



Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Studies

Phase I Environmental Site Assessment

Vacant Property - Oak Ridge Gate Subdivision
Chinon Place at Breezewood Street
Ottawa, Ontario

Prepared For

Ashcroft Homes

Paterson Group Inc.

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December 6, 2017

Report: PE2326-2

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EXECUTIVE SUMMARY

Assessment

A Phase I – Environmental Site Assessment was carried out for the vacant piece of land just west of the Chinon Place and Breezewood Street intersection, in the City of Ottawa, Ontario. The property does not have a civic address. The purpose of this environmental assessment was to research the past and current use of the subject site and adjacent properties and identify any environmental concerns with the potential to impact the subject property.

Based on a review of historical sources, the subject property appears to have never been developed. No historical potentially contaminating activities (PCAs) were identified on the Phase I property. Surrounding properties have historically been used for agricultural purposes, with large scale residential development occurring in the early 2000's. A bus depot was constructed west of the subject site in the late 1980s and was identified by the TSSA as having two (2) USTs. The bus depot is considered a PCA but due to the distance and cross-gradient orientation with respect to the subject site, this PCA is not considered to have resulted in an APEC on the subject property.

Following the historical review, a site visit was conducted. The subject property currently exists as a vacant lot of land with grass, shrubs and small tree coverage. No environmental concerns were identified on the subject site at the time of the site visit.

The surrounding land use consisted primarily of residential properties, with some under construction light commercial property further to the south and a hydro corridor further to the north. The former bus depot to the west is considered a PCA because of the two (2) expired USTs reported by the TSSA to be onsite. However, due to the distance and cross-gradient orientation with respect to the subject site, this PCA is not considered to have resulted in an APEC on the subject property.

Based on the results of this Phase I - Environmental Site Assessment, it is our opinion that **a Phase II - Environmental Site Assessment is not required for the property.**

1.0 INTRODUCTION

At the request of Ashcroft Homes, Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (Phase I ESA) on the vacant land (no civic address) located west of the Chinon Place and Breezewood Street intersection, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Ms. Keiran Watson of Ashcroft Homes. Ms. Watson can be reached by telephone at (613) 226-7266.

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 the requirements of 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:	No civic address for the property.
Legal Description:	Part 3, Part of Lot A, Concession 9, (Geographic Township of Cumberland) in the City of Ottawa, Ontario.
Property Identification Number (PIN):	14526-0650
Location:	The subject site is located on the east side of Trim Road, approximately 230 m north of Valin Street.
Latitude and Longitude:	45° 28' 29" N, 75° 27' 26" W

Site Description:

Configuration:	Rectangular
Site Area:	8,960 m ² (approximate)
Zoning:	DR – Development Reserve
Current Use:	The subject site is vacant, grassed land.
Services:	The subject site is situated in an area that is municipally serviced.

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

Based on a review of historically available information, the Phase I property does not appear to have ever been developed, although it has been used for agricultural purposes in the past.

National Archives

Fire insurance plans are not available for the Phase I study area.

Directories were reviewed at the National Archives for the subject site and properties within the Phase I study area, from 1984 through 2011. The area surrounding the subject site has been listed as residential and commercial since at least 1996. No environmental concerns were noted in the City directories with respect to the use of the subject site.

Plan of Survey

A plan of survey was prepared by the City of Ottawa and dated February 12, 2003. The plan depicts the subject site in its current configuration but has an outdated PIN number. Trim Road has been realigned since 2003 and now borders the western property boundary of the subject site. A copy of the plan is included in Appendix 1.

Previous Environmental Reports

Paterson conducted a previous Phase I ESA in conjunction with a geotechnical project for the subject property in June 2011. At that time, no environmental concerns were identified on the subject site or neighbouring properties. A total of three (3) boreholes were drilled as part of the geotechnical project, and the subsurface material was found to be predominantly firm to stiff native silty-clay. No sub-surface impacts were observed during the drilling program.

City of Ottawa Historic Land Use Inventory (HLUI) Database

A request for information from the City's Historic Land Use Inventory (HLUI 2005) database for the subject property was submitted to the City of Ottawa. The response from the City had not been received at the time of issuance of this report.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on November 29, 2017. The subject site and Phase I study area were not listed in the NPRI database.

PCB Inventory

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

Ontario Ministry of Environment and Climate Change (MOECC) Instruments

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOECC issued instruments for the site. At the time of issuing this report, a response from the MOECC had not been received.

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 in the Phase I study area.

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. At the time of issuing this report, a response from the MOECC had not been received.

MOECC Waste Management Records

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. At the time of issuing this report, a response from the MOECC had not been received.

MOECC Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions for the property. At the time of issuing this report, a response from the MOECC had not been received.

MOECC Brownfields Environmental Site Registry

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

MOECC Waste Disposal Site Inventory

The Ontario Ministry of Environment and Climate Change document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. No records were listed for the subject site or for properties within the Phase I study area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on November 29, 2017. No areas of natural significance were identified on the subject site or within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on November 29, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. According to the TSSA, two (2) expired underground fuel tanks are present at 1830 Trim Road, the former bus depot to the west of the subject site. The TSSA correspondence is attached under Appendix 2.

City of Ottawa Landfill Document

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

4.3 Physical Setting Sources

Aerial Photographs

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

- | | |
|---------|--|
| 1945 | The subject site and surrounding properties appear to be used for agricultural purposes. Scattered farmsteads are present in the general area of the subject site. |
| 1973-85 | No apparent changes have been made to the subject site or majority of surrounding properties. The property to the south appears to have been developed with a residential dwelling. |
| 1990 | No apparent changes have been made to the subject site or surrounding properties to the north, east and south. A bus depot is present west of the subject site, on the opposite side of Trim Road. |
| 1994 | No apparent changes have been made to the subject site or surrounding properties to the east and south. To the north and west of the subject site, excavation activities for the construction of a large municipal drainage ditch are underway. |
| 2005 | (City of Ottawa website) No apparent changes have been made to the subject site or surrounding properties to the south and west. To the east and south, and further to the north and west of the subject site, significant residential development is present. To the north, grassed areas and walking paths appear to be present. |
| 2017 | (City of Ottawa website) No apparent changes have been made to the subject site or surrounding properties to the east, west and south. Trim Road appears to have been realigned north of the subject site and further north residential properties are present. |

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

Topographic Maps

Topographic information was obtained from Natural Resources Canada – The Atlas of Canada website. The topographic maps indicate that the elevation of the subject site is approximately 85 m ASL, and that the regional topography in the general area of the site slopes downward to the north-northeast, towards Cardinal Creek. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website, as a part of this assessment. According to the publication and mapping, the site is situated within the St. Lawrence Lowlands, Till Plains (Drumlinized) physiographic region. According to the mapping description provided: “The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets.” The subject site is in the Central St. Lawrence Lowland, “where the land is rarely more than 150 m above sea level, except for the Monteregion Hills, which consist of intrusive igneous rocks.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of interbedded limestone and dolostone of the Gull River Formation. Overburden consists of clay and silt offshore marine sediments, with a drift thickness on the order of 25 to 50 m.

Water Well Records

A search of the MOECCs web site for all drilled well records within 250 m of the subject site was conducted on November 29, 2017. Based on the search results, three (3) water well records were identified in the Phase I study area. Newer developments within the Phase I study area are municipally serviced.

Water Bodies and Areas of Natural Significance

Cardinal Creek is the closest significant water body, at approximately 500 m to the northeast of the subject site. No creeks, streams, lakes or other water bodies were identified in the Phase I study area. No areas of natural significance were identified within the Phase I study area.

5.0 INTERVIEWS

Ashcroft Homes – Planner

Ms. Kieran Watson of Ashcroft Homes was interviewed via email. Ms. Watson provided the 2003 plan of survey and stated that the property has no municipal address. Ms. Watson stated that the property was purchased by Ashcroft Homes approximately 10 years ago and that she was uncertain as to who the previous property owners were. Ms. Watson was not aware of any environmental concerns with the subject site or surrounding properties.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on November 30, 2017. Weather conditions were overcast, with a temperature of approximately 0°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 study area were also assessed at the time of the site visit.

6.2 Specific Observations at Phase I Property

Buildings and Structures

The subject site is a vacant lot of land. No buildings or structures exist on the subject property. A depiction of the subject site is shown on Drawing PE2326-2 – Site Plan, in the Figures section of this report.

Site Features

The subject site is not developed and exists as a vacant lot of land with grass, shrubs and small tree coverage.

Underground Utilities

The subject site has no underground utilities.

Waste Materials

Minor amounts of non-hazardous municipal solid waste and compostable material was present on the subject site at the time of the site visit. These items are not considered an environmental concern.

Storage Tanks

No storage tanks were present on the subject site at the time of the site visit.

Drains, Pits and Sumps

No drains, pits or sumps were present on the subject site at the time of the site visit.

Unidentified Substances

No unidentified substances were present on the subject site at the time of the site visit.

Hazardous Building Materials

No hazardous building materials were present on the subject site at the time of the site visit.

Phase I Study Area

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

- North - Residential properties, followed by Mondavi Street;
- South - Residential property, followed by Trim Road;
- East - Residential properties, followed by Breezewood Street;
- West - Trim Road, followed by a former bus depot.

The bus depot to the west of the subject site has been closed since 2014. A TSSA search request from 2011 identified two (2) active underground storage tanks (USTs) to be present at the depot. The TSSA search request sent as part of this current ESA, identified two (2) expired USTs. Based on aerial photographs, the likely location of the USTs on the bus depot property is approximately 220 m from the subject site. Based on this significant distance, the USTs are not considered to result in an APEC on the subject site. Property use within the Phase I study area is presented on Drawing PE2326-3 – Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The subject site appears to have never been developed and currently exists as a vacant lot of land. The subject site has previously been used for agricultural purposes.

Potentially Contaminating Activities (PCAs)

Potentially Contaminating Activities (PCAs) were not identified on the subject site. The TSSA identified two (2) expired USTs at the former bus depot to the west of the subject site. These USTs are considered to be a PCA.

Areas of Potential Environmental Concern (APECs)

Based on the distance and cross-gradient location with respect to the subject site, the identified former bus depot (offsite) PCA is not considered to represent an Area of Potential Environmental Concern (APECs) on the subject site.

Contaminants of Potential Concern (CPCs)

No contaminants of concern (CPCs) were identified on the Phase I property.

7.2 Conceptual Site Model

Existing Buildings and Structures

The subject site is a vacant lot of land. No buildings or structures exist on the subject property.

Geological and Hydrogeological Setting

The subject site is located in an area of offshore marine sediments of clay and silt. Groundwater flow is expected to reflect site topography and flow in a north-easterly direction.

Water Bodies

The closest water body is Cardinal Creek, located approximately 500 m northeast of the subject site. There are no water bodies on the subject site or within the Phase I study area.

Areas of Natural Significance

No areas of natural significance were identified within the Phase I study area.

Water Wells

A search of the MOECC's web site for all drilled well records within 250 m of the subject site was conducted on November 29, 2017. Based on the search results, no wells were located on the subject site. Three (3) potable well records were identified within the Phase I study area. Newer developments within the Phase I study area receive full municipal services.

Neighbouring Land Use

Neighbouring land use in the Phase I study area is primarily residential, with a former bus depot to the west, some light commercial use further to the south and a hydro corridor further to the north. The residential properties consist of duplex dwellings and row housing. The bus depot was identified by the TSSA as having two (2) expired USTs on the property, and is considered to be a PCA. The light commercial property is currently under development and the ground surface of the hydro corridor has walking paths. Neighbouring land use does not pose an environmental concern to the subject site.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, the former bus depot to the west of the subject site was the only PCA identified within the Phase I study area. Based on the distance and cross-gradient orientation with respect to the subject site, the bus depot PCA is not considered to have resulted in an APEC on the subject site.

Contaminants of Potential Concern

No CPCs were identified on the subject site.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that there are no APECs on the subject site. The presence of a PCA 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 CONCLUSION

Assessment

A Phase I – Environmental Site Assessment was carried out for the property west of the Chinon Place and Breezewood Street intersection, in the City of Ottawa, Ontario. The property does not have a civic address. The purpose of this environmental assessment was to research the past and current use of the subject site and adjacent properties and identify any environmental concerns with the potential to impact the subject property.

Based on a review of historical sources, the subject property appears to have never been developed. No historical potentially contaminating activities (PCAs) were identified on the Phase I property. Surrounding properties have historically been used for agricultural purposes, with large scale residential development occurring in the early 2000's. A bus depot was constructed west of the subject site in the late 1980s and was identified by the TSSA as having two (2) USTs. The bus depot is considered a PCA but due to the distance and cross-gradient orientation with respect to the subject site, this PCA is not considered to have resulted in an APEC on the subject property.

Following the historical review, a site visit was conducted. The subject property currently exists as a vacant lot of land with grass, shrubs and small tree coverage. No environmental concerns were identified on the subject site at the time of the site visit.

The surrounding land use consisted primarily of residential properties, with some under construction light commercial property further to the south and a hydro corridor further to the north. The former bus depot to the west is considered a PCA because of the two (2) expired USTs reported by the TSSA to be onsite. However, due to the distance and cross-gradient orientation with respect to the subject site, this PCA is not considered to have resulted in an APEC on the subject property.

Based on the results of this Phase I - Environmental Site Assessment, it is our opinion that **a Phase II - Environmental Site Assessment is not required for the property.**

9.0 STATEMENT OF LIMITATIONS

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

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

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

Paterson Group Inc.



Greg van Loenen, B.Eng.



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



Report Distribution:

- Ashcroft Homes (1 copy)
- Paterson Group Inc. (1 copy)

10.0 REFERENCES

Federal Records

Air photos at the Energy Mines and Resources Air Photo Library.
National Archives.
Maps and photographs (Geological Survey of Canada surficial and subsurface).
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.
Chapman, L.J., and Putnam, D.F., 1984: ‘The Physiography of Southern Ontario, Third Edition’, Ontario Geological Survey Special Volume 2.

Municipal Records

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

Local Information Sources

Plan of Survey, prepared by the City of Ottawa, February 2003.
Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE2326-2 – SITE PLAN

DRAWING PE2326-3 – SURROUNDING LAND USE PLAN

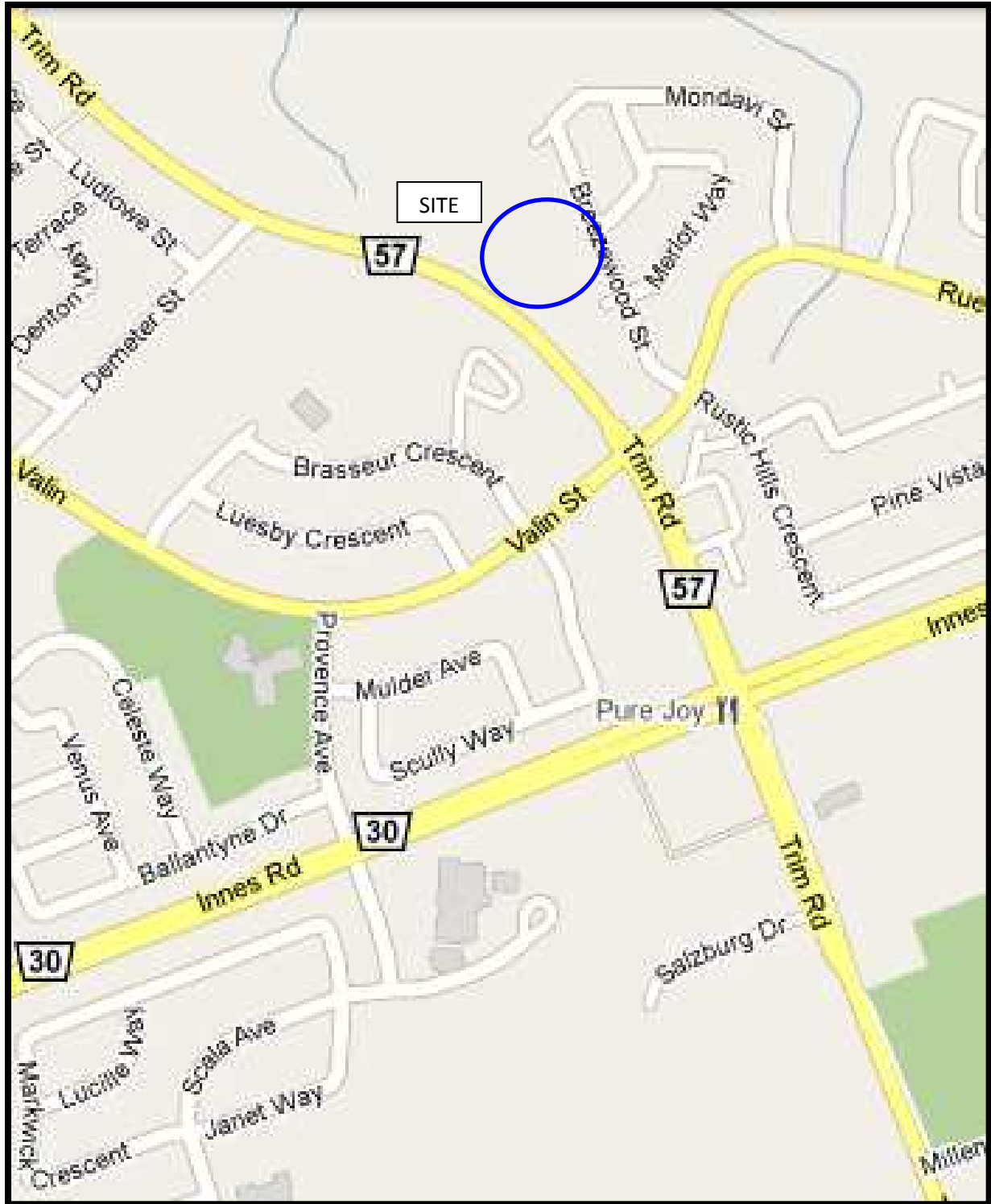


FIGURE 1
KEY PLAN

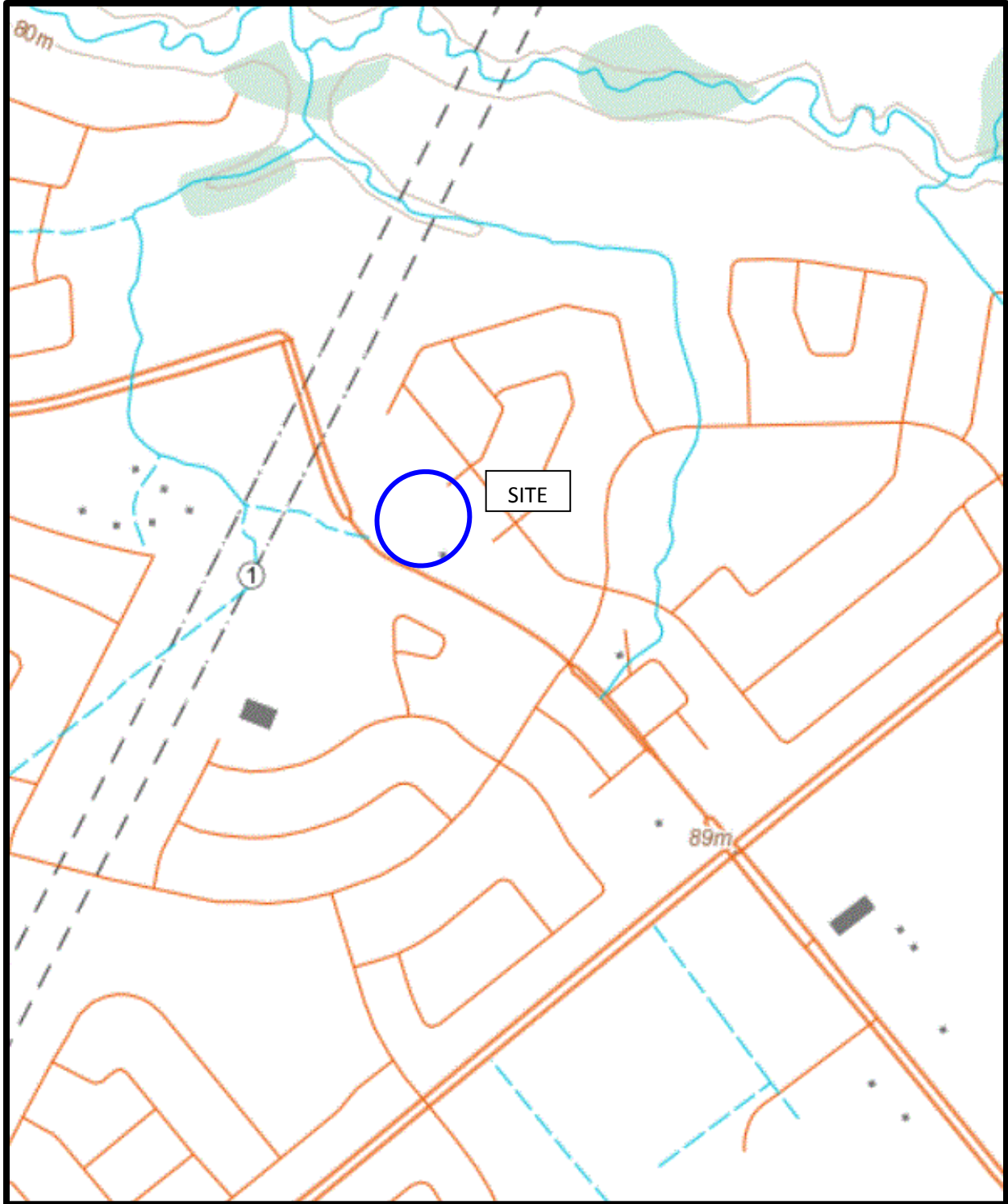
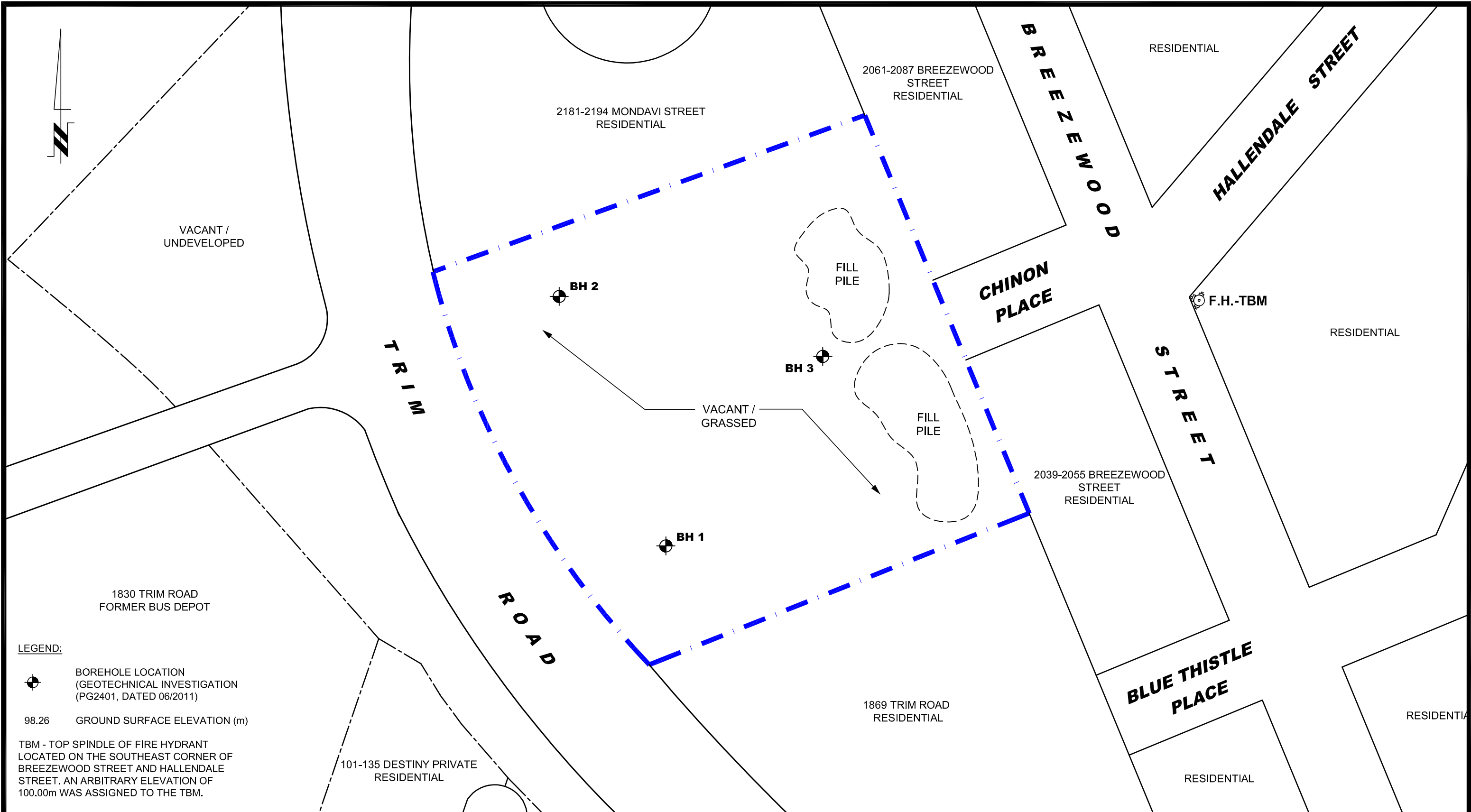


FIGURE 2
TOPOGRAPHIC MAP



LEGEND:



BOREHOLE LOCATION
(GEOTECHNICAL INVESTIGATION
(PG2401, DATED 06/2011))

98.26 GROUND SURFACE ELEVATION (m)

TBM - TOP SPINDLE OF FIRE HYDRANT
LOCATED ON THE SOUTHEAST CORNER OF
BREEZEWOOD STREET AND HALLENDALE
STREET. AN ARBITRARY ELEVATION OF
100.00m WAS ASSIGNED TO THE TBM.

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consulting engineers

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Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL
0			

OTTAWA,
Title:

ASHCROFT HOMES
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
CHINON PLACE AT BREEZEWOOD STREET

ONTARIO

SITE PLAN

Scale: 1:750

Date: 12/2017

Drawn by: RCG

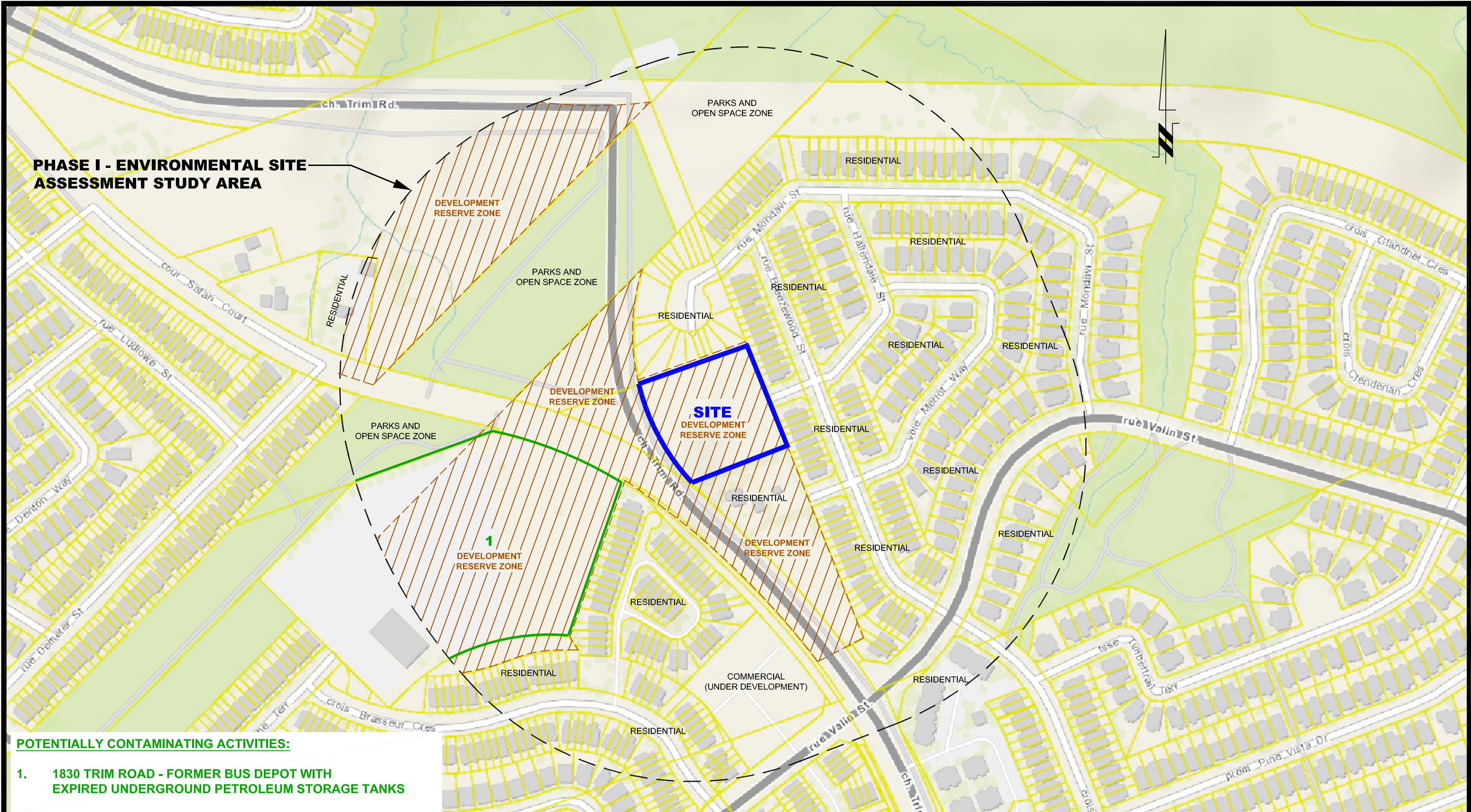
Report No.: PE2326-2

Checked by: GVL

Dwg. No.: **PE2326-1**

Approved by: MSD

Revision No.: 0



PHASE I - ENVIRONMENTAL SITE ASSESSMENT STUDY AREA

POTENTIALLY CONTAMINATING ACTIVITIES:

- 1. 1830 TRIM ROAD - FORMER BUS DEPOT WITH EXPIRED UNDERGROUND PETROLEUM STORAGE TANKS

patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL
0			

OTTAWA,
Title:

ASHCROFT HOMES
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
MONDAVI STREET AT BREEZEWOOD STREET
SURROUNDING LAND USE PLAN

ONTARIO

Scale:	1:3000	Date:	12/2017
Drawn by:	RCG	Report No.:	PE2326-2
Checked by:	GVL	Dwg. No.:	PE2326-2
Approved by:	MSD	Revision No.:	0

APPENDIX 1

PLAN OF SURVEY

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

SCHEDULE					
PART	DESCRIPTION	PI N	NAME OF MOST RECENT TRANSFEREE	AREA	REMARKS
1	PART OF LOT A CONCESSION 9	14526-0093		0.179 ha	
2	PART OF LOT A CONCESSION 9	14526-0093		0.210 ha	
3	PART OF ROAD ALLOWANCE BETWEEN CONCESSIONS 8 AND 9	ALL OF PIN 14526-0093	CAROLE JOANISSE	0.8621 ha	

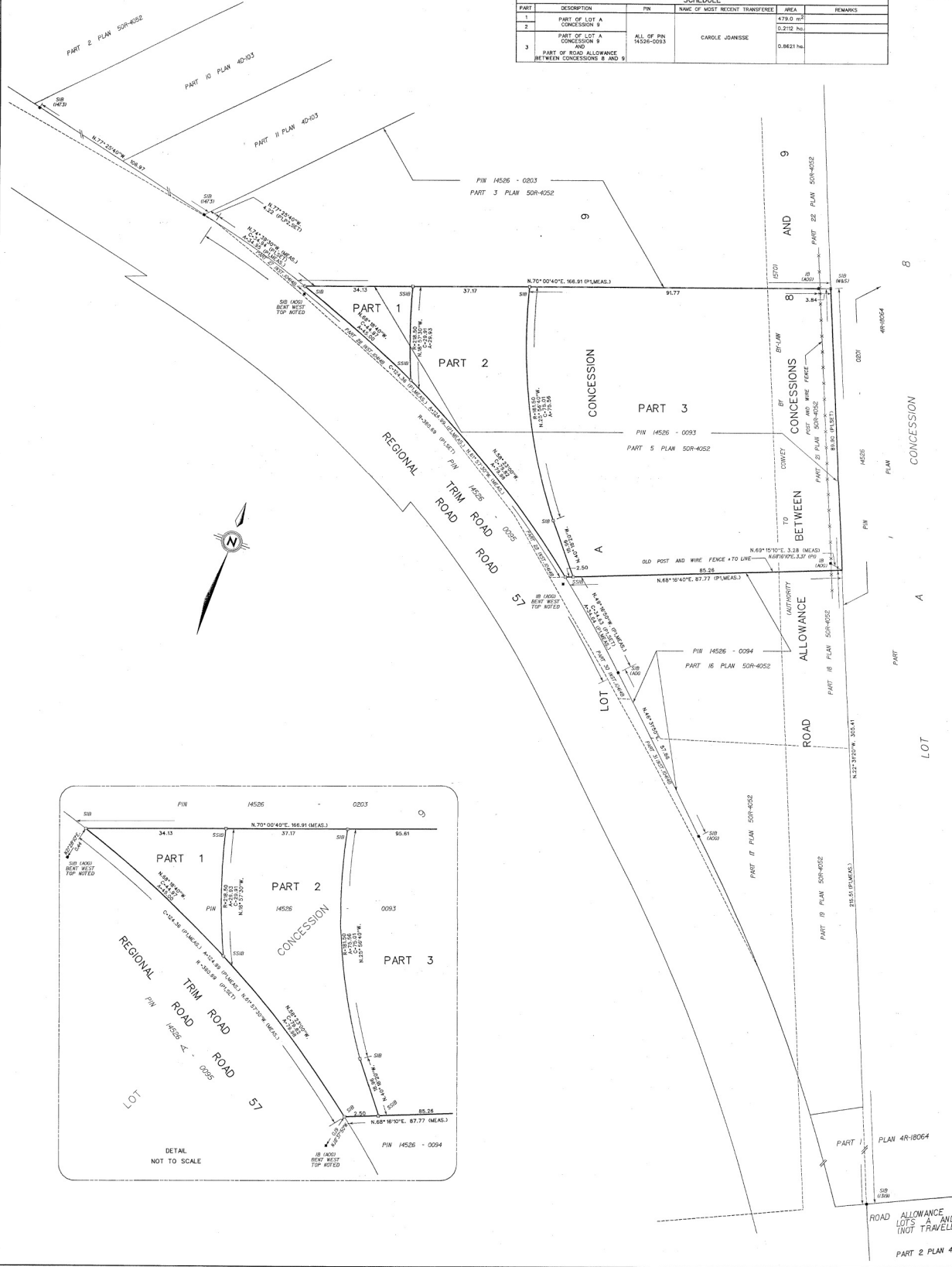
I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT.

PLAN 4R-18344
RECEIVED AND DEPOSITED

DATE February 12, 2003 DATE Feb. 12, 2003

L.A. Tischart
LAND SURVEYOR FOR THE LAND TITLES DIVISION OF OTTAWA

MICHAEL TABAG
CERTIFICATED OFFICER
LAND REGISTRY FOR THE LAND TITLES DIVISION OF OTTAWA-CARLETON No. 4



PLAN OF SURVEY OF
PART OF LOT A CONCESSION 9
AND
PART OF ROAD ALLOWANCE
BETWEEN CONCESSIONS 8 AND 9
GEOGRAPHIC TOWNSHIP OF CUMBERLAND
CITY OF OTTAWA
FORMERLY COUNTY OF RUSSELL

SCALE - 1 : 500
(METRES)

SURVEYED BY STEPHEN A. TISCHART, O.L.S.

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

NOTES AND LEGEND

BEARINGS SHOWN HEREON ARE GRID BEARINGS AND ARE DERIVED FROM THE COMPUTED BEARING OF 4350'40\"/>

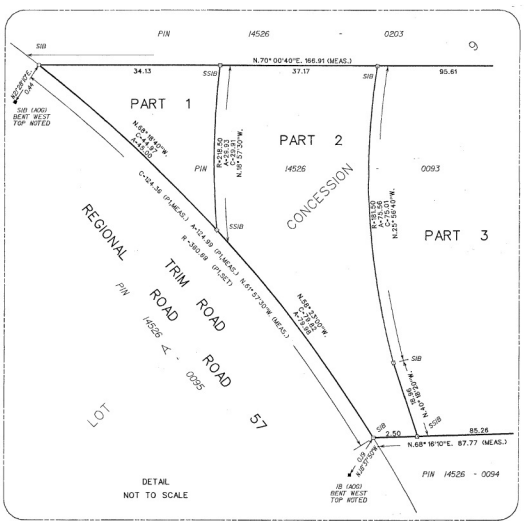
■ DENOTES SURVEY MONUMENT FOUND
□ DENOTES SURVEY MONUMENT PLANTED
SU DENOTES SOURCE UNKNOWN
WIT DENOTES WITNESS
SB DENOTES STANDARD IRON BAR
SDB DENOTES SHORT STANDARD IRON BAR
IB DENOTES IRON BAR
RIB DENOTES ROUND IRON BAR
CP DENOTES CONCRETE PIN
CO DENOTES CUT CROSS
RB DENOTES ROOK BAR
PI DENOTES PLAN 50R-4052
PI1 DENOTES PLAN 40-103

NOTE: FOR COMPARISON PURPOSES A ROTATION OF + 2°47'00\"/>

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEY'S ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 10 DAY OF FEBRUARY, 2003.

Stephen A. Tischart
DATE _____
ONTARIO LAND SURVEYOR



ROAD ALLOWANCE BETWEEN LOTS A AND 1 (NOT TRAVELLED)

PLAN 4R-18344
PART 2 PLAN 4R-18344

OTAWA CORPORATION SERVICES DEPARTMENT SURVEYS AND MAPPING

PROJECT: TRM 50. FIELD WORK BY: I. O. FOSTER
CALCD BY: J.A. MEASHER COMPUTER NO. 5770
CADD BY: J.A. MEASHER M.S. NO. 5770
CHECKED BY: S. TISCHART DRAWING NO. 9775
PEN TABLE: DATE: _____



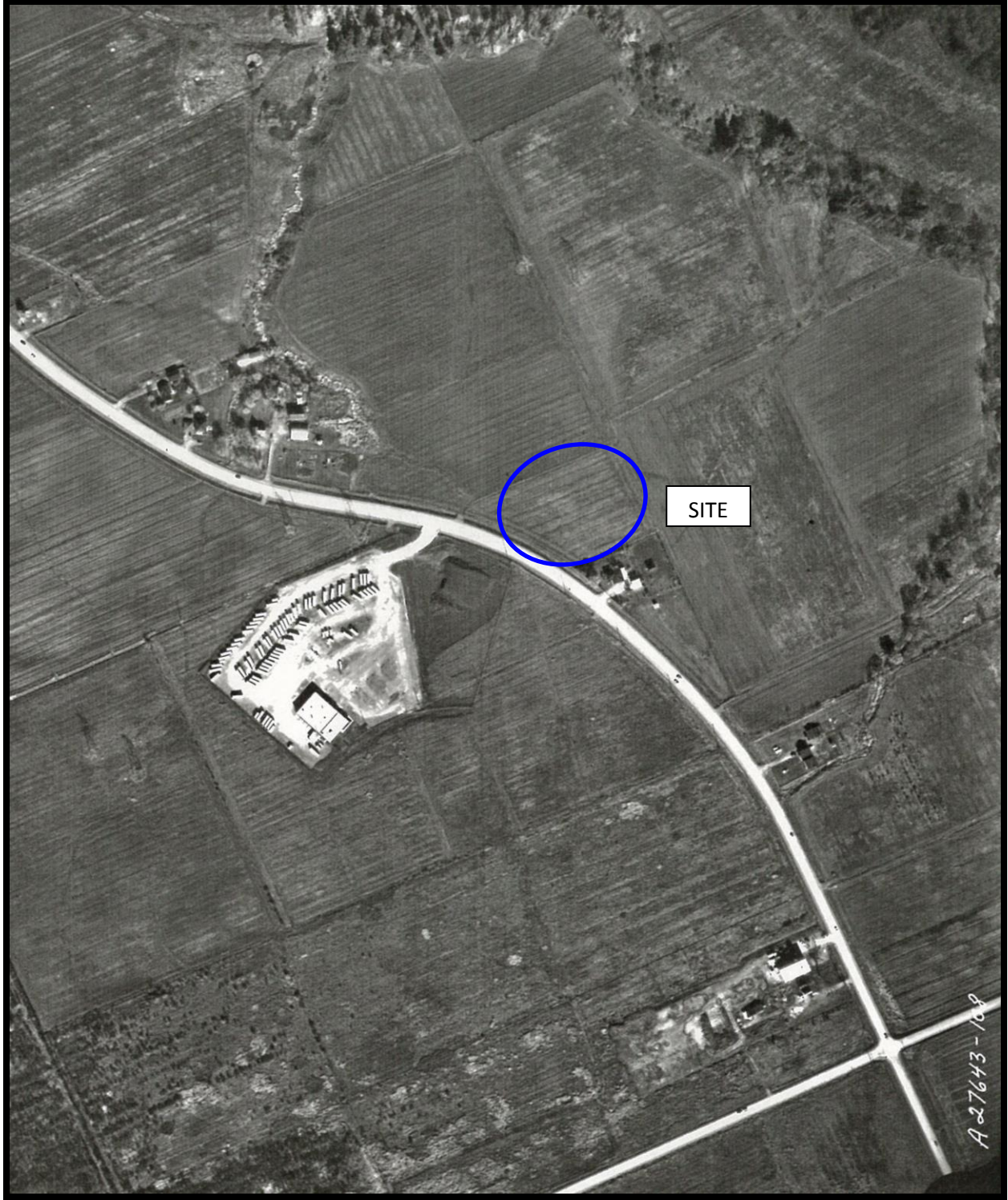
AERIAL PHOTOGRAPH
1945



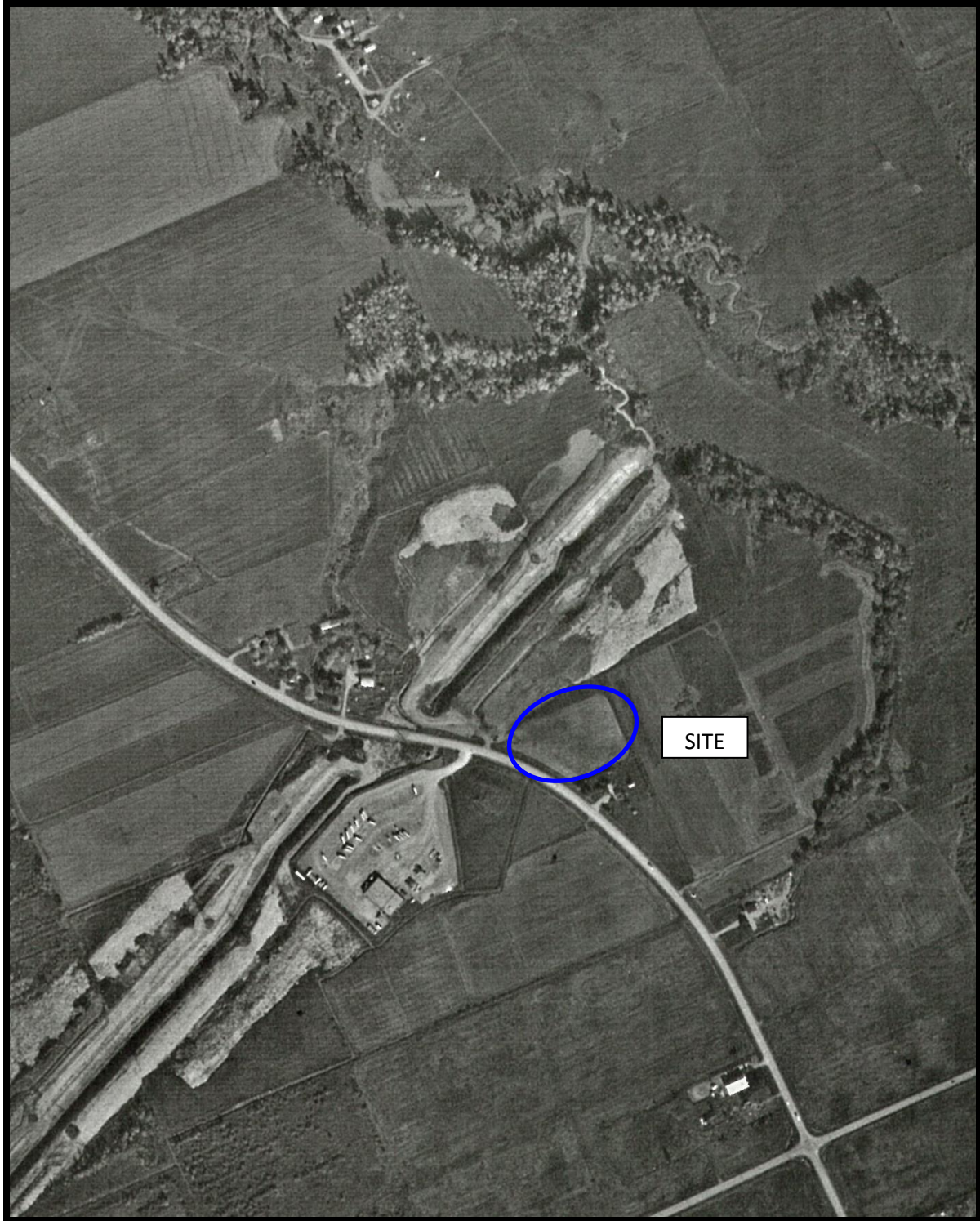
AERIAL PHOTOGRAPH
1973



AERIAL PHOTOGRAPH
1985



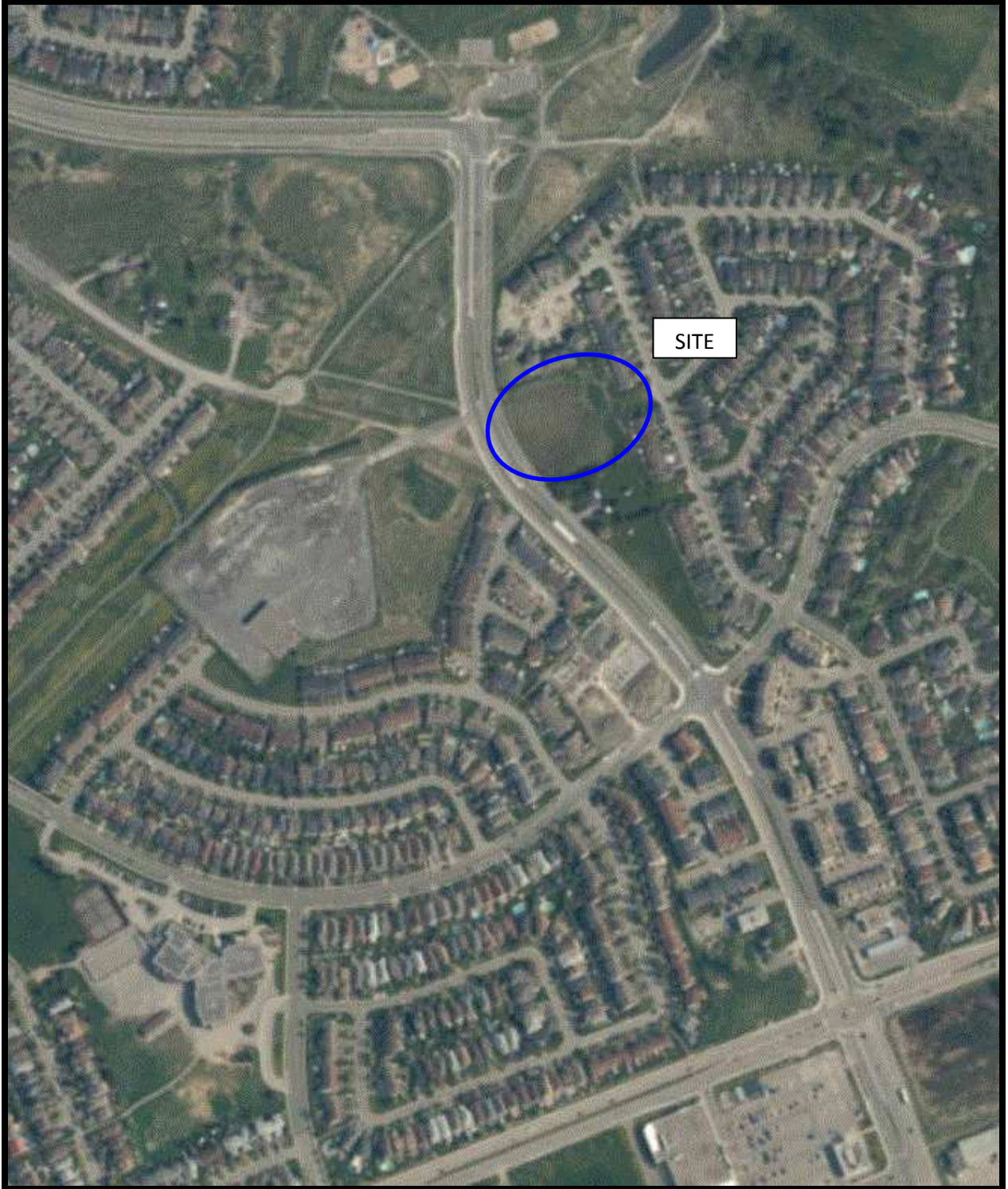
AERIAL PHOTOGRAPH
1990



AERIAL PHOTOGRAPH
1994



AERIAL PHOTOGRAPH
2005



AERIAL PHOTOGRAPH
2017

Site Photographs

PE2326

Part of Lot A, Concession 9, Geographic Township of Cumberland

Nov 30, 2017



Photograph 1: View of the subject site, facing east. Trim Road is present in the foreground. The subject site is currently vacant grassed land.



Photograph 2: View of the subject site, facing northeast. The subject site is flanked to the north and east by newer residential properties.

Site Photographs

PE2326

Part of Lot A, Concession 9, Geographic Township of Cumberland

Nov 30, 2017



Photograph 3: View of the subject site, facing southwest. The east portion of the subject site was observed to have some tree clippings and minor amount of non-hazardous solid waste present.



Photograph 4: View of the subject site, facing northwest. The east portion of the site was also noted to have two (2) fill piles present.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH REQUEST

CITY OF OTTAWA HLUI REQUEST

TSSA CORRESPONDENCE

MOECC WATER WELL RECORDS

Freedom of Information Request

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

Requester Data			For Ministry Use Only	
Name, Company Name, Mailing Address and Email Address of Requester Greg van Loenen Paterson Group Inc. 154 Colonnade Road Ottawa, ON K2E 7J5 Email address: gvanloenen@patersongroup.ca			FOI Request No.	Date Request Received
Telephone/Fax Nos. Tel. 613-226-7381 Fax 613-226-6344			Fee Paid <input type="checkbox"/> ACCT <input type="checkbox"/> CHQ <input type="checkbox"/> VISA/MC <input type="checkbox"/> CASH	
Your Project/Reference No. PE2326		Signature/Print /Name of Requester Greg van Loenen	<input type="checkbox"/> CNR <input type="checkbox"/> ER <input type="checkbox"/> NOR <input type="checkbox"/> SWR <input type="checkbox"/> WCR <input type="checkbox"/> SAC <input type="checkbox"/> IEB <input type="checkbox"/> EAA <input type="checkbox"/> EMR <input type="checkbox"/> SWA	
Request Parameters				
Municipal Address / Lot, Concession, Geographic Township (Municipal address essential for cities, towns or regions) Part of Lot A, Concession 9, Geographic Township of Cumberland				
Present Property Owner(s) and Date(s) of Ownership Ashcroft Homes				
Previous Property Owner(s) and Date(s) of Ownership				
Present/Previous Tenant(s), (if applicable)				
Search Parameters			Specify Year(s) Requested	
<i>Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located.</i>				
Environmental concerns (General correspondence, occurrence reports, abatement)			all	
Orders			all	
Spills			all	
Investigations/prosecutions ➤ Owner AND tenant information must be provided			all	
Waste Generator number/classes			all	
Certificates of Approval ➤ Proponent information must be provided				
1985 and prior records are searched manually. Search fees in excess of \$300.00 could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). If supporting documents are also required, mark SD box and specify type e.g. maps, plans, reports, etc.				
			SD	Specify Year(s) Requested
air - emissions				1986-present
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)				1986-present
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations				1986-present
waste water - industrial discharges				1986-present
waste sites - disposal, landfill sites, transfer stations, processing sites, incinerator sites				1986-present
waste systems - PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste				1986-present
pesticides - licenses				1986-present

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

Office Use Only

Application Number: _____	Ward Number: _____	Application Received: (dd/mm/yyyy): _____
Client Service Centre Staff: _____	Fee Received: \$	<input type="text"/>



Historic Land Use Inventory

Application Form

Notice of Public Record

All information and materials required in support of your application shall be made available to the public, as indicated by Section 1.0.1 of *The Planning Act*, R.S.O. 1990, C.P.13.

Municipal Freedom of Information and Protection Act

Personal information on this form is collected under the authority the *Planning Act*, RSO 1990, c. P. 13 and will be used to process this application. Questions about this collection may be directed by mail to Manager, Business Support Services, Planning Infrastructure and Economic Development Department, 110 Laurier Avenue West, Ottawa, K1P 1J1, or by phone at (613) 580-2424, ext. 24075

Background Information

***Site Address or Location:**

** Mandatory Field*

Applicant/Agent Information:

Name:	<input type="text" value="Paterson Group"/>		
Mailing Address:	<input type="text" value="154 Colonnade Rd South, Ottawa, ON"/>		
Telephone:	<input type="text" value="613-226-7381"/>	Email Address:	<input type="text" value="gvanloenen@patersongroup.ca"/>

Registered Property Owner Information:

Same as above

Name:	<input type="text" value="Ashcroft Homes (1070280 Ontario Inc.)"/>		
Mailing Address:	<input type="text" value="18 Antares Drive, Ottawa, ON"/>		
Telephone:	<input type="text" value="613-226-7266"/>	Email Address:	<input type="text" value="kwatson@ashcrofthomes.ca"/>

Site Details

Legal Description and PIN:

Part of Lot A, Concession 9; (Geographic Township of Cumberland) City of Ottawa. PIN: 14526-0650

What is the land currently used for?

Vacant

Lot frontage:

m

Lot depth:

m

Lot area:

m²

OR

Lot area: (irregular lot)

8,960

m²

Does the site have Full Municipal Services:

Yes

No

Required Fees

Please don't hesitate to visit [the Historic Land Use Inventory website](#) more information. Fees must be paid in full at the time of application submission.

Planning Fee

\$100.00

Submittal Requirements

The following are required to be submitted with this application:

- 1. Consent to Disclose Information:** Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, **the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner.** This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.
- 2. Disclaimer:** Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, Infrastructure and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3.** A site plan or key plan of the property, its location and particular features.
- 4.** Any significant dates or time frames that you would like researched.

Disclaimer
For use with HLUI Database

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

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

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

Signed: _____

Dated (dd/mm/yyyy): 29/11/2017 _____

Per: Greg van Loenen

(Please print name)

Title: Environmental Consultant _____

Company: Paterson Group _____

Greg van Loenen

From: Ruchi Chohan <rchohan@tssa.org> on behalf of Public Information Services <publicinformationsservices@tssa.org>
Sent: December-01-17 2:00 PM
To: Greg van Loenen
Subject: RE: Records Search request for 1869 Trim Road, Ottawa

Hello Greg,

Thank you for your inquiry.

I have searched the below noted address (addresses) and I have located the following record:

1830 Trim Rd, Orleans has record of 2 expired underground fuel tanks

For a more detailed report including underground fuel storage tank details and copies of all inspection reports, please submit your request in writing to Public Information Services via e-mail (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 good day!

Ruchi

From: Greg van Loenen [mailto:GvanLoenen@Patersongroup.ca]
Sent: November 29, 2017 12:04 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: Records Search request for 1869 Trim Road, Ottawa

Good afternoon,

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

1825 Trim Road

1830 Trim Road

1869 Trim Road

200 Prive de la Sittelle

226 Prive de la Sittelle

Thank you,

Regards,

Greg van Loenen, B.Eng.
Environmental Consultant

Paterson Group Inc.
T: 613-226-7381
C: 613-978-1181

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

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 **16011** CON **CON** LOT **09** LOT **91**

Ottawa Carleton **Cumberland**
RR#/Street Number/Name **1970 Trim Rd** City/Town/Village **Orleans** Site/Compartment/Block/Tract etc. **1 9**

GPS Reading NAD **83** Zone **18** Easting **464357** Northing **5035991** Unit Make/Model **Magellan** Mode of Operation: Undifferentiated Averaged Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth Metres	
				From	To
	Clay gravel			0	30.5
				30.5	31.1

Hole Diameter

Depth From	Metres To	Diameter Centimetres
0	31.1	15.55

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth Metres	
			From	To
1588	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	48	0	30.8
Screen				
Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.		
No Casing or Screen				
			<input checked="" type="checkbox"/> Open hole	30.2 31.1

Test of Well Yield

Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	Water Level Metres
Subpump				
Pump intake set at - (metres)		7.73		7.94
Pumping rate - (litres/min)	1	7.93	1	7.70
Duration of pumping	2	7.94	2	7.70
Final water level end of pumping	3	7.9	3	
Recommended pump type	4		4	
Recommended pump depth	5		5	
Recommended pump rate	10		10	
If flowing give rate -	15		15	
	20		20	
	25		25	
	30		30	
	40		40	
	50		50	
	60	7.04	60	7.70

Water Record

Water found at **31.1** metres

Kind of Water: Fresh Sulphur Salty Minerals

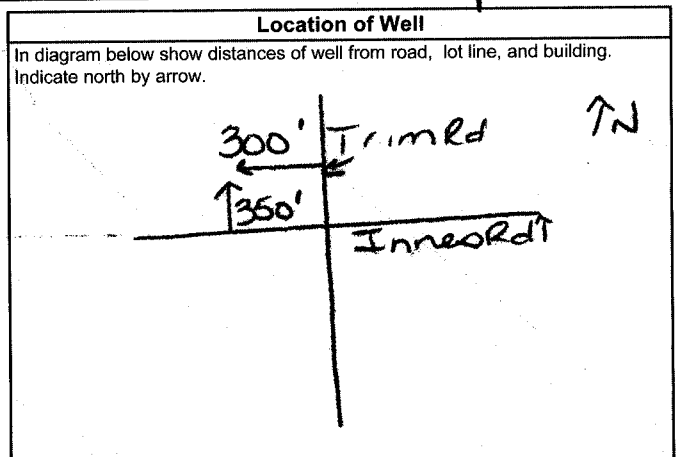
Other: **NOT TESTED**

After test of well yield, water was Clear and sediment free Other, specify **NOT TESTED**

Chlorinated Yes No

Plugging and Sealing Record

Depth set at - Metres From	Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
30.2	0	bentonite slurry	0.7945



Method of Construction

Cable Tool Rotary (air) Diamond Digging
 Rotary (conventional) Air percussion Jetting Other
 Rotary (reverse) Boring Driving

Water Use

Domestic Industrial Public Supply Other
 Stock Commercial Not used
 Irrigation Municipal Cooling & air conditioning

Final Status of Well

Water Supply Recharge well Unfinished Abandoned, (Other)
 Observation well Abandoned, insufficient supply Dewatering
 Test Hole Abandoned, poor quality Replacement well

Audit No. **Z 14538** Date Well Completed **2004 06 18**

Was the well owner's information package delivered? Yes No Date Delivered **2004 06 18**

Well Contractor/Technician Information

Name of Well Contractor **A. Koch Drilling Co Ltd 1119** Well Contractor's Licence No. **1119**

Business Address (street name, number, city etc.) **RR# 1 Richmond, Ont**

Name of Well Technician (last name, first name) **Durcell Shannon 12122** Well Technician's Licence No. **12122**

Signature of Technician/Contractor **[Signature]** Date Submitted **2004 06 18**

Ministry Use Only

Data Source **1119** Contractor **1119**

Date Received **JUL 08 2004** Date of Inspection **YYYY MM DD**

Remarks **1534760** Well Record Number **1534760**



WATER WELL RECORD

319/6 R 52

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK CORRECT BOX WHERE APPLICABLE

111 1515855 15011 CON 09

COUNTY OR DISTRICT: Carleton TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: Cumberland CON. BLOCK, TRACT, SURVEY, ETC.: 9 LOT: 25-27 BA

DATE COMPLETED: 48-53 DAY: 25 MO: 08 YR: 76

3035500 4 ELEVATION: 0285 4 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
yellow	clay			0	18
blue	clay			18	98
grey	gravel			98	105
grey	limestone			105	110

OWRC
B-2-9

31 00181505 0098305 0105211 0110215

41 WATER RECORD

WATER FOUND FEET	KIND OF WATER
0110	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAMETER INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
6 1/2	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE	188	0	0106

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE	CEMENT GROUT LEAD PACKER, ETC.)
10-13		
18-21		
26-29		

71 PUMPING TEST

PUMPING TEST METHOD: PUMP BAILER

PUMPING RATE: 0040 GPM

DURATION OF PUMPING: 01 HOURS 00 MIN

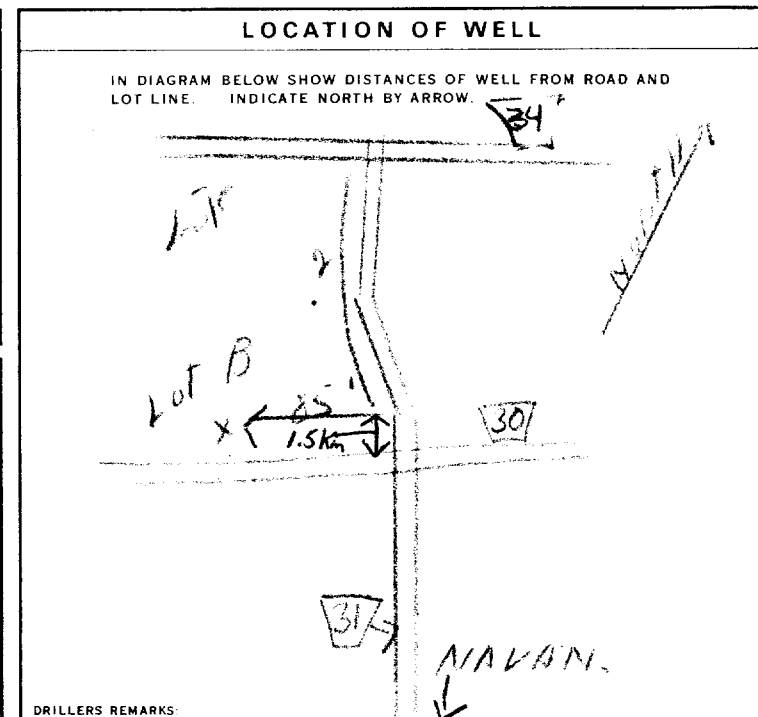
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING PUMPING			
015	030	15 MINUTES: 020	30 MINUTES: 015	45 MINUTES: 015	60 MINUTES: 015

PUMP INTAKE SET AT: 30 FEET

RECOMMENDED PUMP TYPE: SHALLOW DEEP

RECOMMENDED PUMP SETTING: 030 FEET

RECOMMENDED PUMPING RATE: 0010 GPM



FINAL STATUS OF WELL: 1 WATER SUPPLY

WATER USE: 01 DOMESTIC

METHOD OF DRILLING: 4 ROTARY (AIR)

CONTRACTOR

NAME OF WELL CONTRACTOR: G. Charbonneau+Son Drilling Ltd LICENCE NUMBER: 1504

ADDRESS: R R. 2, Box 194, Orleans, Ont. K1C 1T1

NAME OF DRILLER OR BORER: L. Bourgeois

SUBMISSION DATE: DAY 25 MO 8 YR 76

OFFICE USE ONLY

DATA SOURCE: 1504 CONTRACTOR: 1504 DATE RECEIVED: 18 03 77

DATE OF INSPECTION: July 13/77 INSPECTOR: 75

REMARKS: P 95 WI

CSS.S8

31 9/62

UTM 118 2 4 6 4 1 1 1 8 E



1512776

56 No

583

5 R 5 0 3 5 6 1 5 N

Elev. 5 R 0 2 8 5

Basin 2 5

The Ontario Water Resources Commission Act, 1957

WATER WELL RECORD

County or District Russell Township, Village, Town or City LUMBERLAND

Date completed March 30 1961
 (day month year)

Address 27 Wraith St Ottawa

Casing and Screen Record

Inside diameter of casing..... 2"
 Total length of casing..... 94'
 Type of screen.....
 Length of screen.....
 Depth to top of screen.....
 Diameter of finished hole..... ~~2~~ 2"

Pumping Test

Static level..... 18'
 Test-pumping rate..... 7 G.P.M.
 Pumping level..... 25'
 Duration of test pumping..... 2 Hrs
 Water clear or cloudy at end of test..... Clear
 Recommended pumping rate..... 7 G.P.M.
 with pumping level of Pump Set..... 25'

Well Log

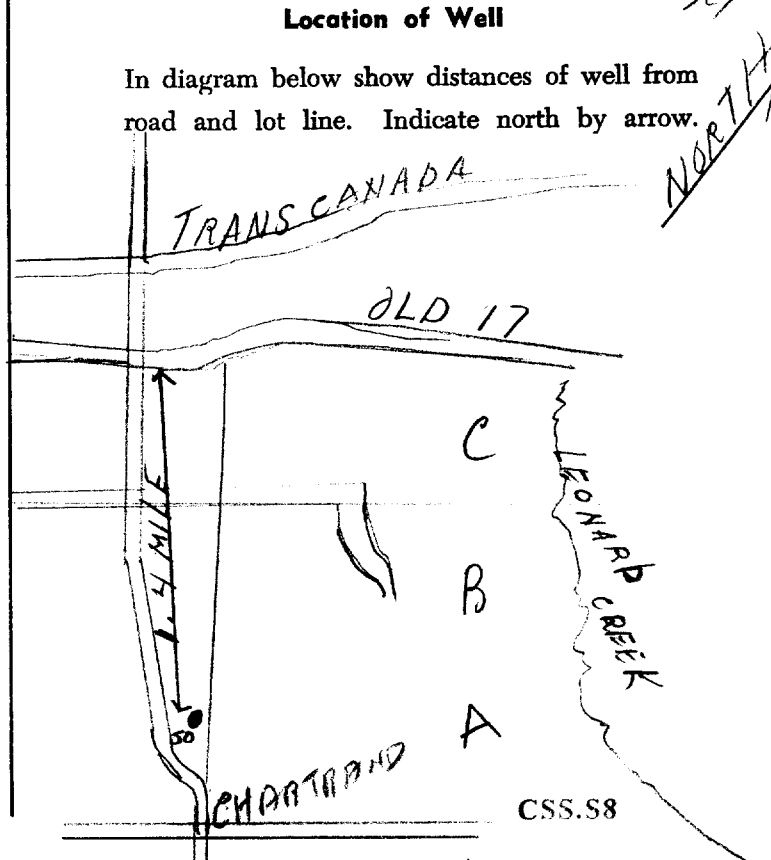
Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
Blue Clay	0'	90'			
Gravel	9(0'	94'	94'	76'	Fresh

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

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

Drilling Firm.....
 Address.....
 Licence Number.....
 Name of Driller Gerard Charbonneau
Orleans Ont
 Address.....
 Date March 30/61
Gerard Charbonneau
 (Signature of Licensed Drilling Contractor)



APPENDIX 3

QUALIFICATIONS OF ASSESSORS

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

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Services

POSITION

Environmental Consultant

EDUCATION

Carleton University, B.Eng., 2015
Environmental Engineering

St. Lawrence College, 2008
Environmental Technician

EXPERIENCE

2016 to Present

Paterson Group Inc.

Environmental and Geotechnical Division
Environmental Consultant

2015 to 2016

Kanellos Consulting Inc.

Environmental Consultant

Summers 2013 & 2014

GFL Environmental Inc.

Environmental Technician

2008 to 2011, summer 2012

Petroleum Enviro Services (Div. of ASM Corrosion Control)

Environmental Consultant

SELECT LIST OF PROJECTS

Nortex Industrial Site - Soil and Groundwater Remediation - Kingston, ON
Contaminated Soil and Groundwater Sampling - Various sites - Eastern ON
Designated Substance Surveys and Reports - Various sites - Eastern ON
Mould Sampling, Assessments and Reports - Various sites - Eastern ON
Surcharge and Settlement Surveys - Ottawa, ON
Tank Site Remediation Program - Various sites - Alberta
Tank Installation Drawings (PTMAA) - Various sites - Alberta