnical purposes be decommissioned in accordance with Ontario Regulation 903, if they are not going to be used in the future. It is anticipated that wells will be decommissioned at the time of future redevelopment.

1.0 INTRODUCTION

At the request of EBC Inc. (EBC), Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) of the properties located at 1950 Scott Street, 312 and 314 Clifton 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 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. Nicolas Rancourt of EBC. Mr. Rancourt can be contacted by telephone at 514-844-0660.

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:	1950 Scott Street, 312 and 314 Clifton Road, Ottawa, Ontario.
Legal Description:	Lots 24 and 25 and Part of Lots 45, 46, 47 and 49, Registered Plan 369, City of Ottawa
Property Identification Numbers:	04021-0239, 04021-0050 and 04021-0049
Location:	The subject site is located at the southwest corner of the intersection of Scott Street and Clifton Road, in the City of Ottawa. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	45° 23' 12" N, 75° 37' 24" W
Site Description:	
Configuration:	Rectangular (approximate)
Site Area:	0.23 ha (approximate)
Zoning:	R5B [1195] H(8) – Residential Fifth Density Zone (1950 Scott Street); and R3R – Residential Third Density Zone (312 and 314 Clifton Road)
Current Use:	The property at 1950 Scott Street is currently occupied by the International Buddhist Progress Society of Ottawa and used as a temple, while the properties at 312 and 314 Clifton Road are occupied by single-family residential dwellings with private garages.
Services:	The Phase I Property is located in a municipally serviced area.

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

The chain of title indicates the entire parcel of land comprising the Phase I Property was owned by private individuals until sold into the three existing lots in 1920. The Clifton Road addresses have always been owned by private individuals indicating residential land use, while the parcel of land addressed 1950 Scott Street was owned by private landowners and/or the Township of Nepean, until purchased by the Independent Coal and Lumber Company in 1948. The property has since been owned by commercial business organizations.

The earliest aerial photograph from 1928 shows the Phase I Property was occupied by the residential dwelling addressed 312 Clifton Road. The existing structures at 1950 Scott Street (office building) and 312 Clifton Road (residential dwelling) are noted on a 1957 Fire Insurance Plan (FIP). The office building at 1950 Scott Street is first visible on the Phase I Property in a 1958 aerial photo. The parcel of land addressed 314 Clifton Road was undeveloped according to the 1957 FIP and the existing dwelling was first observed in a 1965 aerial photograph. The Phase I Property is considered to have been first developed in the 1920's for residential purposes, followed by commercial development circa 1957.

Fire Insurance Plans

Fire insurance plans (FIPs) for the subject site and surrounding lands from 1956 and 1957 cover the majority of the Phase I Study Area. According to the FIPs, the Phase I Property was occupied by an office building at 1950 Scott Street with a residential dwelling and private garage at 312 Clifton Road. The adjacent property to the west was vacant followed by McRae Avenue and several autobody shops and suspected automotive service garages. The properties to the east were occupied by Clifton Road, followed by a transformer sub-station. The adjacent properties to the south were occupied by single-family residential dwellings. To the north, across Scott Street and the Canadian Pacific Railway, now the location of the Transitway, was the Westboro Branch of Independent Coal and Lumber Company.

The review of the FIPs did not identify any on-site potentially contaminating activities (PCAs).

Neighbouring land use in the Phase I Study Area consisted of a combination of residential, commercial and industrial properties. Various off-site PCAs identified during the review of FIPs include: a transformer sub-station, rail lines, coal storage locations, contractor yards, as well as autobody and automotive repair garages.

The locations of all of the PCAs identified in the Phase I-ESA area are depicted on Drawing PE4239-2 - Surrounding Land Use Plan.

City of Ottawa Street Directories

City directories were reviewed in approximately 10 year intervals from 1910 to 2010. The parcel addressed 1950 Scott Street was first listed as Independent Coal and Lumber, from 1953 through 1970. Based on the FIP review, the property was used as office space only; the associated coal and lumber yard was situated further to the north, across Scott Street. This address was also listed as Mahoney & Rich Limited service station in 1960 and Hodgins Brothers Limited heating equipment in 1965. It should be noted that based on the Chain of Title, the Independent Coal and Lumber Company changed their name to Mahoney Holdings between 1948 and 1970. Based on the 1957 FIP and aerial photograph review, 1950 Scott Street is considered to have been occupied only by office space. There is no evidence of a retail fuel outlet at this location. The offices of Triole Investments Ltd. real estate and Univex Canada Ltd. electrical contractors occupied the building in 1975. The current occupant, the International Bhuddist Progress Society, has been listed at 1950 Scott Street since 2002.

The property at 312 Clifton Road was listed as a private residence as early as 1935. The property at 314 Clifton Road was first listed in the 1960's as a private residence.

Neighbouring properties in the Phase I Study Area were listed primarily as residential dwellings, with some land uses of a commercial or industrial nature. Potentially contaminating activities identified from a review of the City Directories are listed below in Table 1.

Table 1: Potentially Contaminating Activities City Directories Review Summary				
Listing	Address	Years Listed	Potentially Contaminating Activity	Represents an Area of Potential Environmental Concern
Gervais Motors	1960 Scott Street	1989	Possible Automotive Service Garage	No
Carson's Body Shop Gas Bar/J's Gas Bar	1976 Scott Street	1972-1992	Retail fuel outlet	No
Westboro Motors	1976 Scott Street	2010	Automotive Service Garage	No
Independent Coal and Lumber Co.	317 Clifton Road (know 1950 Scott Street)	1961, 1970	Office Building	No
Independent Coal and Lumber Co.	25 Clifton Road	1941, 1951, 1961	Bulk Coal Storage Facility	No
Carson's Auto Body Shop	320 McRae Avenue	1959-2010	Automotive Service Garage	No
AutoRebex	320 McRae Avenue	1999-2010	Automotive Service Garage	No
Canadian Bank Note Company	145 Richmond Road	1990, 2000	Industrial Printing	No
Canadian General Electric Co.	175 Richmond Road	1955, 1961	Electronics Manufacturer	No
Guillevin International Pro Restaurant Equipment	175 Richmond Road	1980, 1990, 2000	Restaurant Equipment Manufacturers	No
Fuller Construction	199 Richmond Road	1951, 1961, 1970	Contractors Yard	No
Westboro Auto Imports	199 Richmond Road	1989	Automotive Service Garage	No
Sheera Car Care	201 Richmond Road	2000	Automotive Service Garage	No
Otto's Service Centre	225-245 Richmond Road	1961, 1970, 1980, 1989, 2000, 2010	Car Sales Lot and Automotive Service Garage	No
Ken Workman's Shell Service Station	225 Richmond Road	1951, 1961, 1970	Retail Fuel Outlet	No
Les Auto Body Repairs	314 Athlone Avenue	1961, 1970, 1980, 1989, 2000	Commercial Autobody Shop	No
Brebner Manufacturing and Repairs	360 Kirkwood Avenue	2000	Manufacturer Facility	No
Gifford Auto	359 McRae Avenue	1997, 2000	Automotive Service Garage	No
Frappier's Garage	345 Tweedsmuir	1959	Automotive Service Garage	No

The past use of the adjacent property to the west by Gervais Motors Ltd. is not considered to represent an environmental concern to the subject property, based on its down- or cross-gradient orientation with respect to the subject land, as well as information contained in our files.

The remaining off-site PCAs noted above are not considered to represent areas of potential environmental concern (APECs) on the Phase I Property based on their separation distances and/or orientations with respect to the subject land. The locations of the aforementioned PCAs, are depicted on Drawing PE4239-2 - Surrounding Land Use Plan.

Chain of Title

The entire Phase I Property was owed by various private landowners between 1873 and 1920. The lot addressed 1950 Scott Street was owned by the Independent Coal and Lumber Company from 1948 through 1970, followed by Triole Investments Limited through 1977 and subsequently, the Regional Municipality of Ottawa Carleton through 1999. The property was purchased by the International Buddhist Progress Society, the current property owner, in 1999.

The lots addressed 312 and 314 Clifton Road have always been owned by private landowners and more specifically the Watson family, from 1941 through 2009, when 312 Clifton Road was sold to Mr. Michael O'Neill, the current property owner. The property 314 Clifton Road is currently owned by Mr. David Watson.

No potentially contaminating activities were identified on the Phase I Property, during the review of the chain of title.

Plan of Survey

A Surveyor's Real Property Report prepared by Stantec Geomatics Ltd. and dated March 29, 2018, was reviewed as part of this assessment. The survey plan shows the Phase I Property in its current configuration.

Previous Engineering Reports

Paterson has completed subsurface investigations for the following properties in the immediate vicinity of the Phase I Property: 1960 Scott Street, 319 McRae Avenue and 320 McRae Avenue. Based on the findings of the investigations at 1960 Scott Street and 319 McRae, immediately west and southwest of the Phase I Property, no environmental concerns were identified with regards to the soil located immediately adjacent to the west of the subject land. It should also be noted that the groundwater beneath these properties was determined to be in compliance with the MOECC Table 7 standards for a residential land use in shallow soil conditions.

Geotechnical Investigation

A Geotechnical Investigation was conducted for the Phase I Property in March of 2018. The investigation consisted of the placement of three (3) boreholes; two (2) boreholes at 1950 Scott Street and one (1) borehole at 312 Clifton Road. Overburden materials consist of a pavement structure (asphaltic concrete over crushed stone with silty sand) followed by a glacial till material consisting of brown silty sand with gravel. Bedrock was encountered at depths ranging from approximately 1.6 to 2.1m below grade. Bedrock was cored at each location to depths of 9.9 or 10.2m below grade.

Monitoring wells were installed at each borehole location to access the groundwater table. Stabilized water levels were measured at depths of ranging from approximately 5.9 to 7.8m below ground surface, indicating groundwater flow in a northwesterly direction. Based on other investigations conducted by Paterson Group in the immediate vicinity of the Phase I Property, the groundwater flow in the general vicinity of the Phase I Property is considered to be towards the north. It is anticipated that the groundwater flow beneath the site may be slightly influenced by the recent construction of the multi-storey residential building with two levels of underground parking on the adjacent property to the southwest.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on March 5, 2018. The subject site was not listed in the NPRI database. One (1) site with NPRI records was identified within the Phase I study area. This site is the Canadian Bank Note Company building located at 145 Richmond Road, approximately 150 m southeast of the Phase I Property.

The Canadian Bank Note Company includes a certificate air contaminant release form that indicates 10.891 tonnes of volatile organic compounds were released as emissions in 2010. Reports of this type appear available for this property for 2003 to 2010, however, no other details or figures were available. Based on its separation distance from the Phase I Property, this facility is not considered to represent an APEC on the subject land.

PCB Inventory

A search of the national PCB waste storage sites was conducted. No PCB waste storage sites were identified within the Phase I Study Area.

Ontario Ministry of Environment and Climate Change (MOECC) Instruments

Requests were submitted to the MOECC Freedom of Information office, at the time of the original Phase I site visit, 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 sites comprising the Phase I Property. Based on the MOECC responses dated March 22, 2018, no records were located responsive to the requests. Copies of the MOECC responses are provided in Appendix 2.

MOECC Coal Gasification Plant Inventory

The Ontario Ministry of Environment and Climate Change 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 on the subject site or within the Phase I Study Area.

MOECC Incident Reports

Requests were 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 MOE for the sites comprising the Phase I Property, or adjacent properties. Based on the MOECC responses dated March 22, 2018, no records were located responsive to the requests. Copies of the MOECC responses are provided in Appendix 2.

MOECC Waste Management Records

Requests were submitted to the MOECC Freedom of Information office for information with respect to waste management records. Based on the MOECC responses dated March 22, 2018, no records were located responsive to the requests. Copies of the MOECC responses are provided in Appendix 2.

MOECC Submissions

Requests were submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions that have been submitted to the MOECC. Based on the MOECC responses dated March 22, 2018, no records were located responsive to the requests. Copies of the MOECC responses are provided in Appendix 2.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry (ESR) was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No Records of Site Condition (RSCs) were filed for the subject site.

Three (3) RSCs were identified for the following properties within the Phase I study area: 309 Athlone Avenue, 1900 Scott Street and 319 McRae Avenue. Based on the separation distances of the properties at 309 Athlone Avenue and 1900 Scott Street with respect to the Phase I Property, in combination with the information in the ESR, these properties are not considered to represent an APEC on the subject land.

The RSC for 319 McRae Avenue, situated immediately southwest of the subject property, was filed by Paterson in December of 2014. As discussed previously, groundwater beneath this property was determined to be clean at the time of the Phase II ESA. No indications of contamination were noted along the southern portion of the subject property at the time of the remediation.

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. The MOECC document did not identify any landfill sites in the Phase I Study Area.

Areas of Natural Heritage and Significance Interest

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 March 5, 2018. The search did not identify any provincially significant life sciences or earth sciences areas of natural heritage and scientific interest within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on March 19, 2018, to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. According to the TSSA response dated April 4, 2018, no records were identified. 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. One landfill site was identified within the Phase I Study Area. The review of the report indicates that the landfill was located on McRae Avenue, between Scott Street and Richmond Road, served the City of Ottawa and was active prior to the 1940s. The report indicates that the waste is domestic, of unknown thickness and the footprint has not been identified.

Based on clean groundwater results beneath the adjacent properties to the west and southwest, in combination with observations made during a test pit program completed on the adjacent property to the west, along the common property line, the reported former landfill is not considered to represent an APEC on the Phase I Property.

City of Ottawa Historical Land Use Inventory (HLUI)

A requisition form was sent to the City of Ottawa to request information from the City’s Historical Land Use Inventory (HLUI 2005) database for the subject property. Based on the response letter from the City of Ottawa, dated March 22, 2018 there is one activity associated with the Phase I Property and five (5) activities associated neighbouring properties within the Phase I Study Area. The activities are identified in Table 2 and are further discussed below.

Table 2: Potentially Contaminating Activities HLUI Database				
Activity Number	Address	Years Listed	Potentially Contaminating Activity	Represents an Area of Potential Environmental Concern?
6939	Phase I Property	1940-1970	Independent Coal and Lumber Company (1961) Limited, Petroleum Products wholesale Note that the Phase I Property was used only as offices associated with the aforementioned company.	No
5739	1960 Scott Street	1994	Other motor vehicle services (Generator # ON1041400)	No
7597	1960 Scott Street	2001	Photographic Equipment and Musical Instruments and Supplies, Wholesale	No
13661	319 McRae Avenue	1922, 1948-1956	Thomas G. Fuller Limited, Lumber and Building Materials, Wholesale	No
10616	307 Clifton Road	1948-1957	Ottawa Hydro Transformer Substation	No
150026	1946 Scott Street	1960	Racey MacCallum and Associates Ltd. (testing laboratory, consulting engineers)	No

As discussed previously, Activity 6939 was identified on the FIP as an office only, while the Independent Coal and Lumber Company was situated further north of the Phase I Property, across Scott Street. This activity is therefore not considered to represent a PCA or an APEC on the Phase I Property.

Situated adjacent to the west of the subject land, Activity 7597 is not considered to be a PCA based on the nature of the activity and therefore not considered to represent an APEC on the Phase I Property. Activity 5739 is not considered to represent an APEC on the Phase I Property based on its down- or cross-gradient orientation with respect to the subject land, in combination with information in our files that indicates clean groundwater beneath 1960 Scott Street.

The property at 319 McRae Avenue (Activity 13661) was recently developed with a multi-level residential structure subsequent to a remediation program and filing of an RSC with the MOECC. Groundwater impacts were not identified on the property and this activity is therefore not considered to be a PCA and does not represent an APEC on the Phase I Property.

The transformer substation on Clifton Road (Activity 10616) is a PCA, however it is not considered to represent an APEC on the Phase I Property based the nature of its operation in combination with the separation distance of approximately 25 to 30m and its orientation cross-gradient with respect to the subject land.

Activity 150026 is not considered to be a PCA based on the nature of the activity.

The City response also indicated that the Phase I Property is within the footprint of the former landfill UR-19 – on McRae Avenue. As discussed above, based on the subsurface information obtained from the western portion of 1960 Scott Street and the findings of the current Geotechnical Investigation on the Phase I Property, the former landfill is not considered to represent an APEC on the Phase I Property.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate 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:

- 1928 The Phase I Property appears to be occupied with the existing dwelling addressed 312 Clifton Road. The remainder of the subject land is undeveloped and partially treed. The adjacent property to the west appears vacant, with a small path crossing the property and suspected fill piles near the current location of McRae Avenue. Scott Street appears to be a path along the south side of the rail line, at the current location of the Transitway, with apparent industrial operations further to the north. Clifton Road is present to the east followed by vacant, undeveloped land. The adjacent property to the south also consists of vacant, undeveloped land.
- 1953 The Phase I Property has been developed with the existing commercial structure at 1950 Scott Street, while the remainder of the subject land appears to remain unchanged. Scott Street appears in its current configuration. Larger industrial structures remain present to the north of the Phase I Property, across the rail line. Residential development has occurred east and south of the subject land along both sides of Clifton Road.
- 1958 The Phase I Property appears to remain unchanged from the previous photograph. Commercial or industrial activity appears to be present on the property further southwest and northwest of the subject land. Otherwise, the surrounding land use is generally unchanged.
- 1976 The existing dwelling at 314 Clifton Road is now present on the southern portion of the Phase I Property. No other changes appear to have been made to the subject land. The present day transformer sub-station east of the Phase I Property can be seen. The rail line which was at the location of the present-day Transitway has been removed. To the north of Scott Street, the large industrial complex is no longer present. Further to the northwest, across Scott Street, large additions have been made to an office complex.
- 1984 The Phase I Property remains unchanged from the previous photograph. The adjacent property to the west now has what appears to be shipping containers on it. No other significant changes appear to have been made to the neighbouring properties.

- 1989 No significant changes appear to have been made to the Phase I Property. The adjacent property to the west appears to now be occupied with smaller containers over the eastern portion of the land, with what appears to be a small commercial building on the southeastern portion of the land. There appears to have been additional residential development east of the site, along Clifton Road, south of the transformer sub-station. No other significant changes appear to have occurred on the adjacent and neighbouring properties.
- 1993 The Phase I Property remains unchanged from the previous photograph. The adjacent property to the west has been redeveloped with a new commercial building. Otherwise, no significant changes appear to have been made to the neighbouring properties.
- 2002 (City of Ottawa website) No significant changes appear to have been made to the Phase I Property or adjacent and neighbouring properties.
- 2008 (City of Ottawa website) The Phase I Property remains unchanged from the previous photograph. Residential development has occurred further east of the subject land. Otherwise, no significant changes have been made to the adjacent and neighbouring properties.
- 2014 (City of Ottawa website) The Phase I Property, adjacent and neighbouring properties appear to remain unchanged from the previous photograph.

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 generally slopes down towards the Ottawa River to the north. The topographic map depicts the Hydro corridor on the east side of McRae Avenue and a substation on the north side of Scott Street. Based on the topographic maps, the closest body of water to the subject site is the Ottawa River, the closest point of which is located approximately 880m northwest of the Phase I Property. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

The Ontario Geological Survey publication 'The Physiography of Southern Ontario, Third Edition' was reviewed as a part of this assessment. According to the publication and attached mapping, the site is situated within the Ottawa Valley Clay Plains physiographic region, described as "clay plains interrupted by ridges of rock or sand". Mapping shows the subject site as situated in an area of limestone and till plains.

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, the bedrock in the area of the subject site consists of interbedded limestone and dolostone of the Gull River Formation. Overburden soils are shown as glacial till, with a drift thickness on the order of 2 to 5 m. The findings of the Geotechnical Investigation, confirm the reported subsurface conditions.

Water Well Records

The online interactive well record mapping system was accessed on March 5, 2018. A total of 16 well records were identified within the Phase I Study Area. With the exception of two (2) domestic wells installed in 1948 and 1951, all of the wells in the area of the Phase I Property were utilized as test holes or groundwater monitoring wells.

Three monitoring wells were installed on the Phase I Property during a recent Geotechnical Investigation conducted by Paterson Group. The monitoring wells were installed within the limestone bedrock at depths of approximately 9.9 and 10.2m below ground surface.

Monitoring well records were identified for the properties addressed 1960 Scott Street, 309 Athlone Avenue, 145 Richmond Road, 160 Lanark Avenue (Mahoney Park) and further to the east along Scott Street. As previously discussed, the groundwater beneath 1960 Scott Street is clean based on information in our files. The remaining monitoring wells are not considered to represent a concern to the Phase I Property based on their separations distances of over 100m from the subject land.

Water Bodies and Areas of Natural Significance

No water bodies or Areas of Natural Significance are present on the Phase I Property. The closest water body is the Ottawa River, located approximately 880m northwest of the subject site. No areas of natural significance are known to exist within the Phase I Study Area.

5.0 INTERVIEWS

Mr. Michael O'Neill, the current owner of 312 Clifton Road, was interviewed at the time of the site visit. Mr. O'Neill indicated 314 Clifton Road was originally part of the 312 Clifton Road property. The family of Mr. David Watson, the current owner of 314 Clifton Road, originally owned both parcels of land. According to Mr. O'Neill, 314 Clifton Road was built in the late 1960's or early 1970's and has always been heated with electricity. Large-scale interior renovations were reported to have been completed on the second storey of 314 Clifton Road within the past 10 years.

Mr. O'Neill indicated the property at 312 Clifton Road has been heated with natural gas during his ownership, while the dwelling was likely originally heated with coal fired equipment. He indicated that to his knowledge, no major interior renovations have been completed. Mr. O'Neill also reported that the insulation in the attic is fibreglass. Mr. O'Neill is unaware of any potential environmental concerns with regards to the subject dwellings and the adjacent and neighbouring properties.

A member of the International Bhuddist Progressive Society of Ottawa was also interviewed at the time of the site visit. She indicated that she had been at the 1950 Scott Street location for the past 10 years and that during this time, there have been no significant changes made to the property. She was unfamiliar with the history of the site, however she was unaware of any potential environmental concerns with regards to the current use of the site and neighbouring properties.

A Hydro Ottawa representative was contacted on March 9, 2018, regarding the transformer sub-station at 305 Clifton Road, east of the Phase I Property. The representative was unaware of any spills or leaks from the on-site transformers.

The information obtained in these interviews is consistent with site information obtained from other sources and is considered to be valid.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site visit was conducted on March 1, 2018, between 7:00 and 9:00 AM. Weather conditions were sunny, with a temperature of approximately -1° C. Personnel from the Environmental Department of Paterson Group conducted the site visit. In addition to the site, the uses of neighbouring properties within the Phase I-ESA study area were also assessed at the time of the site visit, from publicly accessible areas.

6.2 Specific Observations at Phase I Property

Buildings and Structures

The parcel of the Phase I Property addressed 1950 Scott Street, is occupied by the International Buddhist Progress Society of Ottawa, which is operated as a temple. The building structure has one storey with a basement level and is constructed with a poured concrete foundation and concrete walls. The exterior is finished with parging and a flat, tar and gravel style. The building, constructed as early as 1953, is currently heated with electricity.

A residential dwelling, private garage and two (2) storage sheds occupy the property addressed 312 Clifton Road. The dwelling is constructed with a stone and mortar foundation and is finished on the exterior with brick and a peaked roof covered with asphaltic shingles. The dwelling is currently heated with natural gas-fired equipment. The private garage is a wood frame structure with a poured slab-on-grade foundation, finished on the exterior with vinyl siding and parging with a peaked roof covered with asphaltic shingles. The storage sheds are temporary metal frame structures. The dwelling and private garage are considered to have been constructed as early as 1928.

A residential dwelling and private garage occupies 314 Clifton Road. The dwelling is constructed with a poured concrete foundation and is finished on the exterior with brick and a peaked roof covered with asphaltic shingles. The building is currently heated with electricity. The private garage is a wood frame structure with a poured slab-on-grade foundation and finished on the exterior with vinyl siding and a peaked roof covered with asphaltic shingles. Both structures are considered to have been constructed in the 1960's.

Underground Utilities

Underground service locates were completed as part of a Geotechnical Investigation carried out at the Phase I Property. On-site buried services consist of municipal water and sanitary sewers and natural gas, which enter the Phase I Property from Scott Street or Clifton Road.

A buried electrical service runs between the dwelling at 312 Clifton Road and the private garage. Approximate locations of known services are shown on Drawing PE4239-1 – Site Plan.

Site Features

The ground surface on the residential properties largely consists of grass and trees, with asphaltic concrete laneways and parking areas. The ground surface at 1950 Scott Street mainly consists of asphaltic concrete parking areas, with a small landscaped area north of the building. Site topography is generally flat, sloping slightly downwards to the north and east. Site drainage consists primarily of sheet flow to catch basins along Scott Street and Clifton Road, with some infiltration occurring in areas of permeable ground surface, such as the landscaped areas.

What appeared to be a former coal chute, was observed on the west exterior wall of 1950 Scott Street, near the chimney. The presence of the coal chute and chimney suggest the building was originally heated with coal fired equipment. No exterior aboveground storage tanks (ASTs) or evidence of exterior underground storage tanks (USTs) were observed at the time of the site visit. No spills, staining, stressed vegetation, or visual or olfactory evidence of contamination was noted on the exterior of the subject site during the Phase I site visit.

With the exception of buried services discussed above, no other underground structures, drains, pits, or sumps were observed on the exterior of the Phase I Property during the site visit. No monitoring wells, potable wells or private sewage systems were observed onsite, nor are any expected to be present, as the site is located in a municipally-serviced area.

Waste generated on site consists of domestic waste and recycling generated from each of the subject buildings. Waste and recycling is collected at the curbside and is collected by the municipality on a weekly basis.

No evidence of recent excavation was observed on the exterior of the subject property. No evidence of current or former railway or spur lines on the subject land were observed at the time of the site visit. There were no unidentified substances observed on the exterior of the Phase I Property.

The above-noted site features are shown on Drawing PE4239-1 - Site Plan.

Interior Assessment

A general description of the interior of each property is provided below:

1950 Scott Street

- ☐ Floor materials consist of vinyl tile, hardwood and poured concrete.
- ☐ Wall materials consist of ceramic tile, gypsum board, wood panelling and concrete block.
- ☐ Ceiling materials consist of acoustic ceiling tiles and gypsum board.

- ☐ Lighting throughout the building is provided by incandescent and fluorescent fixtures.

The building is heated with electric space heaters; electric hot water tanks heat the domestic water.

Based on the date of construction (as early as 1953), potentially asbestos-containing materials (ACMs) observed at the time of the site visit include vinyl floor tiles, acoustic ceiling tiles, drywall joint compound and parging (interior and exterior). Lead-based paints may also be present on older or original painted surfaces beneath newer lead-free paints. Building materials and painted surfaces were observed to be in good condition at the time of the site visit.

Several floor drains were observed throughout the basement level, within the kitchen and washroom areas. The drains appeared to be dry. No other drains, or sumps were observed.

Chemical storage was limited to small quantities of commercially-available cleaning products and paint. All chemicals were properly stored in their original containers, with no evidence of spills or staining observed at the time of the site visit. No concerns associated with chemical storage were identified at the subject site.

No ASTs or evidence of USTs, spills, or staining were observed on the interior of the building.

312 Clifton Road

- ☐ Floor materials consist of vinyl tile, hardwood, carpet, ceramic tile and poured concrete.
- ☐ Wall materials consist of lath and plater, gypsum board, parging, and poured concrete.
- ☐ Ceiling materials consist of lath and plaster and gypsum board, several of which are finished with stipple or decorative plaster, acoustic ceiling tile, particle board and concrete.
- ☐ Lighting throughout the building is provided by incandescent and fluorescent fixtures.

The interior of the private garage is not finished.

Based on the date of construction of the dwelling (as early as 1928), potentially asbestos-containing materials (ACMs) observed at the time of the site visit include vinyl floor tiles, acoustic ceiling tiles, drywall joint compound and parging (interior and exterior). Lead-based paints may also be present on older or original painted surfaces beneath newer lead-free paints. Building materials and painted surfaces were observed to be in good condition at the time of the site visit.

No floor drains or sumps were observed within the subject structures at the time of the site visit.

The building is currently heated with natural gas-fired equipment. Based on the age of the building in combination with observations made at the time of the site visit, it is considered likely that the building was originally heated with coal and possibly fuel-oil, prior to conversion to natural gas. It should be noted however, that no evidence of ASTs or USTs, spills, or staining were observed on the interior of the residential dwelling. The private garage is not heated.

Chemical storage was limited to small quantities of commercially-available cleaning products and paint. Small quantities of lubricant and fuel were noted in the private garage. All chemicals were properly stored in their original containers, with no evidence of spills or staining observed at the time of the site visit. No concerns associated with chemical storage were identified on this portion of the Phase I Property.

314 Clifton Road

- ☐ Floor materials consist of ceramic tile, carpet and poured concrete.
- ☐ Wall materials consist of gypsum board.
- ☐ Ceiling materials gypsum board and stipple plaster finishes.
- ☐ Lighting throughout the building is provided by fluorescent fixtures.

As noted previously, interior renovations were reportedly completed within the past 10 years.

The interior of the private garage was not accessible at the time of the site visit. According to a photograph provided by the client, the interior of the private garage is not finished.

Based on the date of construction of the dwelling (1960's), potentially asbestos-containing materials (ACMs) observed at the time of the site visit include drywall joint compound and stipple plaster. Although renovations were reportedly completed, the removal of all original building materials could not be confirmed at the time of the site visit. Lead-based paints may also be present on older or original painted surfaces beneath newer lead-free paints. Building materials and painted surfaces were observed to be in good condition at the time of the site visit.

A sump pit was present in the basement of the dwelling. Based on the proximity of the water heater and stored items, the sump pit could not be accessed at the time of the site visit.

The building is currently heated with electric baseboard heaters and reportedly heated as such since its construction. An electric hot water heater heats domestic hot water. No ASTs or evidence of USTs, spills, or staining were observed on the interior of the residential dwelling. The private garage is not heated.

Chemical storage within the dwelling was limited to small quantities of commercially-available cleaning products and paint. As noted previously, access to the private garage was not available; the garage is reportedly used for the storage of classic cars and motorcycles only. All chemicals were properly stored in their original containers, with no evidence of spills or staining observed at the time of the site visit. No concerns associated with chemical storage were identified on this portion of the Phase I Property.

Neighbouring Properties

An inspection of 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 - Scott Street, followed by the OC Transpo Transit Way;
- ☐ East - Clifton Road followed by Hydro Ottawa transformer sub-station;
- ☐ South - Residential;
- ☐ West - Vacant commercial lot (proposed residential development).

The use of the property at 305 Clifton Road as a transformer sub-station is considered to be a PCA. Based on observations from aerial photographs in combination with observations made at the time of the site visit, the transformers are situated above-grade on concrete slabs, and are secured within a walled enclosure. Due to the nature of the operation, in combination with the separation distance and orientation with respect to the Phase I Property, the transformer sub-station is not considered to represent an APEC on the subject land.

Current land use and potentially contaminating activities in the Phase I Study Area are illustrated on Drawing PE4239-2 – 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 associated potentially contaminating activities dating back to the first developed use of the site.

Table 3 Land Use History				
Year	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
Entire Property				
1873 to 1889	John Elliott	Unknown	Agricultural or Other	No information from this time period.
1889 to 1890	Andrew Cohan Foster	Unknown	Agricultural or Other	No information from this time period.
1890 to 1898	E.J. Godwin	Unknown	Agricultural or Other	No information from this time period.
1898 to 1906	Rosa Spittal	Unknown	Agricultural or Other	No information from this time period.
1906 to 1909	Henry Bersey	Unknown	Agricultural or Other	No information from this time period.
1909-1920	William Ross	Unknown	Agricultural or Other	No information from this time period.
1950 Scott Street (PIN 0239)				
1920 to 1946	John M. Ross and Charles W. Ross	Vacant, unused land	Agricultural or Other	1928 aerial photograph shows this portion of the Phase I Property as vacant, treed land.
Mar. 1946 to Oct. 1946	The Corporation of the Township of Nepean	Vacant, unused land	Agricultural or Other	No information from this time period obtainable through FIPs or aerial photographs; not listed in City Directories.
1946 to 1948	Edward Sherwood	Vacant, unused land	Agricultural or Other	No information from this time period obtainable through FIPs or aerial photographs; not listed in City Directories.
1948 to 1970	Independent Coal and Lumber Company (later Mahoney Holdings's Limited)	Commercial office building	Commercial	1953, 1958 and 1965 aerials show existing subject structure at 1950 Scott Street; 1957 FIP indicates subject structure occupied by offices.
1970 to 1977	Triole Investments Limited	Commercial office space	Commercial	1976 aerial photograph does not indicate any changes to this portion of the Phase I Property.

Table 3 Continued Land Use History				
Year	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
1950 Scott Street (PIN 0239) Continued				
1977 to 1999	The Regional Municipality of Ottawa-Carleton	Municipal offices	Commercial	Based on 1989 and 1993 aerial photographs, no change in land use on this portion of Phase I Property; 1950 Scott Street not listed in City Directories in 1980 and 1990.
1999 to present	International Buddhist Progress Society, Ottawa Chapter	Church, not for profit organization	Community	No change in land use based on 2014 aerial photographs. 1950 Scott Street listed as International Buddhist Progress Society as early as 2002. Current use of 1950 Scott Street at time of site visit.
312 Clifton Road (PIN 0050)				
1920 to 1922	John M. Ross and Charles W. Ross	Unknown	Agricultural or Other	No information from this time period.
1922 to 1932	Elizabeth Edge	Residential dwelling	Residential	Existing dwelling at 312 Clifton Road can be seen in 1928 aerial photograph.
1932 to 1941	John H. Mackenzie	Residential dwelling	Residential	Listed in 1935 City Directory as John Mackenzie.
1941 to 1993	Alice E. Watson	Residential dwelling	Residential	This parcel of Phase I Property remains unchanged in 1953, 1958, 1965, 1976, 1989 and 1993 aerial photographs. Existing dwelling present on 1957 FIP. Listed as private individuals in City Directories (1941 through 1990).
1993 to 2009	David Owen Watson	Residential dwelling	Residential	No change to land use noted in 2002, 2008 aeriels. Property listed as David Watson in City Directories during this time frame.
2009 to present	Michael O'Neill	Residential dwelling	Residential	No apparent changes to this portion of the Phase I Property noted in 2014 aerial. Property used for residential purposes during 2018 site visit.
314 Clifton Road (PIN 0049)				
1920 to 1941	John M. Ross and Charles W. Ross	Vacant, unused land (formed part of residential property at 312 Clifton Road)	Residential	This portion of Phase I Property appeared to be vacant, partially treed land in 1928 aerial photograph.

Table 3 Continued Land Use History				
Year	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
1941 to 1965	Alice E. Watson	Vacant, unused land followed by residential dwelling circa 1965	Residential	This parcel of Phase I Property appears to remain unchanged in 1953 aerial photograph. Property vacant on 1957 FIP. Existing dwelling observed in 1965 aerial photograph.
1965 to 2007	Raymond Watson and Alice E. Watson	Residential dwelling	Residential	No change to land use noted in 1976, 1989, 1993 or 2002 aerial photographs.
2007 to present	David Owen Watson	Residential dwelling	Residential	No apparent changes to this portion of the Phase I Property noted in 2014 aerial. Property used for residential purposes during 2018 site visit.

Potentially Contaminating Activities (PCAs)

No historical or existing on-site potentially contaminating activities (PCAs) were identified on the Phase I Property.

Off-site PCAs identified within the Phase I Study Area are illustrated on Drawing PE4239-2 – Surrounding Land Use Plan in the Figures section of this report, following the text. Based on their separation distances and/or orientations with respect to the subject land as well as previous work completed by Paterson Group, the PCAs are not considered to represent APECs on the Phase I Property.

Areas of Potential Environmental Concern (APECs)

No APECs were identified on the Phase I Property.

Contaminants of Potential Concern (CPCs)

No CPCs were identified on the Phase I Property.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

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, the bedrock in the area of the subject site consists of interbedded limestone and dolostone of the Gull River Formation. Overburden soils are shown as glacial till, with a drift thickness on the order of 2 to 5 m. The findings of the Geotechnical Investigation, confirm the reported subsurface conditions.

Based on the recent Geotechnical Investigation conducted on the Phase I Property and other investigations completed by Paterson at sites in the immediate vicinity of the subject land, the long-term groundwater table is interpreted to be present in the bedrock layer. Based on the groundwater levels measured at the on-site monitoring well locations, the groundwater flow beneath the Phase I Property is in a northwesterly direction. It is anticipated, however, that groundwater flow in the general vicinity of the Phase I Property is to the north and that the groundwater flow beneath the site may be slightly influenced by the recent construction of the multi-storey residential building with two levels of underground parking on the adjacent property to the southwest.

Buildings and Structures

The subject site is currently occupied by a two residential dwellings and associated private garages at 312 and 314 Clifton Road, and a Buddhist temple at 1950 Scott Street. The buildings are considered to have been constructed between the 1920's and the 1960's.

In addition to the aforementioned buildings, two small, steel frame storage sheds are also present at 312 Clifton Road. No other buildings or structures are present on the Phase I Property.

Water Bodies

There are no water bodies on the subject site or within the Phase I Study Area. The nearest water body is the Ottawa River, located approximately 880m to the northwest of the Phase I Property.

Areas of Natural Significance

No areas of natural significance were identified on the site or in the Phase I ESA Study Area.

Drinking Water Wells

The online interactive well record mapping system was accessed on March 5, 2018. No potable well records were identified for the Phase I Property. Two records of domestic wells, dated 1948 and 1951, were identified for properties within the Phase I Study Area. These wells are no longer considered to be in operation as the Phase I Property and surrounding properties are municipally serviced.

Monitoring Well Records

Three monitoring wells were installed on the Phase I Property during a recent Geotechnical Investigation conducted by Paterson Group. The monitoring wells were installed within the limestone bedrock at depths of approximately 9.9 and 10.2m below ground surface.

A total of 14 well records for test holes or groundwater monitoring wells were identified for other properties within the Phase I Study Area. Monitoring well records were identified for the properties addressed 1960 Scott Street, 309 Athlone Avenue, 145 Richmond Road, 160 Lanark Avenue (Mahoney Park) and further to the east along Scott Street. As previously discussed, the groundwater beneath 1960 Scott Street is clean based on information in our files. The remaining monitoring wells are not considered to represent a concern to the Phase I Property based on their separation distances of over 100m from the subject land.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is primarily residential with some commercial land use.

Potentially Contaminating Activities (PCAs)

No historical or existing on-site PCAs were identified on the Phase I Property. As noted previously, based on the findings of investigative work conducted by Paterson on the adjacent properties to the west and southwest, previously occupied by automotive service garages and/or contractor yards, these properties are not considered to be PCAs. A transformer sub-station situated to the east of the Phase I Property, across Clifton Road is the closest off-site PCA with respect to the Phase I Property. Based on the nature of its operation in combination with its cross-gradient orientation and separation distance of approximately 30m, the substation is not considered to represent an APEC on the Phase I Property.

Other historical or existing off-site PCAs identified within the Phase I-ESA study area are presented on Drawing PE4239-2 – Surrounding Land Use Plan. Based on their separation distances and/or orientations with respect to the Phase I Property, the PCAs are not considered to represent APECs on the Phase I Property.

Areas of Potential Environmental Concern (APECs)

As noted above, no historical or existing on-site PCAs were identified on the Phase I Property. None of the aforementioned off-site PCAs identified within the Phase I Study Area are considered to have resulted in APECs on the Phase I Property.

Contaminants of Potential Concern (CPCs)

There are no CPCs on the Phase I Property.

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 there are no PCAs on the Phase I Property which may potentially have impacted the subject site. The presence of PCAs was 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

Assessment

A Phase I-Environmental Site Assessment (ESA) was carried out for the properties addressed as 1950 Scott Street, 312 and 314 Clifton Road, in the City of Ottawa, Ontario. The purpose of the Phase I-ESA was to research the past and current use of the site and study area and to identify environmental concerns with the potential to have impacted the subject property.

Based on the available historical information sources, the Phase I Property was first developed for residential purposes as early as 1928. An office building, associated with the Independent Coal and Lumber Company located further north of Scott Street, was constructed on the northern portion of the Phase I Property (1950 Scott Street) as early as 1953. The southern portion of the Phase I Property was developed with an additional residential dwelling in the 1960's.

The adjacent properties to the west and southwest were originally vacant, followed by use for commercial purposes. The property to the east, across Clifton Road, has been occupied by a transformer sub-station since as early as 1957. As noted above, the land further to the north, across Scott Street, was used for industrial purposes (including a Canadian Pacific Rail line), while properties to the south have historically been used for residential purposes.

Paterson is in the process of filing a record of site condition (RSC) in the MOECC's Environmental Site Registry for the residential redevelopment of the adjacent property to the west, and was previously responsible for the filing of an RSC for the residential property to the southwest. Based on information in our files, these properties are not considered to represent areas of potential environmental concern on the Phase I Property.

Based on recent groundwater levels obtained from monitoring wells installed on the Phase I Property for geotechnical purposes, the groundwater flow beneath the site is considered to be in a northwesterly direction. While the Hydro transformer sub-station is considered to be a PCA, it is not considered to represent an APEC on the Phase I Property based on the nature of its operation and the separation distance of approximately 30m across Clifton Road in combination with its cross-gradient orientation with respect to the subject land.

Historical PCAs further west and north of the Phase I Property are not considered to result in APECs on the subject land based on their separation distances and/or orientations with respect to the Phase I Property.

Following the historical review, a site visit was conducted. Based on the findings of the site visit, no on-site PCAs were identified. At the time of the site visit, the current use of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. No off-site PCAs with the potential to impact the Phase I Property were identified at the time of the site visit.

Based on the findings of the Phase I-ESA, it is our opinion that **a Phase II-ESA is not required for the Phase I Property.**

Recommendations

Based on the ages of the subject structures (1920's through 1960's) potentially asbestos containing materials (ACMs) observed at the time of the site visit include, vinyl floor tiles, hard plaster, decorative and stipple plasters, acoustic ceiling tiles, drywall joint compound and exterior parging. Based on dates of construction, lead-based paints (LBPs) may be present within the structures on older or original painted surfaces beneath newer paints. All building materials and painted surfaces were observed to be in good condition at the time of the site visit and the potential for ACMs and LBPs is not considered to represent an immediate concern.

It is our understanding that the subject structures will be demolished in conjunction with future redevelopment. Prior to any demolition activities, a designated substance survey (DSS) must be conducted for the existing structures, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

It is recommended that the monitoring wells installed for geotechnical purposes be decommissioned in accordance with Ontario Regulation 903, if they are not going to be used in the future. It is anticipated that wells will be decommissioned at the time of future redevelopment.

9.0 STATEMENT OF LIMITATIONS

This Phase I-Environmental Site Assessment (ESA) 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.

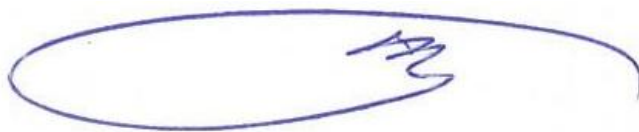
Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

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

Paterson Group Inc.



Karyn Munch, P.Eng., QP_{ESA}



Mark S. D'Arcy, P.Eng., QP_{ESA}



Report Distribution:

- ☐ EBC Inc.
- ☐ Paterson Group

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

MOECC Freedom of Information and Privacy Office.
MOECC Municipal Coal Gasification Plant Site Inventory, 1991.
MOECC document titled “Waste Disposal Site Inventory in Ontario”.
MOECC Brownfields Environmental Site Registry.
Office of Technical Standards and Safety Authority, Fuels Safety Branch.
MNR Areas of Natural Significance.
MOECC Water Well Inventory.

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.

Local Information Sources

Chain of Title obtained through Read Abstracts Limited, March 2018.
Geotechnical Investigation conducted by Paterson Group, 2018.
Previous Engineering Reports.
Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4239-1 – SITE PLAN

DRAWING PE4239-2 – SURROUNDING LAND USE PLAN

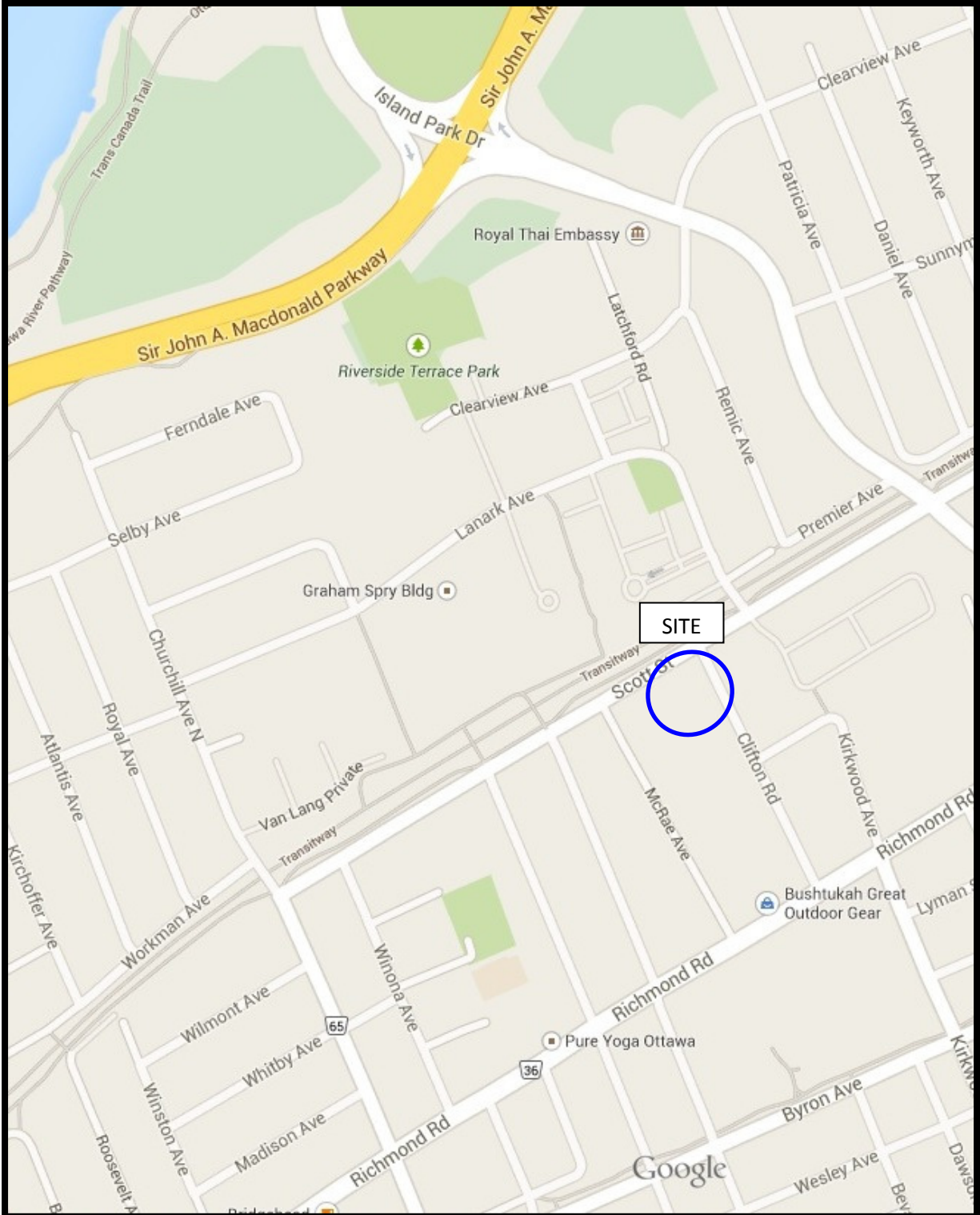


FIGURE 1
KEY PLAN

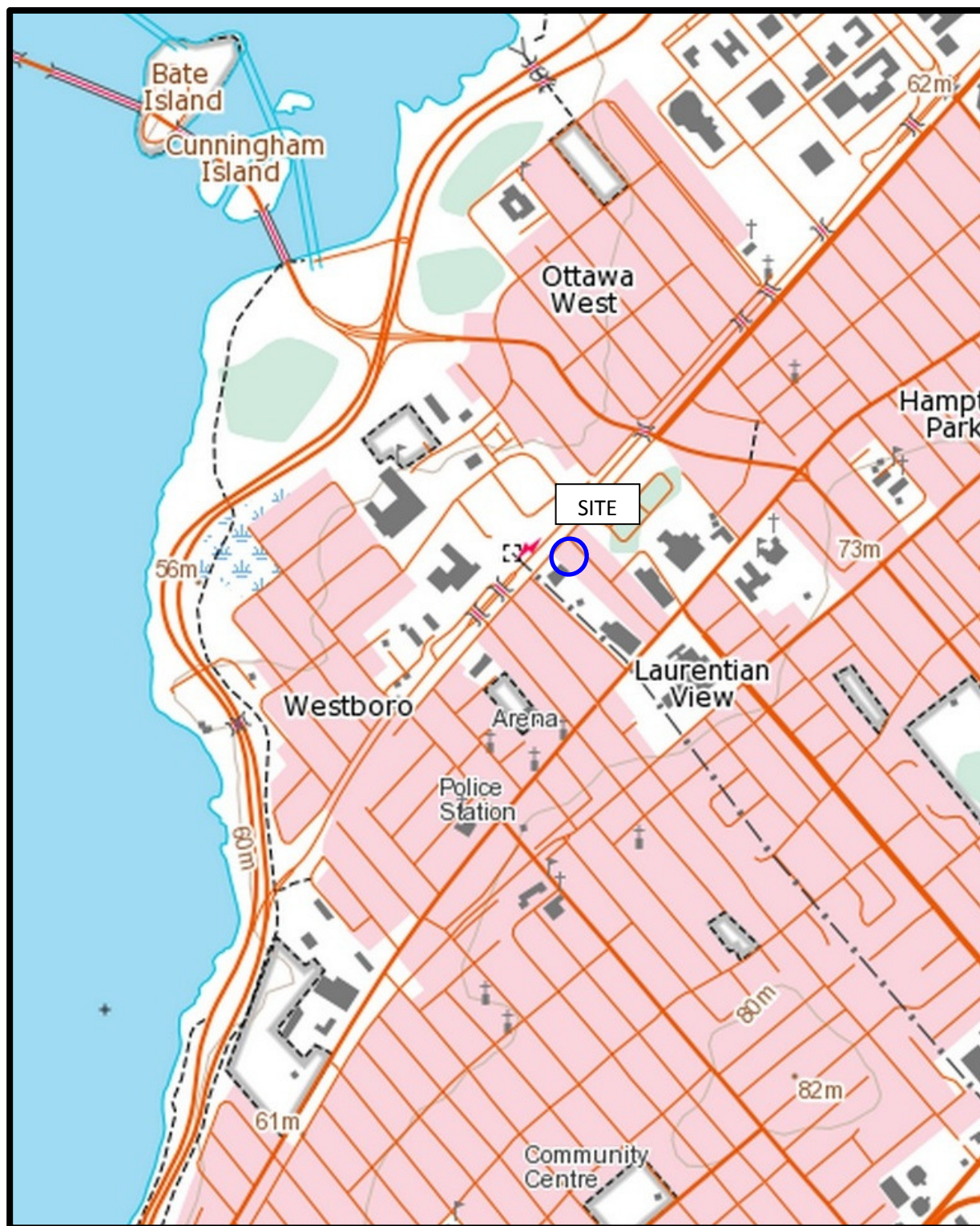
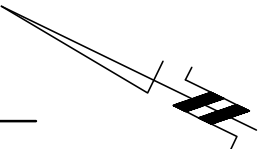


FIGURE 2
TOPOGRAPHIC MAP

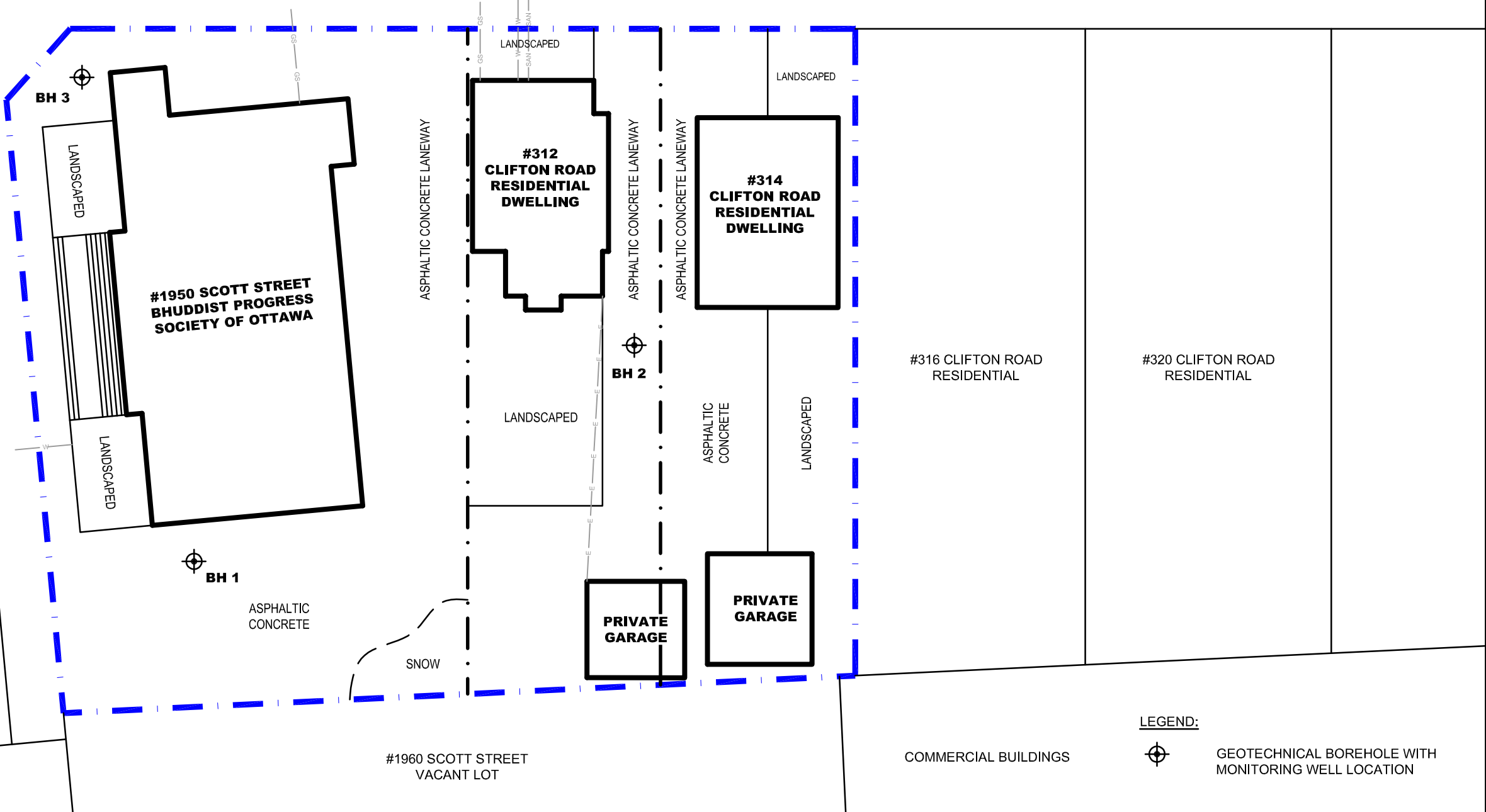
#305 CLIFTON ROAD HYDRO SUBSTATION	#311-313 CLIFTON ROAD RESIDENTIAL	#315 CLIFTON ROAD RESIDENTIAL	#319 CLIFTON ROAD RESIDENTIAL	
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CLIFTON ROAD



SCOTT STREET

TRANSITWAY



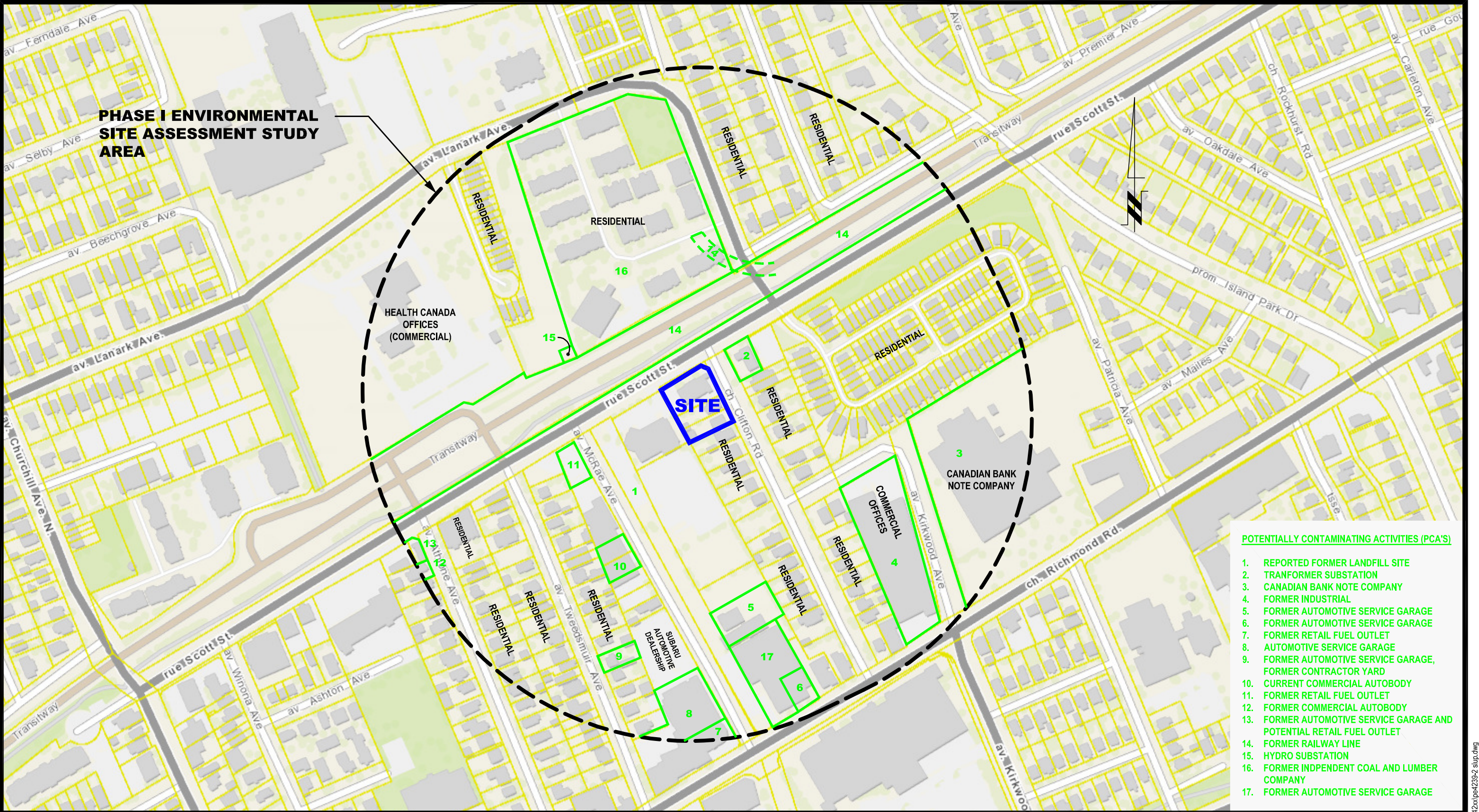
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0			
NO.	REVISIONS	DATE	INITIAL

EBC INC.	
PHASE I - ENVIRONMENTAL SITE ASSESSMENT	
1950 SCOTT STREET, 312 & 314 CLIFTON ROAD	
OTTAWA,	ONTARIO
Title: SITE PLAN	

Scale:	1:300	Date:	03/2018
Drawn by:	MPG	Report No.:	PE4239-1
Checked by:	KM	Dwg. No.:	PE4239-1
Approved by:	MSD	Revision No.:	0



POTENTIALLY CONTAMINATING ACTIVITIES (PCA'S)

- 1. REPORTED FORMER LANDFILL SITE
- 2. TRANSFORMER SUBSTATION
- 3. CANADIAN BANK NOTE COMPANY
- 4. FORMER INDUSTRIAL
- 5. FORMER AUTOMOTIVE SERVICE GARAGE
- 6. FORMER AUTOMOTIVE SERVICE GARAGE
- 7. FORMER RETAIL FUEL OUTLET
- 8. AUTOMOTIVE SERVICE GARAGE
- 9. FORMER AUTOMOTIVE SERVICE GARAGE, FORMER CONTRACTOR YARD
- 10. CURRENT COMMERCIAL AUTOBODY
- 11. FORMER RETAIL FUEL OUTLET
- 12. FORMER COMMERCIAL AUTOBODY
- 13. FORMER AUTOMOTIVE SERVICE GARAGE AND POTENTIAL RETAIL FUEL OUTLET
- 14. FORMER RAILWAY LINE
- 15. HYDRO SUBSTATION
- 16. FORMER INDEPENDENT COAL AND LUMBER COMPANY
- 17. FORMER AUTOMOTIVE SERVICE GARAGE

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0			
NO.	REVISIONS	DATE	INITIAL

EBC INC.

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
1950 SCOTT STREET, 312 & 314 CLIFTON ROAD

OTTAWA,
Title:

ONTARIO

SURROUNDING LAND USE PLAN

Scale:	1:3000	Date:	03/2018
Drawn by:	MPG	Report No.:	PE4239-1
Checked by:	KM	Dwg. No.:	PE4239-2
Approved by:	MSD	Revision No.:	0

APPENDIX 1

CHAIN OF TITLE

PLAN OF SURVEY

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS



READ Abstracts Limited

331 Cooper Street, Suite 300, Ottawa, Ontario K2P 0A4

Email: search@readsearch.com

Tel.: 613-236-0664

Fax: 613-236-3677

ENVIRONMENTAL SEARCH

Patersongroup
Attn: Karyn Munch

BRIEF DESCRIPTION OF LAND:

1950 Scott St., and 312 and 314 Clifton Rd., Ottawa
Part of Lots 45, 46, 47, 48, Plan 369; Lot 25, Plan 369; Lot 24, Plan 369

PIN: 04021-0239
04021-0050
04021-0049

LAST REGISTERED OWNER: INTERNATIONAL BUDDHIST PROGRESS SOCIETY,
OTTAWA CHAPTER (PIN 0239)
MICHAEL O'NEILL (PIN 0050)
DAVID OWEN WATSON (PIN 0049)

CHAIN OF TITLE:

Deed NP1923 registered April 22, 1873
From John Heney to John Elliott

Deed NP14100 registered October 18, 1889
From John Elliott to Andrew Cowan

Deed NP14493 registered August 30, 1890
From Andrew Cowan to E. J. Godwin

Deed NP 18260 registered August 22, 1898
From E. J. Godwin to Rosa Spittal

Deed NP20925 registered April 30, 1906
From Rosa Spittal and George Spittal to Henry Bersey

Deed NP22775 registered June 10, 1909
From Henry V. Bersey to William Ross

Plan 369 registered August 10, 1914
By William Ross

PIN 0239, Lots 45-48, Plan 369

Deed NP34842 registered July 22, 1920
From estate of William Ross to John M. Ross and Charles W. Ross

Tax Deed NP47248 registered March 11, 1948
To Corporation of the Township of Nepean

Deed NP55919 registered October 8, 1946
From Corporation of the Township of Nepean to Harold Vail

Deed NP55920 registered October 8, 1946
From Harold Vail to Edward Sherwood

Deed NP60058 registered July 23, 1948
From Edward Sherwood To Independent Coal and Lumber Company

By Deposit CR692631 Independent Coal and Lumber Company changed it's name to
Mahoney Holdings Limited

Deed CR573507 registered April 15, 1970
From Mahoney Holdings Limited to Triole Investments Limited

Deed CR705202 registered March 9, 1977
From Triole Investments Limited to The Regional Municipality of Ottawa-Carleton

Deed LT1172884 registered January 5, 1999
From The Regional Municipality of Ottawa-Carleton to International Buddhist Progress
Society, Ottawa Chapter

PIN 0050, Lot 25, Plan 369

Deed NP34842 registered July 22, 1920
From estate of William Ross to John M. Ross and Charles W. Ross

Deed NP35372 registered March 27, 1922
From John M. Ross and Charles W. Ross to Elizabeth Edge

Deed NP43290 registered July 25, 1932
From Elizabeth Edge to John H. Mackenzie

Deed NP48222 registered May 31, 1941
From John H. Mackenzie to Alice E. Watson

Deed N650835 registered February 15, 1993
From Alice Edith Watson to David Owen Watson

Deed OC1032978 registered September 24, 2009
From David Owen Watson to Michael O'Neill

PIN 0049, Lot 24, Plan 369

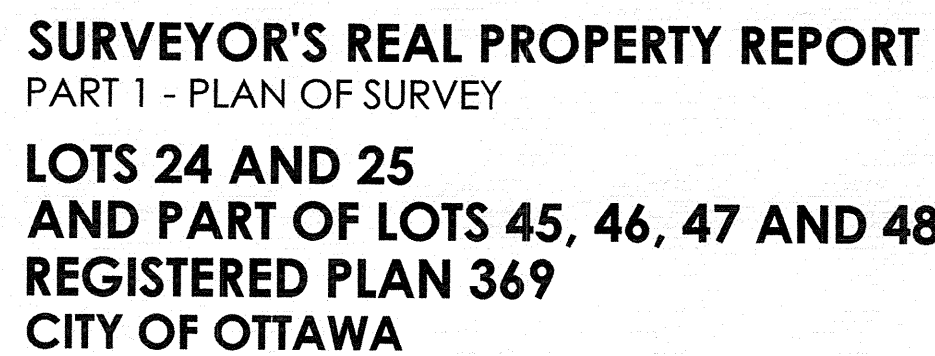
Deed NP34842 registered July 22, 1920
From estate of William Ross to John M. Ross and Charles W. Ross

Deed NP48221 registered May 31, 1941
From Charles W. Ross to John H. Mackenzie

Deed NP48222 registered May 31, 1941
From John H. Mackenzie to Alice E. Watson

Deed CR476572 registered May 4, 1965
From Alice E. Watson to Raymond Watson and Alice Edith Watson

Deed OC782224 registered October 9, 2007
From estate of Raymond Watson and Alice Edith Watson to David Owen Watson



METRIC CONVERSION

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

BEARING NOTE

BEARINGS ARE ASTRONOMIC AND ARE REFERRED TO THE WESTERLY LIMIT OF CLIFTON ROAD AS SHOWN ON PLAN 5R-14769, HAVING A BEARING OF N26°29'40"W.

ELEVATION NOTE

ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928:1978) AND ARE DERIVED FROM THE CAN-NET VRS NETWORK MONUMENT: OTTAWA ELEVATION=95.230.

UTILITY NOTE

LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE AND ARE PER THE CITY OF OTTAWA UCC SHEET No.'s E-05-01 AND E-05-02 AND PLAN & PROFILE DRAWING No.1246 (SHEETS 1&2) AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.

NOTE

THIS PLAN OF SURVEY IS TO BE READ IN CONJUNCTION WITH THE REPORT SUMMARY NOTED AS PART 2 HEREON.

THIS REPORT CAN ONLY BE UPDATED BY THIS OFFICE. NO ADDITIONAL PRINTS OF THIS ORIGINAL REPORT WILL BE ISSUED SUBSEQUENT TO THE DATE OF CERTIFICATION.

ALL TIES ARE MINIMUM UNLESS OTHERWISE NOTED.

ALL TIES TO CURVED BOUNDARY ARE RADIAL TO ARC.

RISK OF UNDERGROUND SERVICES, MONUMENTATION PLANTED ACCORDINGLY.

PART 2

This Report was prepared for E.B.C. Inc. and the undersigned accepts no responsibility for the use by other parties.

1. REGISTERED RIGHTS-OF-WAY/EASEMENTS
No rights-of-way or easements were found to be registered against the subject property.
2. PROPERTY IMPROVEMENTS
See Part 1 (Plan of Survey) for details.
3. COMPLIANCE WITH MUNICIPAL ZONING BYLAWS
Compliance is not certified by this report.
4. ADDITIONAL REMARKS

LEGEND

■	DENOTES	FOUND MONUMENTS
■		SET MONUMENTS
IB	"	IRON BAR
IR	"	ROUND IRON BAR
SIB	"	STANDARD IRON BAR
SSIB	"	SHORT STANDARD IRON BAR
CC	"	CUT CROSS
CP	"	CONCRETE PIN
WIT	"	WITNESS
PIN	"	PROPERTY IDENTIFICATION NUMBER
MEAS, MS	"	MEASURED
PROP	"	PROPORTIONED
SG	"	ORIGIN UNKNOWN
MAG	"	STANTEC GEOMATICS LTD.
P	"	MAGNETIC BEARING
P1	"	REGISTERED PLAN 549
P2	"	PLAN 4R-8932
P3	"	PLAN BY 1465 DATED APRIL 6, 2017
P4	"	PLAN BY 1465 DATED SEPTEMBER 29, 1992
P5	"	PLAN BY 725 DATED APRIL 20, 1964
P6	"	PLAN BY 1931 DATED JUNE 26, 2015
P7	"	PLAN BY SG SATED MARCH 15, 2013
P8	"	PLAN 14-652
P9	"	PLAN 5R-13115
BF	"	PLAN 4R-29996
CLF	"	BOARD FENCE
RMOC	"	CHAIN LINK FENCE
CM	"	REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
WHW	"	CONCRETE MONUMENT
C/	"	WOOD RETAINING WALL
—	"	CALCULATED PER
—	"	OVERHEAD UTILITY WIRES
AV	"	ANCHOR
BZ	"	BOLLARD
CB	"	CATCH BASIN
DCB	"	DOUBLE CB
DCBH	"	CB MANHOLE
DCBMH	"	DOUBLE CB MANHOLE
CBSI	"	SIDE INLET CB
HYD	"	FIRE HYDRANT
MP	"	MONITORING PIN
MH	"	MAINTENANCE HOLE UNIDENTIFIED
MHB	"	MAINTENANCE HOLE BELL
MH HYDRO	"	MAINTENANCE HOLE HYDRO
MHSA	"	MAINTENANCE HOLE SANITARY
MHST	"	MAINTENANCE HOLE STORM
SN	"	SIGN
TR BELL	"	TERMINAL BOX - BELL
TR CATV	"	TERMINAL BOX - CABLE
TCB	"	TRAFFIC CONTROL BOX
UP	"	UTILITY POLE
VB	"	VALVE BOX
VC	"	VALVE CHAMBER
WV	"	WATER VALVE
—cm	"	TREE CONIFEROUS Ø centimetres
—cm	"	TREE DECIDUOUS Ø centimetres
— P	"	UNDERGROUND POWER
— T	"	UNDERGROUND BELL
— G	"	UNDERGROUND GAS

SURVEYOR'S CERTIFICATE

I CERTIFY THAT

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 2ND. DAY OF MARCH , 2018.

Mar 29/18
DATE

DATE _____ BRIAN J. WEBSTER
ONTARIO LAND SURVEYOR
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is STRICTLY PROHIBITED.

SRO MAP COORDS: X= 363564 Y= 502882



Stantec Geomatics Ltd

stantec.com

DRAWN: ME	CHECKED: KJ	PM: BW	FIELD: ES	PROJECT No.: 161613828-110
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AERIAL PHOTOGRAPH
1928



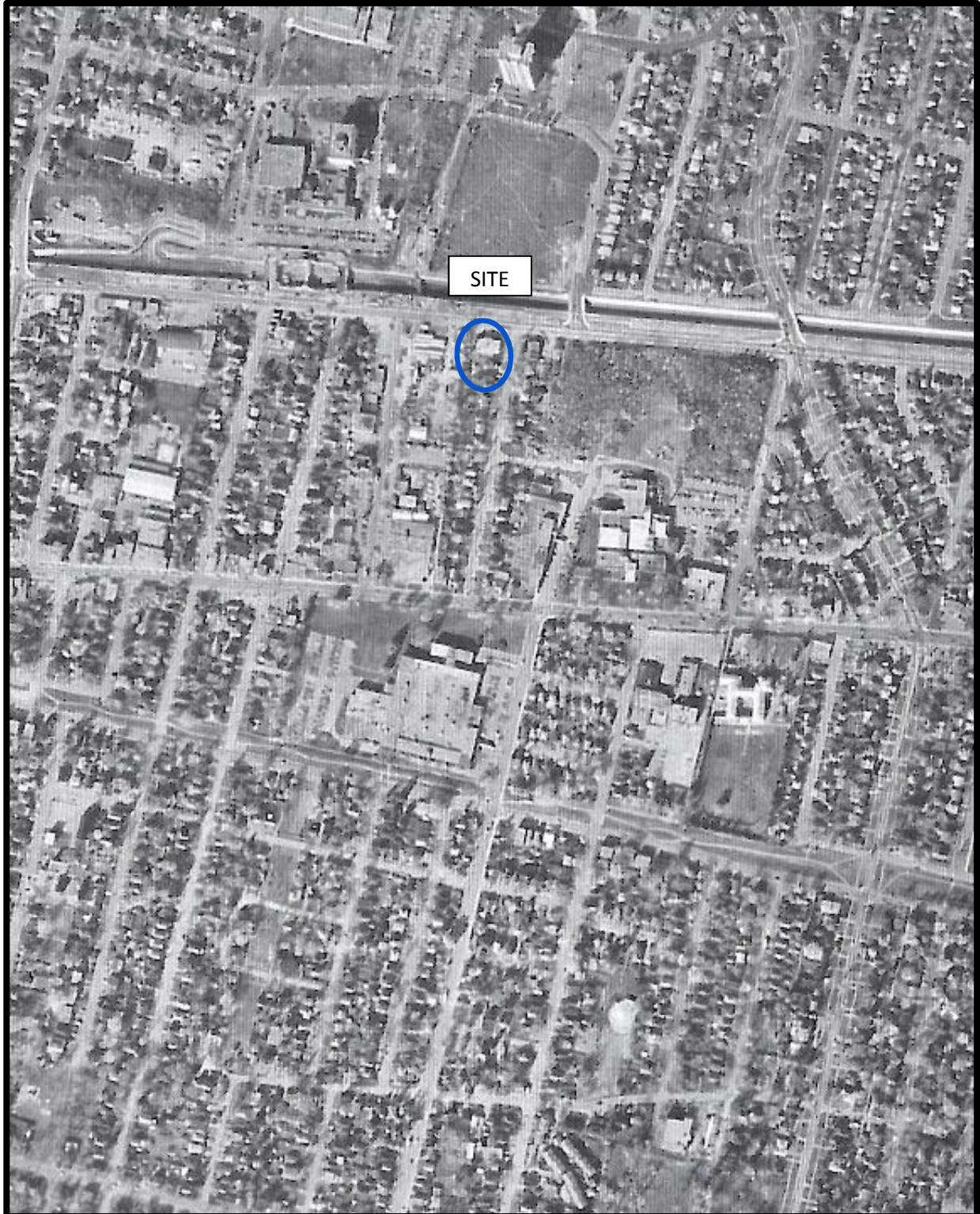
AERIAL PHOTOGRAPH
1953



AERIAL PHOTOGRAPH
1958



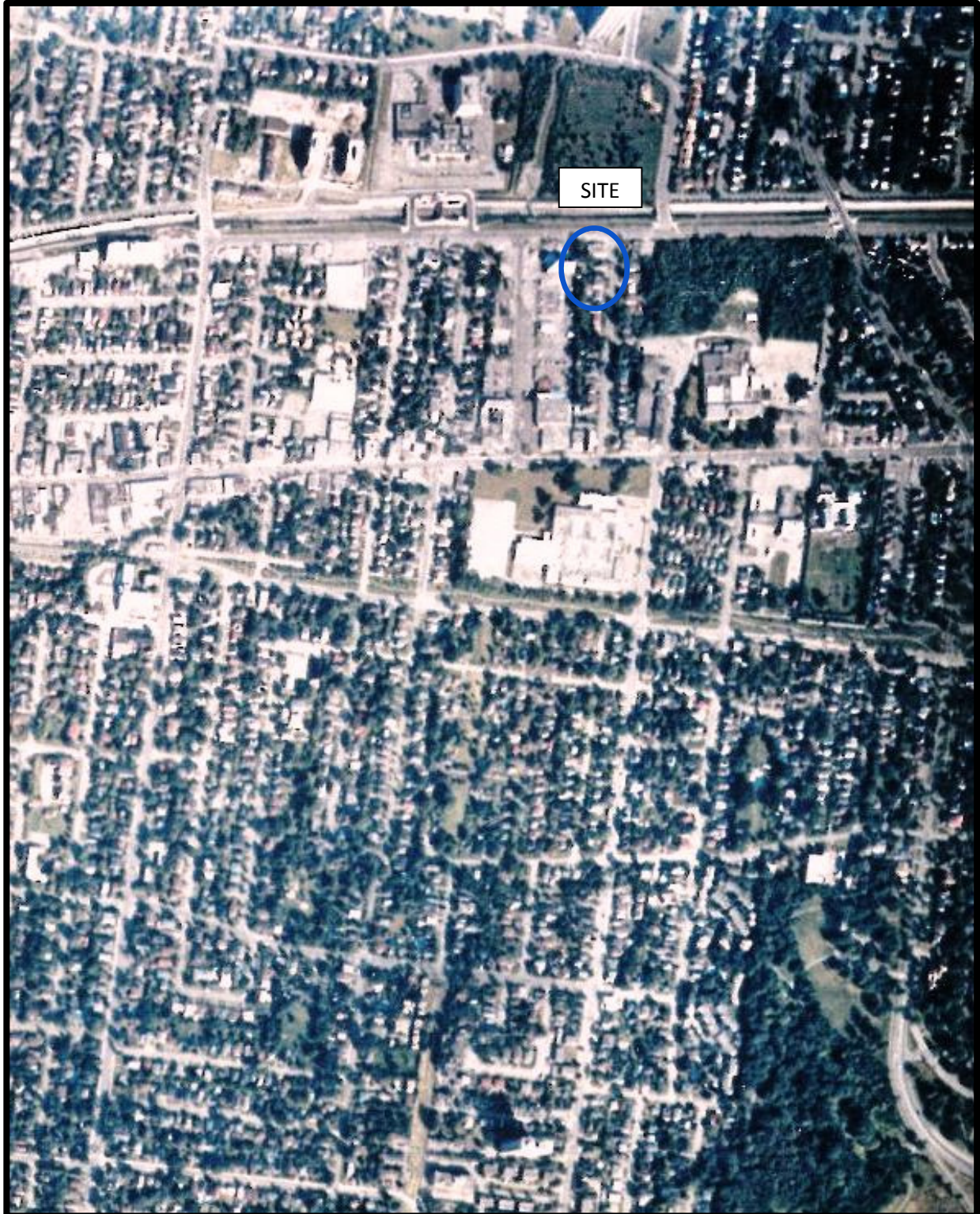
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1976



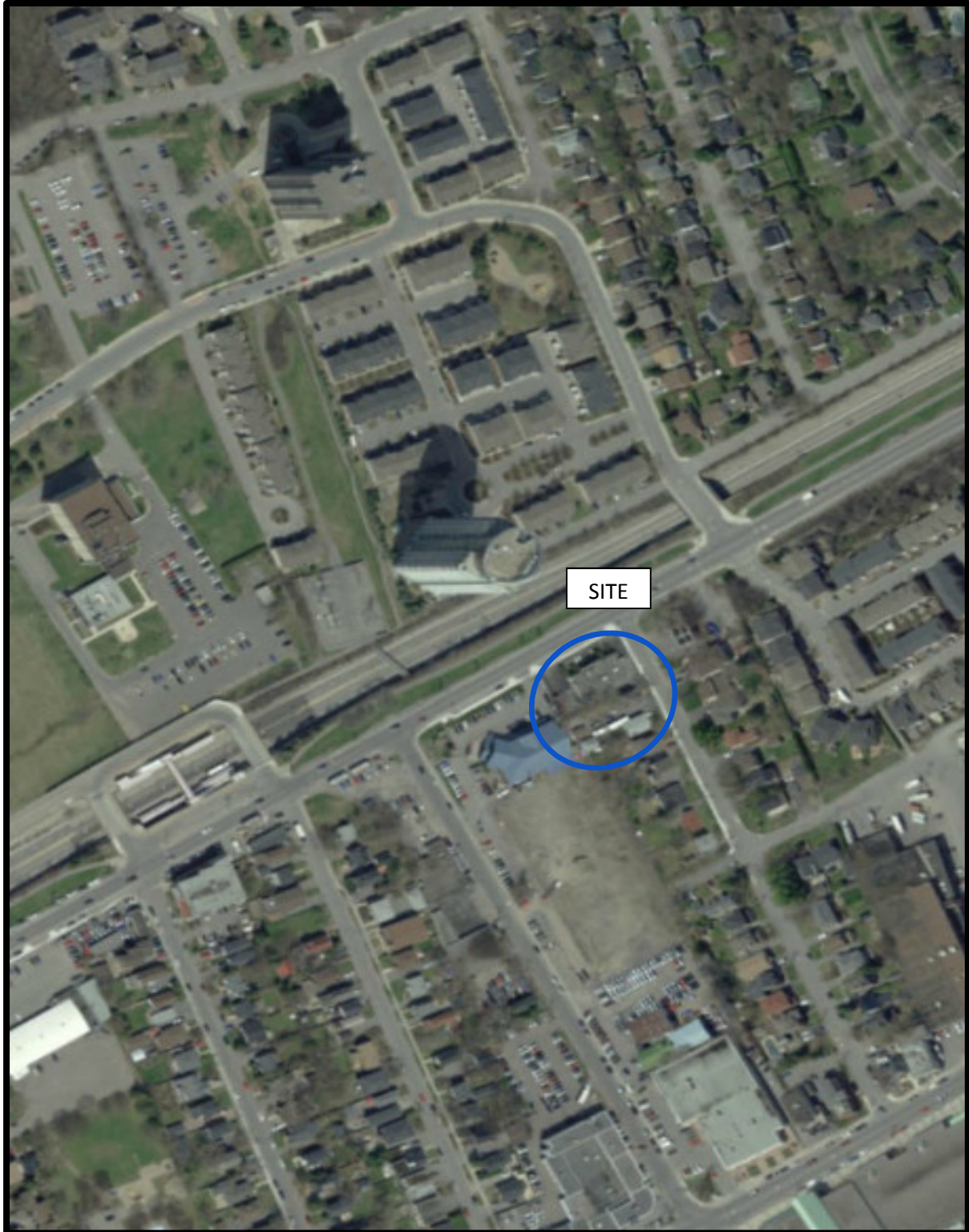
AERIAL PHOTOGRAPH
1984



AERIAL PHOTOGRAPH
1989



AERIAL PHOTOGRAPH
1993



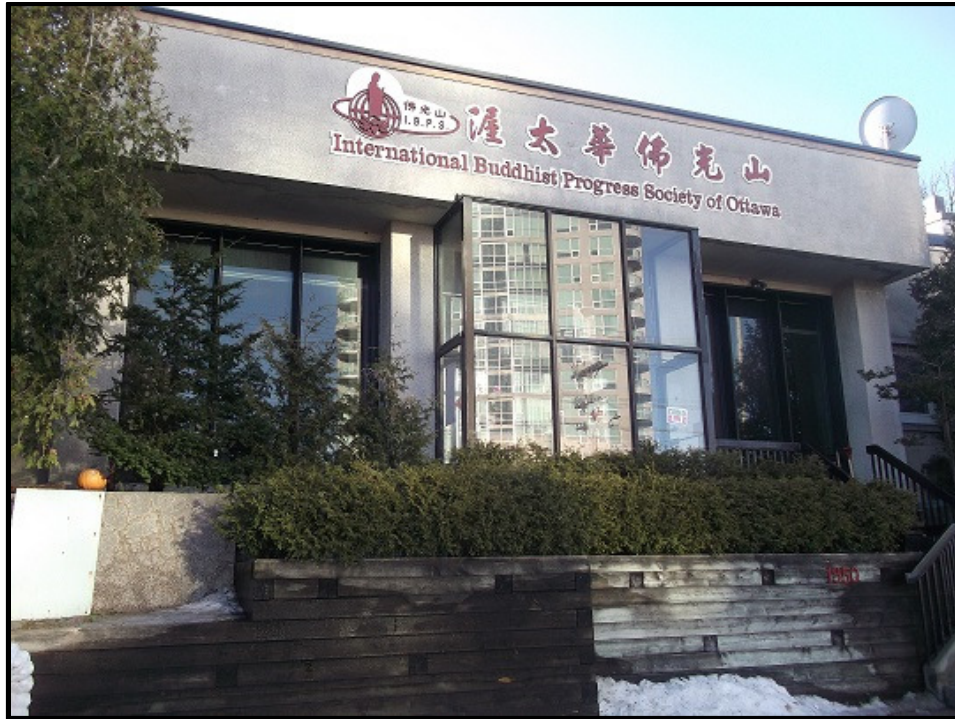
AERIAL PHOTOGRAPH
2014

Site Photographs

PE4239

1950 Scott Street, 312 and 314 Clifton Road – Ottawa, ON

March 1, 2018



Photograph 1: North face of subject building at 1950 Scott Street, facing southeast.



Photograph 2: East face of subject building addressed 1950 Scott Street, facing northwest. Photograph also depicts residential property to the north, across Scott Street.

Site Photographs

PE4239

1950 Scott Street, 312 and 314 Clifton Road – Ottawa, ON

March 1, 2018



Photograph 3: East face of subject building at 312 Clifton Road, facing west.



Photograph 4: View of private garage at 312 Clifton Road, facing west. Photograph also illustrates newly constructed residential building (2015) immediately southwest of the Phase I Property.

Site Photographs

PE4239

1950 Scott Street, 312 and 314 Clifton Road – Ottawa, ON

March 1, 2018



Photograph 5: East face of subject building at 314 Clifton Road, facing west.



Photograph 6: View of private garage at 314 Clifton Road, facing west.

Site Photographs

PE4239

1950 Scott Street, 312 and 314 Clifton Road – Ottawa, ON

March 1, 2018



Photograph 7: View of vacant, commercial lot (future residential development) at 1960 Scott Street, adjacent to the west of the Phase I Property, facing southwest.



Photograph 8: View of Hydro transformer sub-station at 305 Clifton Road, facing east.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

MOECC WELL RECORDS

CITY OF OTTAWA HLUI SEARCH

TSSA CORRESPONDENCE

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



March 22, 2018

Karyn Munch
Paterson Group Inc.
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Karyn Munch:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2018-01414, Your Reference PE4239

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 1950 Scott Street, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Assessment and Permissions 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 Moliann Weir at Moliann.Weir4@ontario.ca.

Yours truly,

Janet Dadufalza
FOI Manager

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
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Tél. : (416) 314-4075
Téléc.: (416) 314-4285



March 22, 2018

Karyn Munch
Paterson Group Inc.
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Karyn Munch:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2018-01412, Your Reference PE4239

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 312 Clifton Road, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Assessment and Permissions 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.**

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Toronto ON M4V 1M2
Tél. : (416) 314-4075
Télééc.: (416) 314-4285



March 22, 2018

Karyn Munch
Paterson Group Inc.
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Karyn Munch:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2018-01413, Your Reference PE4239

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 314 Clifton Road, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Assessment and Permissions 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 Moliann Weir at Moliann.Weir4@ontario.ca.

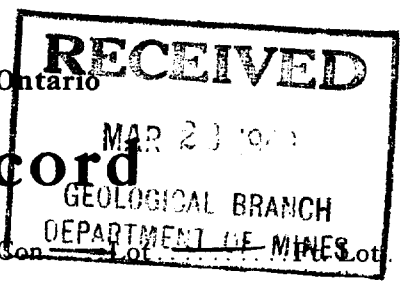
Yours truly,

Janet Dadufalza
FOI Manager

02 441455 - unacceptable
UTM 180 111 E 102 ASE 306 15 N 3972
Elev. 9 R 02000
Basin 250
Cone - 1-0-0
Lot - 32



The Well Drillers Act
Department of Mines, Province of Ontario



Water Well Record

NEPEAN

County or District Carleton Tp. NEPEAN Con. 102 Lot. 32

Acres 180.00
including pump)

Pipe and Casing Record

Pumping Test

Casing diameter(s) <u>5</u>	Date <u>February 26</u>
Length(s) of casing(s) <u>10 ft</u>	Developed Capacity
Length of screen	Duration of Test
Type of screen	Pumping Rate <u>200 g.p.m.</u>
Type of pump	Drawdown <u>3 ft</u>
Capacity of pump	Static level of completed well <u>8 ft</u>
Depth of pump setting <u>20 ft</u>	Is well a gravel-wall type? <u>No</u>

Water Record

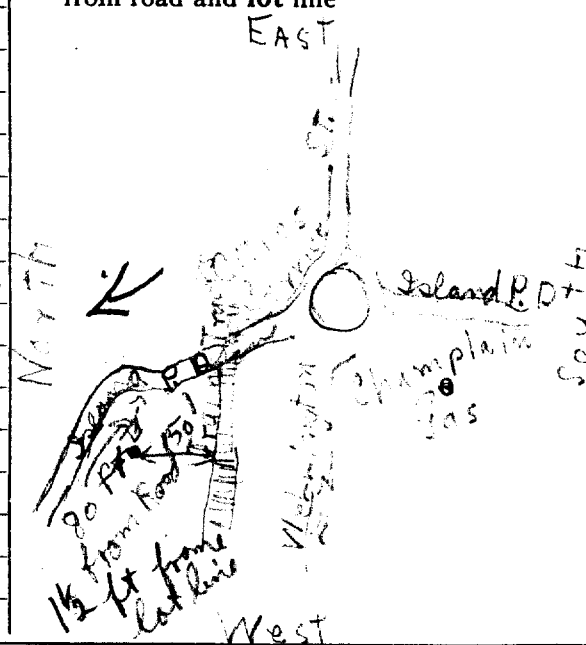
Kind (fresh or mineral) <u>Fresh</u>	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur etc.) <u>Soft</u>			
Appearance (clear, cloudy, coloured) <u>Clear</u>	<u>119 ft</u>	<u>Salt</u>	<u>110 feet</u>
For what purpose(s) is the water to be used? <u>For house and lawn garden etc.</u>			
How far is well from possible source of contamination? <u>25 feet</u>			
What is source of contamination? <u>septic tank</u>			
Enclose a copy of any mineral analysis that has been made of water			

Well Log

Drift and Bedrock Record	From	To
	0 ft.ft.
<u>Sand</u>		<u>1</u>
<u>Blue Clay</u>	<u>2</u>	<u>5</u>
<u>White limestone</u>	<u>6</u>	<u>50</u>
<u>Black slate</u>	<u>50</u>	<u>60</u>
<u>Blue slate</u>	<u>60</u>	<u>125</u>

Location of Well

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



UTM 118Z 4411400E

9R 5027440N

Elev. 9R 0200

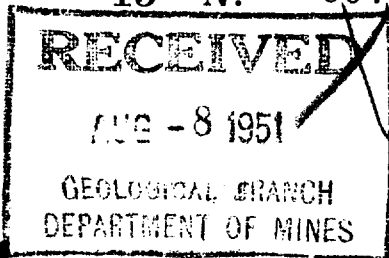
Basin 25



ONTARIO

ASE 306

15 No 3975



The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

County or Territorial District Carleton Township, Village, Town or City Ottawa
Town or City Nepean
Date Completed June (day) 14 (month) 33 (year) Cost of well (excluding pump) 1433

Pipe and Casing Record

Pumping Test

Casing diameter(s) <u>2</u>	Date <u>20</u>
Length(s) of casing(s) <u>30</u>	Static level <u>20</u>
Type of screen <u>30</u>	Pumping level <u>30</u>
Length of screen <u>30</u>	Pumping rate <u>30</u>
Distance from top of screen to ground level <u>30</u>	Duration of test <u>30</u>
Is well a gravel-wall type? <u>30</u>	Distance from cylinder or bowls to ground level <u>30</u>

Water Record

Kind (fresh or mineral) <u>fresh</u>	Depth(s) to Water Horizon(s) <u>80</u>	Kind of Water <u>hard</u>	No. of Feet Water Rises <u>60</u>
Quality (hard, soft, contains iron, sulphur, etc.) <u>fresh</u>			
Appearance (clear, cloudy, coloured) <u>clear</u>			
For what purpose(s) is the water to be used? <u>drinking</u>			
How far is well from possible source of contamination? <u>30</u>			
What is the source of contamination? <u>30</u>			
Enclose a copy of any mineral analysis that has been made of water <u>30</u>			

Well Log

Overburden and Bedrock Record

From 0 ft. To ...ft.

Clay

1 4

Gravel

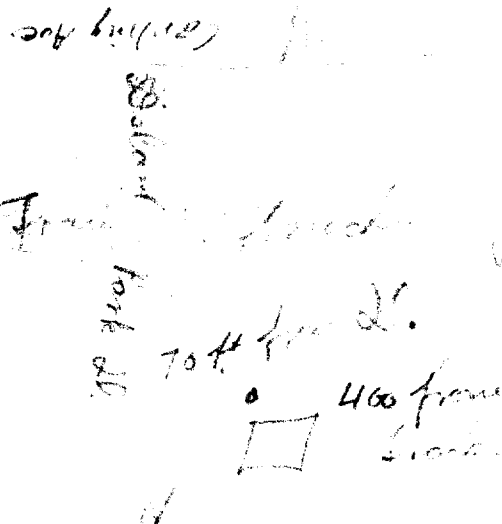
4 18

White Limestone

18 125

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? 30
Drilling Firm Horden & Mulligan
Address Wentworth St. 14
Name of Driller John M. Mullen Address Regina, Sask. 2nd St. 12
Date 30 Licence Number 30

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.
- Ministry Use Only**

Well Owner's Information and Location of Well Information

Ministry Use Only												
MUN					CON						LOT	

	M-11	AH	(S)	N	L	N	BB	(C)	(S)	(M)
--	------	----	-----	---	---	---	----	-----	-----	-----

RR#/Street Number/Name 309 Athlone Avenue				City/Town/Village Ottawa		Site/Compartment/Block/Tract etc.	
GPS Reading	NAD 83	Zone 18	Easting 541130	Northing 5027223	Unit Make/Model Garmin GPS map 76	Mode of Operation: <input type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify _____	

Log of Overburden and Bedrock Materials (see instructions)

Log of Overburden and Bedrock Materials (see instructions)				Depth From	Metres To
General Colour	Most common material	Other Materials	General Description		
	Asphalt concrete		Typical Monitoring Well Installation (5 wells as a cluster)	0	1.0
DK Brown	Silty sand	gravel		0.10	1.27
Brown	Sandy silt			1.27	1.52
Grey	Limestone	shale layers		1.52	4.70

Hole Diameter		
Depth	Metres	Diameter
From	To	Centimetres
0	4.70	20

Water Record			
Water found at _____ Metres		Kind of Water	
<input type="checkbox"/> _____ m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur	
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals	
<input type="checkbox"/> Other: _____			
<input type="checkbox"/> _____ m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur	
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals	
<input type="checkbox"/> Other: _____			
<input type="checkbox"/> _____ m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur	
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals	
<input type="checkbox"/> Other: _____			
After test of well yield, water was			
<input type="checkbox"/> Clear and sediment free			
<input type="checkbox"/> Other, specify _____			
Chlorinated		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Construction Record				
Inside diam centimetres	Material	Wall thickness centimetres	Depth	Metres
			From	To
Casing				
50 mm	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Schedule 40	0.9	1.25
	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			
	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			
Screen				
Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.	1.25	4.70
58 mm		#10		
No Casing or Screen				
<input type="checkbox"/> Open hole				

Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping ____ hrs + ____ min	2		2	
Final water level end of pumping _____ metres	3		3	
Recommended pump type. <input type="checkbox"/> Shallow <input type="checkbox"/> Deep	4		4	
Recommended pump depth. _____ metres	5		5	
Recommended pump rate. (litres/min)	10		10	
	15		15	
If flowing give rate - (litres/min)	20		20	
	25		25	
If pumping discontinued, give reason.	30		30	
	40		40	
	50		50	
	60		60	

Plugging and Sealing Record			<input checked="" type="checkbox"/> Annular space	<input type="checkbox"/> Abandonment
Depth set at - Metres		Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
From	To			
0.9	1.25	Bentonite. 20 4.6	20 4.6.	

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	

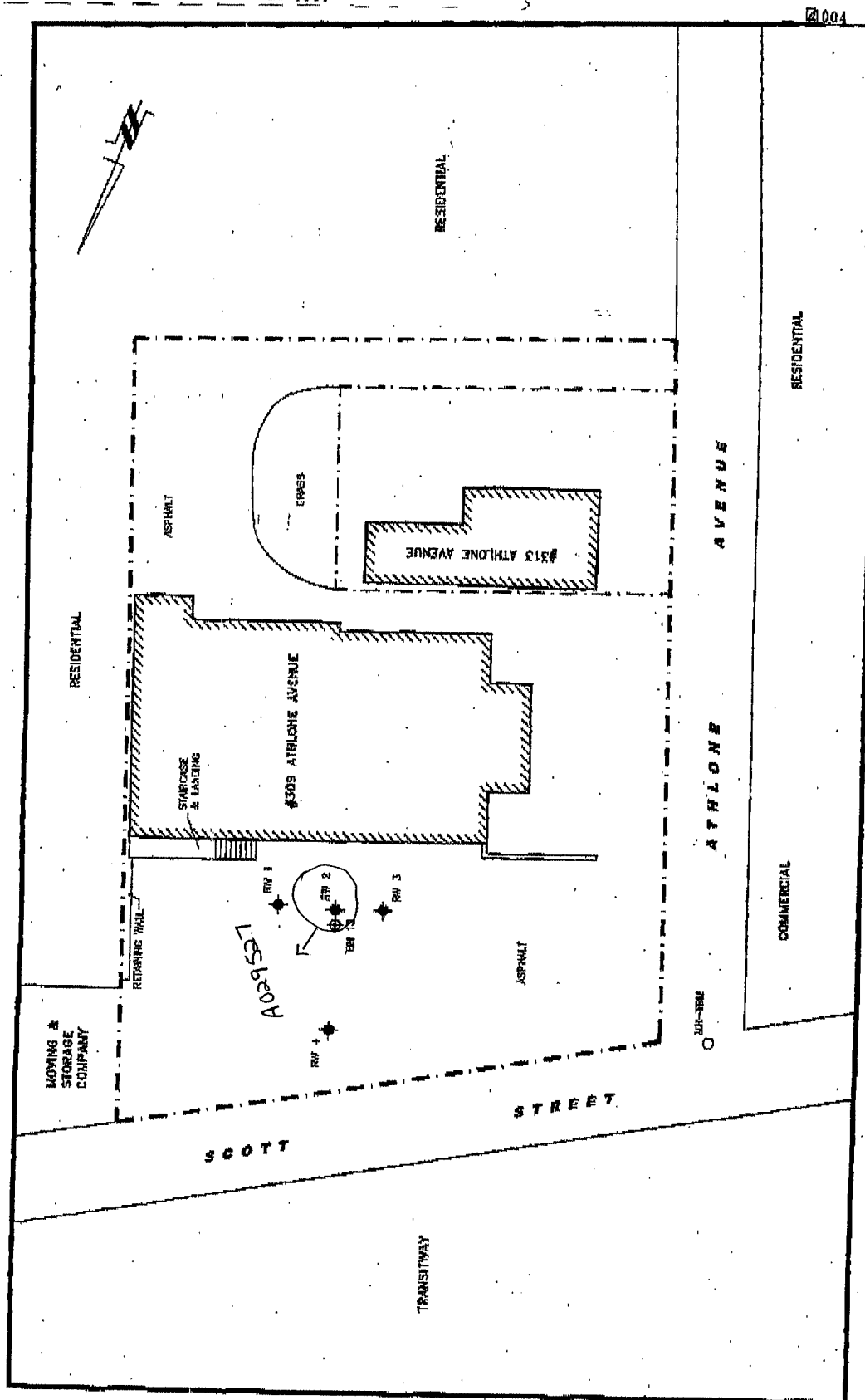
Water Use			
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	<i>Sample</i>
<input type="checkbox"/> 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 checked="" 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 George Downing Estate Drilling Ltd	Well Contractor's Licence No. 1844
Business Address (street name, number, city etc.) 410 Main St. Greenville-Sen-La-Pouge, Qc J0V1B0	
Name of Well Technician (last name, first name) Downing, Bruce	Well Technician's Licence No. T2173
Signature of Technician/Contractor x [Signature]	Date Submitted 2005 07 16

Location of Well			
<p>In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.</p> <div style="text-align: center; font-size: 2em; margin-top: 20px;"> Please see site plan (attached) </div>			
Audit No. z 31645	Date Well Completed 2005 ^{YYY} 08 ^{MM} 25 ^{DD}		
Was the well owner's information package delivered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Delivered YYY MM DD		

Ministry Use Only			
Data Source		Contractor 1844	
Date Received	YYYY	MM	DD
OCT	12	2005	
Remarks		Well Record Number	



OCT 12 2005

231645

1844

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				City/Town/Village		Site/Compartment/Block/Tract etc.	
GPS Reading		NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation: <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify _____
		83	18	941527	5037132	RAE	CDL UTA

Log of Overburden and Bedrock Materials (see instructions)

Log of Overburden and Bedrock Materials (see instructions)					Depth		Metres
General Colour	Most common material	Other Materials	General Description	From	To		
	Reddish-brown silty clay		Topsoil, 0-10 cm, dark brown, silty, organic	0.00	0.10		
	Light brown silty clay		Topsoil, 10-20 cm, light brown, silty, organic	0.10	0.20		
			Topsoil, 20-30 cm, light brown, silty, organic	0.20	0.30		
			Topsoil, 30-40 cm, light brown, silty, organic	0.30	0.40		
			Topsoil, 40-50 cm, light brown, silty, organic	0.40	0.50		
			Topsoil, 50-60 cm, light brown, silty, organic	0.50	0.60		
			Topsoil, 60-70 cm, light brown, silty, organic	0.60	0.70		
			Topsoil, 70-80 cm, light brown, silty, organic	0.70	0.80		
			Topsoil, 80-90 cm, light brown, silty, organic	0.80	0.90		
			Topsoil, 90-100 cm, light brown, silty, organic	0.90	1.00		
			Topsoil, 100-110 cm, light brown, silty, organic	1.00	1.10		
			Topsoil, 110-120 cm, light brown, silty, organic	1.10	1.20		
			Topsoil, 120-130 cm, light brown, silty, organic	1.20	1.30		
			Topsoil, 130-140 cm, light brown, silty, organic	1.30	1.40		
			Topsoil, 140-150 cm, light brown, silty, organic	1.40	1.50		
			Topsoil, 150-160 cm, light brown, silty, organic	1.50	1.60		
			Topsoil, 160-170 cm, light brown, silty, organic	1.60	1.70		
			Topsoil, 170-180 cm, light brown, silty, organic	1.70	1.80		
			Topsoil, 180-190 cm, light brown, silty, organic	1.80	1.90		
			Topsoil, 190-200 cm, light brown, silty, organic	1.90	2.00		
			Topsoil, 200-210 cm, light brown, silty, organic	2.00	2.10		
			Topsoil, 210-220 cm, light brown, silty, organic	2.10	2.20		
			Topsoil, 220-230 cm, light brown, silty, organic	2.20	2.30		
			Topsoil, 230-240 cm, light brown, silty, organic	2.30	2.40		
			Topsoil, 240-250 cm, light brown, silty, organic	2.40	2.50		
			Topsoil, 250-260 cm, light brown, silty, organic	2.50	2.60		
			Topsoil, 260-270 cm, light brown, silty, organic	2.60	2.70		
			Topsoil, 270-280 cm, light brown, silty, organic	2.70	2.80		
			Topsoil, 280-290 cm, light brown, silty, organic	2.80	2.90		
			Topsoil, 290-300 cm, light brown, silty, organic	2.90	3.00		
			Topsoil, 300-310 cm, light brown, silty, organic	3.00	3.10		
			Topsoil, 310-320 cm, light brown, silty, organic	3.10	3.20		
			Topsoil, 320-330 cm, light brown, silty, organic	3.20	3.30		
			Topsoil, 330-340 cm, light brown, silty, organic	3.30	3.40		
			Topsoil, 340-350 cm, light brown, silty, organic	3.40	3.50		
			Topsoil, 350-360 cm, light brown, silty, organic	3.50	3.60		
			Topsoil, 360-370 cm, light brown, silty, organic	3.60	3.70		
			Topsoil, 370-380 cm, light brown, silty, organic	3.70	3.80		
			Topsoil, 380-390 cm, light brown, silty, organic	3.80	3.90		
			Topsoil, 390-400 cm, light brown, silty, organic	3.90	4.00		
			Topsoil, 400-410 cm, light brown, silty, organic	4.00	4.10		
			Topsoil, 410-420 cm, light brown, silty, organic	4.10	4.20		
			Topsoil, 420-430 cm, light brown, silty, organic	4.20	4.30		
			Topsoil, 430-440 cm, light brown, silty, organic	4.30	4.40		
			Topsoil, 440-450 cm, light brown, silty, organic	4.40	4.50		
			Topsoil, 450-460 cm, light brown, silty, organic	4.50	4.60		
			Topsoil, 460-470 cm, light brown, silty, organic	4.60	4.70		
			Topsoil, 470-480 cm, light brown, silty, organic	4.70	4.80		
			Topsoil, 480-490 cm, light brown, silty, organic	4.80	4.90		
			Topsoil, 490-500 cm, light brown, silty, organic	4.90	5.00		
			Topsoil, 500-510 cm, light brown, silty, organic	5.00	5.10		
			Topsoil, 510-520 cm, light brown, silty, organic	5.10	5.20		
			Topsoil, 520-530 cm, light brown, silty, organic	5.20	5.30		
			Topsoil, 530-540 cm, light brown, silty, organic	5.30	5.40		
			Topsoil, 540-550 cm, light brown, silty, organic	5.40	5.50		
			Topsoil, 550-560 cm, light brown, silty, organic	5.50	5.60		
			Topsoil, 560-570 cm, light brown, silty, organic	5.60	5.70		
			Topsoil, 570-580 cm, light brown, silty, organic	5.70	5.80		
			Topsoil, 580-590 cm, light brown, silty, organic	5.80	5.90		
			Topsoil, 590-600 cm, light brown, silty, organic	5.90	6.00		
			Topsoil, 600-610 cm, light brown, silty, organic	6.00	6.10		
			Topsoil, 610-620 cm, light brown, silty, organic	6.10	6.20		
			Topsoil, 620-630 cm, light brown, silty, organic	6.20	6.30		
			Topsoil, 630-640 cm, light brown, silty, organic	6.30	6.40		
			Topsoil, 640-650 cm, light brown, silty, organic	6.40	6.50		
			Topsoil, 650-660 cm, light brown, silty, organic	6.50	6.60		
			Topsoil, 660-670 cm, light brown, silty, organic	6.60	6.70		
			Topsoil, 670-680 cm, light brown, silty, organic	6.70	6.80		
			Topsoil, 680-690 cm, light brown, silty, organic	6.80	6.90		
			Topsoil, 690-700 cm, light brown, silty, organic	6.90	7.00		
			Topsoil, 700-710 cm, light brown, silty, organic	7.00	7.10		
			Topsoil, 710-720 cm, light brown, silty, organic	7.10	7.20		
			Topsoil, 720-730 cm, light brown, silty, organic	7.20	7.30		
			Topsoil, 730-740 cm, light brown, silty, organic	7.30	7.40		
			Topsoil, 740-750 cm, light brown, silty, organic	7.40	7.50		
			Topsoil, 750-760 cm, light brown, silty, organic	7.50	7.60		
			Topsoil, 760-770 cm, light brown, silty, organic	7.60	7.70		
			Topsoil, 770-780 cm, light brown, silty, organic	7.70	7.80		
			Topsoil, 780-790 cm, light brown, silty, organic	7.80	7.90		
			Topsoil, 790-800 cm, light brown, silty, organic	7.90	8.00		
			Topsoil, 800-810 cm, light brown, silty, organic	8.00	8.10		
			Topsoil, 810-820 cm, light brown, silty, organic	8.10	8.20		
			Topsoil, 820-830 cm, light brown, silty, organic	8.20	8.30		
			Topsoil, 830-840 cm, light brown, silty, organic	8.30	8.40		
			Topsoil, 840-850 cm, light brown, silty, organic	8.40	8.50		
			Topsoil, 850-860 cm, light brown, silty, organic	8.50	8.60		
			Topsoil, 860-870 cm, light brown, silty, organic	8.60	8.70		
			Topsoil, 870-880 cm, light brown, silty, organic	8.70	8.80		
			Topsoil, 880-890 cm, light brown, silty, organic	8.80	8.90		
			Topsoil, 890-900 cm, light brown, silty, organic	8.90	9.00		
			Topsoil, 900-910 cm, light brown, silty, organic	9.00	9.10		
			Topsoil, 910-920 cm, light brown, silty, organic	9.10	9.20		
			Topsoil, 920-930 cm, light brown, silty, organic	9.20	9.30		
			Topsoil, 930-940 cm, light brown, silty, organic	9.30	9.40		
			Topsoil, 940-950 cm, light brown, silty, organic	9.40	9.50		
			Topsoil, 950-960 cm, light brown, silty, organic	9.50	9.60		
			Topsoil, 960-970 cm, light brown, silty, organic	9.60	9.70		
			Topsoil, 970-980 cm, light brown, silty, organic	9.70	9.80		
			Topsoil, 980-990 cm, light brown, silty, organic	9.80	9.90		
			Topsoil, 990-1000 cm, light brown, silty, organic	9.90	10.00		

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		Recovery		
								Time min	Water Level Metres	Time min	Water Level Metres		
			Casing						Pump intake set at - (metres)	Static Level			
			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized						Pumping rate - (litres/min)	1		1	
			<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	2		2	
			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized						Final water level end of pumping _____ metres	3		3	
			<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	4		4	
									Recommended pump depth. _____ metres	5		5	
									Recommended pump rate. (litres/min)	10		10	
									If flowing give rate - (litres/min)	15		15	
										20		20	
										25		25	
									If pumping discontinued, give reason.	30		30	
										40		40	
										50		50	
										60		60	
Water Record			Screen										
Water found at _____ Metres	Kind of Water		Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.								
<input type="checkbox"/> m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur											
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals											
<input type="checkbox"/> Other:													
<input type="checkbox"/> m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur											
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals											
<input type="checkbox"/> Other:													
<input type="checkbox"/> m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur											
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals											
<input type="checkbox"/> Other:													
After test of well yield, water was			No Casing or Screen										
<input type="checkbox"/> Clear and sediment free			<input type="checkbox"/> Open hole										
<input type="checkbox"/> Other, specify _____													
Chlorinated <input type="checkbox"/> Yes <input type="checkbox"/> No													

Plugging and Sealing Record			<input type="checkbox"/> Annular space	<input checked="" type="checkbox"/> Abandonment
Depth set at - Metres		Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
From	To			
2.5	2.0	Bentonite Slurry	2	
1.5	2.5	Cement	3 Bags	
0	1.5	Casing Cutt Off - & Reformed		

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 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 type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	
<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 <i>Drinking Water</i>	Well Contractor's Licence No. <i>6574</i>
Business Address (street name, number, city etc.) <i>Box 3204 - Cochrane Ont. K4H 1L0</i>	
Name of Well Technician (last name, first name) <i>S. Shue</i>	Well Technician's Licence No. <i>310</i>
Signature of Technician/Contractor <i>[Signature]</i>	Date Submitted <i>Jan 11, 98</i>

Location of Well											
<p>In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.</p> <div style="height: 300px; border: 1px solid black; margin-top: 10px;"></div>											
Audit No. z 28743	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px;">Date Well Completed</td> <td style="width: 20%; padding: 5px;">YYYY</td> <td style="width: 20%; padding: 5px;">MM</td> <td style="width: 30%; padding: 5px;">DD</td> </tr> <tr> <td style="padding: 5px;">Date Delivered</td> <td style="padding: 5px;">YYYY</td> <td style="padding: 5px;">MM</td> <td style="padding: 5px;">DD</td> </tr> </table>			Date Well Completed	YYYY	MM	DD	Date Delivered	YYYY	MM	DD
Date Well Completed	YYYY	MM	DD								
Date Delivered	YYYY	MM	DD								
Was the well owner's information											
<table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">package delivered?</td> <td style="width: 10%; text-align: center;"><input type="checkbox"/> Yes</td> <td style="width: 10%; text-align: center;"><input type="checkbox"/> No</td> <td style="width: 60%;"></td> </tr> </table>				package delivered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No					
package delivered?	<input type="checkbox"/> Yes	<input type="checkbox"/> No									

Ministry Use Only			
Data Source		Contractor	
		6574	
Date Received	YYYY MM DD	Date of Inspection	YYYY MM DD
NOV 24 2005			
Remarks		Well Record Number	
DWC VIA PHONE 2005/11/15			

All measurements recorded in: ☒ Metric ☐ Imperial

Follow instructions on the front and back of this form. Print or Type

Well Tag No. of Deepest Well: (Print Well Tag No.)

N/A

Well # on Drawing of Deepest Well:

Page 1 of 1

Well Cluster Location Information														Mandatory Attachments/Additional Information							
Address of Well Location (Street Number(s)/Name(s), RR, if available)								Lot(s)		Concession(s)		Geographic Township		County/District/Upper Tier Municipality		<input checked="" type="checkbox"/> Land Owner Consent Form must be attached. <input checked="" type="checkbox"/> Detailed Drawing of All Well Locations must be attached. I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed.					
145 Richmond RD								-		-		CITY of Ottawa		CITY of Ottawa							
City, Town, Village or Hamlet								Province		GPS Unit Make		Model		Unit Mode of Operation		Signature of Technician/Contractor Date (yyyy/mm/dd)					
OTTAWA								Ontario		Garmin		map 76		<input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify:							
Well Details																					
Well # on Drawing	UTM Coordinates		Hole Depth (m/ft)	Hole Diameter (cm/in)	Method of Construction	Casing Material; Diameter (cm/in)	Casing (m/ft)		Screen Interval (m/ft)		Annular Space Material (m/ft)			Overburden/Bedrock or Abandonment Filling Material Intervals (m/ft)	Static Water Level (m/ft)	Date of Completion (yyyy/mm/dd)					
	Zone	Easting					Northing	From	To	From	To	From	To				Material:				
#1	18	441548	5027320	4.9m	N/A	-	-	-	-	-	-	-	-	Gravel 0-0.61m Bentonite 0.61-4.9m	4.4m	20111102					
#2	18	441523	5027309	4.6m	N/A	-	-	-	-	-	-	-	Gravel 0-0.61m Bentonite 0.61m-4.6m	4.6m	20111102						
#3	18	441606	5027350	2.43m	N/A	-	-	-	-	-	-	-	Gravel 0-0.61m Bentonite 0.61m-2.43m	2.43m	20111102						
Well Contractor and Well Technician Information														Date First Well in Cluster Constructed or Abandoned (yyyy/mm/dd)		Date Last Well in Cluster Completed (yyyy/mm/dd)		Ministry Use Only			
Business Name of Well Contractor				Business Address (Street Number/Name, RR)				Municipality				Province		2011 01 02		2011 11 02		Date Received (yyyy/mm/dd)		Audit No.	
G & T Drilling LTD				276 Drive-in RD				Ngongee				ON						JAN 31 2012		C 16367	
Postal Code		Bus. Telephone No.		Well Contractor's Licence No.				Business E-mail Address				Well Abandonment		Person Abandoning the Wells: Name (Print or Type) - See instruction 11 on the back of this form		Comments:					
K7R3L1		6133544760		7085				getdrilling@mycanda.ca													
Name of Well Technician (First Name, Last Name)				Well Technician's Licence No.				Signature of Well Technician				Date Submitted (yyyy/mm/dd)									
Tim Harrison				2251								2011 11 15									

Well ID

Well ID Number: 7224472

Well Audit Number: C22336

Well Tag Number: A147202

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

Well Location

Address of Well Location	
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441521.00 Northing: 5027205.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
----------------	----------------------	-----------------	---------------------	------------	----------

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
------------	----------	--	---------------

Method of Construction & Well Use

Method of Construction	Well Use
------------------------	----------

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
-----------------	-----------------------	------------	----------

Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 6964

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
------------	----------	----------

Audit Number: C22336

Date Well Completed: January 24, 2014

Date Well Record Received by MOE: July 24, 2014

Updated: February 2, 2018

Rate [Rate](#)

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Tags

- [Environment and energy](#)
- [Drinking water](#)

Well ID

Well ID Number: 7240886
 Well Audit Number: Z198253
 Well Tag Number: A173740

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

Well Location

Address of Well Location	205 LANARK AVE.
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	OTTAWA
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441131.00 Northing: 5027480.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	LOAM	STNS	SOFT	0 m	1.32 m
GREY	LMSN	LYRD		1.32 m	12.19 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	CONCRETE/FLUSHMOUNT	
.31 m	8.84 m	BENTONITE	
8.84 m	12.19 m	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring and Test Hole

Status of Well

Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
4.03 cm	PLASTIC	0 m	9.14 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
4.82 cm	PLASTIC	9.14 m	12.19 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 m	1.83 m	11.43 cm
1.83 m	12.19 m	7.62 cm

Audit Number: Z198253

Date Well Completed: April 17, 2015

Date Well Record Received by MOE: May 05, 2015

Updated: February 2, 2018

Rate [Rate](#)

Well ID

Well ID Number: 7265948
 Well Audit Number: Z229830
 Well Tag Number: A190916

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

Well Location

Address of Well Location	160 LANARK AVENUE
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441305.00 Northing: 5027564.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	SAND	FILL	SOFT	0 m	1.22 m
BRWN	SAND		SOFT	1.22 m	2.13 m
BRWN	SILT		PCKD	2.13 m	2.44 m
GREY	LMSN		PCKD	2.44 m	5.79 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	
.31 m	2.44 m	BENTONITE	
2.44 m	5.79 m	SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring and Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	2.74 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	2.74 m	5.29 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
0 m	2.44 m	11.43 cm
2.44 m	5.79 m	7.62 cm

Audit Number: Z229830

Date Well Completed: June 09, 2016

Date Well Record Received by MOE: July 04, 2016

Updated: February 2, 2018

Rate [Rate](#)

Well ID

Well ID Number: 7265949
 Well Audit Number: Z229802
 Well Tag Number: A190915

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

Well Location

Address of Well Location	160 LANARK AVENUE
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441323.00 Northing: 5027536.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	LOAM		SOFT	0 m	.31 m
BRWN	SAND	GRVL	LOOS	.31 m	2.13 m
GREY	LMSN		WTHD	2.13 m	5.79 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMONT/ CONCRETE	
.31 m	2.59 m	BENTONITE	
2.59 m	5.79 m	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring and Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	2.74 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	2.74 m	5.79 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
0 m	3.1 m	11.43 cm
3.1 m	5.79 m	7.62 cm

Audit Number: Z229802

Date Well Completed: June 09, 2016

Date Well Record Received by MOE: July 04, 2016

Updated: February 2, 2018

Rate [Rate](#)

Well ID

Well ID Number: 7265950
 Well Audit Number: Z229801
 Well Tag Number: A190913

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

Well Location

Address of Well Location	60 LANARK AVENUE
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441296.00 Northing: 5027526.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN	LOAM		SOFT	0 m	.31 m
BRWN	SAND	GRVL	LOOS	.31 m	1.22 m
GREY	LMSN		WTHD	1.22 m	4.88 m

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
0 m	.31 m	FLUSHMOUNT/ CONCRETE	
.31 m	1.62 m	BENTONITE	
1.68 m	4.88 m	FILTER SAND	

Method of Construction & Well Use

Method of Construction	Well Use
Air Percussion	Monitoring and Test Hole

Status of Well

Monitoring and Test Hole

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
5.2 cm	PLASTIC	0 m	1.83 m

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To
6.03 cm	PLASTIC	1.83 m	4.88 m

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7241

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
0 m	1.52 m	11.43 cm
1.52 m	4.88 m	7.62 cm

Audit Number: Z229801

Date Well Completed: June 09, 2016

Date Well Record Received by MOE: July 04, 2016

Updated: February 2, 2018

Rate [Rate](#)

Well ID

Well ID Number: 7290746
 Well Audit Number: Z256707
 Well Tag Number: A190915

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

Well Location

Address of Well Location	160 LANARK AVENUE
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: 441300.00 Northing: 5027544.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
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Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
5.79 m	0 m	GROUTED 3/8 BENTONITE	

Method of Construction & Well Use

Method of Construction	Well Use
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Status of Well

Abandoned-Other

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
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Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1558

Results of Well Yield Testing

After test of well yield, water was	
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	Y

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
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Audit Number: Z256707

Date Well Completed: May 04, 2017

Date Well Record Received by MOE: July 24, 2017

Updated: February 2, 2018

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Tags

- [Environment and energy](#)
- [Drinking water](#)

Well ID

Well ID Number: 7290747
 Well Audit Number: Z256708
 Well Tag Number: A190916

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

Well Location

Address of Well Location	160 LANARK AVENUE
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: 441294.00 Northing: 5027544.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
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Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
5.79 m	0 m	GROUTED 3/8 BENTONITE HOLEPLUG	

Method of Construction & Well Use

Method of Construction	Well Use
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Status of Well

Abandoned-Other

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
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Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1558

Results of Well Yield Testing

After test of well yield, water was	
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	Y

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
----------------------	------

Hole Diameter

Depth From	Depth To	Diameter
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Audit Number: Z256708

Date Well Completed: May 04, 2017

Date Well Record Received by MOE: July 24, 2017

Updated: February 2, 2018

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- [Environment and energy](#)
- [Drinking water](#)

Well ID

Well ID Number: 7290748
 Well Audit Number: Z256705
 Well Tag Number: A190913

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

Well Location

Address of Well Location	160 LANARK AVENUE
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: 441302.00 Northing: 5027549.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
----------------	----------------------	-----------------	---------------------	------------	----------

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
5.79 m	0 m	GROUTED 3/8 BENTONITE HOLEPLUG	

Method of Construction & Well Use

Method of Construction	Well Use
------------------------	----------

Status of Well

Abandoned-Other

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
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Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1558

Results of Well Yield Testing

After test of well yield, water was	
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	Y

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
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Audit Number: Z256705

Date Well Completed: May 04, 2017

Date Well Record Received by MOE: July 24, 2017

Updated: February 2, 2018

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Tags

- [Environment and energy](#)
- [Drinking water](#)

Well ID

Well ID Number: 7290749
 Well Audit Number: Z256709
 Well Tag Number: A155785

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

Well Location

Address of Well Location	160 LANARK AVENUE
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: 441276.00 Northing: 5027574.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
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Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
7.92 m	0 m	GROUTED 3/8 BENTONITE HOLEPLUG	

Method of Construction & Well Use

Method of Construction	Well Use
------------------------	----------

Status of Well

Abandoned-Other

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
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Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1558

Results of Well Yield Testing

After test of well yield, water was	
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	Y

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
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Audit Number: Z256709

Date Well Completed: May 05, 2017

Date Well Record Received by MOE: July 24, 2017

Updated: February 2, 2018

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Tags

- [Environment and energy](#)
- [Drinking water](#)

Well ID

Well ID Number: 7265890
 Well Audit Number: C26623
 Well Tag Number: A200790

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

Well Location

Address of Well Location	
Township	NEPEAN TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 441274.00 Northing: 5027306.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
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Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed
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Method of Construction & Well Use

Method of Construction	Well Use
------------------------	----------

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To
-----------------	-----------------------	------------	----------

Construction Record - Screen

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

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 7328

Results of Well Yield Testing

After test of well yield, water was
If pumping discontinued, give reason
Pump intake set at
Pumping Rate
Duration of Pumping
Final water level
If flowing give rate
Recommended pump depth
Recommended pump rate
Well Production
Disinfected?

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind
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Hole Diameter

Depth From	Depth To	Diameter
------------	----------	----------

Audit Number: C26623

Date Well Completed: May 06, 2016

Date Well Record Received by MOE: July 04, 2016

Updated: February 2, 2018

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Tags

- [Environment and energy](#)
- [Drinking water](#)



File Number: D06-03-17-0172

March 22, 2018

Paterson Group
154 Colonnade Road South
Ottawa ON
K2E 7J5

Sent via email [kmunch@patersongroup.ca]

Dear Paterson Group,

**Re: Information Request
312 and 314 Clifton Road, 1950 Scott Street, Ottawa, Ontario ("Subject Property")**

Internal Department Circulation

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

- Disposals and Environmental Remediation: The subject properties are within the footprint of former landfill Ur-19 – McRae Avenue. The City has no information regarding the current environmental conditions of this former landfill as the site is under private ownership.

Search of Historical Land Use Inventory

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

A search of the HLUI database revealed the following information:

- There is one (1) activity associated with the Subject Property: Activity Number 6939.

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

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Planning, Infrastructure and Economic
Development Department

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 14743
Fax: (613) 560-6006
www.ottawa.ca

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

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 14743
Télééc: (613) 560-6006
www.ottawa.ca

- There are five (5) activities associated with properties located within 50m of the Subject Property: Activity Numbers 13661, 5739, 7597, 15026 and 10616.

Please note that Activity Numbers 13661 and 10616 have a PIN Certainty of “2”. This identifier acknowledges that there is some uncertainty about the exact location of the land use activity and that the activity may or may not have been located on the Subject Property. All database entries with a PIN Certainty of “2” require independent verification as to their precise location.

A site map has been included to show the location of the Subject Property as well as the location of all the activities noted above, including the HLUI database’s location of the Activity Numbers with a PIN Certainty of “2”.

Additional information may be obtained by contacting:

Ontario’s Environmental Registry

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

The Ontario Land Registry Office

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

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

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an “as is” basis with no

representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.

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

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

If you have any further questions or comments, please contact Justin Marr at 613-580-2424 ext. 14743 or HLUI@ottawa.ca

Sincerely,

A handwritten signature in cursive script, appearing to read "Justin Marr".

Justin Marr

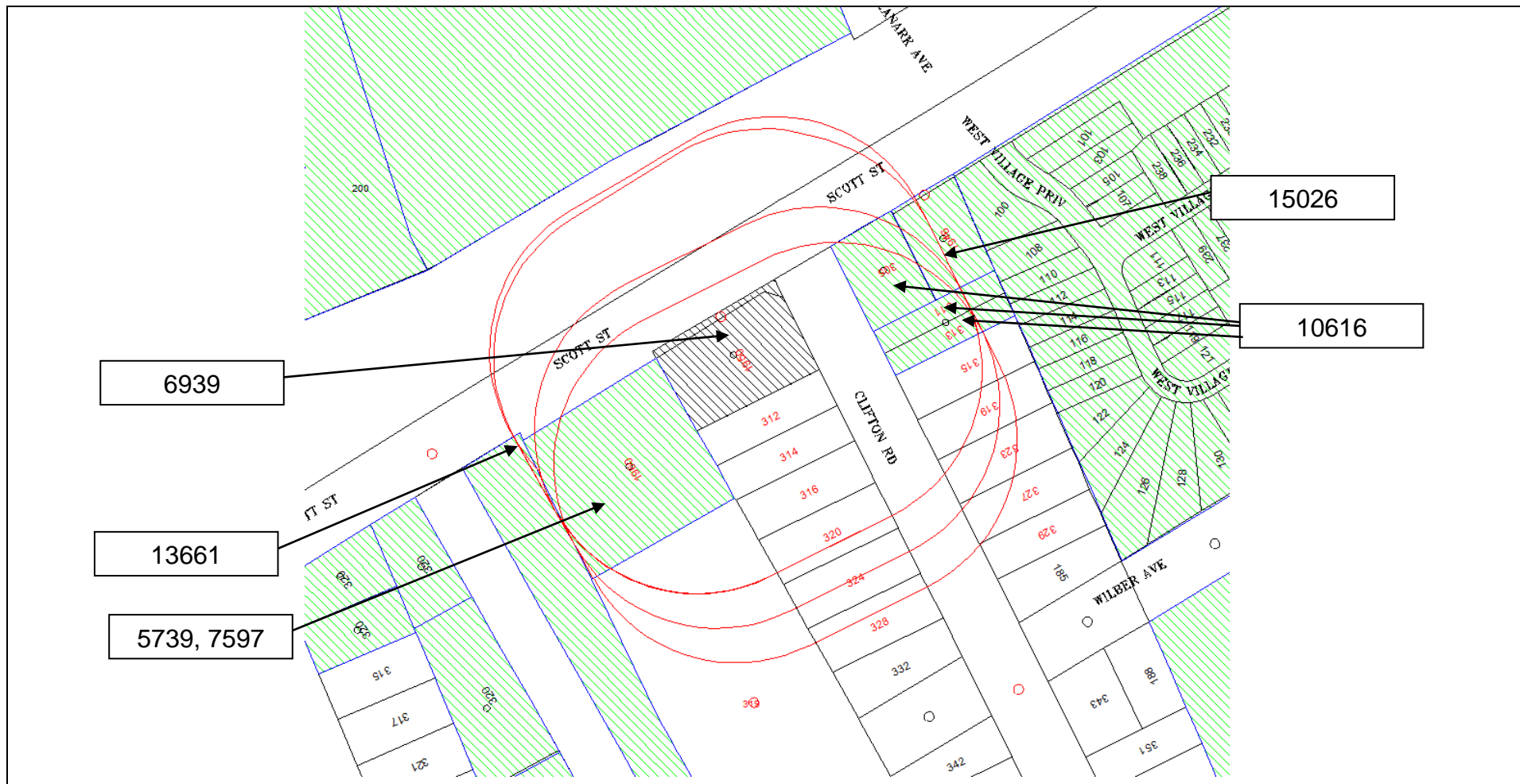
Per:

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

MB / JM

Attach: 8

cc: File no. D06-03-17-0172




Scale 1: n/a

312 & 314 Clifton Road 1950 Scott Street
Ottawa, ON
File # D06-03-17-0172
Justin Marr



Overview

ID# = Activity Identification Number

 = Subject Site



CITY OF OTTAWA
HLUI ID: __679GH3
AREA (Square Metres): 4649.506

Report: RPTC_OT_DEV0122
Run On: 16 Mar 2018 at: 17:31:16

Study Year
1998

PIN
040210028

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 13661 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 5191
Related PINS: 040210028
Name: THOMAS G. FULLER LIMITED
Address: MCRAE AVENUE, OTTAWA
Facility Type: Lumber and Building Materials, Wholesale
Comments 1: Located at Richmond Rd. and Scott St. (east side)
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: FIP1912,vol2; FIP1922-251-567,vol2; FIP1948-309-567; FIP1956-309-4-567,vol3; M.1948, M.1955, M.1963; BEP 1950
HL References 2:
HL References 3:

NAICS	SIC
493120	479
416320	563
444110	563
238390	421
238990	421
493190	479
416310	563
444120	563
493130	479
416340	563
444190	563

Company Name

Thomas G. Fuller Ltd.
W.C. Edwards

Year of Operation

c. 1948-1956
c. 1922



CITY OF OTTAWA
HLUI ID: __679F33
AREA (Square Metres): 2387.127

Report: RPTC_OT_DEV0122
Run On: 16 Mar 2018 at: 17:32:05

Study Year
1998

PIN
040210029

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 5739 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 6827
Related PINS: 040210029
Name: GERVAIS MOTORS LIMITED
Address: 1960 SCOTT STREET, OTTAWA
Facility Type: Other Motor Vehicle Services
Comments 1: GEN# = ON1041400
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: PID1994
HL References 2:
HL References 3:

NAICS **SIC**
488410 639

Company Name

Gervais Motors Ltd.

Year of Operation

c. 1994



CITY OF OTTAWA
HLUI ID: __679F33
AREA (Square Metres): 2387.127

Report: RPTC_OT_DEV0122

Run On: 16 Mar 2018 at: 17:32:05

Study Year
1998

PIN
040210029

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 7597 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :**
Related PINS: 040210029
Name: LUMETRIX CORP
Address: 1960 SCOTT STREET, OTTAWA
Facility Type: Photographic Equipment and Musical Instruments and Supplies, Wholesale
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2001 Employment Survey

NAICS **SIC**
414130 0

Company Name **Year of Operation**
LUMETRIX CORP c. 2001



CITY OF OTTAWA
HLUI ID: __679FLU
AREA (Square Metres): 1262.774

Report: RPTC_OT_DEV0122
Run On: 16 Mar 2018 at: 17:32:22

Study Year
1998

PIN
040210051

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 6939 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 879
Related PINS: 040210051
Name: INDEPENDENT COAL AND LUMBER COMPANY (1961) LIMITED
Address: 1950 SCOTT STREET, OTTAWA
Facility Type: Petroleum Products, Wholesale
Comments 1: - also lists coal & lumber yard
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: S.1958, S.1961, S.1964-65, M.1900, M.1910, M.1920, M.1930, M.1940, M.1950,M.1958, M.1960, M.1961, M.1964, M.1970, M.1980
HL References 2:
HL References 3:

NAICS	SIC
444110	563
416340	563
321992	254
482112	453
337110	254
482113	453
412110	511
321215	254
444120	563
444190	563
454310	511
416310	563
419120	511
483116	453
416320	563
488210	453
321911	254
482114	453

Company Name

Independent Coal and Lumber Company (1961) Ltd.

Year of Operation

c. 1940-1970

**CITY OF OTTAWA**

HLUI ID: __679EYL

AREA (Square Metres): 640.228

Report: RPTC_OT_DEV0122

Run On: 16 Mar 2018 at: 17:32:39

Study Year
1998**PIN**
040210052**Multi-NAIC**
Y**Multiple Activities**
N

Activity ID: 10616 **Multiple PINS:** Y

PIN Certainty: 2 **Previous Activity ID(s) :** 2436

Related PINS: 040210052

Name: OTTAWA HYDRO -TRANSFORMER SUBSTATION

Address: 307 CLIFTON ROAD, OTTAWA

Facility Type: Electric Power Systems Industry

Comments 1:

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1948, M.1955, M.1963; FIP1912-vol2; FIP1922-vol2; FIP1948-309-1304,vol3; FIP1956/57-309-3-1304,vol3, BEP 1950

HL References 2:

HL References 3:

NAICS	SIC
221121	491
221119	491
221111	491
221113	491
221112	491
221122	491

Company Name

Ottawa Hydro -Transformer Substation

Year of Operation

c. 1948-1957



CITY OF OTTAWA
HLUI ID: __679E24
AREA (Square Metres): 666.239

Report: RPTC_OT_DEV0122
Run On: 16 Mar 2018 at: 17:33:00

Study Year
1998

PIN
040210053

Multi-NAIC
N

Multiple Activities
N

Activity ID: 15026 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 3281
Related PINS: 040210053
Name: Racey MacCallum and Associates Ltd.
Address: 1946 SCOTT ST, OTTAWA
Facility Type: Testing Laboratory, Consulting Engineers
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1960, M.1970, M.1980
HL References 2:
HL References 3:

NAICS **SIC**
0 775

Company Name **Year of Operation**
Racey MacCallum and Associates Ltd. c. 1960



CITY OF OTTAWA
HLUI ID: __679EXL
AREA (Square Metres): 630.824

Report: RPTC_OT_DEV0122
Run On: 16 Mar 2018 at: 17:33:24

Study Year
1998

PIN
040210054

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 10616 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 2436
Related PINS: 040210052
Name: OTTAWA HYDRO -TRANSFORMER SUBSTATION
Address: 307 CLIFTON ROAD, OTTAWA
Facility Type: Electric Power Systems Industry
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1948, M.1955, M.1963; FIP1912-vol2; FIP1922-vol2; FIP1948-309-1304,vol3; FIP1956/57-309-3-1304,vol3, BEP 1950
HL References 2:
HL References 3:

NAICS	SIC
221121	491
221119	491
221111	491
221113	491
221112	491
221122	491

Company Name	Year of Operation
Ottawa Hydro -Transformer Substation	c. 1948-1957

Karyn Munch

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: April-04-18 4:17 PM
To: Karyn Munch
Subject: RE: PE4239 - Records Search

Hello Karyn,

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

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

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

Thank you and have a great day,

Yalini

From: Karyn Munch [<mailto:KMunch@Patersonsgroup.ca>]
Sent: April 4, 2018 3:59 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: RE: PE4239 - Records Search

Good afternoon Yalini,

Could you please complete a search of your records for **underground/aboveground storage tanks, historical spills or other incidents/infractions** for the addresses below.

Thank you very much!

Best Regards,
Karyn

From: Public Information Services [<mailto:publicinformationsservices@tssa.org>]
Sent: April-04-18 3:51 PM
To: Karyn Munch <KMunch@Patersonsgroup.ca>
Subject: RE: PE4239 - Records Search

Good afternoon Karyn,

Thank you for your request for confirmation of public information.

To facilitate our search, would you kindly specify which safety program(s) or technology (e.g. fuel tanks, elevators, etc.) you want TSSA to search.

Thank you in advance and kind regards,

Yalini

From: Karyn Munch <KMunch@Patersongroup.ca>

Sent: March 19, 2018 3:53 PM

To: Public Information Services <publicinformationsservices@tssa.org>

Subject: PE4239 - Records Search

Good afternoon,

Could you please search your records for the following addresses in the City of Ottawa:

1946, 1950, 1960 Scott Street

305, 311, 312, 313, 314, 315, 316 Clifton Road

Thank-you very much.

Best Regards,

Karyn Munch, P.Eng.

patersongroup
solution oriented engineering

154 Colonnade Road South

Ottawa, Ontario, K2E 7J5

Tel: (613) 226-7381 Ext. 217

Fax: (613) 226-6344

Email: kmunch@patersongroup.ca

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APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Services

POSITION

Intermediate Environmental Engineer

EDUCATION

Carleton University, B.Eng. 2002
Environmental Engineering

MEMBERSHIPS AND AWARDS

Professional Engineers of Ontario
Ottawa Geotechnical Society

EXPERIENCE

2011-present

Paterson Group Inc.

Consulting Engineers
Geotechnical and Environmental Division
Intermediate Engineer

2009-2010

Department of Indian and Northern Affairs

Contaminated Sites Division
Environment Officer (PC-02)

2003 to 2009

Paterson Group Inc.

Consulting Engineers
Geotechnical and Environmental Division
Intermediate Engineer

2002 to 2003

Dessau Soprin Inc.

Consulting Engineers
Environmental Division
Junior Engineer

SELECT LIST OF PROJECTS

Billings-Hurdman Interconnect Watermain - Ottawa
Telus Building Remediation - Ottawa
Block D Lands Remediation and Redevelopment – Kingston
Gladstone Avenue Reconstruction - Ottawa
Lees Avenue Coal Tar Site - City of Ottawa
Nortel Networks Environmental Monitoring Program
3W Zone Feedermain – Ottawa
Bank Street Reconstruction – Ottawa
Lees Avenue Remediation Program – Ottawa
Colonnade Road North Development – Ottawa
Montreal Road Reconstruction – Ottawa
Designated Substance Surveys – Residential and Commercial Sites - Ottawa
Phase I & II Environmental Site Assessments – Residential, Commercial and Industrial Sites – Ottawa (CSA Z768-01 and O.Reg 269/11)
Brownfields Applications and Records of Site Condition – Residential and Commercial Redevelopment

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Services

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

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
Agricultural Supply Facilities - Eastern Ontario
Laboratory Facility – Edmonton (Alberta)
Ottawa International Airport - Contaminant Migration Study - Ottawa
Richmond Road Reconstruction - Ottawa
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
Commercial Properties – Guelph and Brampton
Brownfields Remediation – Alcan Site - Kingston
Montreal Road Reconstruction - Ottawa
Appleford Street Residential Development - Ottawa
Remediation Program - Ottawa Train Yards
Remediation Program - Bayshore and Heron Gate
Gladstone Avenue Reconstruction – Ottawa
Somerset Avenue West Reconstruction - Ottawa