Geotechnical Engineering

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Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

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Phase I Environmental Site Assessment

20 Frank Nighbor Place Ottawa, Ontario

Prepared For

764703 Ontario Inc. c/o Colonnade Development

Paterson Group Inc.

Consulting Engineers 154 Colonnade Road South Ottawa (Nepean), Ontario Canada K2E 7J5

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Report: PE4065-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Colonnade Development acting on behalf of 764703 Ontario Inc. to conduct a Phase I Environmental Site Assessment of 20 Frank Nighbor Place, 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 property.

Based on historical searches, the lot has been vacant land since at least 1945 and has been used, in part, for agricultural purposes. Surrounding properties historically consisted of agricultural fields and vacant treed lands. Neighbouring properties were developed into commercial offices and retail stores in the late 1990s. The historical review did not identify any potentially contaminating activities (PCAs) on the subject site or on neighbouring properties and as a result, no areas of potential environmental concern (APECs) were identified on the subject site.

Following the historical review, a site visit was conducted. The subject site is currently vacant land covered with agricultural vegetation, marsh land, and grass and trees. A gravel access road traverses the site and sewer and storm water management drains were observed on the property. Highway No. 417 is located north of the subject site and the Carp River runs adjacent to the western property boundary. Neighbouring properties further to the west, east and south were observed to be commercial offices and retail properties. The site visit did not identify any PCAs or APECs.

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 Colonnade Development acting on behalf of 764703 Ontario Inc., Paterson Group (Paterson) conducted a Phase I Environmental Site Assessment (Phase I ESA) of 20 Frank Nighbor Place, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Cal Kirkpatrick of Colonnade Development. Colonnade Development offices are located at 16 Concourse Gate, Suite 200, Ottawa, Ontario. Mr. Kirkpatrick can be reached by telephone at (613) 225 8118

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:	20 Frank Nighbor Place – Ottawa (Kanata), Ontario.			
Legal Description:	Part of Block 2, Registered Plan 4M-1012, Geographic Township of March, City of Ottawa.			
Property Identification Number (PIN):	04509-0111			
Location:	The subject site is located on the west side of Frank Nighbor Place, approximately 340 m west of the Silver Seven Road intersection, Ottawa.			
Latitude and Longitude:	45° 18' 03" N, 75° 55' 10" W;			
Site Description:				
Configuration:	Irregular.			
Site Area:	8.00 hectares.			
Zoning:	IL6 [1414]H(30)-h, Light Industrial Zone.			
Current Use:	The subject site is undeveloped, vacant land, partially used for agriculture.			
Services:	The subject site is situated in a municipally serviced area.			

3.0 SCOPE OF INVESTIGATION

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

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

4.0 RECORDS REVIEW

4.1 General

Phase I ESA Study Area Determination

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

First Developed Use Determination

According to the city directories and aerial photos, the lot has never been developed.

Fire Insurance Plans

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

City of Ottawa Street Directories

Suburban Ottawa city directories from 1994 to 2011 at the National Archives were reviewed in approximate 5 year intervals for the subject site and properties located within the Phase I study area. Directories prior to these dates are not available. From 1994 to 2011, the subject site was not listed in the directories. It is possible that the property was formerly listed under a different address. Adjacent properties were listed as commercial offices and retail properties. No environmental concerns were noted in the city directories reviewed.

Property Ownership

The current property owner is 764703 Ontario Inc. It has been reported to Paterson that the current owners have had possession of the property for over 25 years. Ownership of the property prior to this is unknown.

Plan of Survey

A survey plan dated December 2, 2016, prepared by Annis, O'Sullivan, Vollebekk Ltd., was provided to Paterson for review. A copy of the survey plan is attached 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 22, 2017. The subject site was not listed in the NPRI database. One record of pollutant release was listed in the database for a property within the Phase I study area, located 225 m to the southeast of the subject site (500 Palladium Drive). 1.9 Kg of lead was released to air in 2014. Based on the quantity of lead and the distance from the subject site, this pollutant release is not considered to pose a concern to the subject site.

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, the MOECC search results had not been received. A copy of the response will be forwarded to the client if it contains 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 subject 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, the MOECC search results had not been received. A copy of the response will be forwarded to the client if it contains 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, the MOECC search results had not been received. A copy of the response will be forwarded to the client if it contains 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. At the time of issuance of this report, the MOECC search results had not been received. A copy of the response will be forwarded to the client if it contains any pertinent information.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of the assessment for the site, neighbouring properties and the general area of the site. No Record of Site Conditions (RSC) were filed within the Phase I study area.

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 26, 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 26, 2017 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. The TSSA's response has

indicated that no records exist for the subject site or neighbouring properties. A copy of the TSSA's 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.

City of Ottawa Historical Land Use Inventory (HLUI) Database

A request for information from the City's Historical Land Use Inventory (HLUI 2005) database for the subject property was submitted to the City of Ottawa. At the date of issuance of this report, a response had not been received from the City. A copy of the response will be forwarded to the client, should it contain any pertinent information.

Previous Environmental Reports

Paterson conducted a Phase I ESA on the subject site in 2002 and a Geotechnical Investigation on the subject site in September 2002 and in May 2005. The Phase I-ESA did not identify any historical or current environmental concerns with the subject site or adjacent properties and a Phase II ESA was not recommended. The Geotechnical Investigation did not identify any deleterious fill or evidence of potential contamination.

A review of other Paterson projects conducted in the general area of the subject site did not identify any significant environmental concerns.

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:

1947 The subject site is vacant. The west part appears to be vegetated with grass and small brush and the eastern portion used for agricultural purposes. South of the subject site the Carp River is visible. Surrounding lands appear to be used for agricultural purposes with scattered farmsteads present.

- 1959 No significant changes appear to have been made to the subject site or surrounding properties within the Phase I study area.
- 1979 No significant changes have been made to the subject site or surrounding properties, except immediately to the north, where Highway No. 417 is present.
- 1987 No significant changes appear to have been made to the subject site or surrounding properties within the Phase I study area.
- 1994 It appears that top soil is being stripped or tilled on the eastern portion of the subject site with the remainder of the property appearing vacant and sparsely treed. Properties to the east also have access roads present which lead from Silver Seven Road. No other significant changes have been made to surrounding properties. Further to the south, Palladium Drive appears under construction.
- 2002 The majority of the subject site appears to be vacant grassed and sparsely treed land. The southeast corner of the subject site as well as the neighbouring property to the southeast are cleared and undeveloped. Frank Nighbor Place is present and the neighbouring properties to the east and south are developed with the currently existing commercial buildings and parking lots. The Carp River appears to have been engineered further south and neighbouring properties to the southwest, on the opposite side of the Carp River, have been developed with commercial buildings.
- 2014 (City of Ottawa Website) No significant changes have been made to the subject site. The neighbouring property to the southeast has been developed with a commercial building. No other significant changes have been made to the neighbouring properties.

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

Topographic Maps

Topographic maps were obtained from Natural Resources Canada - The Atlas of Canada website. The topographic maps indicate that the site topography and regional topography in the area of the subject site slopes slightly downward to the west towards the Carp 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 primarily of interbedded shale and limestone of the Verulan Formation on the western portion of the subject site and sandstone of the Nepean Formation on the eastern portion. The thickness of overburden ranges from 10 to 15 m on the western portion of the subject site and 5 to 10 m on the eastern portion. The overburden consists of organic deposits on the western portion of the subject site near the Carp River and offshore clay and silt marine sediments on the eastern portion.

Water Well Records

A search of the MOECC's website for all drilled well records within 250 m of the subject site was conducted on June 22, 2017. No water well records were found on the subject site. No drinking water well records were found in the Phase I study area. The search returned 2 monitoring well records within the Phase I study area, approximately 130 m north of the subject site (285 Didsbury Road). PDFs of the well records were not available on the MOECC's website, however, an HTML format of the well records within the search radius has been included in Appendix 2.

Water Bodies and Areas of Natural Significance

The Carp River runs along the western property boundary of the subject site. According to the Ministry of Natural Resources Information Atlas, no areas of natural or scientific interest are present on the subject property or within the Phase I study area.

5.0 INTERVIEWS

Property Owner Representative

Mr. Cal Kirkpatrick, a representative of Colonnade Development, was contacted via email to inquire about the subject site. Mr. Kirkpatrick stated that the current owner, 764703 Ontario Inc., has had possession of the property for the last 25 years but previous ownership is unknown. Mr. Kirkpatrick indicated that he is not aware of any environmental issues regarding the subject site.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on June 26, 2017. Weather conditions were clear, with a temperature of approximately 24°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 that time.

6.2 Specific Observations at the Phase I Property

Buildings and Structures

The site was undeveloped at the time of the site visit.

Below Ground Structures

Below ground structures included sanitary sewer and storm water management drains.

Potable Water Source

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

Underground Utilities

City of Ottawa sanitary sewers were observed on the subject site along the gravel access road. Storm water management drains were also observed near the western property boundary of the subject site. No other underground utilities were noted during the site assessment.

Ground Surface

Across the eastern portion of the subject site, the ground surface consisted of corn fields. The northwestern portion of the property consisted of marsh land and trees, and the southwest portion of the property was also treed, with a small area covered with a mixed fill material of silt, clay and cobbles. A gravel access road was observed to run northeast-southwest from Frank Nighbor Place towards the Carp River and then run south towards Palladium Drive. A ditch and stormwater drain was observed on the western portion of the subject site.

No areas of stained soil or visibly stressed vegetation were observed on the subject site. Standing water on the site appeared clear, with no visible sheen or indications of contaminant impact.

Railway Lines

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

Polychlorinated Biphenyls (PCBs)

A pad mounted transformer and several pad mounted invertors were observed on an adjacent property to the east of the subject site (Home Depot). A second pad mounted transformer was observed on an adjacent property to the southeast of the subject site (Movati Gym). Based on the age of this electrical equipment, polychlorinated biphenyls (PCBs) would not have been used during installation.

At the time of assessment, no leaks, staining/discolouration or stressed vegetation beneath the transformers or invertors was observed. The transformer oil within the transformers and cooling fluid within the invertors are not considered to be environmental concerns.

Site Features

The subject site is currently vacant land covered with agricultural vegetation, marsh land, and grass and trees. A gravel access road traverses the site and sewer and storm water management drains were observed on the property. The subject site was observed to be approximately at grade with neighbouring properties and Frank Nighbor Place. Site drainage is primarily infiltration with minor run-off to the adjacent street and the Carp River.

No drinking water wells were identified on the subject site by the MOECC well record website or during the site visit. No private sewage systems were observed on the subject property, nor are any expected to be present as the site has never been developed. 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 visit. Land use adjacent to the subject site was as follows:

- North Highway No. 417, followed by commercial property and under-development lands;
- South International Data Casting Corp. and Xtreme Trampoline Park, followed by vacant land then Palladium Drive;
- East The Home Depot and Movati Athletic Kanata, followed by vacant land and Silver Seven Road;
- West The Carp River, followed by Canadian Tire Centre parking lot and Skywave a ORBCOMM Company.

No concerns were noted with the current use of the surrounding properties. Property use within the Phase I study area is shown on Drawing PE4065-2 -Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

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

Table 1 - Land Use History – 20 Frank Nighbor Place								
Time Period	Land Use	Potentially Contaminating Activities	Areas of Potential Environmental Concern					
1945 to present	Agriculture/vacant	None	None					

Potentially Contaminating Activities (PCAs)

No potentially contaminating activities (PCAs) have been identified on the subject site or within the Phase I study area.

Areas of Potential Environmental Concern (APEC)

As no PCAs have been identified, no APECs are present on the subject site.

Contaminants of Potential Concern (CPC)

No CPCs 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 both interbedded shale and limestone of the Verulan Formation and sandstone of the Nepean formation. Surficial soils consist of a combination of organic deposits and offshore clay and silt marine sediments. Drift thickness is 10 to 15 m on the western portion of the site and 5 to 10 m on the eastern portion. Hydrogeological conditions are considered to mimic the topographic setting; as a result, groundwater is expected to flow west towards the Carp 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 or structures on the subject site.

Water Bodies

The Carp River runs along the western perimeter 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 or within the Phase I study area

Neighbouring Land Use

Neighbouring land use in the Phase I study area consists of commercial and institutional. Land use is shown on Drawing PE4065-2 Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, no PCAs or APECs were identified on the subject property

Assessment of Uncertainty and/or Absence of Information

The absence of PCAs within the Phase I study area was 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 Colonnade Development acting on behalf of 764703 Ontario Inc. to conduct a Phase I Environmental Site Assessment of 20 Frank Nighbor Place, 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 property.

Based on historical searches, the lot has been vacant land since at least 1945 and has been used, in part, for agricultural purposes. Surrounding properties historically consisted of agricultural fields and vacant treed lands. Neighbouring properties were developed into commercial offices and retail stores in the late 1990s. The historical review did not identify any potentially contaminating activities (PCAs) on the subject site or on neighbouring properties and as a result, no areas of potential environmental concern (APECs) were identified on the subject site.

Following the historical review, a site visit was conducted. The subject site is currently vacant land covered with agricultural vegetation, marsh land, and grass and trees. A gravel access road traverses the site and sewer and storm water management drains were observed on the property. Highway No. 417 is located north of the subject site and the Carp River runs adjacent to the western property boundary. Neighbouring properties further to the west, east and south were observed to be commercial offices and retail properties. The site visit did not identify any PCAs or APECs.

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.

Datersongroup Ottawa Kingston North Bay

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 764703 Ontario 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:

- 764703 Ontario Inc. (5 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., 2016. Paterson Engineering Reports. Personal Interviews.

Public Information Sources

Google Earth. Google Maps/Street View.

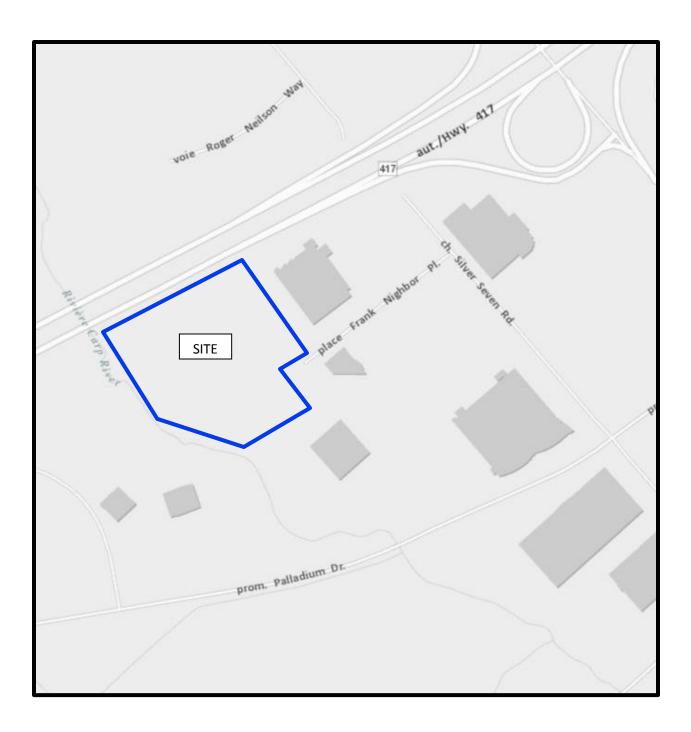
FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4065-1 – SITE PLAN

DRAWING PE4065-2 – SURROUNDING LAND USE PLAN



<u>figure 1</u> KEY PLAN

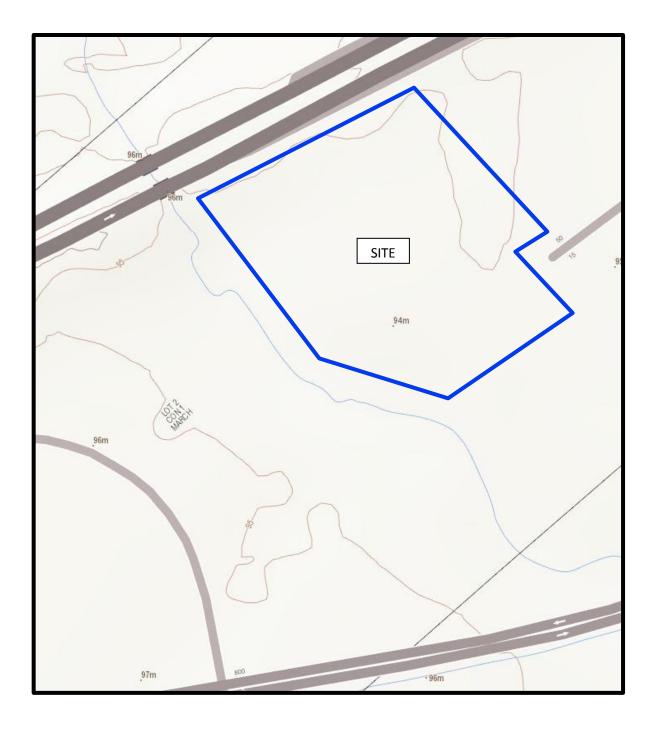
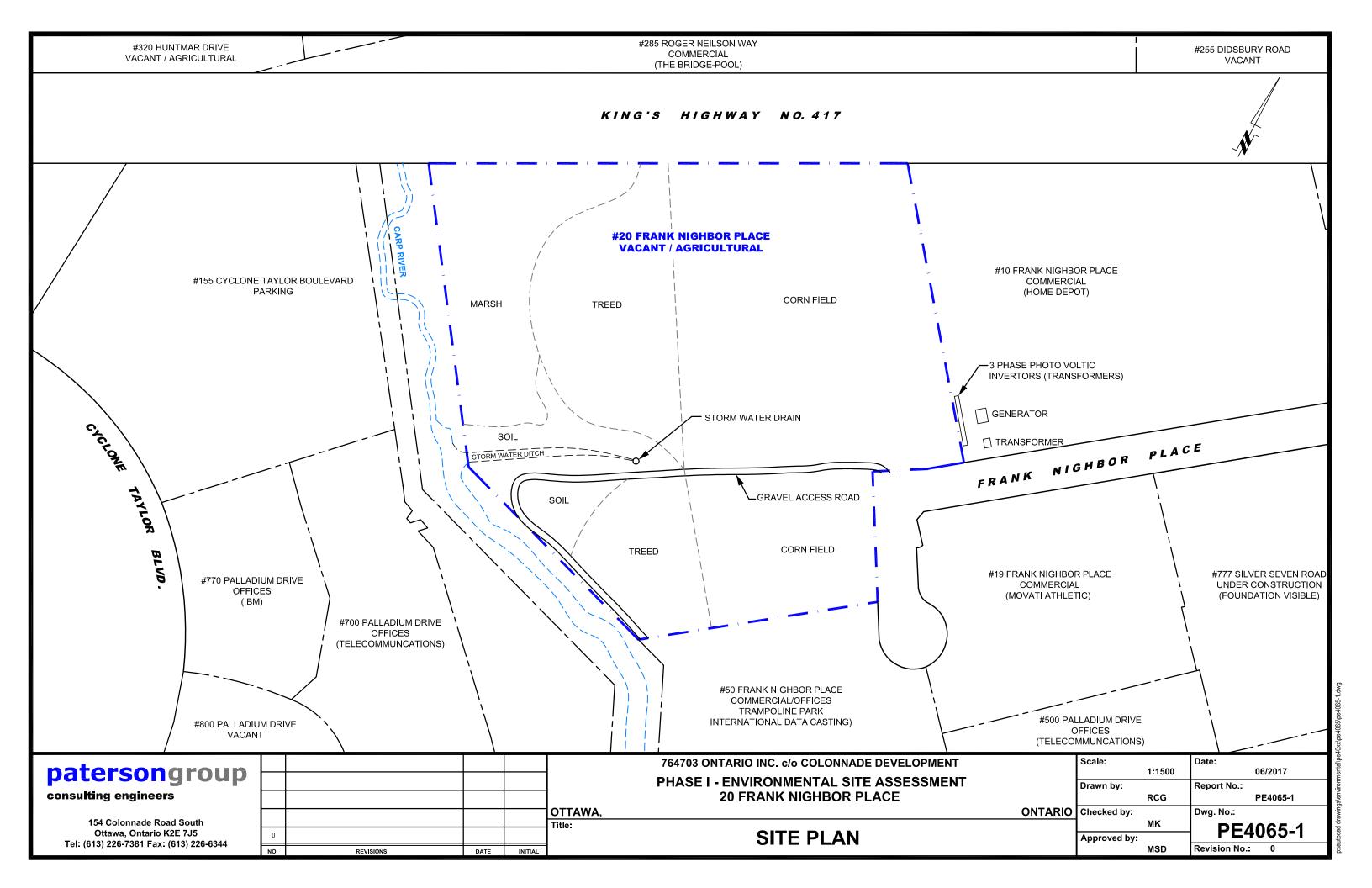
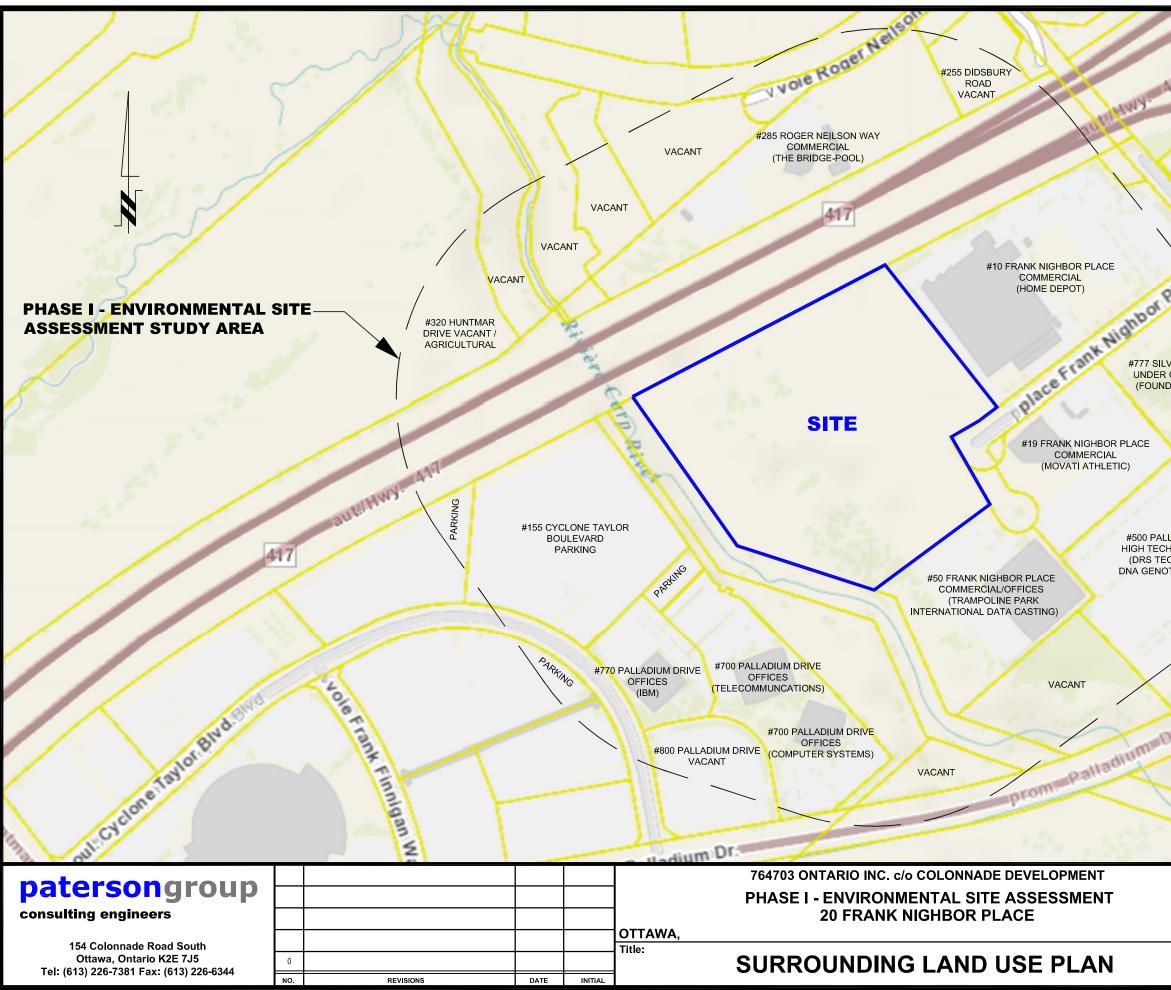


FIGURE 2 TOPOGRAPHIC MAP





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	Approved by:	MK	PE4065-2
	1	MSD	Revision No.: 0

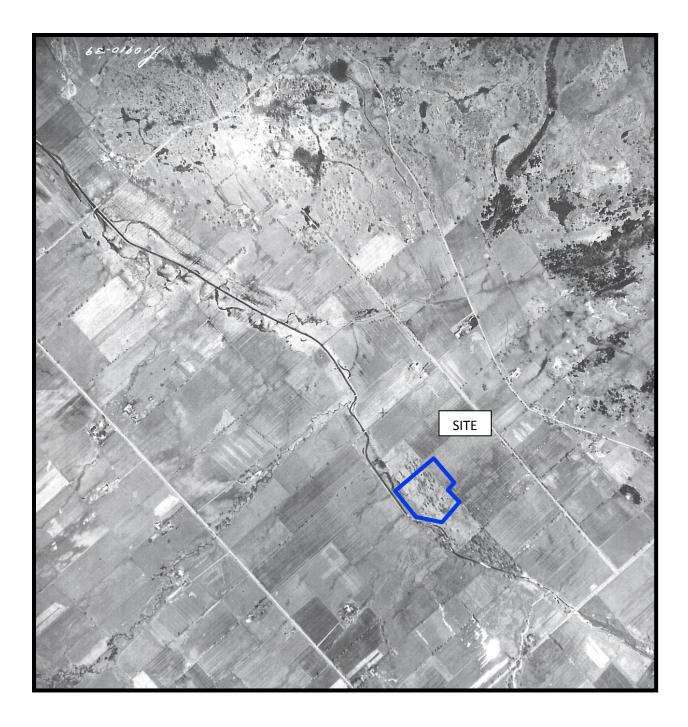
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APPENDIX 1

SURVEY PLAN

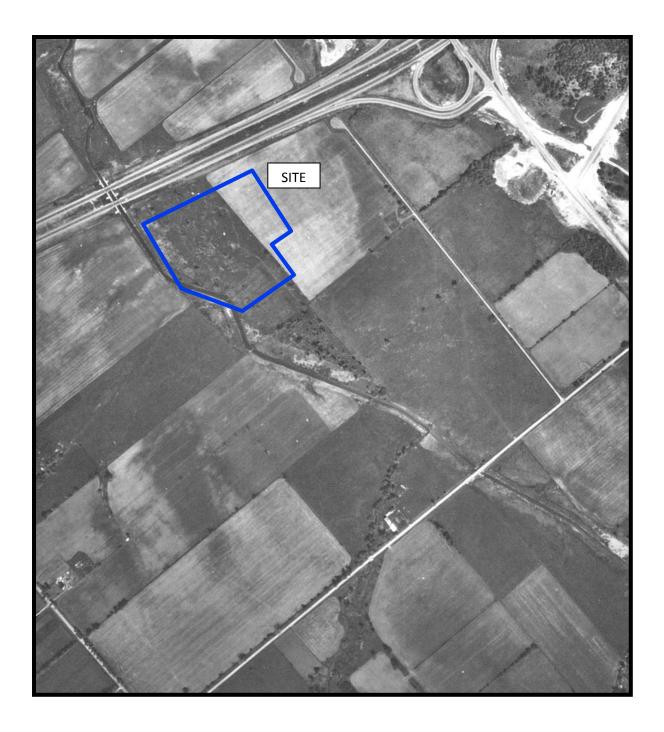
AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

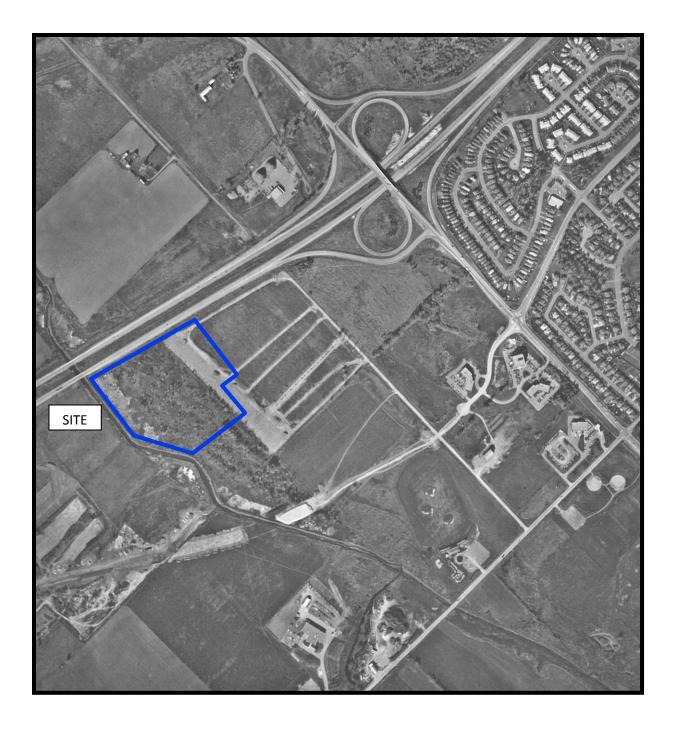


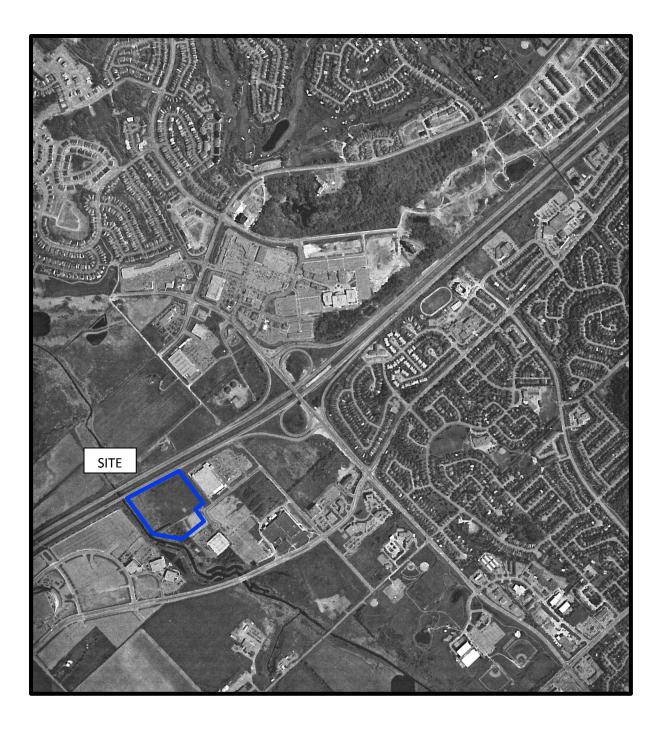
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Site Photographs

PE4065

20 Frank Nighbor Place, Ottawa, ON

June 26, 2017



Photograph 1: View of the west side of the site, facing west. Photograph illustrates the Carp River, an on-site sanitary sewer and a non-vegetated cleared area. A commercial business and Canadian Tire Center are visible in the distance. No environmental concerns were identified.



Photograph 2: View from the west side of the subject site, facing south. Photograph illustrates soil, grass, a gravel access road and trees in the distance. No environmental concerns were identified.

Site Photographs

PE4065

20 Frank Nighbor Place, Ottawa, ON

June 26, 2017

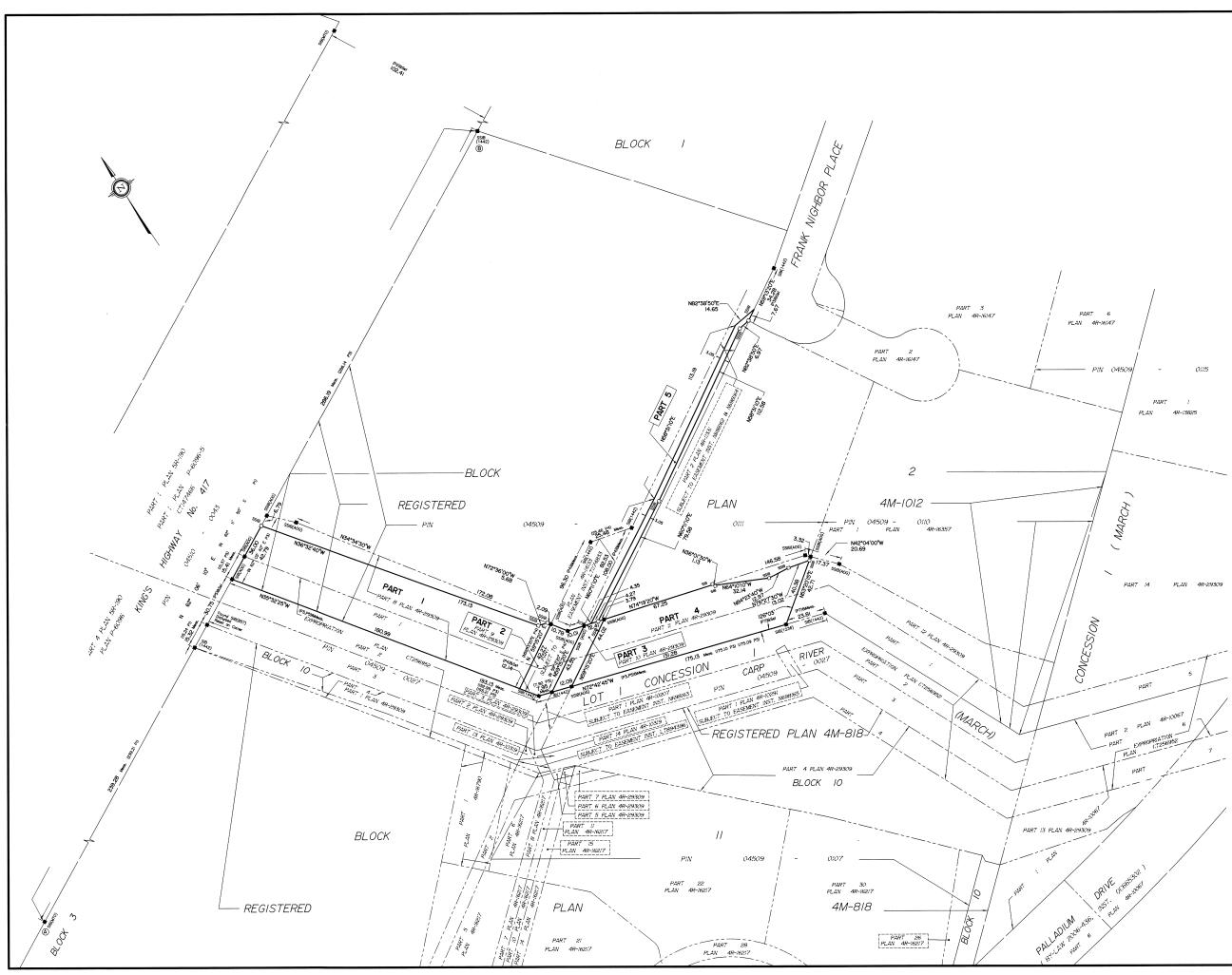


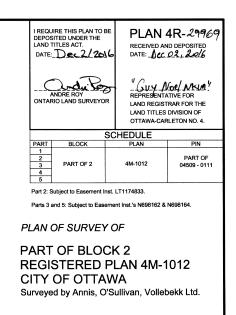
Photograph 3: View of a stormwater ditch and swamp located on the western perimeter of the site. Photograph taken facing north. No environmental concerns were identified.



Photograph 4: View of the central and eastern most portion of the subject site. Photograph depicts a gravel access road and corn fields on either side. Photograph taken facing east. No environmental concerns were identified.

patersongroup -









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

Surveyor's Certificate

I CERTIFY THAT

- This surveys and plan are correct and in accordance with the Surveys Act, the Surveyors Act and the Land Titles Act and the regulations made under them.
 The survey was completed on the 1st day of December, 2016.

Dec 2/2016

Andre Roy Ontario Land Surveyor

Notes & Legend

	•	
-0-	Denotes	Survey Monument Planted
		Survey Monument Found
SIB		Standard Iron Bar
SSIB		Short Standard Iron Bar
IB		Iron Bar
CP		Concrete Pin
(WIT)	•	Witness
(AOG) •	Annis, O'Sullivan, Vollebekk Ltd.
Meas.		Measured
(P1)		Registered Plan 4M-818
(P2)	•	Plan 147466 (P-6096-5)
(P3)	-	Registered Plan 4M-1012
(P4)	-	Plan 4R-14133
(P5)	-	Expropriation Plan CT256952
(P7)	-	Plan 4R-16357

Distances shown on this plan are ground distances and can be converted to grid distances by multiplying by the combined scale factor of 0.999915.

Bearings are grid, derived from Can-Net 3.0 Real Time Network GPS observations on reference points A and B, shown hereon, having a bearing of N82706'10'W and are referenced to Specified Control Points 0191975/075 and 01919770923, MTM Zone 9 (76'30' West Longitude) NAD-83 (original).

For bearing comparisons, a rotation of: 00°2040° counter-clockwise was applied to bearings on plan (P1), 00°260°0° counter-clockwise was applied to bearings on plan (P3) and (P4), 00°26°55° counter-clockwise was applied to bearings on plan (P5),

Coordinates are derived from Can-Net 3.0 Real Time Network GPS observations referenced to Specified Control Points 01919750705 and 01919770923, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

alues are to urban accuracy in accordance with O. Reg. 216/10

. 01919750705	5016816.93	360806.84	

. Point A . Point B	Northing	5013536.21 5017930.51 5018205.11	Easting	349881.53 350400.22	

Caution: Coordinates cannot, in themselves, be used to re-establish corners or boundaries shown on this plan



APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

WATER WELL RECORDS

CITY OF OTTAWA HLUI REQUEST

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

June 26, 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-2017-04532, Your Reference PE4065

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: 20 Frank Nighbor Place, 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,

FOI Manager

Well ID

Well ID Number: 7230084 Well Audit Number: *Z171304* Well Tag Number: *A147883 This table contains information from the original well record and any subsequent updates.*

Well Location

Address of Well Location	285 DIDSBURY ROAD
Township	MARCH TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18
	Easting: 427839
	Northing: 5017024

Municipal Plan and Sublot Number Other

Overburden and Bedrock

Materials Interval

Most Common Material	Other Materials	General Description	Depth From	Depth To
LOAM	SAND	SILT	0 m	.15 m
CLAY	SILT	SAND	.15 m	1.52 m
CLAY	SAND	SILT	1.52 m	2.44 m
SILT	CLAY	HARD	2.44 m	5.03 m
	LOAM CLAY CLAY	LOAM SAND CLAY SILT CLAY SAND	Most Common MaterialOther MaterialsDescriptionLOAMSANDSILTCLAYSILTSANDCLAYSANDSILT	Most Common MaterialOther MaterialsDescriptionDepth FromLOAMSANDSILT0 mCLAYSILTSAND.15 mCLAYSANDSILT1.52 m

Approxim			
Annular			
Space/Abandonment			
Sealing Record			
Depth From 1.39 m	Depth To 1.99 m	Type of Sealant Used (Material and Type) BENTONITE	Volume Placed
Method of Construction &			
Well Use			
Method of Construction Other Method	Well Use		
HSA	Monitoring		
Status of Well Observation Wells Construction Record -			
Casing			
Inside	Open Hole or material	Depth	Depth
Diameter 5.08 cm	PLASTIC	From .15 m	To 2.3 m
Construction Record -			
Screen			
Outside	Material	Depth	Depth
Diameter 5.89 cm	PLASTIC	From 2.3 m	To 3.82 m
			0.01

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

0 m

Draw Down & Recovery				
Draw Down Time(min) SWL	Draw Down Wa	ater level	Recovery Time(min)	Water level
	1			1
	2			2
	3			3
	4			4
	5			5
	10			10
	15			15
	20			20
	25			25
	30			30
	40			40
	45		2	45
	50			50
	60		6	60
Water Details				
	Kind			
Water Found at Depth 1.1 m	Kina			
Hole Diameter				
Depth From	Depth To		Diameter	

5.03 m

20.3 cm

Audit Number: Z171304 Date Well Completed: July 30, 2013 Date Well Record Received by MOE: October 24, 2014

Well ID

Well ID Number: 7230085 Well Audit Number: *Z171283* Well Tag Number: *A147883 This table contains information from the original well record and any subsequent updates.*

Well Location

Address of Well Location	285 DIDSBURY RD
Township	MARCH TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	Ottawa
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18
	Easting: 427839

Northing: 5017024

Municipal Plan and Sublot Number Other

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To
BRWN GREY GREY GREY GREY Annular	LOAM CLAY CLAY SILT TILL	SILT SILT SILT CLAY SILT	CLAY SAND SAND CLAY	0 m .22 m 2.29 m 2.98 m 10.67 m	.22 m 2.29 m 2.98 m 10.67 m 11.59 m
Space/Abandonment Sealing Record					
Depth From 6.74 m Method of Construction & Well Use	Depth To 7.29 m	Type of Sealant Used (Material and Type) BENTONITE	Volume Placed		
Method of Construction Other Method HSA	Well Use Monitoring				
Status of Well Observation Wells Construction Record -					
Casing Inside Diameter 5.08 cm	Open Hole or material PLASTIC	Depth From .15 m	Depth To 7.64 m		

Construction Record -

Screen

0 m

JULUT			
Outside	Material	Depth	Depth
Diameter		From	То
5.89 cm	PLASTIC	7.64 m	9.16 m
Draw Down & Recovery			
Draw Down Time(min) SWL	Draw Down Water leve	el Recovery Time(min)	Water level
	1		1
	2		2
	3		3
	4		4
	5		5
	10		10
	15		15
	20		20
	25		25
	30		30
	40		40
	45		45
	50		50
	60		60
Water Details			
Water Found at Depth	Kind		
1.75 m			
Hole Diameter			
Depth	Depth	Diameter	
From	То		

11.59 m

20.3 cm

Audit Number: Z171283 Date Well Completed: July 30, 2014 Date Well Record Received by MOE: October 24, 2014

Application Number:	Ward Number:	Application Received: (dd/mm/yyyy):
Client Service Centre Staff:		Fee Received: \$



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	20 Frank Nighbor Place, Ottawa, ON		
Location:			
	* Mandatory Field	 10 - 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

Applicant/Agent Information:

Name:	Paterson Group			
Mailing Address:	154 Colonnade Rd South, Ottawa, ON			
Telephone:	613-226-7381	Email Address:	mmoroz@patersongroup.ca	
Registered Property Owner Information:				
Name:	764703 Ontario Inc			
Mailing Address:	16 Concourse Gate, Suite 200 Ottawa, ON K2E 758			
Telephone:	613 225 8118 Ext 322	Email Address:	Ckirkpatrick@Colonnade.ca	

Site Details

Legal Description and PIN:	Part of Block 2, Registered Plan 4M-1012, Geographic Township of March, City of Ottawa. 04509-0111	
What is the land currently used for?	Vacant/Agricultural	
	e: m Lot depth: m Lot area: m² : area: {irregular lot} 80,000 m² e have Full Municipal Services: Yes (No	
	Required Fees te to visit <u>the Historic Land Use Inventory</u> website Fees must be paid in full at the time of application submission.	
Planning Fee	\$100.00	
	Submittal Requirements	
The following are r	equired to be submitted with this application:	
of an indiv	to Disclose Information: Consultants and other third parties may make requests for information on behalf ridual or corporation. However, if the requester is not the owner of the property, the requester must the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner. This will	

- authorize 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:

- 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): 06/07/2017 Per: Marek Moroz (Please print name) Title: Environmental Consultant

Company: Paterson Group

Marek Moroz

From:	Public Information Services <publicinformationservices@tssa.org></publicinformationservices@tssa.org>
Sent:	June-27-17 11:02 AM
То:	Marek Moroz
Subject:	RE: TSSA Records Search, PE4065 - 20 Frank Nighbor Place

Hi Marek,

Thank you for your inquiry.

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

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (<u>publicinformationservices@tssa.org</u>) 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,

Roxana



Roxana Mashtaler | Public Information Agent

Facilities 345 Carlingview Drive Toronto, Ontario M9W 6N9 Tel: +1-416-734-3472 | Fax: +1-416-231-6183 | E-Mail: <u>rmashtaler@tssa.org</u> www.tssa.org



From: Marek Moroz [mailto:MMoroz@Patersongroup.ca]
Sent: Monday, June 26, 2017 9:38 AM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: TSSA Records Search, PE4065 - 20 Frank Nighbor Place

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:

10, 19, 20 and 50 Frank Nighbor Place;

285 Roger Neilson Way;

777 Silver Seven Road;

And 500, 700 and 770 Palladium Drive ;

Thank you very much,

Marek

Marek Moroz, G.I.T.

patersongroup

solution oriented engineering 60 years serving our clients

154 Colonnade Road South Ottawa, Ontario, K2E 7J5 Cell: (613) 229-9822 Tel: (613) 226-7381 Ext. 248 Fax: (613) 226-6344 Email: <u>MMoroz@patersongroup.ca</u>

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. 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.

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Marek Moroz, B.Sc. G.I.T.

Geotechnical

Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

POSITION

Environmental Consultant

EDUCATION

Algonquin College, Graduate Certificate, 2017 Environmental Management and Assessment

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

MEMBERSHIPS

Ottawa Geotechnical Group Association of Professional Geoscientists of Ontario

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

patersongroup

Mark S. D'Arcy, P. Eng.

patersongroup

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