



Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological Services

Phase I - Environmental Site Assessment

1919 Maple Grove Road
Ottawa, Ontario

Prepared For

Formasian Development Corporation
c/o 110 Architects Incorporated

Paterson Group Inc.

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

Tel: (613) 226-7381
Fax: (613) 226-6344
www.patersongroup.ca

May 11, 2018

Report: PE4308-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Formasian Development Corporation, courtesy of 110 Architects, to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of 1919 Maple Grove Road, 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 historical searches, the property was first developed in 2004 with a two-storey residential dwelling. Prior to development, the subject site was used for agriculture. No environmental concerns were identified with the historical use of the subject site.

Surrounding properties historically consisted agricultural lands and residential properties. No potentially contaminating activities were identified within the Phase I-ESA study area, as such, no areas of potential environmental concern are known to exist on the subject site.

Following the historical review, a site visit was conducted. The site is currently occupied by a two-storey residential dwelling with a gravel driveway. The building is heated with propane and utilizes a private well and septic system. Neighbouring properties to the south, east and west were identified as residential properties. Undeveloped lands are located north and west of the subject site. No potentially contaminating activities were identified during the site visit.

Conclusion

Based on the findings of the Phase I-ESA, in our opinion, **a Phase II – Environmental Site Assessment is not required.**

1.0 INTRODUCTION

At the request of Formasian Development Corporation, courtesy of 110 Architects, Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (ESA) for 1919 Maple Grove Road, in the City of Ottawa, Ontario. The purpose of this Phase I – Environmental Site Assessment (Phase I – ESA) was to research the past and current use of the site and study area to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I – ESA by Mr. Vincent Li, of Formasian Development Corporation. Formasian Development Corporation is located at 1919 Maple Grove Road, Ottawa, Ontario, K2S 1B9. Mr. Gupta can be reached by telephone at (613) 799-9117.

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

This Phase I-ESA report has been prepared in general accordance with the agreed scope-of-work and 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, a cursory review made at the time of the field assessment and past field work conducted on the subject site. 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: 1919 Maple Grove Road, Ottawa, ON.

Legal Description: Part of Lot 1, Concession 1, Geographic Township of Huntley, now in the City of Ottawa.

Property Identification Number: 04487-0347

Location: The site is located on the north side of Maple Grove Road, north of the intersection of Maple Grove Road and Johnwoods Street, in the City of Ottawa, Ontario. Refer to Figure 1 - Key Plan following the body of this report.

Latitude and Longitude: 45° 17' 0.56" N, 75° 55' 46.07" W

Site Description:

Configuration: Irregular.

Site Area: 6.50 ha (approximate)

Zoning: DR – Development Reserve Zone

Current Use: The property is currently occupied by a two-storey residential dwelling.

Services: The subject site utilizes a private well and septic system, however, the site is located in a municipally serviced area.

3.0 SCOPE OF INVESTIGATION

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

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

4.0 RECORDS REVIEW

4.1 General

Phase I 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 the historical search, the property addressed 1919 Maple Grove Road has never been listed in the City directories, however, according to the property owner, Mr. Vincent Li, the residential dwelling was built in 2004.

Fire Insurance Plans

Fire Insurance Plans (FIPs) are not available for the subject site.

City of Ottawa Street Directories

Ottawa city directories from 1980 through 2011 were reviewed at approximate five-year intervals, for the subject site and properties located within the Phase I-ESA study area.

Due to the suburban nature of the subject site, City directories were not available for the area of the subject site until the mid-1990s. The property addressed 1919 Maple Grove Road was not listed in the City directories, however, as mentioned above, the residential dwelling was constructed in 2004. Neighbouring properties have always been listed as residential dwellings.

Chain of Title

Based on the availability of historical information for the subject site, such as interviews, aerial photographs and City directories, a Chain of Title was not requested for the subject site.

Plan of Development

A plan depicting the subject site and future development, prepared by 110 Architects in September of 2016 was reviewed as part of this assessment. A copy of the plans is provided in Appendix 1.

Previous Engineering Reports

Paterson has conducted several geotechnical and environmental engineering projects in the area of the subject site. Based on a review of these reports, no environmental concerns were identified.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on April 20, 2018. The subject site was not listed in the NPRI database. No properties within the 250 m Phase I-ESA study area were listed in the NPRI database

PCB Inventory

A search of national PCB waste storage sites was conducted on April 20, 2018. No PCB waste storage sites were identified within a 250 m radius of the subject site.

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. No instrument records were found by the MOECC for the subject site.

MOECC Coal Gasification Plant Inventory

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

MOECC Incident Reports

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

MOECC Waste Management Records

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

MOECC Submissions

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

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No Record of Site Condition (RSC) was found for the subject site. One (1) RSC was filed for 5831 Hazeldean Road, approximately 250m southeast of the subject site.

Information provided within the RSC indicates that 80m³ of impacted soil was removed from the neighbouring site. No groundwater impacts were detected. Based on the separation distance between the RSC property and the subject site, the RSC property is not considered to represent an area of potential environmental concern (APEC) on the subject site.

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 (ANSI)

According to the Ministry of Natural Resources (MNR), the subject property is not listed as an area of natural and scientific interest. There are no ANSIs within the Phase I-ESA study area. Based on the MNR resources, an unevaluated wetland is located on the southern portion of the subject site.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on April 12, 2018 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. The TSSA search did not identify any records in their database.

City of Ottawa Landfill Document

The document entitled “Old Landfill Management Strategy, Phase I - Identification of Sites, City of Ottawa”, was reviewed. No former landfills were identified in the vicinity of the subject property.

City of Ottawa Historical Land Use Inventory

A requisition form was sent to the City of Ottawa on May 11, 2018 to request information from the City’s Historical Land Use Inventory (HLUI 2005) database for the subject property. At the time 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.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed. Based on the review, the following observations have been made:

- | | |
|------|--|
| 1945 | The subject site appears vacant and undeveloped. Surrounding lands are predominantly undeveloped or used for agricultural purposes. The intersection of Maple Grove Road and Johnwoods Street is visible directly south of the subject site. |
| 1959 | No significant changes appear to have been made to the subject site or neighbouring properties. |

-
- | | |
|------|---|
| 1971 | No significant changes appear to have been made to the subject site or neighbouring properties. |
| 1976 | (City of Ottawa website) No significant changes appear to have been made to the subject site. Several residential dwellings have been built on the north side of Maple Grove Road, east and west of the subject site. |
| 1987 | The site appears largely tree covered and remains undeveloped. A residential dwelling has been constructed southwest of the subject site at 1939 Maple Grove Road. |
| 1999 | (City of Ottawa website) No significant changes appear to have been made to the subject site. A residential subdivision has been constructed on the south side of Maple Grove Road and west of Johnwoods Street. |
| 2005 | (City of Ottawa website) A residential dwelling has been constructed on the southern portion of the subject site. No significant changes appear to have been made to neighbouring properties. |
| 2017 | (City of Ottawa website) No significant changes have been made to the subject site. The adjacent property to the east and properties southeast of the subject site have been developed with residential subdivisions. |

Laser copies of some of the aerial photographs reviewed are included in Appendix 1 of this report.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada - The Atlas of Canada website. The topographic maps indicate that the subject site lies between 106-108m in elevation. The regional topography in the general area of the subject site slopes downward to the east. Feedmill Creek is located approximately 400m west of the subject site, running from a storm water management pond west of the subject site to a marshland. 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, which is generally less than 150 m above sea level.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on the information from NRCAN, bedrock in the area of the site consists of interbedded limestone and dolostone of the Gull River Formation. Based on the maps, overburden across the site consists of glacial till and ranges from 0 - 3m on the western and south-eastern portion of the site and 3 to 10m on the north-eastern portion of the site.

Water Well Records

According to the water well records search, no wells are located on the subject property. A total of seven (7) drinking well records, drilled between 1971 and 2004 were found for properties within the study area. Based on the number of records, only the three (3) most proximal records have been added to the appendix.

Water Bodies and Areas of Natural Significance (ANSIs)

No ANSIs or water bodies are located within the study area. The nearest water body to the subject site is Feedmill Creek, located approximately 400m west.

Fill Materials

A small soil stockpile, approximately two (2) yards, was observed approximately 30m northeast of the residential dwelling. According to the property owner, Mr. Vincent Li, the soil is native to the subject site. Based on observations made during the assessment, the soil pile does not represent an environmental concern.

5.0 INTERVIEWS

Property Owner Representative

Mr. Vincent Li, the property owner and representative of Formasian Development Corporation was contacted via email in April of 2018 and was present during the site visit to answer questions. Mr. Li indicated that the residential dwelling was built in 2004. Paterson was told by Mr. Li that the dwelling has always been heated with a propane-fired furnace. Mr. Li informed Paterson that the septic field is located at the rear of the dwelling. Mr. Li indicated that the groundwater from one other the sump pit is pumped to the ditch along Maple Grove Road. Paterson was told by Mr. Li that the previous owner was Mr. William Bullen, who owned the property from 1973 to 2003. Mr. Li was unaware of any environmental concerns with the subject site.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site visit was carried out on April 26, by Mr. Marek Moroz, an employee with the Environmental Department of Paterson Group. The weather conditions were overcast with a temperature of 12°C. The uses of the neighbouring properties within the Phase I-ESA study area were also assessed at the time of the site visit, from publicly accessible locations.

6.2 Specific Observations at Phase I Property

Buildings and Structures

A two-storey residential dwelling is located on the southern portion of the subject site. The dwelling is clad with vinyl siding, stone blocks and concrete and has a poured concrete foundation and a single basement level.

Below Ground Structures

A septic field is located north of the residential dwelling. No other below ground structures were observed on the subject site.

Storage Tanks

No storage tanks were observed on the subject site.

Water Source

The subject site is in an area that is serviced with municipal water, however, the subject site utilizes a private water well located beside the southwest corner of the dwelling. Private water wells may still be in use on older properties along Maple Grove Road.

Underground Utilities

As previously mentioned, a septic field is located north of the residential dwelling. Hydro lines are expected to run just west of the gravel driveway from the residential dwelling to a hydro pole along Maple Grove. Drainage pipes, used to discharge groundwater from a sump pit, are expected to run parallel to the buried hydro lines, however, the drainage pipes are located a few meters further west.

Groundwater Monitoring Wells

No groundwater monitoring wells were observed on the subject property.

Sewage Works

The subject site utilizes a private septic system, however, neighbouring properties to the east and south are connected to the City of Ottawa sanitary sewer system.

Site Features

The majority of the ground surface of the subject site is covered by mature trees. An area with standing water was observed south of the residential dwelling and west of the driveway in a treed area. Small areas surrounding the residential dwelling were covered by grass. A gravel driveway was observed on the southern portion of the site. No staining was observed on the ground surface of the subject property. The vegetation on the site did not appear to be distressed.

Drainage methods on the subject site consist of infiltration within grassed, treed and gravel covered areas and runoff towards the ditch along the Maple Grove Road.

The site topography is generally flat, with very slight elevated mounds within the forested area on the northern portion of the site. The site topography slopes gradually towards northeast while the regional topography slopes down towards the east. Regional groundwater is considered to flow in an easterly direction, towards the Carp River.

Potentially Contaminating Activities

No potentially contaminating activities (PCAs) were observed on the subject site.

Neighbouring Properties

Land use adjacent to the subject site was as follows:

- North - Vacant and undeveloped lands;
- South - Maple Grove Road followed by residential dwellings;
- East - A residential subdivision;
- West - Residential dwellings and vacant and undeveloped land.

An inspection of the neighbouring properties was conducted at the time of the site inspection. No potentially contaminating activities were identified on neighbouring properties within the Phase I study area. Property use within the Phase I study area is shown on Drawing PE4308-2 - Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

No potentially contaminating activities were identified on the subject property. The property appears to have remained vacant until the development of the present-day residential dwelling in 2004.

7.2 Areas of Potential Environmental Concern

No areas of potential environmental concern were identified within the Phase I study area.

7.3 Conceptual Site Model

Water Bodies

No water bodies are located within the Phase I study area. The nearest waterbody is Feedmill Creek, located approximately 400m west of the subject site.

Areas of Natural and Scientific Interest

No areas of natural and scientific interest exist within the Phase I-ESA study area.

Drinking Water Wells

According to the water well records search, no wells are located on the subject property. A total of seven (7) drinking well records, drilled between 1971 and 2004 were found for properties within the study area. Based on the number of records, only the three (3) most proximal records have been added to the appendix.

Neighbouring Land Use

Neighbouring lands in the Phase I-ESA study area are used for residential purposes. No potentially contaminating activities (PCAs) were identified within the Phase I-ESA study area at the time of the site assessment. Neighbouring land use within the Phase I-ESA study area is depicted on Drawing: PE4308-2 - Surrounding Land Use Plan.

Areas of Potentially Contaminating Activities and Potential Environmental Concerns

As no PCAs were identified, no existing or historical areas of potential environmental concern (APECs) were identified within the Phase I-ESA study area.

8.0 CONCLUSIONS

Assessment

Paterson Group was retained by Formasian Development Corporation, courtesy of 110 Architects, to conduct a Phase I Environmental Site Assessment (Phase I-ESA) of 1919 Maple Grove Road, 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 historical searches, the property was first developed in 2004 with a two-storey residential dwelling. Prior to development, the subject site was used for agriculture. No environmental concerns were identified with the historical use of the subject site.

Surrounding properties historically consisted agricultural lands and residential properties. No potentially contaminating activities were identified within the Phase I-ESA study area, as such, no areas of potential environmental concern are known to exist on the subject site.

Following the historical review, a site visit was conducted. The site is currently occupied by a two-storey residential dwelling with a gravel driveway. The building is heated with propane and utilizes a private well and septic system. Neighbouring properties to the south, east and west were identified as residential properties. Undeveloped lands are located north and west of the subject site. No potentially contaminating activities were identified during the site visit.

Conclusion

Based on the findings of the Phase I-ESA, in our opinion, **a Phase II – Environmental Site Assessment is not required.**

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with the agreed scope-of-work, in compliance with O.Reg. 153/094 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 the Formasian Development Corporation. Permission and notification from the abovementioned party and Paterson will be required to release this report to any other party.

Paterson Group Inc.



Marek Moroz, P.Geo.



Mark D'Arcy, P.Eng.



Report Distribution:

- Formasian Development Corporation (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.

Municipal Records

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

Local Information Sources

Chain of Title obtained through Read Abstracts Limited, August 2013.
Current Plan of Survey, prepared by Farley, Smith and Denis Surveying Ltd., Ontario Land Surveyors.
Previous Environmental Reports.
Personal Interviews.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4308-1 – SITE PLAN

DRAWING PE4308-2 – SURROUNDING LAND USE PLAN

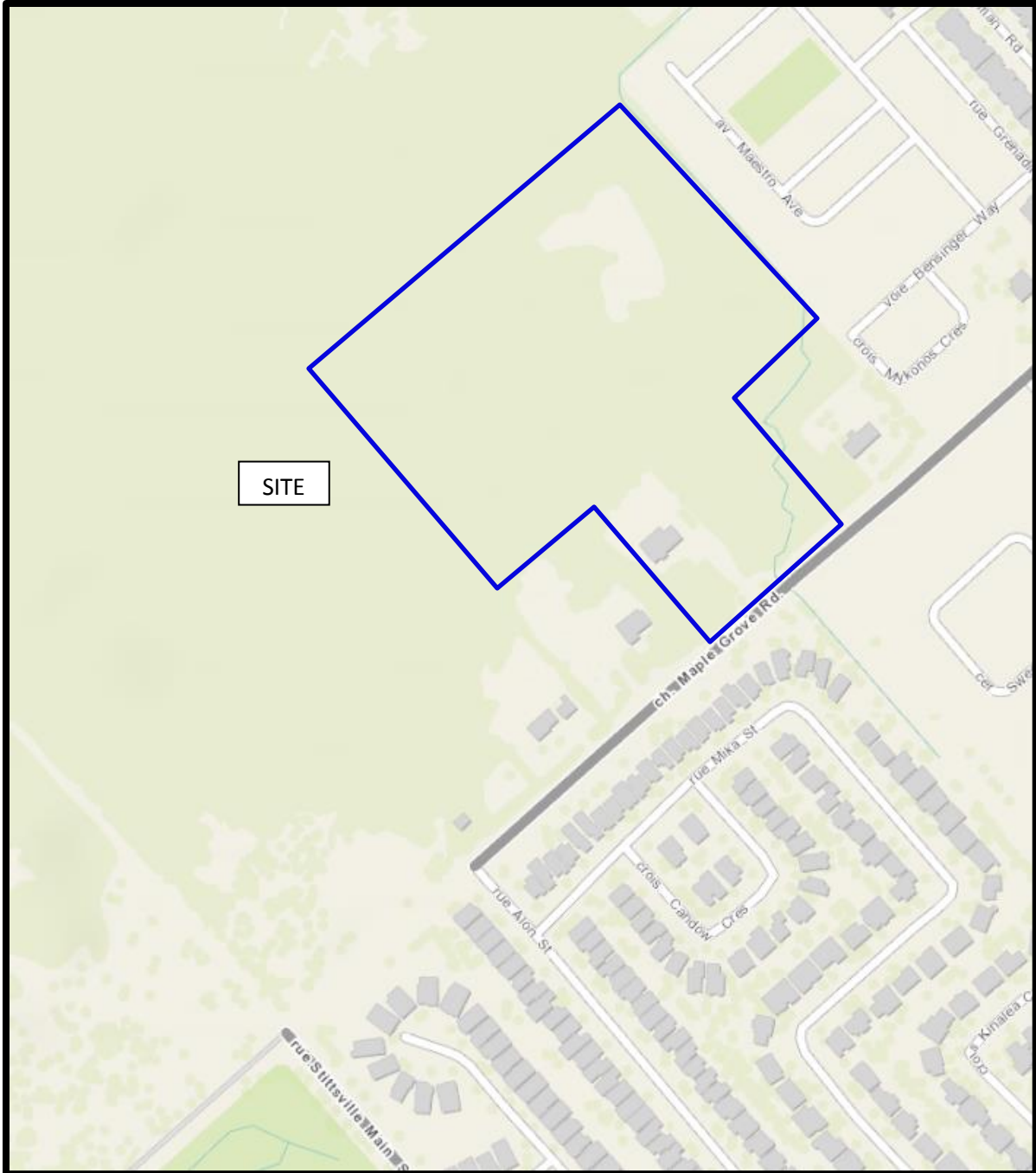


FIGURE 1
KEY PLAN

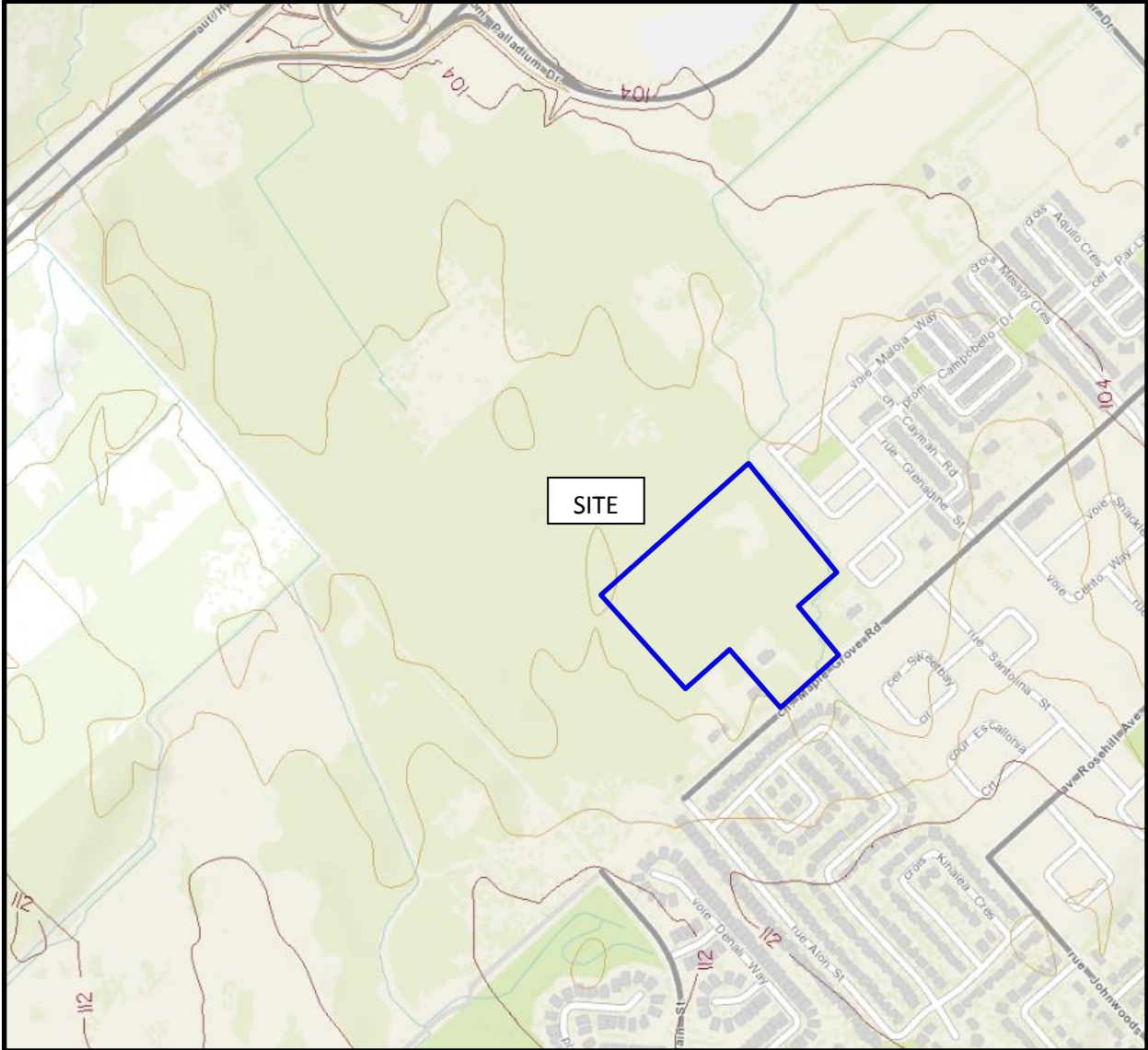
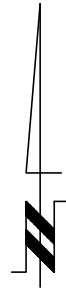


FIGURE 2
TOPOGRAPHIC MAP



195 HUNTMAR DRIVE
UNDEVELOPED

1919 MAPLE GROVE ROAD
FORESTED

1895 MAPLE GROVE ROAD
RESIDENTIAL

APPROXIMATE LOCATION
OF SEPTIC FIELD

2-STOREY
RESIDENTIAL
DWELLING

LANDSCAPED

GRAVEL DRIVEWAY

TREED

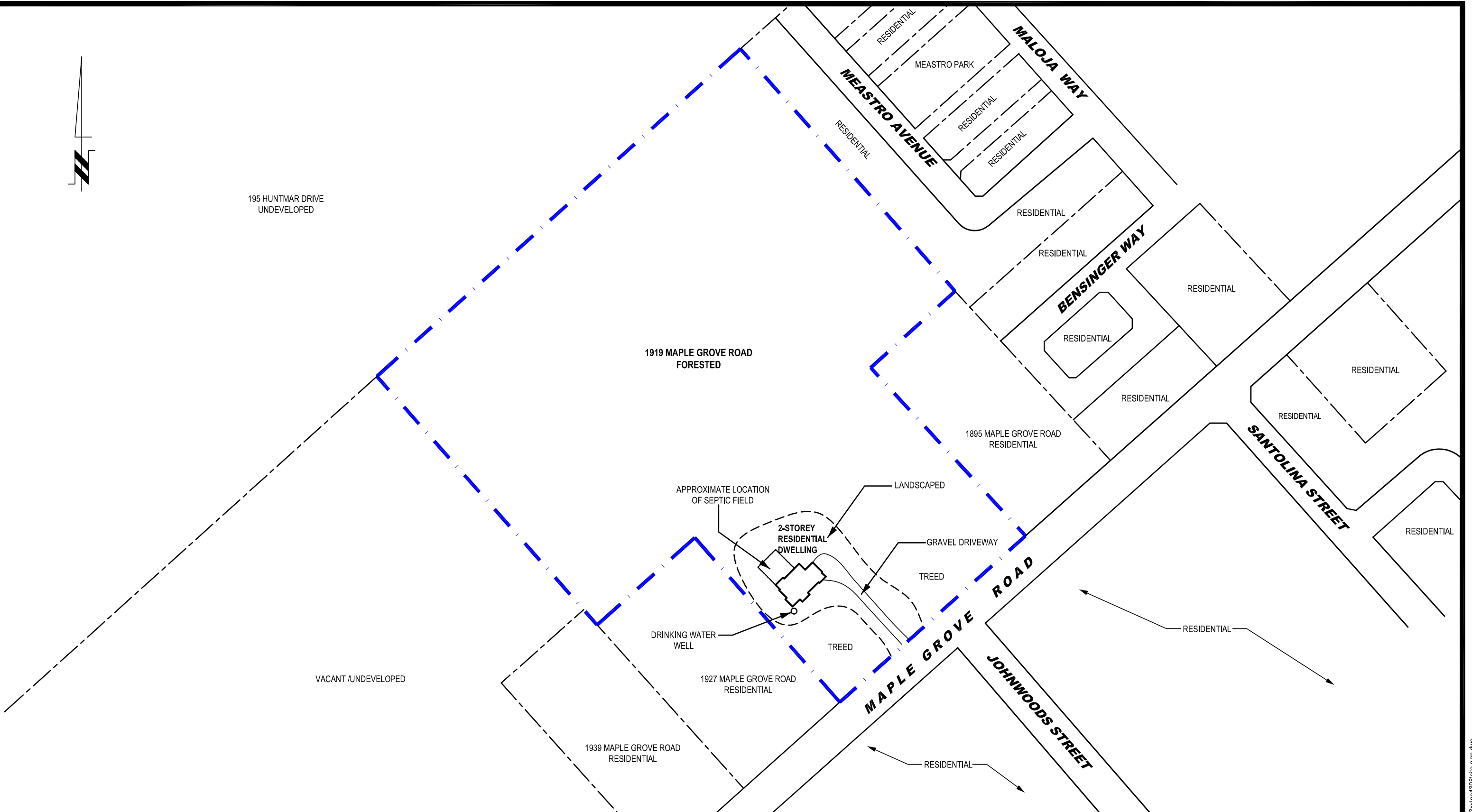
DRINKING WATER
WELL

TREED

1927 MAPLE GROVE ROAD
RESIDENTIAL

1939 MAPLE GROVE ROAD
RESIDENTIAL

VACANT /UNDEVELOPED



patersongroup
consulting engineers

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

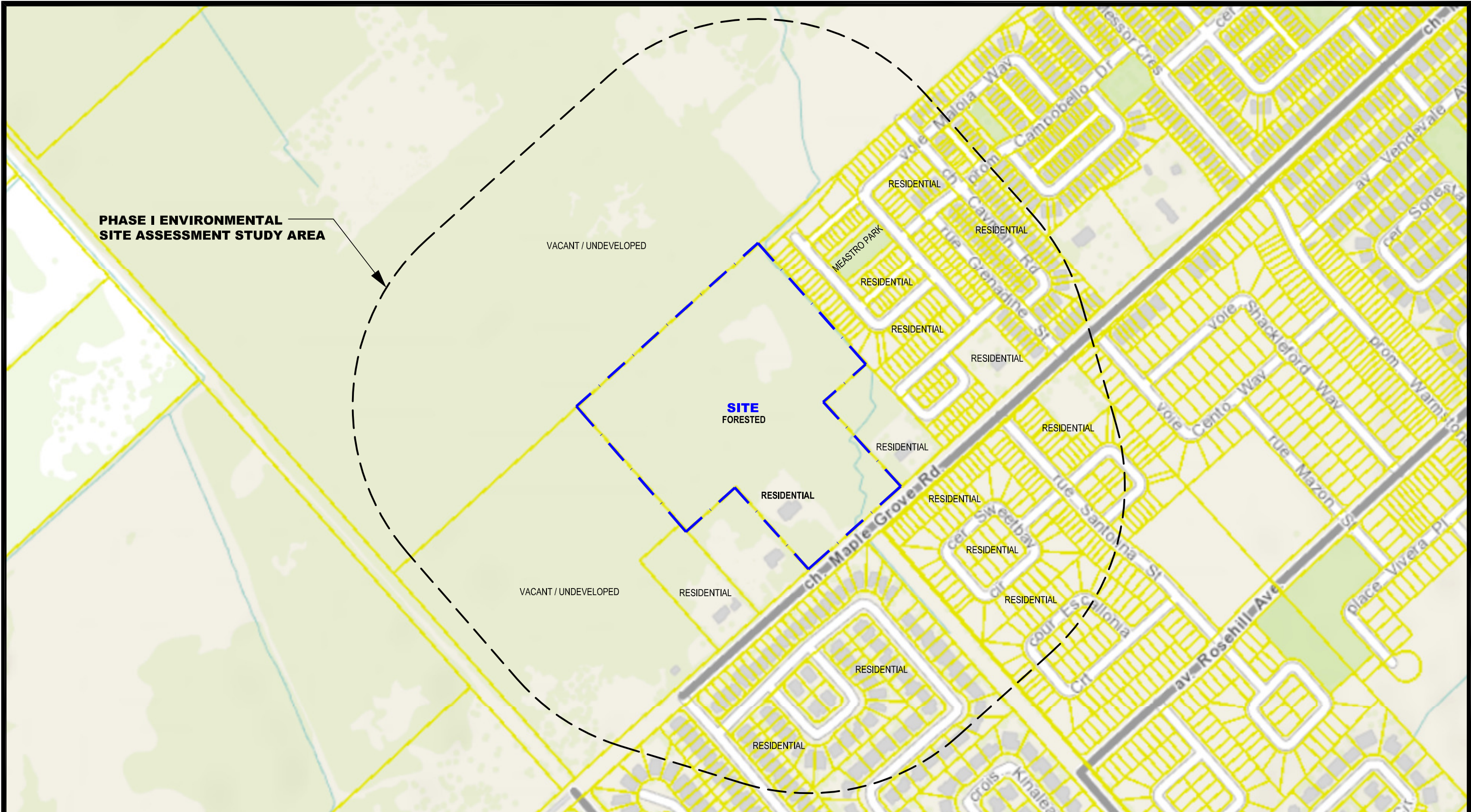
NO.	REVISIONS	DATE	INITIAL
0			

FORMASIAN DEVELOPMENT CORPORATION
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
1919 MAPLE GROVE ROAD

OTTAWA, ONTARIO

SITE PLAN

Scale:	1:2000	Date:	05/2018
Drawn by:	RCG	Report No.:	PE4308-1
Checked by:	MM	Dwg. No.:	PE4308-1
Approved by:	MSD	Revision No.:	0



**PHASE I ENVIRONMENTAL
SITE ASSESSMENT STUDY AREA**

VACANT / UNDEVELOPED

**SITE
FORESTED**

VACANT / UNDEVELOPED

patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL
0			

FORMASIAN DEVELOPMENT CORPORATION
PHASE I - ENVIRONMENTAL SITE ASSESSMENT
 1919 MAPLE GROVE ROAD
 OTTAWA, ONTARIO
SURROUNDING LAND USE PLAN

Scale:	1:4000	Date:	05/2018
Drawn by:	RCG	Report No.:	PE4308-1
Checked by:	MM	Dwg. No.:	PE4308-2
Approved by:	MSD	Revision No.:	0

APPENDIX 1

PLAN OF DEVELOPMENT

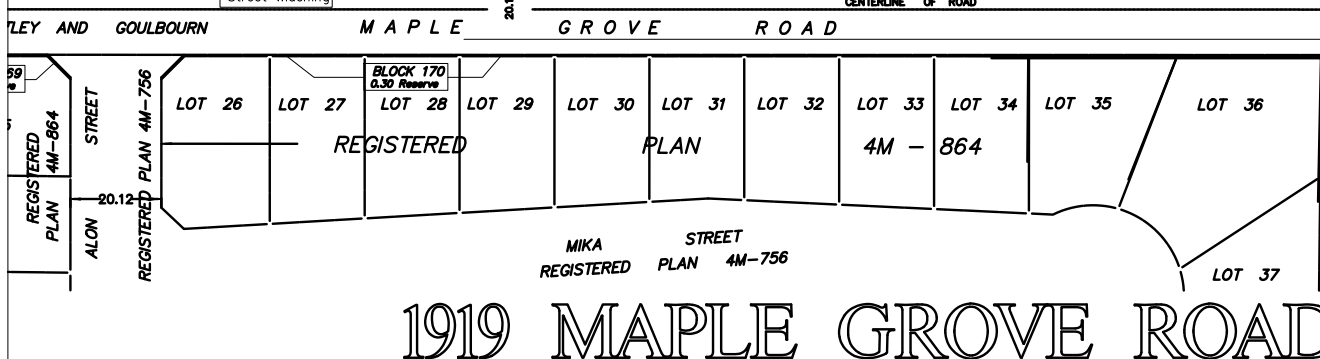
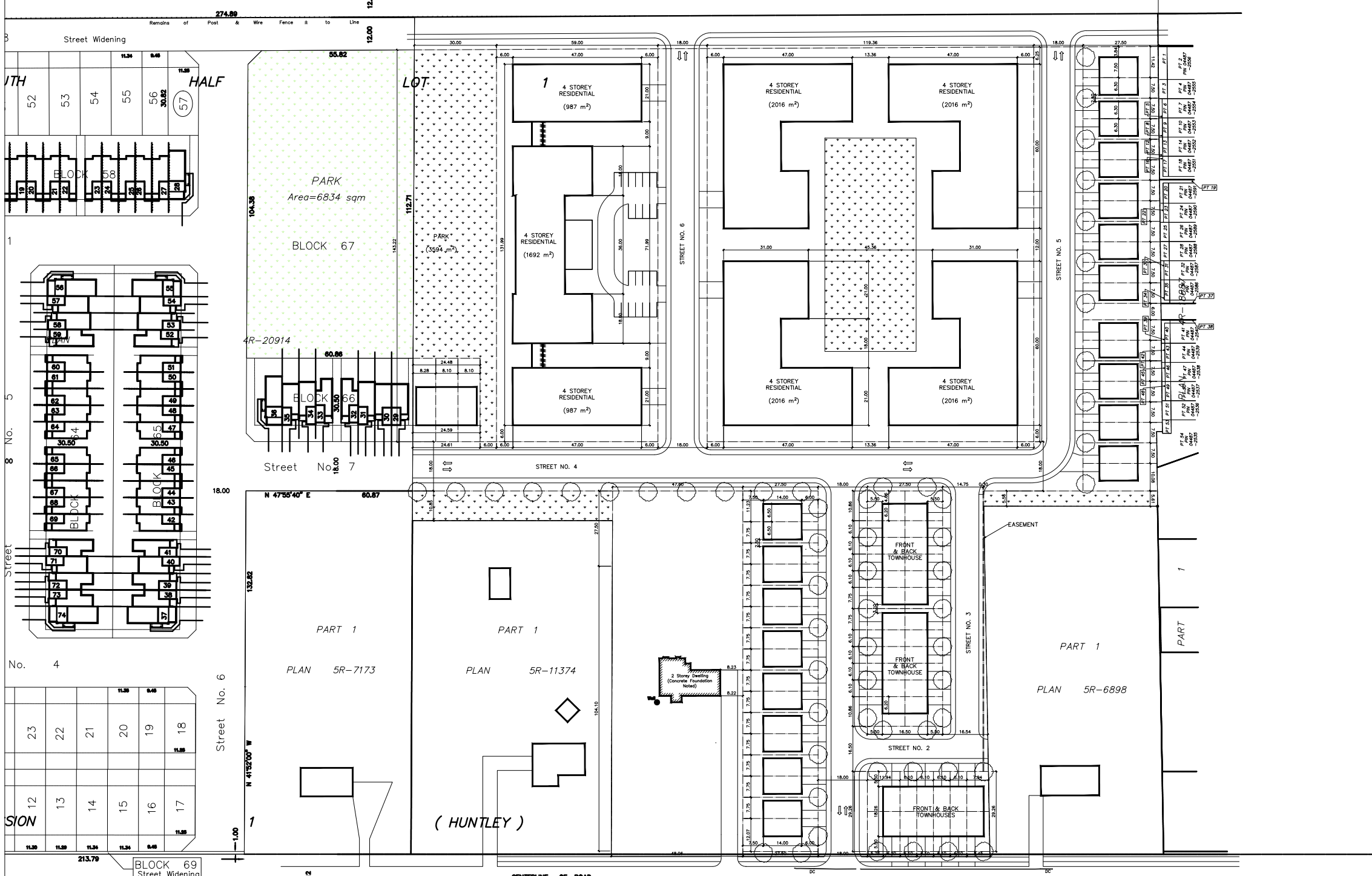
AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

NOT FOR CONSTRUCTION

TO BE DEVELOPED BY ADJOINING DEVELOPER

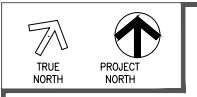
Line Between The North And South Halves Lot 1



1919 MAPLE GROVE ROAD

DEVELOPMENT CONCEPT PLAN

0 10 20 30 40 50 100 metres
 SCALE : 1 : 750
 DATE : 2016-02-20



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KEY PLAN:

110 ARCHITECTS
 ARCHITECTURE + URBAN DESIGN
 INC.
 110 ARTHUR STREET, OTTAWA, ONTARIO, CANADA, K1R 7C2
 TEL: 613-799-9117 E-mail: info@110architects.com

SEAL AND SIGNATURE:

CLIENT:
 FORMANIAN DEVELOPMENT CORP.
 1919 MAPLE GROVE ROAD
 STITTSVILLE, ONTARIO K2S 1B9
 TEL: (613) 836-6633
 E-MAIL: vincello@forman.com.ca

PROJECT:
**1919 MAPLE GROVE
 MASTER PLAN**

DATE	ISSUED	REV.	FOR SUBMISSION	BY
2018-03-15	12	MINOR REVISIONS		
2018-03-06	11	MINOR REVISIONS		
2018-02-21	10	DRAFT FOR STUDIES		
2017-10-24	9	OPT-3 (CITY COMMENTS)		
2017-09-25	8	OPT-3 (CITY COMMENTS)		
2017-07-03	7	STREETS COMMENTS		
2017-06-27	6	EDITS & REDRAW		
2017-06-05	5	CHANGES - SURVEY		
2016-10-28	4	ADJUSTMENTS		
2016-10-23	3	DESIGN CHANGE		
2016-09-24	2	DESIGN CHANGE		
2016-09-19	1			
2016-09-18	0			

TITLE: Site Plan

SCALE: AS NOTED
 PROJECT No.: 010
 DATE: SEPT 18, 2016
 APPROVED BY: JG
 DRAWN BY: TW / EL / JG

A-001

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION



AERIAL PHOTOGRAPH
1945



AERIAL PHOTOGRAPH
1959



AERIAL PHOTOGRAPH
1971



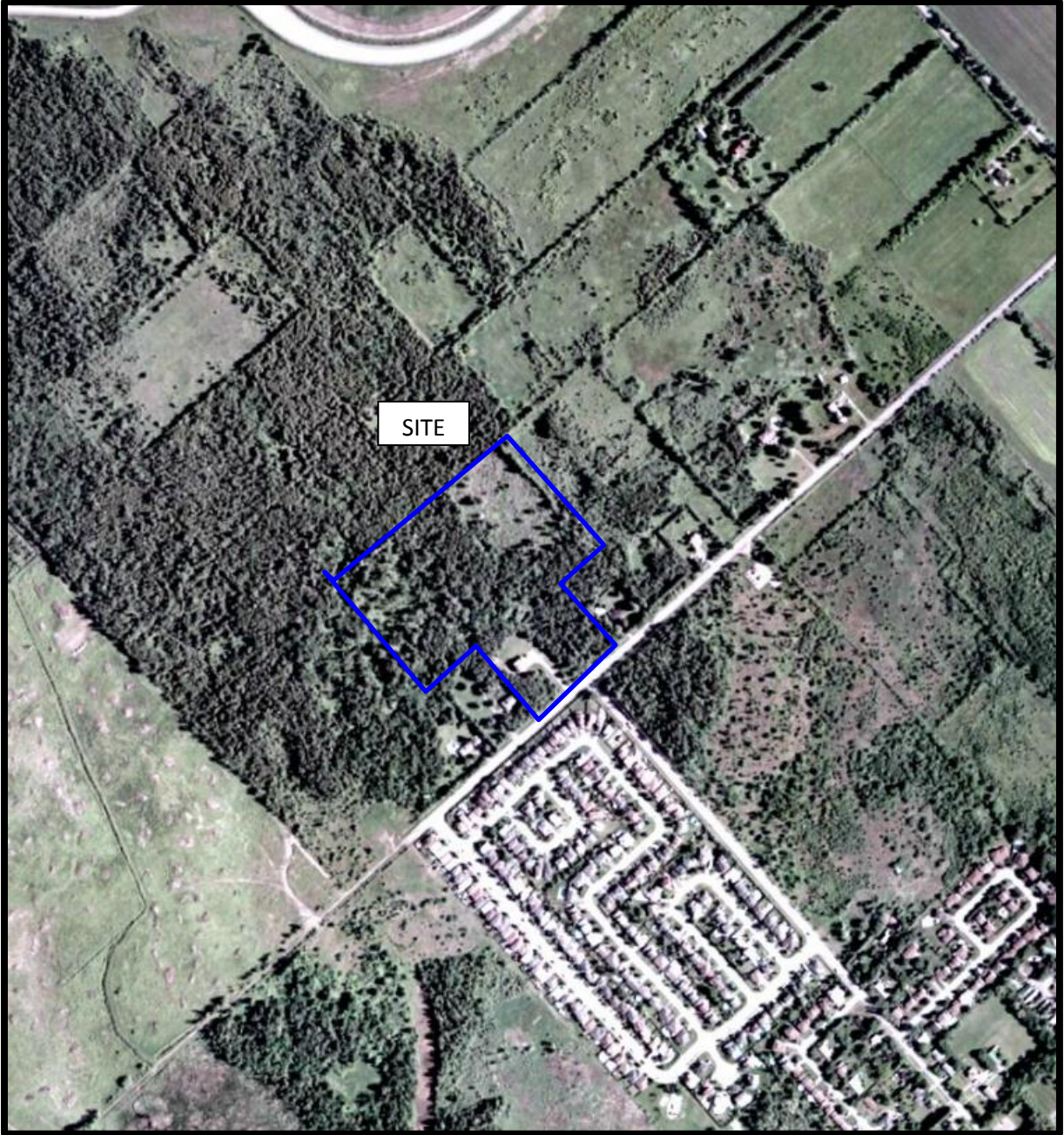
AERIAL PHOTOGRAPH
1976



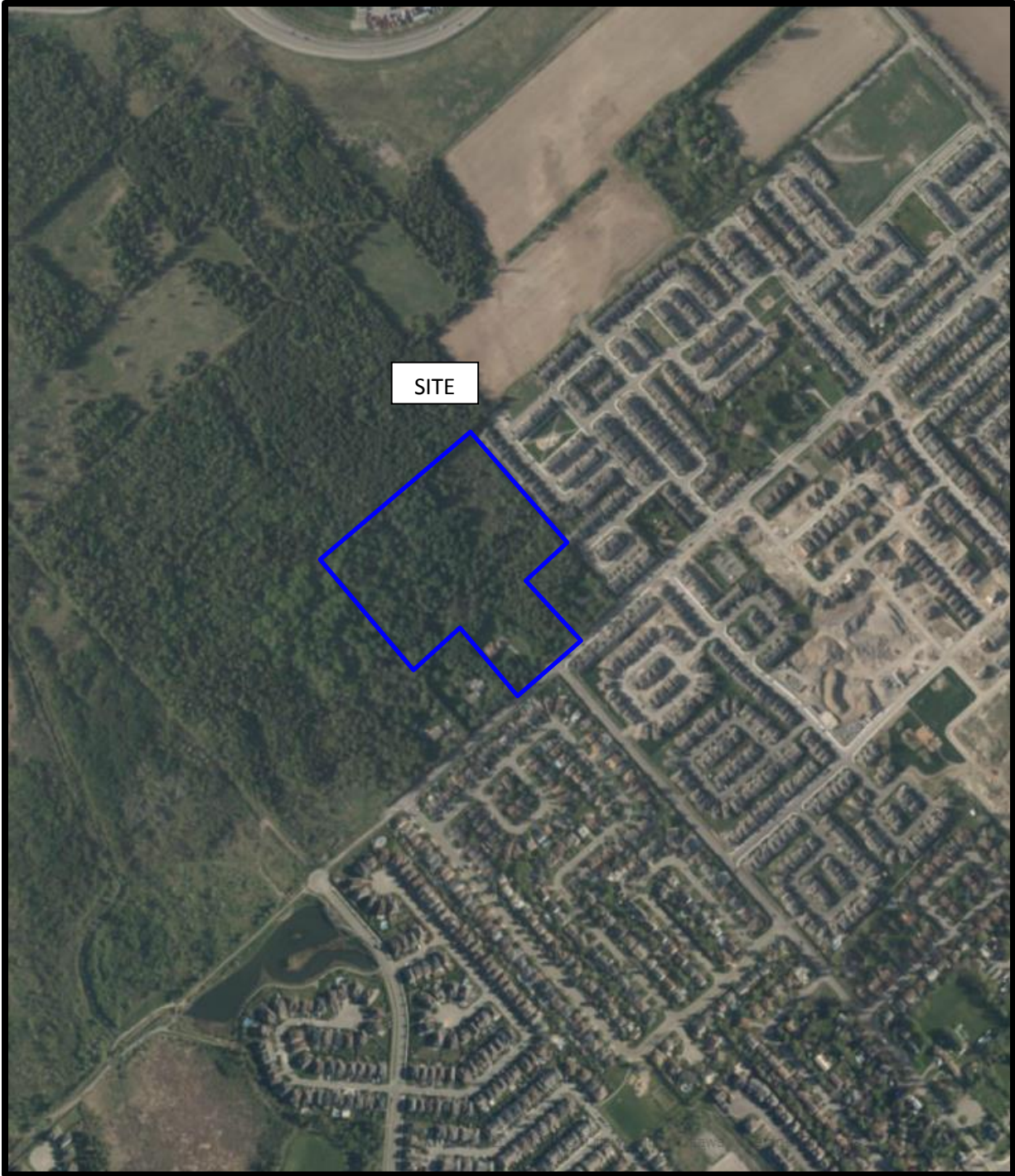
AERIAL PHOTOGRAPH
1987



AERIAL PHOTOGRAPH
1999



AERIAL PHOTOGRAPH
2005



AERIAL PHOTOGRAPH
2017

Site Photographs

PE4308

1919 Maple Grove Road, Ottawa, ON

April 26, 2018



Photograph 1: View of the southern portion of the site, facing northeast. Photograph illustrates a two-storey residential dwelling.



Photograph 2: View from the southwestern portion of the subject site, facing north. Photograph illustrates a landscaped area adjacent to the residential dwelling.

Site Photographs

PE4308

1919 Maple Grove Road, Ottawa, ON

April 26, 2018



Photograph 3: View from southern portion of the subject site, facing north. Photograph illustrates a gravel driveway, a treed area and a landscaped area.



Photograph 4: View from the northern portion of the subject site, facing northeast. Photograph illustrates a forested area in the vicinity of the proposed residential development.

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

TSSA CORRESPONDENCE

MOECC WELL RECORDS

Ministry of the Environment
and Climate Change

Freedom of Information and
Protection of Privacy Office

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

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

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

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



April 23, 2018

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-2018-02676, Your Reference PE4308

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: 1919 Maple Grove Road, 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 Sharon Menzies at Sharon.Menzies@ontario.ca.

Yours truly,

Janet Dadufalza
FOI Manager

Marek Moroz

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: April-23-18 9:52 AM
To: Marek Moroz
Subject: RE: TSSA Records Search, PE4308 - Ottawa, ON

Good morning Marek,

Thank you for your request for confirmation of public information.

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

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

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

Kind regards,

Yalini

From: Marek Moroz <MMoroz@Patersongroup.ca>
Sent: April 20, 2018 1:30 PM
To: Public Information Services <publicinformationsservices@tssa.org>
Subject: TSSA Records Search, PE4308 - Ottawa, ON

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 (Stittsville), Ontario:

1849, 1888, 1895, 1919, 1939, 1981 Maple Grove Road;

195 Huntmar;

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: MMoroz@patersongroup.ca

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



Ontario

WATER WELL RECORD

318/58

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

MUNICIPALITY: 15005 CON. CON LOT: 101
11 | 1513367 |

COUNTY OR DISTRICT <u>Essex</u>	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE <u>Huntley</u>	CON. BLOCK, TRACT, SURVEY, ETC. <u>1</u>	LOT <u>101</u>
DATE COMPLETED DAY <u>11</u> MO. <u>06</u> YR. <u>73</u>			48-53
RC. ELEVATION <u>4732</u>		RC. BASIN CODE <u>4 26</u>	IV <u>44</u>

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Brown	Sand Clay			0'	9'
Dark	Limestone			9'	105'
Grey	Limestone			105'	125'
Dark	Limestone			125'	223'

31 000900528 0105 1/5 0125 1/5 0123 1/5

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0085	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
0220	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
	20-23 1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
	25-28 1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
	30-33 1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
06	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE	188	0	0222
5 7/8	4 <input checked="" type="checkbox"/> OPEN HOLE		22	0225
06	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input checked="" type="checkbox"/> OPEN HOLE		22	0223

SCREEN

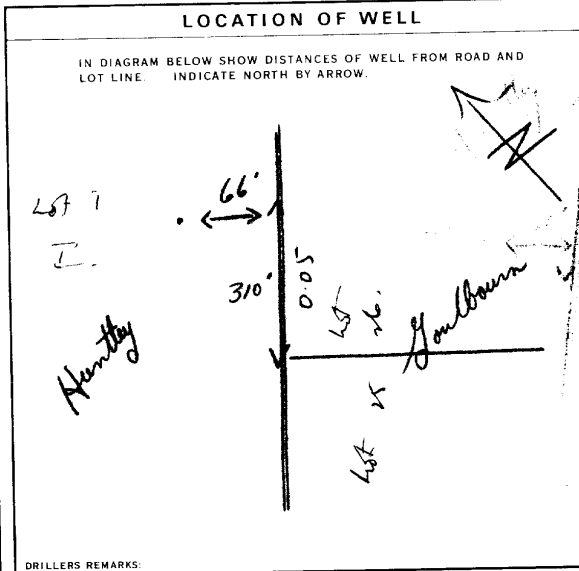
SIZES (S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN	
	INCHES	FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE	CEMENT GROUP LEAD PACKER, ETC.
10-13	14-17	
18-21	22-25	
26-29	30-33	80

71 PUMPING TEST

PUMPING TEST METHOD 1 <input checked="" type="checkbox"/> PUMP 2 <input type="checkbox"/> BAILER	PUMPING RATE <u>0006</u> GPM	DURATION OF PUMPING <u>02</u> HOURS <u>00</u> MINS
STATIC LEVEL <u>030</u> FEET	WATER LEVEL END OF PUMPING <u>090</u> FEET	WATER LEVELS DURING PUMPING 15 MINUTES <u>090</u> FEET 30 MINUTES <u>090</u> FEET 45 MINUTES <u>090</u> FEET 60 MINUTES <u>090</u> FEET
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST <u>0005</u> GPM
RECOMMENDED PUMP TYPE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP	RECOMMENDED PUMP SETTING <u>110</u> FEET	RECOMMENDED PUMPING RATE <u>0005</u> GPM



54 FINAL STATUS OF WELL

1 <input checked="" type="checkbox"/> WATER SUPPLY	5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY
2 <input type="checkbox"/> OBSERVATION WELL	6 <input type="checkbox"/> ABANDONED, POOR QUALITY
3 <input type="checkbox"/> TEST HOLE	7 <input type="checkbox"/> UNFINISHED
4 <input type="checkbox"/> RECHARGE WELL	

55-56 WATER USE

1 <input checked="" type="checkbox"/> DOMESTIC	5 <input type="checkbox"/> COMMERCIAL
2 <input type="checkbox"/> STOCK	6 <input type="checkbox"/> MUNICIPAL
3 <input type="checkbox"/> IRRIGATION	7 <input type="checkbox"/> PUBLIC SUPPLY
4 <input type="checkbox"/> INDUSTRIAL	8 <input type="checkbox"/> COOLING OR AIR CONDITIONING
<input type="checkbox"/> OTHER	9 <input type="checkbox"/> NOT USED

57 METHOD OF DRILLING

1 <input type="checkbox"/> CABLE TOOL	6 <input type="checkbox"/> BORING
2 <input type="checkbox"/> ROTARY (CONVENTIONAL)	7 <input type="checkbox"/> DIAMOND
3 <input type="checkbox"/> ROTARY (REVERSE)	8 <input type="checkbox"/> JETTING
4 <input type="checkbox"/> ROTARY (AIR)	9 <input type="checkbox"/> DRIVING
5 <input checked="" type="checkbox"/> AIR PERCUSSION	

CONTRACTOR

NAME OF WELL CONTRACTOR <u>Capital Water Supply Ltd.</u>	LICENCE NUMBER <u>1558</u>
ADDRESS <u>Box 490, Stittville, Ontario.</u>	
NAME OF DRILLER OR BORER <u>Larry Drynan</u>	LICENCE NUMBER
SIGNATURE OF CONTRACTOR <u>Halter Lawrence</u>	SUBMISSION DATE DAY <u>13</u> NO. <u>6</u> YR. <u>73</u>

OFFICE USE ONLY

DATA SOURCE <u>1</u>	58 CONTRACTOR <u>1558</u>	59-62 DATE RECEIVED <u>130873</u>	63-68
DATE OF INSPECTION	INSPECTOR		
REMARKS: <u>P-R</u>			



WATER WELL RECORD

31651

Water management in Ontario 1. PRINT ONLY IN SPACES PROVIDED
2. CHECK CORRECT BOX WHERE APPLICABLE

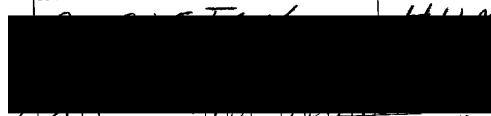
11 1511241 15005 30N 91

10 14 15 22 23 24

CON. BLOCK, TRACT, SURVEY, ETC. I LOT 25-27 001

COUNTY OR DISTRICT [REDACTED] TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE HUNTLEY DATE COMPLETED 48-53 04 MO 06 YR 71

RC. ELEVATION RC. BASIN CODE
14 130 0350 205



GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
	TOP SOIL	CLAY		0	8
GREY	LIMESTONE		HARD	8	88

31 0008 0005 0088215

32

41 WATER RECORD

WATER POUND-KY - FEET	KIND OF WATER
10-13	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
15-18	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
30-33	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
10-11	1 <input checked="" type="checkbox"/> STEEL		0020
12	2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE	.188	0
13-16	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE		20-23
17-18	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE		24-25
24-25	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE		26

SCREEN

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

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET	MATERIAL AND TYPE	(CEMENT GRÖ) LEAD PACKER, E.
10-13	8	CEMENT GROUT
14-17		
18-21		
22-25		
26-29		
30-33		
80		

71 PUMPING TEST METHOD

10 PUMPING RATE 11-14 DURATION OF PUMPING

1 PUMP 2 BAILER 0007 GPM. 01 HOURS 00 MINS.

15-16 1 PUMPING
2 RECOVERY

17-18

19-21 008 FEET 22-24 045 FEET 25-28 022 FEET 29-31 011 FEET 32-34 009 FEET 35-37

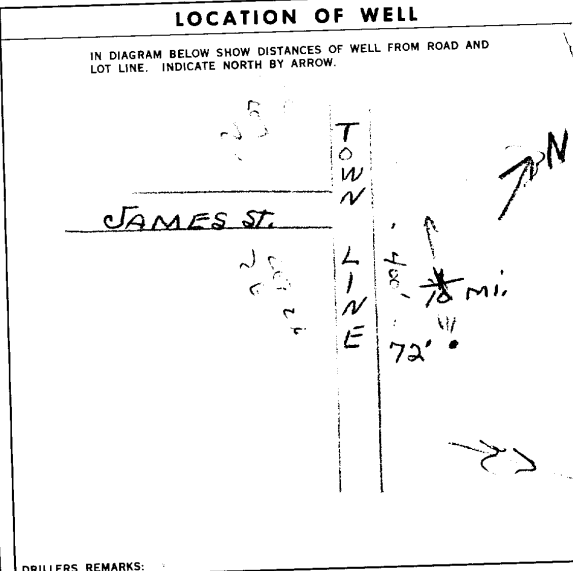
38-41 PUMP INTAKE SET AT WATER AT END OF TEST

IF FLOWING, GIVE RATE GPM. 1 CLEAR 2 CLOUDY

RECOMMENDED PUMP TYPE 43-45 RECOMMENDED PUMP SETTING 46-49 RECOMMENDED PUMPING RATE

SHALLOW DEEP 065 FEET 0005 GPM.

50-53 000.2 GPM./FT. SPECIFIC CAPACITY



54 FINAL STATUS OF WELL

1 WATER SUPPLY 5 ABANDONED, INSUFFICIENT SUPPLY
2 OBSERVATION WELL 6 ABANDONED, POOR QUALITY
3 TEST HOLE 7 UNFINISHED
4 RECHARGE WELL

55-56 WATER USE 01

1 DOMESTIC 5 COMMERCIAL
2 STOCK 6 MUNICIPAL
3 IRRIGATION 7 PUBLIC SUPPLY
4 INDUSTRIAL 8 COOLING OR AIR CONDITIONING
 OTHER 9 NOT USED

57 METHOD OF DRILLING

1 CABLE TOOL 6 BORING
2 ROTARY (CONVENTIONAL) 7 DIAMOND
3 ROTARY (REVERSE) 8 JETTING
4 ROTARY (AIR) 9 DRIVING
5 AIR PERCUSSION

CONTRACTOR

NAME OF WELL CONTRACTOR LTD LICENCE NUMBER
MCLEAN WATER SUPPLY 3504

ADDRESS
1532 RAVEN AVE, OTTAWA 3.

NAME OF DRILLER OR BORER LICENCE NUMBER
A. DUMAIS H.F.A.

SIGNATURE OF CONTRACTOR SUBMISSION DATE
DAY 7 MO 6 YR 71

OFFICE USE ONLY

DATA SOURCE 1 58 CONTRACTOR 3504 59-62 DATE RECEIVED 070771 63-68

DATE OF INSPECTION INSPECTOR

REMARKS: CS8.38

PK
WI

Instructions for Completing Form

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

Well Owner's Information and Location of Well Information

Ministry Use Only
 MUN / 15005 CON C001 LOT 01

Ottawa Carleton West Carleton
 RR#/Street Number/Name 1919 maple grove Rd. City/Town/Village Stittsville
 GPS Reading NAD 83 Zone 18 Easting 426984 Northing 5014858 Unit Make/Model magellan Mode of Operation: Undifferentiated Averaged
 Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
	sand + gravel			0	4.6
	grey limestone			4.6	39.6

Hole Diameter

Depth Metres	Diameter Centimetres
From To	
0 39.6	15.25

Construction Record

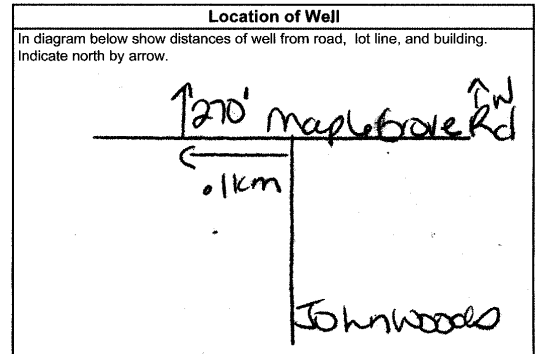
Inside diam centimetres	Material	Wall thickness centimetres	Depth From Metres	To Metres
15.88	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	.48	0	6.7
Screen				
Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.		
No Casing or Screen				
<input checked="" type="checkbox"/> Open hole				

Test of Well Yield

Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
Subpump				
Pump intake set at - (metres)		Static Level 4.96		12.70
Pumping rate (litres/min)	1	7.58	1	8.95
Duration of pumping	2	8.88	2	7.41
Final water level end of pumping (metres)	3	9.70	3	7.02
Recommended pump type	4	10.26	4	6.72
Recommended pump depth (metres)	5	10.65	5	6.49
Recommended pump rate (litres/min)	10	11.62	10	6.02
If flowing give rate - (litres/min)	15	11.80	15	5.80
	20	12.04	20	5.47
	25	12.21	25	5.45
	30	12.32	30	5.42
	40	12.46	40	5.40
	50	12.60	50	5.37
	60	12.70	60	5.32

Plugging and Sealing Record

Depth set at - Metres	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
From To		
6.1 0	Cement Slurry	.4767



Method of Construction

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

Water Use

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

Final Status of Well

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

Audit No. **Z 14530** Date Well Completed **2004 06 11**

Was the well owner's information package delivered? Yes No Date Delivered **2004 06 14**

Well Contractor/Technician Information

Name of Well Contractor **A. Koch Drilling Ltd** Well Contractor's Licence No. **1119**
 Business Address (street name, number, city, etc.) **2641 Richmond, Ont**
 Name of Well Technician (last name, first name) **Puyell Shannon** Well Technician's Licence No. **Ta122**
 Signature of Technician/Contractor **[Signature]** Date Submitted **2004 06 28**

Ministry Use Only

Date Source Contractor **1119**

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

Remarks Well Record Number **1534762**

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

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, B.Sc., 2012
Specialization in Geology with Minor in Spanish

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

Summer of 2012

Alder Resources Ltd.

Junior Mining Company
Exploration Geologist

SELECT LIST OF PROJECTS

Contaminated Soil and Groundwater Sampling – Various Sites – Eastern Ontario
Surcharge and Settlement Surveys – Ottawa, ON.
Remediation Programs – Various Sites – 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