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Phase I Environmental Site Assessment

Blocks 2 and 3 – McGarry Terrace
Ottawa, Ontario

Prepared For

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Report: PE4055-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Canadian Rental Development Services Inc. to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of Blocks 2 and 3 (1012 and 1024) McGarry Terrace, in the City of Ottawa, Ontario. The purpose of this Phase I – Environmental Site Assessment 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 properties.

Based on a review of historical sources, the subject property was developed as early as 1945 with a structure (suspected barn or shed) on the southwest portion of the property. A laneway was constructed through the site connecting 1034 McGarry Terrace to Strandherd Drive in the early 1970s. The majority of the site has remained undeveloped since 1945. The on-site structure was removed between 1960 and 1973. No environmental concerns were identified with respect to the historical use of the subject site.

Surrounding properties historically consisted of agricultural fields and undeveloped treed lands, with one exception. The historical review identified a former automotive service garage to the southwest of the subject site (1034 McGarry Terrace). Paterson have specific information on this adjacent property, as a number of environmental assessment have been completed since 1997 to assess the environmental condition of 1034 McGarry Terrace. The most recent investigative work was conducted in 2013 by Paterson. Based on these reports, this property does not represent a concern to the subject site.

Following the historical review, a site visit was conducted. The subject site is currently an undeveloped grass covered and treed lot with one asphalt laneway connecting Strandherd Drive and 1034 McGarry Terrace. A remnant poured concrete slab was observed on the southwest portion of the subject site. Neighbouring property use is generally commercial and residential. One retail fuel outlet and one automotive service garage were identified within the Phase I study area. Based on the distance and down-gradient or cross-gradient orientation of these sites, none are considered to represent an area of potential environmental concern to the subject site.

Conclusion

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

1.0 INTRODUCTION

At the request of Canadian Rental Development Services Inc., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of Blocks 2 and 3 on McGarry Terrace, 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 Pierre Guindon of Canadian Rental Development Services Inc. Canadian Rental Development Services Inc. offices are located at 201-320 March Road, Ottawa, Ontario. Mr. Guindon can be reached by telephone at (613) 797-1076.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all 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: 1012 and 1024 (Block 2 and 3 RP4M-1303) McGarry Terrace, Ottawa, Ontario.

Legal Description: Blocks 2 and 3 on RP4M-1303, City of Ottawa.

Property Identification Numbers: 04732-2605 and 04094-0036.

Location: The subject site is located on the northeast side of McGarry Terrace and southeast of Strandherd Drive, in the City of Ottawa.

Latitude and Longitude: 45° 16' 20.70" N, 75° 44' 22.50" W;

Site Description:

Configuration: Rectangular (combined).

Site Area: 0.78 hectares (approximately).

Zoning: MC [1441] H(20), mixed-use centre zone.

Current Use: The subject site is currently undeveloped.

Services: The subject site is situated in 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

Based on available information at the time of preparing this report (aerial photographs), it appears as though the southwest portion of the subject property was developed with a structure as early as the mid 1950's. It is suspected that the building was a shed or barn. Based on aerial photos, the remaining portion of the lot has never been developed with the exception of a laneway built as early as the early 1970s and serving the residence to the south.

Fire Insurance Plans

Fire insurance plans (FIPs) are not available for the area of the subject site.

City of Ottawa Street Directories

Ottawa city directories from 1996 to 2011 were reviewed, at approximate ten (10) year intervals, for the subject site and properties located within the Phase I ESA study area. No concerns were identified in the sparse city directories.

Property Ownership

Paterson contacted Canadian Rental Development Services Inc., the purchaser, in order to determine the historical property owners. A representative from Canadian Rental Development Services Inc. informed Paterson that the property is currently owned by 1763377 Ontario Inc.

Plan of Survey

A survey plan dated March 13, 2007, and prepared by Fairhall, Moffatt and Woodland, was provided to Paterson for review. A copy, which identifies Blocks 2 and 3 on McGarry Terrace is provided in Appendix 1.

4.2 Environmental Source Information

Environment and Climate Change Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on June 5, 2017. The subject site was not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

A search of national PCB waste storage sites was conducted. No PCB waste storage sites were identified in the Phase I study area.

Ontario Ministry of Environment (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 issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Coal Gasification Plant Inventory

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

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

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 issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Submissions

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions have been submitted to the MOECC. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. At the time of issuance of this report, a response had not been received. A copy of the response will be forwarded to the client, should it contain any pertinent information.

MOECC Waste Disposal Site Inventory

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

Areas of Natural Significance Interest (ANSI)

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 June 6, 2017. The search did not reveal any natural features or areas of natural significance within the Phase I study area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on June 6, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties.

The TSSA search results had found two (2) neighbouring properties in their records.

3580 Stranherd Drive, is recorded as an address with three (3) active underground fuel tanks. 3651 Stranherd Drive, is recorded as an address with one (1) active cylinder exchange centre.

Due to the nature of the facility, the activity located at 3580 Strandherd Drive (Esso retail fuel outlet) is considered a potentially contaminating activity. However, based on the age (built in 2005) and its distance (approximately 200 m) and cross-gradient location from the subject site, the retail fuel outlet is not considered an environmental concern to the subject site. Based on its nature, the activity located at 3651 Strandherd Drive is not considered an environmental concern to the subject site.

A copy of the response has been included in Appendix 2.

City of Ottawa Landfill Document

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

Previous Environmental Reports

A review of environmental projects in the area of the subject land was completed by Paterson Group.

Prior to Paterson’s involvement, a Phase I/II-ESA was conducted for the neighbouring property to the southwest (currently 1034 McGarry Terrace, formerly known as 3641 Strandherd Drive) in 1997. Historical information collected as part of the report indicated that an automotive garage was formerly located on the property. Areas of impacted soil were encountered in the vicinity of the garage building and a site remediation program was conducted.

Following the remedial works, confirmatory samples were collected from the excavations, and were analyzed for a combination of petroleum hydrocarbons, volatile organic compounds and polycyclic aromatic hydrocarbons. All confirmatory samples were found to be in compliance with the selected Ministry of the Environment and Energy standards applicable to the subject site.

In September 2013, a Phase I-ESA was conducted by Paterson on 1034 McGarry Terrace. In order to verify that the findings of the remediation satisfy the

current MOE standards, a Phase II-ESA was conducted for the neighbouring property. Based on results from the Phase II-ESA sampling program, the former neighbouring automotive service garage is considered to have been effectively remediated and does not pose an environmental concern to the subject site.

4.3 Physical Setting Sources

Aerial Photographs

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

1945	The subject site appears to be used for agriculture at this time. A structure is visible on the southern part of the subject site, however due to the poor scale of the photograph, it is difficult to distinguish. The majority of the surrounding lands appear to be used for agricultural purposes.
1954	No significant changes have been made to the subject or neighbouring properties. Neighbouring properties appear to be used for agricultural purposes.
1960	No significant changes have been made to the subject site or adjacent properties.
1973	The barn on the southern part of the subject site is no longer present. A laneway is visible extending from Strandherd Drive to the subject site. Two additional buildings, suspected to be the historical garage buildings, are on the property to the south.
1979	No significant changes have been made to the subject site or adjacent properties.
1987	No apparent changes have been made to the subject or neighbouring properties. Increased residential development is apparent further to the northwest.
1999	No significant changes have been made to the subject site or adjacent properties.
2014	(City of Ottawa Website) No significant changes appear to have been made to the subject property. The laneway is still present.

McGarry Terrace has been developed to the west of the subject site. Longfields Drive has been developed to the east. To the west of the subject site, a large commercial building has been constructed, and to the east, a large residential complex. North of the subject site, residential dwellings have been developed. South of the property, lands appear to be under development or have been developed with commercial buildings and residential dwellings.

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

Topographic Maps

Topographic maps were obtained from The City of Ottawa – geoOttawa website. The topographic maps indicate that the regional topography in the area of the subject site slopes slightly to the south towards the Jock River. No environmental concerns were identified on the topographic mapping. An illustration of the referenced topographic map is present on Figure 2 - Topographic Map following the body of this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada - The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: “The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets.” The subject site is located in the Central St. Lawrence Lowland, “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 the information from NRCAN, bedrock in the area of the site consists of interbedded sandstone and dolomite of the March Formation. Based on the maps, the thickness of overburden ranges from 10 to 15 m and consists of till.

Water Well Records

A search of the MOECC’s web site for all drilled well records within 250 m of the subject site was conducted on June 6, 2017. No water well records were found on the subject site. The search returned one (1) well record within the Phase I

study area, approximately 170 m southwest of the subject property. The well record within the search radius has been included in Appendix 2.

Fill Materials

No fill material was observed on the subject property.

Water Bodies and Areas of Natural Significance

There are no areas of natural and scientific interest or water bodies on the subject property or within the study area. The nearest water body to the subject site is the Jock River, located approximately 1 km to the south.

5.0 INTERVIEWS

Property Owner Representative

Mr. Pierre Guidon, a representative of Canadian Property Rental Services Inc., was contacted to inquire about the subject property. Mr. Guidon told Paterson the current property owners are 1763377 Ontario Inc.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on June 8, 2017. Weather conditions were clear, with a temperature of approximately 17 °C. Mr. Marek Moroz 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 assessment.

6.2 Specific Observations at the Phase I Property

Buildings and Structures

The site was undeveloped at the time of the site visit. One remnant poured concrete slab was observed on the southwest corner of the subject property, adjacent to McGarry Terrace. No other buildings or structures were observed at the time of the site visit.

Below Ground Structures

No below ground structures were observed at the time of the site visit.

Portable Water Source

The subject property is currently not serviced, however, municipal services are present in the local area.

Underground Utilities

No underground utilities were noted during the site visit on the subject site.

Ground Surface

The ground surface across the majority of the property consists of grass covered and treed areas. One asphalt laneway crosses the subject property from north to south. A small remnant poured concrete slab was observed on the southwest portion of the property, adjacent to McGarry Terrace. No areas of stained soil were observed on the property. No visibly stressed vegetation was observed. No standing water was observed on the subject site.

Railway Lines

No railway lines were observed on the subject site or within the Phase I ESA study area.

Polychlorinated Biphenyls (PCBs)

A pad mounted transformer was observed along the rear parking lot of an adjacent property to the east (1111 Longfields Drive). A pole mounted transformer was observed on McGarry Terrace, west of the subject site. Based on the age of the transformers (installed after 1980), PCBs are not expected to be present within them. At the time of assessment, no leaks, staining/discolouration or dead grass beneath the transformers was observed. The transformers are not considered to be an environmental concern.

Site Features

The subject site is currently an undeveloped grass covered and treed lot with an asphalt access road running northwest-southeast in the middle of the property, connecting Strandherd Drive to 1034 McGarry Terrace. Adjacent properties to the subject site are below grade with respect to the subject site, with the exception of the neighbouring property to the south (1034 McGarry Terrace), which is at grade. McGarry Terrace is slightly lower in elevation with respect to the subject site. Site drainage consists of natural runoff towards the northwest, towards the northeast and towards McGarry Terrace or infiltration in grass covered areas.

A remnant poured concrete slab of an old structure was observed on the southwest portion of the subject site, adjacent to McGarry Terrace. No evidence of current or former railway or spur lines on the subject property was observed at the time of the site inspection. There were no unidentified substances observed on the subject site.

Neighbouring Properties

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

- North - An undeveloped and vacant lot followed by Strandherd Drive;
- South - Various vacant structures followed by Marketplace Avenue;
- East - A retirement residence followed by Longfields Drive;
- West - McGarry Terrace followed by a Wal-Mart store.

A diesel backup generator was observed in the rear parking lot of the adjacent property to the east (1111 Longfields Drive). No staining or stressed vegetation were observed near the generator.

A Wal-Mart store, located approximately 45 m to the northwest from the subject site (3651 Standherd Drive), was observed to be operating an automotive service garage. Based on aerial photographs, the automotive service garage was built in 2011. Due to the nature of this facility, it is considered a Potentially Contaminating Activity. Based on the age of this facility, it is our opinion that the lube shop and automotive service garage is not considered to have impacted the subject site and is not considered an APEC on the subject site.

No other concerns were noted with the current use of the surrounding properties. Property use within the Phase I study area is shown on Drawing PE4055-2 - Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

Based on aerial photos, the property appeared to be used for agriculture until the early 1970s. A structure is visible on the southwest portion of the property in air photos. In the early 1970s, the lot is treed and no longer appears to be used for agriculture. A laneway is visible in air photos connecting Strandherd Drive to 1034 McGarry Terrace (formerly 3641 Strandherd Drive) and the structure in the southwest portion of the property is no longer visible in air photos.

Currently, the subject site is owned by 1763377 Ontario Inc. No concerns have been identified with the past use of the subject site.

Potentially Contaminating Activities (PCAs)

No potentially contaminating activities (PCAs) have been identified on the subject property.

Three (3) Potentially Contaminating Activities (PCAs) outside of the subject property but within the Phase I study area are shown on Drawing PE4055-2 - Surrounding Land Use Plan.

Based on historical searches, a former automotive service garage was identified on an adjacent property to the southwest (1034 McGarry Terrace, formerly 3641 Strandherd Drive). As previously discussed, Paterson is familiar with this adjacent property and its environmental condition. Based on our knowledge, this former automotive service garage is not considered to have impacted the subject site and is not considered to be an APEC on the subject property.

A Wal-Mart store, located approximately 45 m to the northwest from the subject site (3651 Strandherd Drive), was observed to be operating a lube shop and automotive service garage. Based on aerial photographs, the lube shop and automotive service garage was built in 2011. Based on the age of this facility, it is our opinion that the automotive service garage is not considered to have impacted the subject site and is not considered an APEC on the subject site.

An Esso retail fuel outlet was observed approximately 200 m to the northeast of the subject property (3580 Strandherd Drive). Based on a search of historical sources (aerial photos and city directories), the retail fuel outlet was built in 2005. Based on the age, distance and down-gradient location of the retail fuel outlet it is not considered to have impacted the subject site.

The above noted PCAs are presented in Table 1 below.

Table 1 Potentially Contaminating Activities					
Potentially Contaminating Activity (PCA)	Location of PCA with respect to Phase I Property	Nature of Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
3580 Strandherd Drive	200 m northeast of subject site	Retail Fuel Outlet; Item 28, Gasoline and Associated Products Storage in Fixed Tanks	Off-site	BTEX, PHCs F1-F4	Soil, Groundwater
3651 Strandherd Drive	45 m northwest of subject site	Item 52, Storage, maintenance, fuelling and repair of equipment, vehicles, and materials used to maintain transportation equipment;	Off-site	BTEX, PHCs F1-F4	Soil, Groundwater
1034 McGarry Terrace	Adjacent to the subject site	Item 52, Storage, maintenance, fuelling and repair of equipment, vehicles, and materials used to maintain transportation equipment.	Off-site	BTEX, PHCs F1-F4	Soil, Groundwater

The above noted PCAs do not pose a concern to the subject site based on their age, distance and/or down-gradient location from the Phase I property.

No other PCAs were noted in the Phase I study area.

Areas of Potential Environmental Concern (APEC)

As detailed above, the three (3) identified PCAs do not present APECs for the subject site.

Contaminants of Potential Concern (CPC)

No contaminants of potential concern were identified, since no APECs were identified on the subject site.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on information from the Geological Survey of Canada, bedrock beneath the site area consists of interbedded sandstone and dolomite of the Gull River Formation. It was reported that surficial soils consist of Quaternary sediments, specifically glacial till deposits, with a drift thickness of 3-10 m. Hydrogeological conditions are considered to mimic the topographic setting; as a result, groundwater is expected to south towards Jock River.

Contaminants of Potential Concern

As per Section 7.1 of this report, no CPCs were identified on the subject site.

Existing Buildings and Structures

There are no buildings on the subject site. One remnant concrete slab foundation was identified on the southwest portion of the subject site.

Water Bodies

No water bodies are located on the subject site. The nearest body of water is Jock River, situated approximately 1 km south of the subject site.

Areas of Natural Significance

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

Drinking Water Wells

Based on the results of the well record search, no water wells were identified on the subject site. According to a search of MOECC records, a potable drinking water well is located approximately 170 m southwest of the subject site. However, the off-site drinking water well is not likely to be present as the area in the vicinity of the drinking water well has been redeveloped into retail/commercial properties. The drinking water well record has been included in Appendix 2.

Neighbouring Land Use

Neighbouring land use in the Phase I study area consists of residential and retail/commercial. Land use is shown on Drawing PE4055-2 Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, there were no Potentially Contaminating Activities or Areas of Potential Environmental Concern identified at the subject site. The three (3) PCAs identified within the Phase I study area are not considered to represent Areas of Potential Environmental Concern with respect to the subject site.

Assessment of Uncertainty and/or Absence of Information

The PCAs within the Phase I study area were confirmed by a variety of independent sources. 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

Paterson Group was retained by Canadian Rental Development Services Inc. to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of Blocks 2 and 3 (1012 and 1024) McGarry Terrace, in the City of Ottawa, Ontario. The purpose of this Phase I – Environmental Site Assessment 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 properties.

Based on a review of historical sources, the subject property was developed as early as 1945 with a structure (suspected barn or shed) on the southwest portion of the property. A laneway was constructed through the site connecting 1034 McGarry Terrace to Strandherd Drive in the early 1970s. The majority of the site has remained undeveloped since 1945. The on-site structure was removed between 1960 and 1973. No environmental concerns were identified with respect to the historical use of the subject site.

Surrounding properties historically consisted of agricultural fields and undeveloped treed lands, with one exception. The historical review identified a former automotive service garage to the southwest of the subject site (1034 McGarry Terrace). Paterson have specific information on this adjacent property, as a number of environmental assessment have been completed since 1997 to assess the environmental condition of 1034 McGarry Terrace. The most recent investigative work was conducted in 2013 by Paterson. Based on these reports, this property does not represent a concern to the subject site.

Following the historical review, a site visit was conducted. The subject site is currently an undeveloped grass covered and treed lot with one asphalt laneway connecting Strandherd Drive and 1034 McGarry Terrace. A remnant poured concrete foundation was observed on the southwest portion of the subject site. Neighbouring property use is generally commercial and residential. One retail fuel outlet and one automotive service garage were identified within the Phase I study area. Based on the distance and down-gradient or cross-gradient orientation of these sites, none are considered to represent an area of potential environmental concern to the subject site.

Conclusion

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

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 Canadian Rental Development Services Inc. Permission and notification from the above noted party and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Marek Moroz, G.I.T.



Mark S. D'Arcy, P.Eng.



Report Distribution:

- Canadian Rental Development Services Inc. (2 copies)
- Paterson Group (1 copy)

10.0 REFERENCES

Federal Records

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

Provincial Records

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 geoOttawa website.

Local Information Sources

Plan of Survey - Annis, O’Sullivan, Vollebekk Ltd., 2013.
‘Phase I - Environmental Site Assessment, 5786 Fernbank Road, Ottawa, Ontario’, prepared by Houle Chevrier Engineering, March 31, 2015
Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4055-1 – SITE PLAN

DRAWING PE4055-2 – SURROUNDING LAND USE PLAN

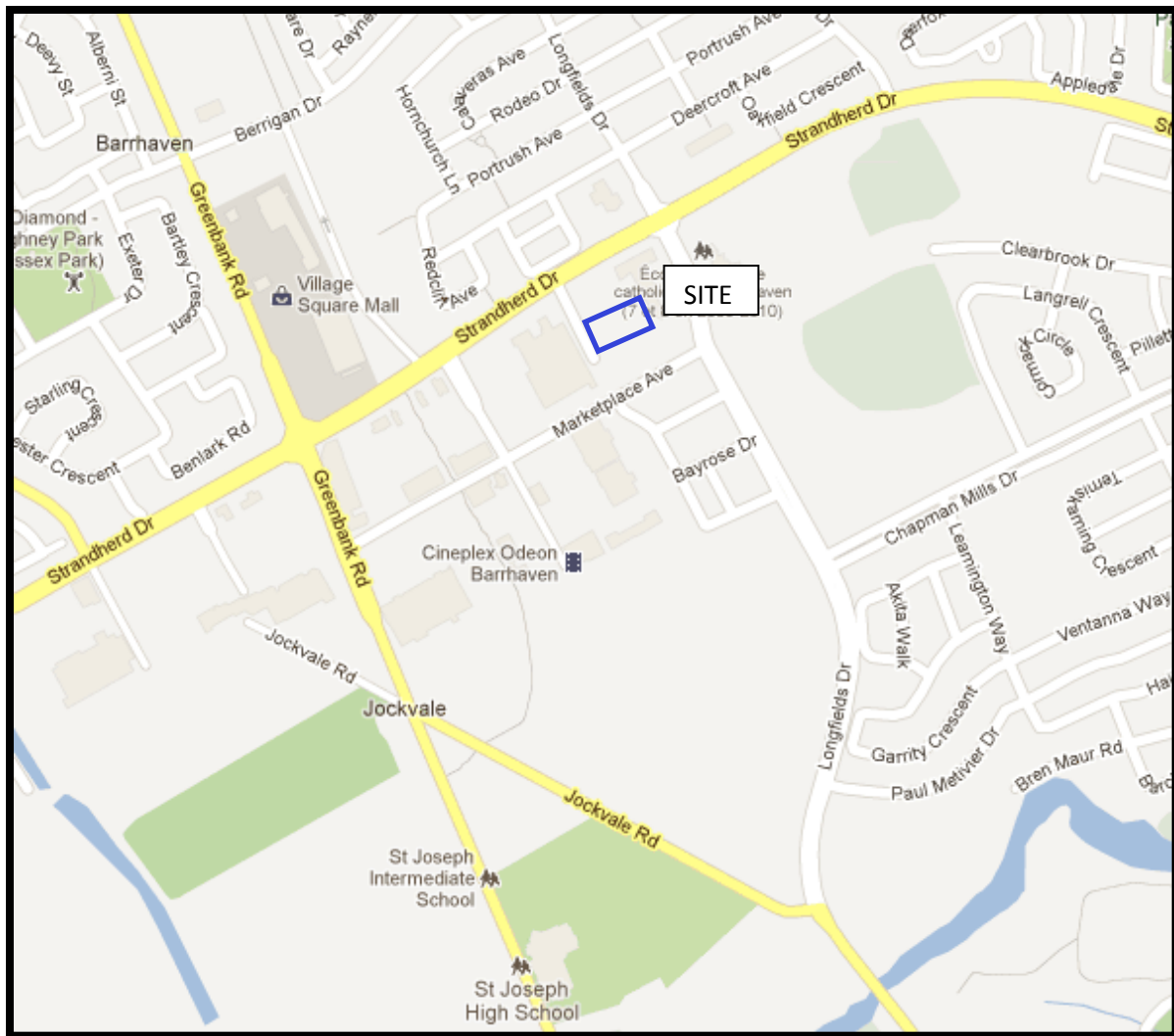


FIGURE 1
KEYPLAN

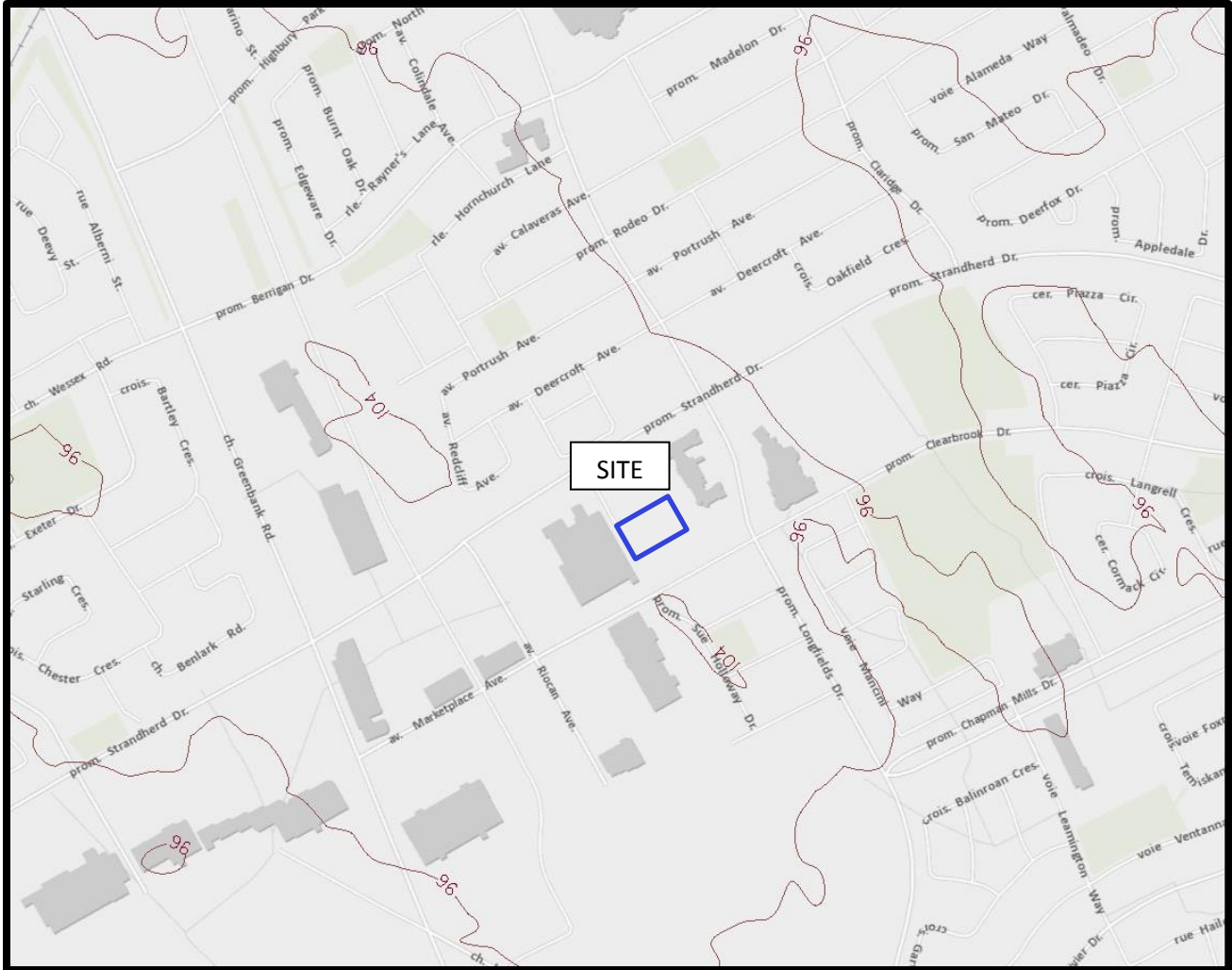
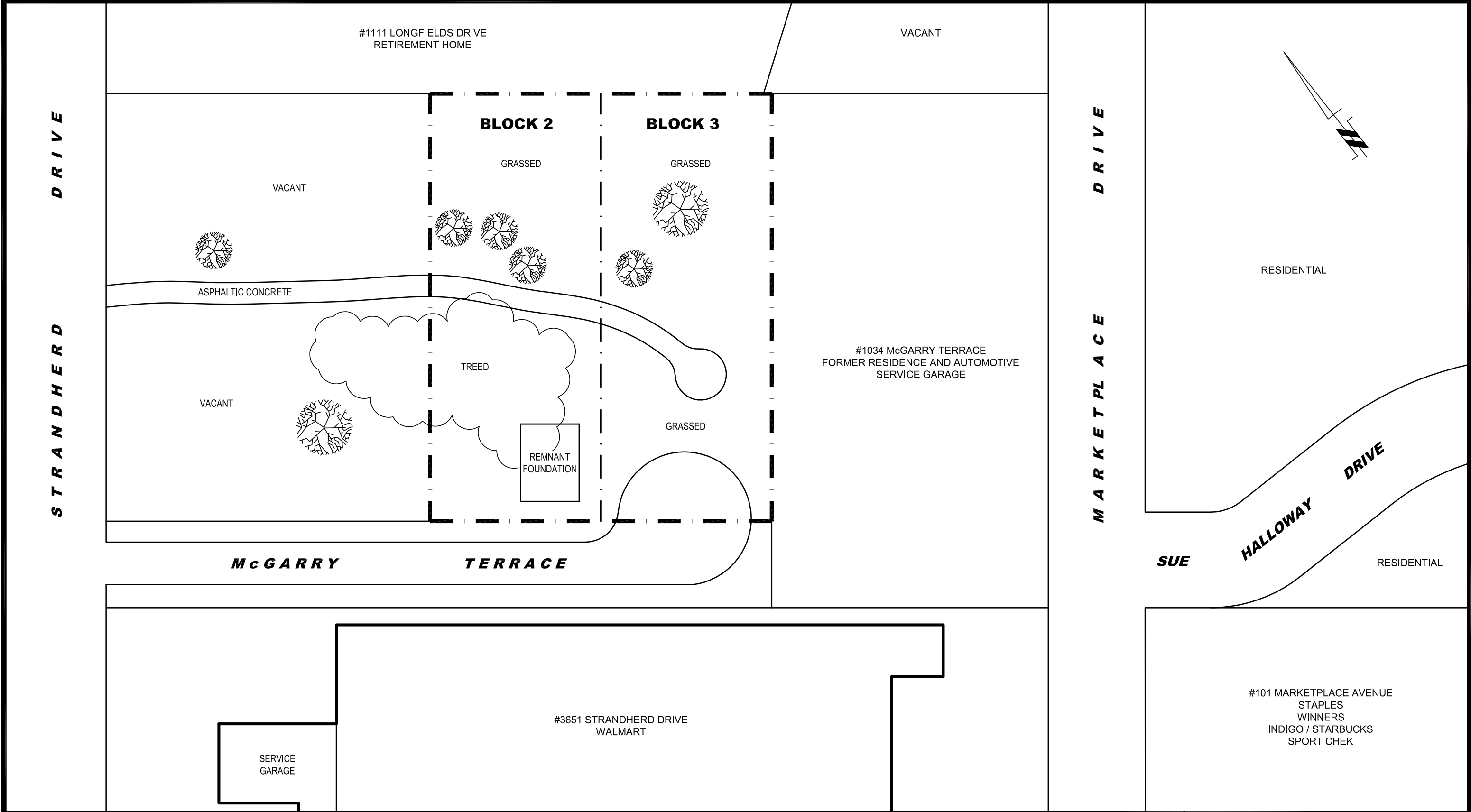
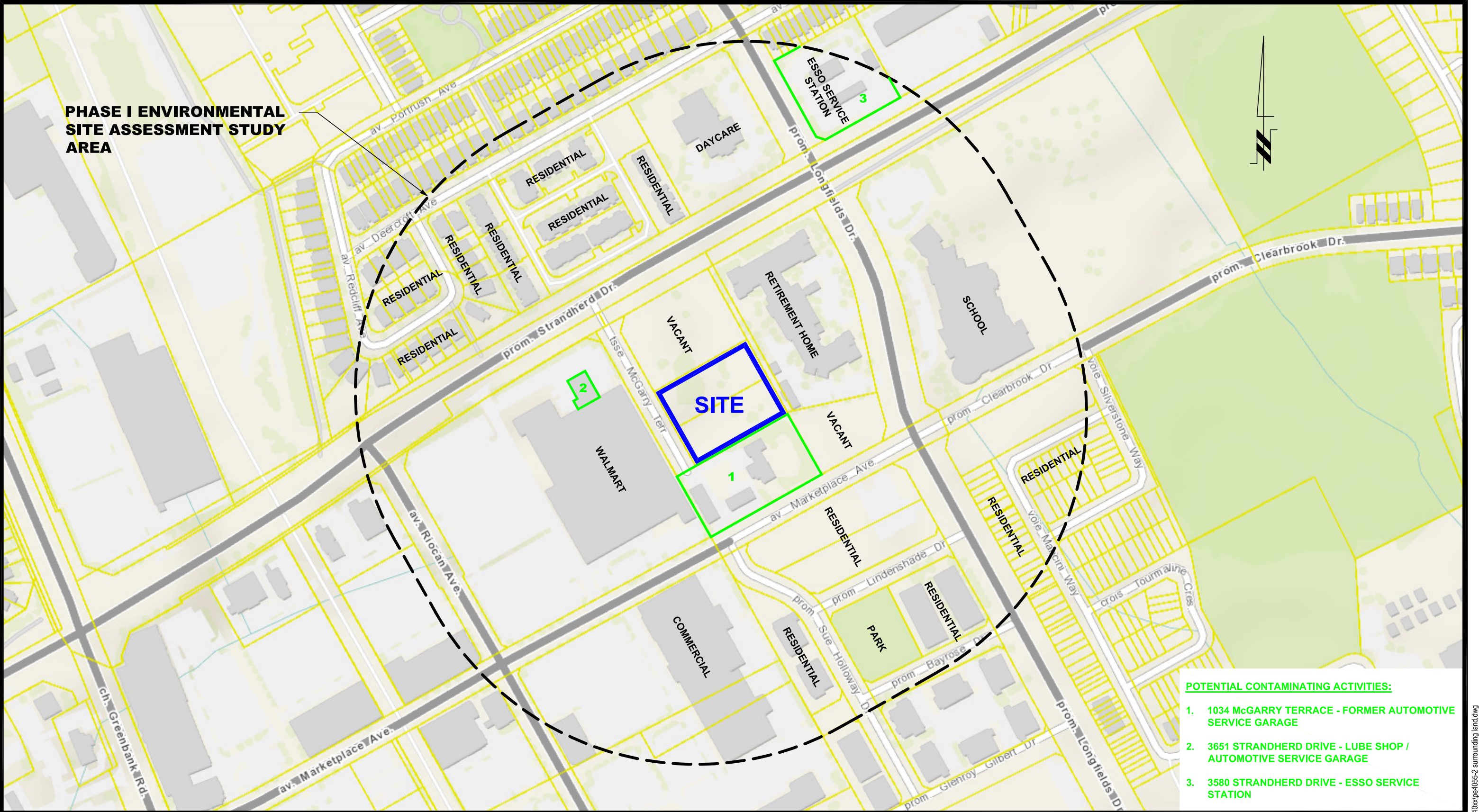


FIGURE 2
TOPOGRAPHIC MAP



<div><div>patersongroup</div><div>consulting engineers</div><div>154 Colonnade Road South Ottawa, Ontario K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344</div></div>					CANADIAN RENTAL DEVELOPMENT SERVICES INC. PHASE I - ENVIRONMENTAL SITE ASSESSMENT BLOCK 2 & 3 McGARRY TERRACE	Scale: 1:750	Date: 06/2017	
						OTTAWA, Title:	Drawn by: MPG	Report No.: PE4055-1
	0				SITE PLAN	Checked by: MM	Dwg. No.: PE4055-1	
	NO.	REVISIONS	DATE	INITIAL				Approved by: MSD



PHASE I ENVIRONMENTAL
SITE ASSESSMENT STUDY
AREA

SITE

POTENTIAL CONTAMINATING ACTIVITIES:

1. 1034 McGARRY TERRACE - FORMER AUTOMOTIVE SERVICE GARAGE
2. 3651 STRANDHERD DRIVE - LUBE SHOP / AUTOMOTIVE SERVICE GARAGE
3. 3580 STRANDHERD DRIVE - ESSO SERVICE STATION

patersongroup
consulting engineers

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

0			
NO.	REVISIONS	DATE	INITIAL

CANADIAN RENTAL DEVELOPMENT SERVICES INC.	
PHASE I - ENVIRONMENTAL SITE ASSESSMENT	
BLOCKS 2 & 3 McGARRY TERRACE	
OTTAWA,	ONTARIO
Title: SURROUNDING LAND USE PLAN	

Scale:	1:3000	Date:	06/2017
Drawn by:	MPG	Report No.:	PE4055-1
Checked by:	MM	Dwg. No.:	PE4055-2
Approved by:	MSD	Revision No.:	0

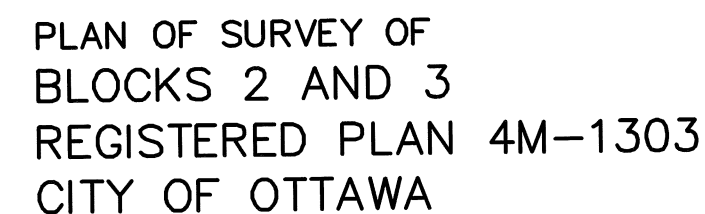
APPENDIX 1

SURVEY PLAN

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

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





A number line is shown with major tick marks at 0, 10, 20, and 50 metres. There are also minor tick marks every 2 units (2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50). A line segment is drawn from 0 to 6, representing 6 metres.

FAIRHALL, MOFFATT & WOODLAND LIMITED
ONTARIO LAND SURVEYORS

NOTES

1. BEARINGS HEREON ARE GRID, DERIVED FROM THE EASTERLY LIMIT OF BLOCKS 1, 2 AND 3, REGISTERED PLAN 4M-1303, SHOWN AS HAVING A BEARING OF N 29°34'50" W.
2. ELEVATIONS ARE REFERRED TO GEODETIC DATUM (CGVD28).

LEGEND

- | | |
|---|------------------------------|
|  | - SURVEY MONUMENT SET |
|  | - SURVEY MONUMENT FOUND |
| SIB | - STANDARD IRON BAR |
| SSIB | - SHORT STANDARD IRON BAR |
| IB | - IRON BAR |
| CP | - CONCRETE PIN |
| (P) | - PLAN 4M-1303 |
| (S) | - SET |
| (M) | - MEASURED |
| (SU) | - SOURCE UNKNOWN |
| PIN | - PROPERTY IDENTIFIER NUMBER |
| (STANTEC) | - STANTEC SURVEYING |

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.

2. THE SURVEY WAS COMPLETED ON MARCH 13, 2017.

2017/03/17
DATE

APPROVED: _____
JOHN H. GUTRI
ONTARIO LAND SURVEYOR

ASSOCIATION OF ONTARIO
LAND SURVEYORS
PLAN SUBMISSION FORM
2010057



THIS PLAN IS NOT VALID
UNLESS IT IS AN EMBOSSED
ORIGINAL COPY
ISSUED BY THE SURVEYOR
In accordance with
Regulation 1026, Section 29 (3).

JOB No.	X14400
---------	--------

E364443. N5015058

REFERENCE No.	1 - 4M-1303
---------------	-------------

S: \\JOBS\\X14400\\dwgs\\
sketch.dwg (dj)

MAR. 17/17

**Fairhall
Moffatt &
Woodland**

L I M I T E D
ONTARIO LAND SURVEYORS

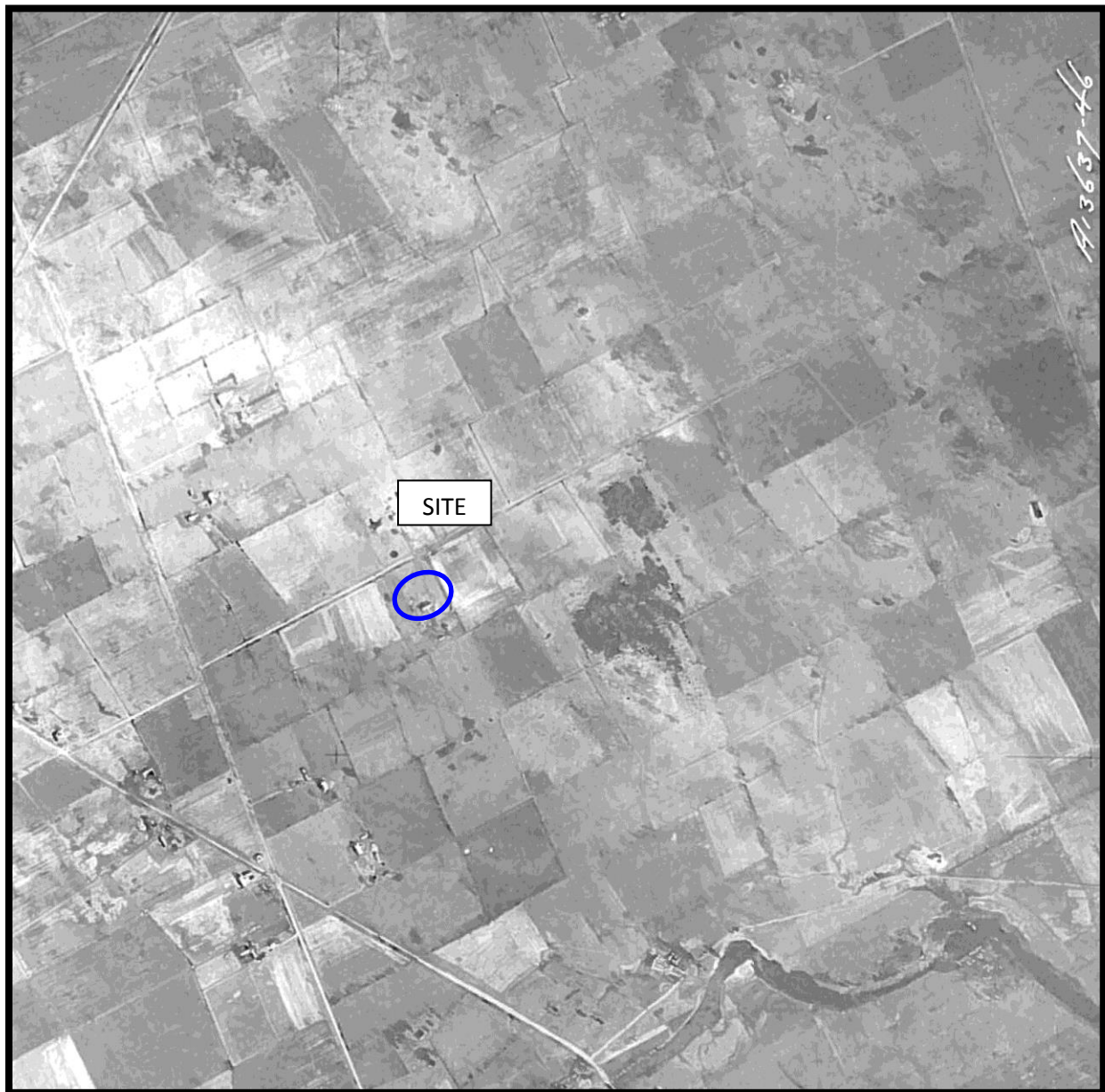
Surveying and Land Information Services

100-600 TERRY FOX DRIVE, KANATA, ONTARIO K2L 4B6
TEL: (613) 591-2580 FAX: (613) 591-1495
www.framco.ca

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AERIAL PHOTOGRAPH
1945



AERIAL PHOTOGRAPH
1954



AERIAL PHOTOGRAPH
1960



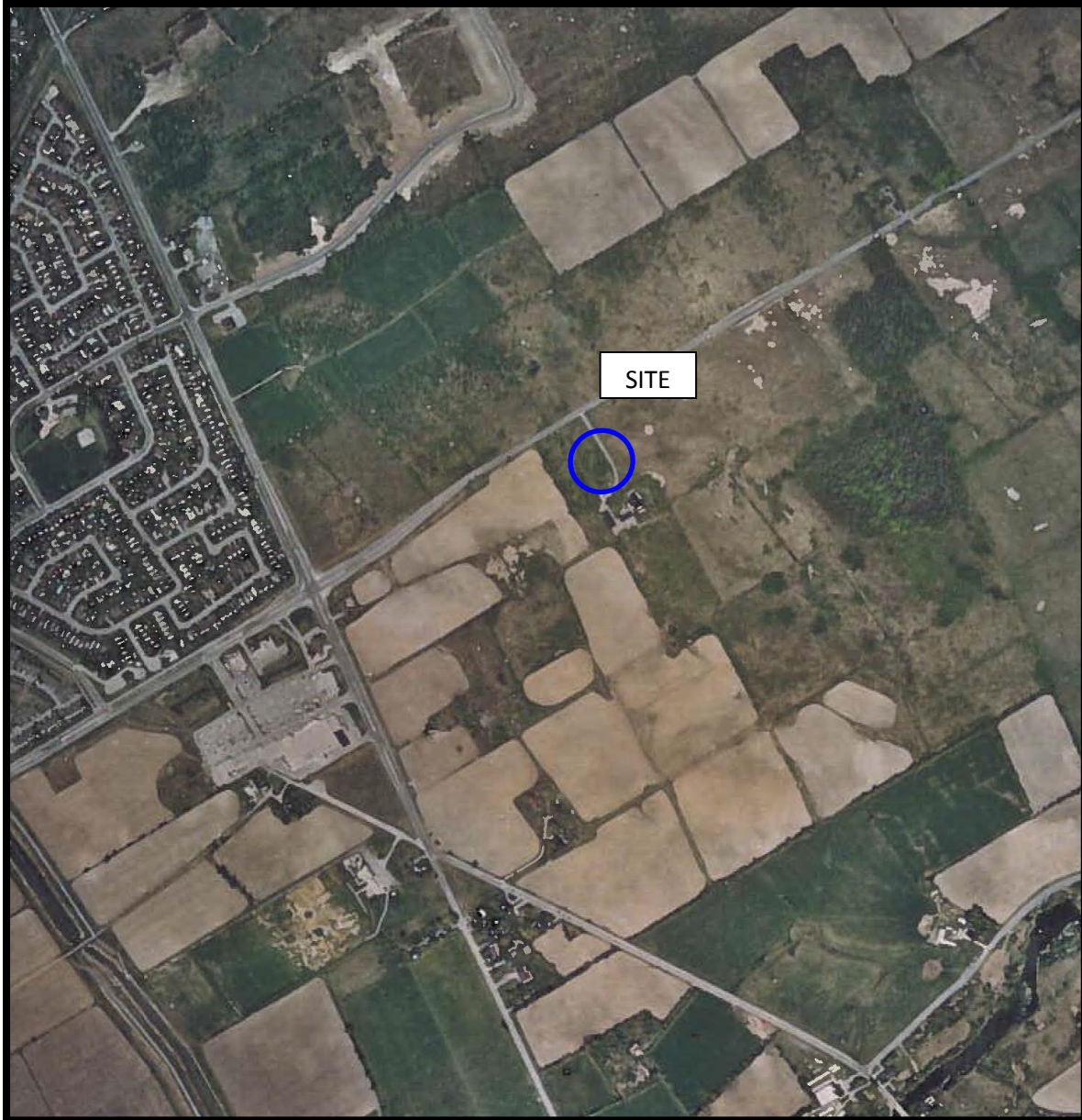
AERIAL PHOTOGRAPH
1973



AERIAL PHOTOGRAPH
1979



AERIAL PHOTOGRAPH
1987



AERIAL PHOTOGRAPH
1999



AERIAL PHOTOGRAPH
2014

Site Photographs

PE4055

Block 2 and 3, McGarry Terrace, Ottawa, ON

June 8, 2017



Photograph 1: View of the southwest portion of the subject site, facing east. Photograph illustrates the raised elevation of the site with respect to McGarry Terrace and the main land cover.



Photograph 2: View of the southwestern portion of the subject site, facing north. Photograph illustrates a remnant foundation on the property. No environmental concerns were identified with the foundation.

Site Photographs

PE4055

Block 2 and 3, McGarry Terrace, Ottawa, ON

June 8, 2017



Photograph 3: View of the central portion of the subject site, facing north. Photograph illustrates an asphalt access road leading to the subject site from Strandherd Drive.



Photograph 4: View of the middle of the subject site, facing east. Photograph illustrates the raised elevation with respect to the adjacent property to the east and the main land cover.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

WATER WELL RECORDS

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



June 6, 2017

Marek Moroz
Paterson Group Inc
154 Colonnade Rd
Ottawa, ON K2E 7J5

Dear Marek Moroz:

RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2017-04056, Your Reference PE4055

The Ministry is in receipt of your request made pursuant to the *Freedom of Information and Protection of Privacy Act* and has received your payment in the amount of \$5.00 (non-refundable application fee), along with your \$30.00 deposit.

The search is being conducted on the following: Lot 15, Con 2, Twp of Nepean (Ottawa). If there is any discrepancy please contact us immediately.

You may expect a reply or additional communication as your request is processed. For your information, the Ministry charges for search, copying and preparation time.

If you have any questions regarding this matter, please contact Jeneska Abano at jeneska.abano@ontario.ca.

Yours truly,

Janet Dadufalza
FOI Manager

UTM 118 2 441915 10 E



31G5b

GROUND WATER BRANCH

OCT 3 1963 15

No

6002

5 5013101010 N

The Ontario Water Resources Commission Act

Elev 4103310

WATER WELL RECORD

Basin 251 or District

Township, Village, Town or City Nepean

Con. T L R F Lot 15

Date completed Oct 31 63
(day month year)

Address R.R. #2, Box 421, Ottawa-Ont.

Casing and Screen Record

Inside diameter of casing 5"

Total length of casing 66'

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 5"

Pumping Test

Static level 37

Test-pumping rate 7 G.P.M.

Pumping level 49

Duration of test pumping 1 hr

Water clear or cloudy at end of test cloudy

Recommended pumping rate 7 G.P.M.

with pump setting of 70 feet below ground surface

Well Log

Water Record

Overburden and Bedrock Record

loam

hardpan & boulders

gravel

limestone

From ft.

To ft.

Depth(s) at which water(s) found

Kind of water (fresh, salty, sulphur)

0

4

80

fresh

55

55

103

55

61

61

104

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

old house

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

upland

Drilling or Boring Firm

Capital Water Supply

Address 1243 Heron Rd

Ottawa

Licence Number 976

Name of Driller or Borer S Huff

Address

Date Oct 31 1963

Walter Kavanagh

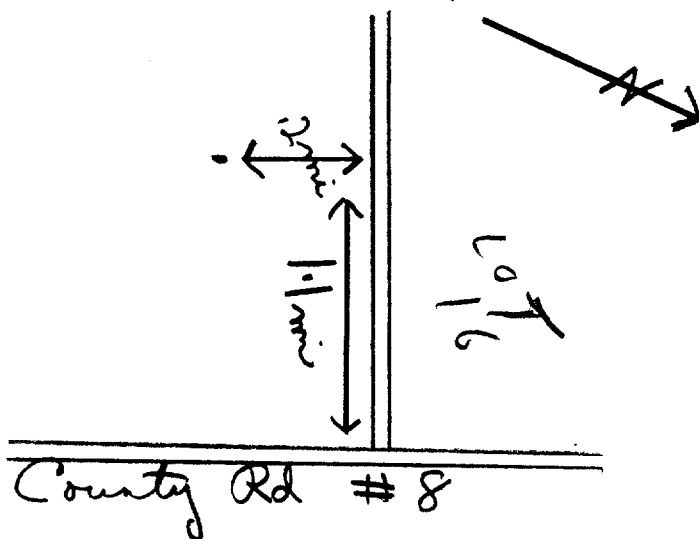
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M-60-4138

OWRC COPY

Location of Well

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



Marek Moroz

From: Ruchi Chohan <rchohan@tssa.org> on behalf of Public Information Services <publicinformationsservices@tssa.org>
Sent: June-14-17 9:46 AM
To: Marek Moroz
Subject: RE: TSSA Records Search, PE4055 - 1012 and 1022 McGarry Terrace (block 2 and 3)

Hello Marek,

Thank you for your inquiry.

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

3580 Stranherd Drive, Nepean has record of 3 active underground fuel tanks

3651 Stranherd Drive, Nepean has record of 1 active cylinder exchange centre

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 great day!

Regards,

Ruchi

From: Marek Moroz [mailto:MMoroz@Patersongroup.ca]
Sent: Wednesday, June 07, 2017 4:18 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: TSSA Records Search, PE4055 - 1012 and 1022 McGarry Terrace (block 2 and 3)

Good afternoon,

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

1012, 1024 and 1034 McGarry Terrace;

1099, 1110, 1111 and 1117 Longfield Drive;

and 3560 3580, 3651 Strandherd Drive.

Thank you very much,

Marek

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

**Geotechnical
Engineering**

POSITION

Environmental Consultant

**Environmental
Engineering**

EDUCATION

Hydrogeology

Algonquin College, Graduate Certificate, 2017
Environmental Management and Assessment

**Geological
Engineering**

University of Ottawa, 2012
Specialization in Geology with Minor in Spanish

Materials Testing

MEMBERSHIPS

Building Science

Ottawa Geotechnical Group
Association of Professional Geoscientists of Ontario

**Archaeological
Services**

EXPERIENCE

2017 to Present:

Paterson Group Inc.

Consulting Engineers
Geotechnical and Environmental Division
Environmental Consultant

2016 to 2017

Geological Survey of Canada

Federal Research Organization in Earth Sciences
Canada Groundwater Program
Physical Scientist

2012 to 2015

KGHM International

International Mining Company
Geologist and Project Manager

SELECT LIST OF PROJECTS

Contaminated Soil and Groundwater Sampling - Various sites - Eastern Ontario
Surcharge and Settlement Surveys - Ottawa, ON
Regional Groundwater Assessment and Research - Lake Simcoe Region
Geological Compilation and 3D Modelling - Franke Mine, Chile
Resource Investigation and Mineral Exploration - Rosita, Nicaragua

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