Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

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Phase I-Environmental Site Assessment

1015 March Road
Ottawa, Ontario

Prepared For

Kanata United

December 7, 2020

Report: PE4677-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Kanata United. to conduct a Phase I-Environmental Site Assessment (ESA) for the property located at 1015 March Road, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the subject site and the Phase I Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property.

According to the historical research, the Phase I Property was originally developed circa 1977 with the existing residential building. The property has always been used as agricultural land as well as a residence. Historical land use of the neighbouring properties included residential and agricultural areas with no potentially contaminating activities (PCAs) being identified within the study area.

Following the historical research, a site visit was conducted. Currently, the subject property is occupied by an inhabited, bungalow with a basement. Neighbouring land use in the Phase I Study Area consists of residential dwellings and agricultural lands and no PCAs were noted with the current use of the subject site or the surrounding properties.

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

Recommendations

Based on the age of the building, potentially asbestos containing materials (ACMs) that may be present in the subject building include dry wall joint compound, ceiling stipple and vinyl tiles. Based on date of construction, lead-based paints (LBPs) may be present within building. All building materials and painted surfaces were observed to be in good condition at the time of the site visit.

It is our understanding that the subject building will continue to be used as a residential dwelling until the site is redeveloped. Prior to any renovation or demolition activities, a designated substance survey (DSS) must be conducted for the existing structures, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety Act.

1.0 INTRODUCTION

At the request of Kanata United., Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) for the property located at 1015 March Road, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject properties.

Paterson was engaged to conduct this Phase I-ESA by Mr. Michael Wong from Kanata United. The head office is located at 856 Melwood Avenue, Ottawa, Ontario. Mr. Wong can be reached by telephone at (613) 294-5960.

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 (O.Reg.) 153/04, as amended, under the Environmental Protection Act, and 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:	1015 March Road, Ottawa, Ontario
Legal Description:	Part of Lot 13, Concession 3, Geographic Township of March, City of Ottawa
Location:	The site is located on the west side of March Road, approximately 750 m north of Old Carp Road, in the City of Ottawa, Ontario. Refer to Figure 1 - Key Plan in the Figures section following the text.
PIN:	04526-1625
Latitude and Longitude:	45° 21’ 41.12" N, 75° 56' 50.42" W

Site Description:

Configuration:	Rectangular
Area:	4.9 hectares (approximately)
Zoning:	RC – Residential Zone RU – Rural Zone
Current Use:	The subject site is occupied by a residential dwelling with an agricultural field.
Services:	The subject site is serviced by a private well and septic system.

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 properties, and if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of O.Reg. 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 Study Area for this assignment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

First Developed Use Determination

The subject site was developed with a residential dwelling in 1977.

Fire Insurance Plans

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

City of Ottawa Street Directories

City directories were reviewed in approximately ten (10) year intervals back to 2000 as no directories were available prior to amalgamation. The subject site was first listed in the 2000 directories as a residential property and has remained as such to the present day.

Neighbouring properties in the Phase I study area were listed as residential dwellings. There were no listings associated with potentially contaminating activities.

Chain of Title

Paterson did not request a Chain of Title for the subject site as it was determined that sufficient information was gathered from other sources, such as personal interviews, aerial photograph and city directories.

Plan of Survey

Paterson was provided with a Survey Plan dated October 28, 2008, prepared by Annis O'Sullivan Vollebekk Ltd. The plan depicts the subject site in its current configuration. Appendix 1 contains a copy of the Survey Plan.

Previous Engineering Reports

Previous engineering reports have been completed by others in the general vicinity of the subject site. The reports included a geotechnical and hydrogeological report that were completed by Kollaard Associates on November 17, 2006 and April 9, 2009 A review of these reports did not identify any additional environmental concerns regarding the current subject property

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on July 9, 2019. No listings for the subject site or properties within the study area were identified in the NPRI database.

PCB Inventory

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

Ministry of the Environment, Conservation and Parks (MECP) Submissions

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the property. The response from the MECP FOI office indicated that there were no documented records for the Phase I Property.

MECP Instruments

A request was submitted to the MECP Freedom of Information (FOI) office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site. The response from the MECP FOI office indicated that there were no documented records for the Phase I Property.

MECP Incident Reports

A request was submitted to the MECP FOI office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP for the site or adjacent properties.

The response from the MECP FOI office indicated that there were no documented records for the Phase I Property or adjacent lands.

MECP Waste Management Records

A request was submitted to the MECP FOI office for information with respect to waste management records. The response from the MECP FOI office indicated that there were no documented records for the Phase I Property.

MECP Brownfields Environmental Site Registry

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

MECP 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. There are no former waste disposal sites located within 250 m of the Phase I Study Area.

MECP 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 Municipal Coal Gasification Plant Sites are located within the Phase I Study Area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the website of the Ontario Ministry of Natural Resources (MNR) on July 9, 2019. The search did not reveal any 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 July 2, 2019, to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. No records are listed in the TSSA registry for the subject site or the adjacent properties. A copy of the TSSA correspondence is included in Appendix 2.

City of Ottawa Landfill Document

The document entitled "Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa", was reviewed. There were no former landfill sites identified within the Phase 1 Study Area.

City of Ottawa Historical Land Use Inventory (HLUI)

A search of the City of Ottawa's Historical Land Use Inventory (HLUI) database was conducted as part of this assessment. The search indicated that there were no activities associated with the subject site or with properties situated 250m from the subject property. A copy of the HLUI request form is provided in Appendix 2.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. Based on the review, the following observations have been made:

1976 The subject site is vacant agricultural land with no obvious buildings. Neighbouring lands to the north, north west and south east of the site consist of some residential dwellings. Much of the surrounding area is occupied by vacant agricultural fields and treed lands.

1991 The subject site now has a residential dwelling located in the southeast corner of the property. The surrounding lands are primarily comprised of agricultural fields with some areas being developed with residential dwellings.

2008 No significant changes are apparent on the subject site or neighbouring lands aside from the development of a large subdivision to the southeast of the subject site.

2017 The subject site and surrounding lands appear unchanged from the previous photograph.

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

Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the regional topography in the general area of the site slopes down in a north-easterly direction towards the Ottawa River. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

The Ontario Geological Survey publication 'The Physiography of Southern Ontario, Third Edition' was reviewed as a part of this assessment. According to the publication, the site is situated within the Ottawa Clay Plain physiographic region.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area consists of interbedded sandstone dolomite of the March Formation. The surficial geology on the northern and southern portion of the site consist of offshore marine sediments (erosion terraces) and exposed bedrock, respectively, with a drift thickness ranging from 0 to 3 m.

Water Well Records

A well record search was conducted on July 9, 2019 for all drilled wells within 250 m of the subject site. The search returned twenty-three (23) well records: twenty-one (21) domestic wells and two (2) abandoned wells. The abandoned well records from 1992 and 2006 were identified more than 150 m northwest of the subject site and are not considered to pose a concern to the subject site. The domestic wells were drilled between 1957 to 2013 to depths ranging from 13.7 to 45.7 m below the ground surface.

One domestic well drilled in 1977 was identified on the subject site. The domestic well was drilled to a depth of approximately 35 m below the ground surface. It is expected that this domestic well is still being utilized for potable purposes.

Based on this record, the subsurface profile consists of native clay overlying limestone and sandstone bedrock. The bedrock on-site was intercepted at approximately 3.35 m below the ground surface.

The stratigraphy in the Phase I Study Area generally consists of the same profile as the subject site, however, the overburden thickness varies between 0.9 to 3.66 m below the ground surface. A copy of the well records has been included in Appendix 2.

Areas of Natural Significance and Water Bodies

No areas of natural significance or bodies of water were identified on the Phase I Property. A small creek was identified on the adjacent property to the west, approximately 50 m from the subject site.

5.0 INTERVIEWS

Property Owner Representative

Kanata United, the current property owner was interviewed on July 22, 2019 during the site assessment. Mr. Michael Wong has owned the property since early 2003. The residential dwelling was converted to natural gas in 2009, prior to which it was on oil. Mr. Wong is unaware of any aboveground storage tanks, underground storage tanks or any potential environmental concerns with respect to the subject property.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site visit was conducted on December 4, 2020. Weather conditions were overcast with a temperature of approximately 1°C. Mr. Samuel Berube from the Environmental Department of Paterson conducted the site assessment. In addition to the site, the uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site visit.

6.2 Specific Observations at the Phase I Property

Site Features

The site is occupied by a one storey residential building with basement and a private garage/shed.

The dwelling is situated in the south-eastern corner of the property with grass covered areas at the rear and side of the building. The private garage/shed is located to the south of the residence and is surrounded by overgrown grass and other vegetation. The remainder of the property is a large agricultural field that is currently used by a nearby farmer.

The property is relatively flat and at grade with the neighbouring properties.

No evidence of current or former railway or spur lines was observed on the subject property at the time of the site visit. No areas of staining, stressed vegetation or unidentified substances were observed on-site at this time.

Subsurface Structures and Utilities

Underground utility services on the property include natural gas and the home operates on a private septic system for wastewater. The septic tank is located on the north east side of the property in the front yard of the residential dwelling. There is also a private well being utilized on the subject site which is in the back yard of the residence.

Buildings and Structures

The subject building was built circa 1977. The exterior of the dwelling is finished in tan brick with some areas containing plastic siding and has a sloped shingle style roof.

The private shed/garage was constructed in conjunction with the residential circa 1977.

Interior Assessment

A general description of the interior of the subject building is as follows:

- ❒ Floor finishes consisted of vinyl tiles, hardwood, laminate and concrete (basement);
- ❒ Wall finishes consist of dry wall, wood, ceramic tiles and concrete/stone and mortar (basement);
- ❒ Ceilings are finished with ceiling stipple, decorative plaster, ceiling tiles;
- ❒ Lighting is provided by incandescent fixtures.

Based on the age of the building, potentially asbestos containing materials (ACMs) maybe present in the subject building, including dry wall joint compound, ceiling stipple and vinyl tiles. Lead-based paints may also be present on painted surfaces.

Fuel and Chemical Storage

The building is heated by a natural gas fired furnace, prior to which a fuel oil burning furnace was used. The dwelling converted to natural gas in 2009. The basement concrete floor did not show any signs of staining or unusual odour at the time of the site visit

Wastewater Discharge

The site is not connected to the City of Ottawa sanitary sewer system. Given the rural setting, a private sewage system is being utilized on the Phase I Property. There was a sump pump noted onsite as there had been slight water infiltration into the basement prior to the site visit. No mould or staining was observed as a result of the seepage. Small sporadic pools of water that had no obvious sheen or discoloring were noted in the basement but were not posing any environmental hazards. No potential environmental concerns were identified inside the subject building at the time of the assessment.

Waste Management

Garbage is stored inside of the private garage that is located on the subject site. The waste generated from the site is non-hazardous and collected weekly by the municipality.

Neighbouring Properties

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection.

Land use adjacent to the subject site is as follows:

- ❑ Northeast - March Road, followed by agricultural land;
- ❑ Southwest - Vacant land;
- ❑ Southeast - Agricultural land;
- ❑ Northwest - Residential dwelling, followed by St. Isidore School.

Land use within the Phase I Study Area (250 m radius) is primarily used for residential and agricultural purposes.

No existing off-site PCAs were identified at the time of the site visit. Surrounding land use is shown on Drawing PE4677-2 – Surrounding Land Use Plan.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

Based on the available historical records, the Phase I Property was initially developed with the present-day residential building circa 1977. No potential environmental concerns were noted with the historical or current land use of the subject property.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

No PCAs were identified within the Phase I ESA Study Area and therefore, no APEC's were identified on the subject property.

Contaminants of Potential Concern

No Contaminants of Potential Concern were identified on the subject site.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

Based on the information from the Geological Survey of Canada, the overburden in the area consists of offshore marine sediments (clay) with a drift thickness ranging from 1 to 3 m. Bedrock in the area consists of interbedded sandstone and limestone of the March Formation.

Based on the domestic well record, the site stratigraphy consists of native clay overlying limestone and sandstone bedrock. Bedrock was reached at approximately 3.35 m below the ground surface.

Groundwater flow is interpreted to be in a north-easterly direction towards the Ottawa River.

Existing Buildings and Structures

The site is occupied by a one (1) storey residential building with a single basement level and a private garage/shed.

Water Bodies and Areas of Natural Significance

No areas of natural significance were identified on the Phase I Property or within the Phase I Study Area. One small creek was identified approximately 50 m west of the subject property.

Drinking Water Wells

One domestic well drilled in 1977 was identified on the subject site. The domestic well was drilled to a depth of approximately 35 m below the ground surface. This domestic well is still being utilized for potable purposes.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area consists primarily of residential, and agricultural fields.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

There are no PCAs or APECs on or near the subject site

Contaminants of Potential Concern

There are no contaminants of potential concern.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I- ESA is considered to be sufficient to conclude that there is no APECs on the subject site. A variety of independent sources were consulted as part of this assessment, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSIONS

Assessment

Paterson Group was retained by Kanata United to conduct a Phase I-Environmental Site Assessment (ESA) for the property located at 1015 March Road, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the subject site and the Phase I Study Area and to identify any environmental concerns with the potential to have impacted the Phase I Property.

According to the historical research, the Phase I Property was originally developed circa 1977 with the existing residential dwelling. The property has always been used as agricultural land as well as a residence. Historical land use of the neighbouring properties included agricultural and residential areas with no potentially contaminating activities (PCAs) being identified within the study area.

Following the historical research, a site visit was conducted. Currently, the subject property is occupied by a bungalow with a basement. Neighbouring land use in the Phase I Study Area consists of residential dwellings and agricultural lands with no PCAs noted with the current use of the subject site or the surrounding properties.

Based on the results of the assessment, it is our opinion that a Phase II-Environmental Site Assessment is not required for the subject property

Recommendations

Based on the age of the building, potentially asbestos containing materials (ACMs) that may be present in the subject building include dry wall joint compound, ceiling stipple and vinyl tiles. Based on date of construction, lead-based paints (LBPs) may be present within building. All building materials and painted surfaces were observed to be in good condition at the time of the site visit.

It is our understanding that the subject building will continue to be used as a residential dwelling until the site is redeveloped. Prior to any renovation or demolition activities, a designated substance survey (DSS) must be conducted for the existing structures, in accordance with Ontario Regulation 490/09 under the Occupational Health and Safety

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, 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 Kanata United. Permission and notification from Kanata United and Paterson will be required to release this report to any other party.

Paterson Group Inc.

Samuel Berube, B.Eng.

Mark S. D'Arcy, P.Eng.

Report Distribution:

- ❑ Kanata United
- ❑ Paterson Group

10.0 REFERENCES

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

Provincial Records
MECP Freedom of Information and Privacy Office.
MECP Municipal Coal Gasification Plant Site Inventory, 1991.
MECP document titled “Waste Disposal Site Inventory in Ontario”.
MECP Brownfields Environmental Site Registry.
Office of Technical Standards and Safety Authority, Fuels Safety Branch.
MNR Areas of Natural Significance.
MECP Water Well Record 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.
Intera Technologies Limited Report “Mapping and Assessment of Former Industrial Sites, City of Ottawa”, 1988.
geoOttawa: City of Ottawa electronic mapping website.
City of Ottawa Historical Land Use Inventory (HLUI) Database

Local Information Sources
Personal Interviews.

Public Information Sources
Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4677-1 – SITE PLAN

DRAWING PE4677-2 – SURROUNDING LAND USE PLAN

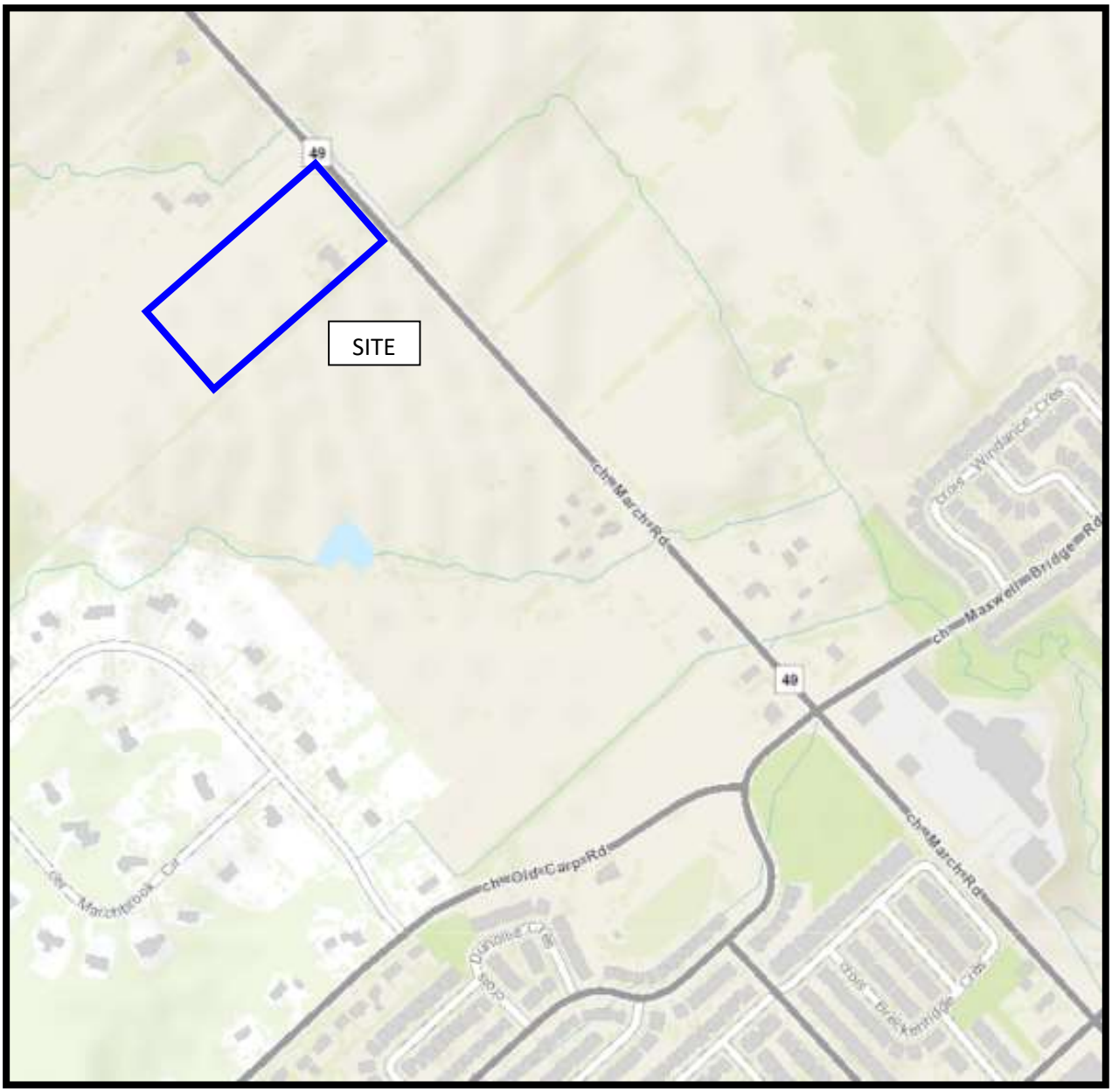
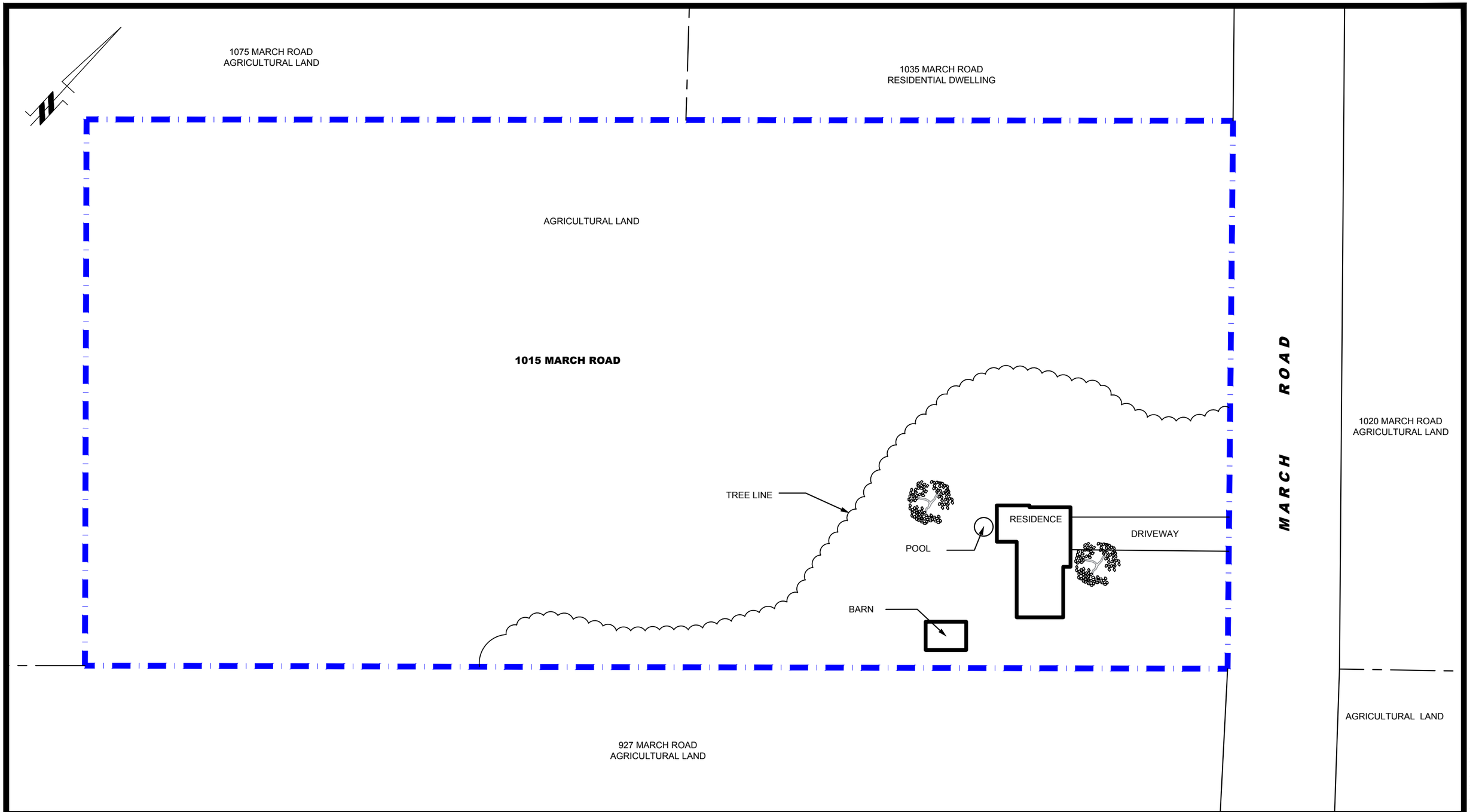


FIGURE 1

KEY PLAN

FIGURE 2

TOPOGRAPHIC MAP



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NO.	REVISIONS	DATE	INITIAL

KANATA UNITED

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
1015 MARCH ROAD

KANATA, **ONTARIO**

Title:

SITE PLAN

Scale: 1:1000	**Date:** 07/2019
Drawn by: YA	**Report No.:** PE4677-1
Checked by: MW	**Dwg. No.:** PE4677-1
Approved by: MSD	**Revision No.:**

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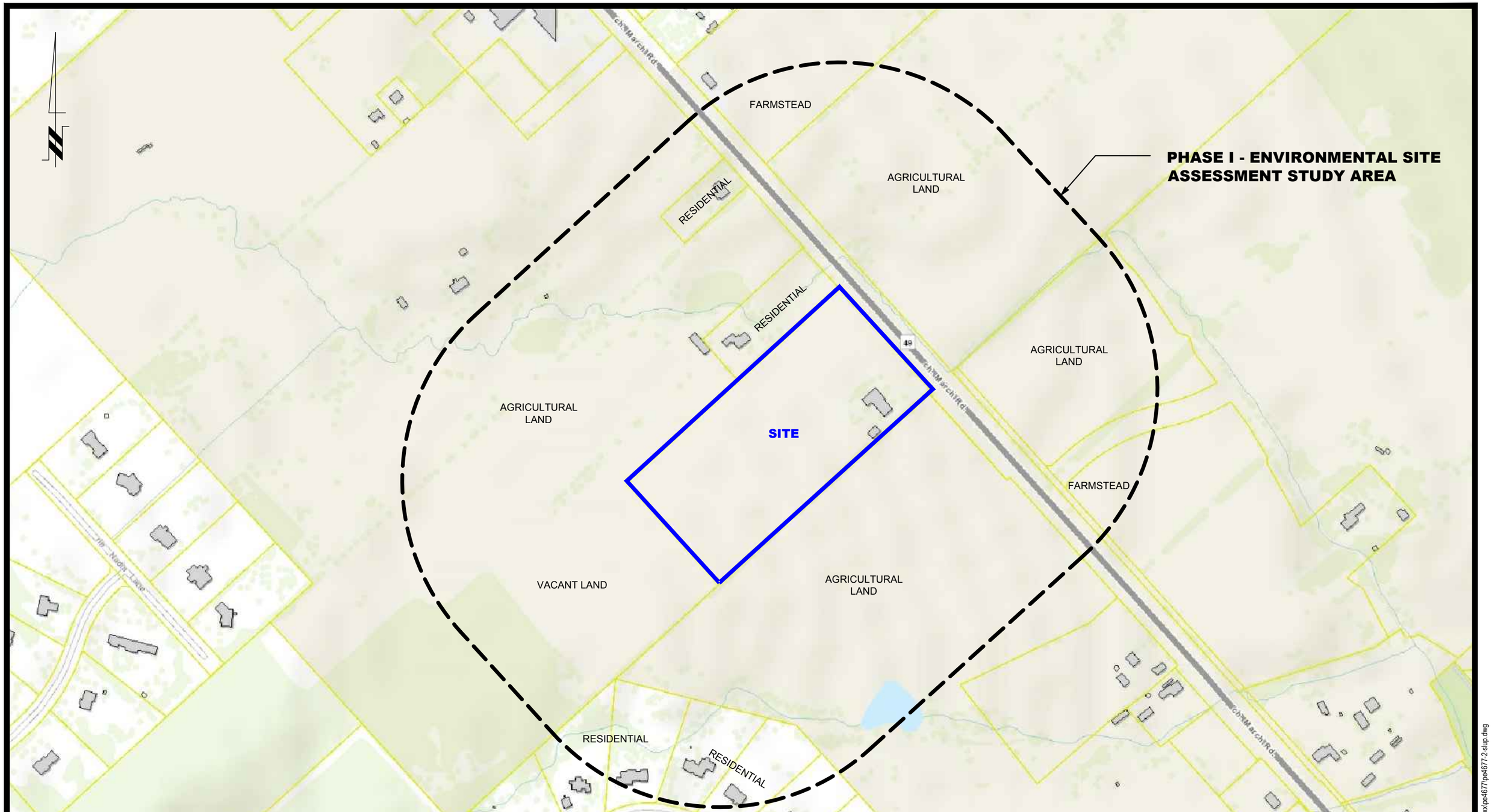

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NO.	REVISIONS	DATE	INITIAL

KANATA UNITED

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
1015 MARCH ROAD

KANATA, ONTARIO

Title:

SURROUNDING LAND USE PLAN

Scale: 1:4000	Date: 07/2019
Drawn by: YA	Report No.: PE4677-1
Checked by: MW	Dwg. No.: PE4677-2
Approved by: MSD	Revision No.:

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APPENDIX 1

SURVEY PLAN

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS

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

DATE: Oct. 28, 2008

E.H. HERWEYER
ONTARIO LAND SURVEYOR

PLAN 4R-23264

RECEIVED AND DEPOSITED
DATE: Oct 29-08

J Mason Asst Dpty

LAND REGISTRAR FOR THE LAND TITLES DIVISION OF OTTAWA-CARLETON NO. 4.

SCHEDULE

PART	LOT	CONCESSION	PIN
1	PART OF LOT 13	3 MARCH	ALL OF PIN 04526-0158
2			

PLAN OF SURVEY OF

PART OF LOT 13
CONCESSION 3
GEOGRAPHIC TOWNSHIP OF MARCH
CITY OF OTTAWA

Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

Scale 1 : 2000

80 60 40 20 0 40 80 Metres

Metric

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

Surveyor's Certificate

I CERTIFY THAT :

1. This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act, the Land Titles Act and the regulations made under them.
2. The survey was completed on the 14th day of October, 2008.

Oct. 28, 2008
Date

E. H. Herweyer
Ontario Land Surveyor

Notes & Legend

—□—	Denotes	Survey Monument Planted
—■—	"	Survey Monument Found
SIB	"	Standard Iron Bar
SSIB	"	Short Standard Iron Bar
IB	"	Iron Bar
(WIT)	"	Witness
(AOG)	"	Annis, O'Sullivan, Vollebekk Ltd.
Meas.	"	Measured
(D1)	"	Inst. N369633
(P1)	"	Plan 5R-12357
(P2)	"	Plan 4R-12611
(P3)	"	Plan 4R-10431
(P4)	"	Plan 4R-19264
(P5)	"	Registered Plan 4M-723
(P6)	"	Plan by (1144), dated March 7, 1978
C/L	"	Centreline

Bearings are astronomic, derived from the southwesterly limit of March Road as widened shown to be N41°59'00"W on Plan 4R-12611

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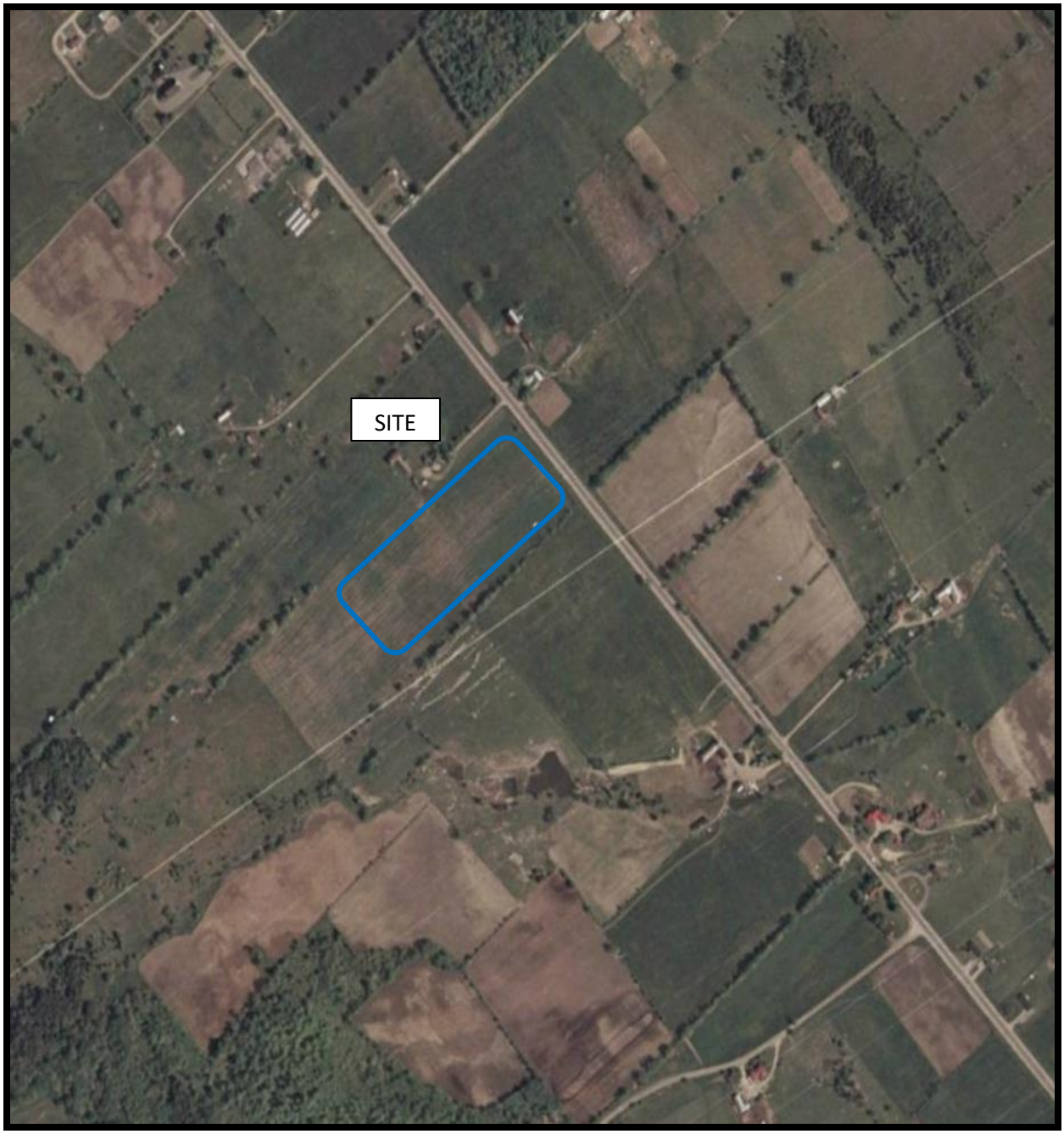
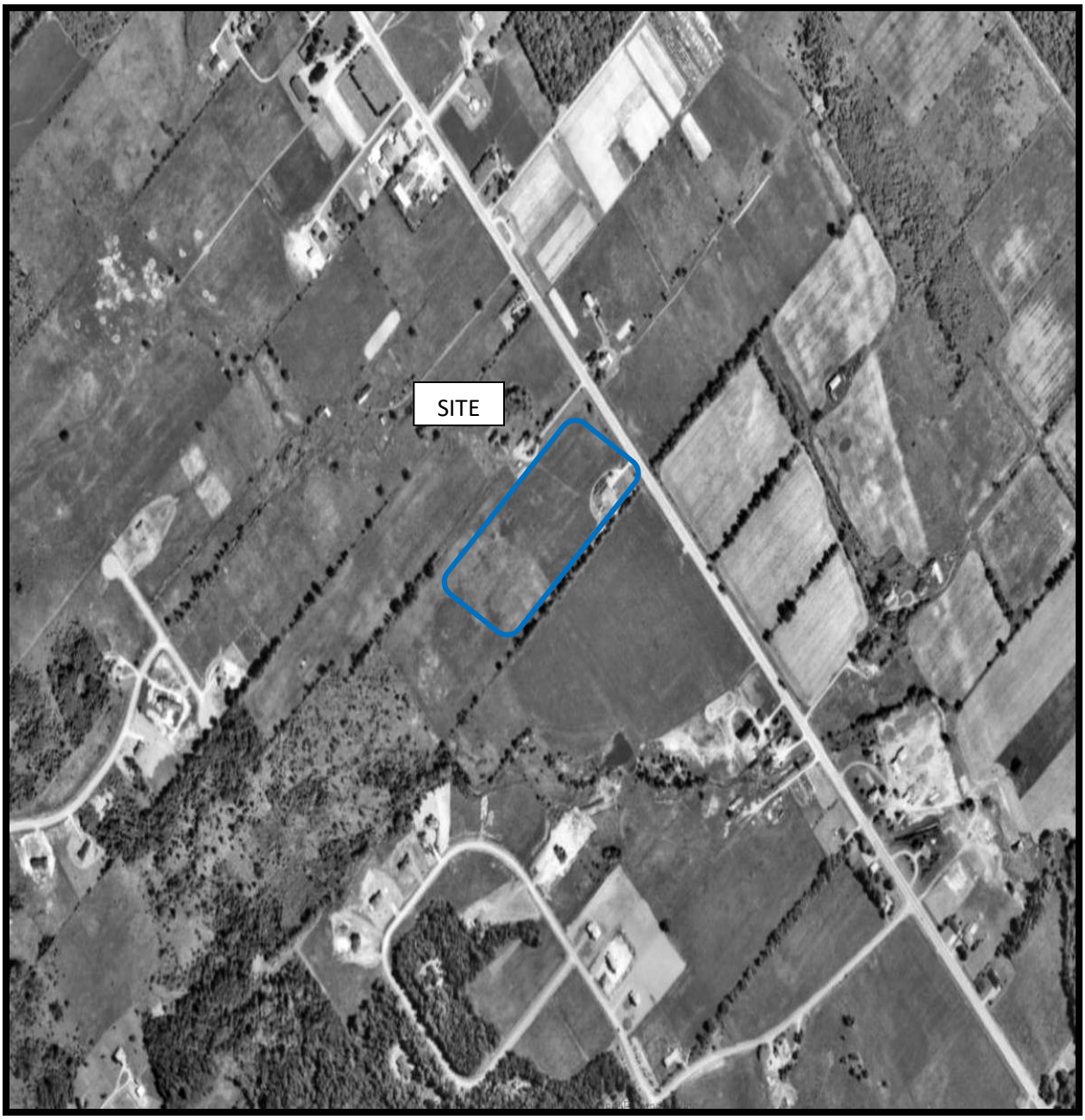
Ontario Land Surveyors

Job No. 9466-08 MWong PIL113 C3 MA R F.dwg SF



AERIAL PHOTOGRAPH 1976



AERIAL PHOTOGRAPH 1991

AERIAL PHOTOGRAPH 2008

AERIAL PHOTOGRAPH 2017

Site Photographs

PE4677 1015 March Road – Ottawa, ON July 22, 2019

Photograph 1: Front view of the subject property, looking southwest.

Photograph 2: Rear view of subject property, looking northwest.

APPENDIX 2

MECP FREEDOM OF INFORMATION

TSSA CORRESPONDENCE

HLUI RESPONSE

MECP WELL RECORDS

Ministry of the Environment, Conservation and Parks

Access and Privacy Office

12th Floor
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Toronto ON M4V 1M2
Tel: (416) 314-4075
Fax: (416) 314-4285

Ministère de l'Environnement, de la Protection de la nature et des Parcs

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

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

Ontario

July 15, 2019

Adrian Menyhart
Paterson Group Inc
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Adrian Menyhart:

RE: ***Freedom of Information and Protection of Privacy Act* Request**
Our File # A-2019-04655, Your Reference PE4677

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 1015 March Road, Ottawa.

After a thorough search through the files of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Assessment and Permissions Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, no records were located responsive to your request. To provide you with this response and in accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, the fee owed is $30.00 for 1 hour of search time @ $30.00 per hour. **We have applied the $30.00 for this request from your initial payment. This file is now closed.**

You may request a review of my decision by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, ON M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a $25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Sasha Naidu at 416-314-4075 or sasha.naidu@ontario.ca.

Yours truly,

for Janet Dadufalza
Manager, Access and Privacy

Samuel Berube

From: Mandy Witteman
Sent: July 9, 2019 8:32 AM
To: Samuel Berube
Subject: FW: Search Records Request (PE4666) (No Record)

See below – email to TSSA for inquiring of neighbouring properties. You can ask them to do a search for 10 properties free of charge

Cheers,

Mandy Witteman

patersongroup
solution oriented engineering
over 60 years servicing our clients

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381 Ext. 339
Cell: (403) 921-1157

From: Public Information Services <publicinformationservices@tssa.org>
Sent: July-02-19 1:47 PM
To: Mandy Witteman <MWitteman@Patersongroup.ca>
Subject: Re: Search Records Request (PE4666) (No Record)

Hello,

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 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 publicinformationservices@tssa.org or through mail along with a fee of $56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

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

Thank you and have a great day,

Roxana

Public Information Agent
Facilities and Business Services
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-6222 | Fax: +1-416-734-3568 | E-Mail: publicinformationservices@tssa.org
www.tssa.org

From: Mandy Witteman <MWitteman@Patersongroup.ca>
Sent: July 2, 2019 12:24 PM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: Search Records Request (PE4666)

Good Afternoon,

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

Langstaff Drive: 147, 119, 118
Carp Rd: 3806, 3790, 3709
Cavanagh Dr: 105, 102
Donald B. Munro Dr: 405

Thank you.

Cheers,

Mandy Witteman

patersongroup
solution oriented engineering
over 60 years servicing our clients

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381 Ext. 339
Cell: (403) 921-1157

File Number: D06-03-19-0106

August 15, 2019

Samuel Berube
Paterson Group
154 Colonnade Road South
Ottawa, Ontario
K2E 7J5

Sent via email [sberube@patersongroup.ca]

Dear Mr. Berube,

Re: Information Request
1015 March Road, Ottawa, Ontario ("Subject Property")

Internal Department Circulation

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

- *Environmental Remediation Unit:* The City's Environmental Remediation Unit has environmental records on file pertaining to properties adjacent to the subject property. Visit https://ottawa.ca/en/city-hall/accountability-and-transparency/accountability-framework/freedom-information-and-protection-privacy/access-information to submit requests for information under the Municipal Freedom of Information and Protection of Privacy Act.

Search of Historical Land Use Inventory

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

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Property.

The HLUI database was also searched for activity associated with properties located within 250m of the Subject Property. The search revealed the following:

- There are no activities associated with the properties located within 250m of the Subject Property.

A site map has been included to show the location of the Subject Property.

Additional information may be obtained by contacting:

Ontario's Environmental Registry

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

The Ontario Land Registry Office

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

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

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.

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

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

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

Sincerely,

Samantha Gatchene

Per:

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

MB/SG

Enclosures

cc: File no. D06-03-19-0106

Scale 1: n/a	1015 March Road Ottawa, ON File # D06-03-19-0106 Samantha Gatchene Ottawa	Overview = Subject Site

388A

31G5d

UTM 18 | 426430 E

Co. 5 R 5023105 N

Elev. 14 R 0260

Basin 25 | Carleton

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District Carleton Township, Village, Town or City March

Con. III Lot 12 Date completed 23 (day) May (month) 1963 (year)

[redacted] ...ess 716 Edison Ave Ottawa

Casing and Screen Record	
Inside diameter of casing	6¼"
Total length of casing	20'
Type of screen	none
Length of screen	—
Depth to top of screen	—
Diameter of finished hole	6"

Pumping Test	
Static level	15'
Test-pumping rate	5 G.P.M.
Pumping level	40'
Duration of test pumping	1 hr
Water clear or cloudy at end of test	clear
Recommended pumping rate	5 G.P.M.
with pump setting of	50' feet below ground surface

Well Log: Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
clay & broken rock	0	12		
LimesTone	12	38		
Sandstone	38	60	60	fresh

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

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

Drilling or Boring Firm McLean Water Supply LTd.

Address 1532 Raven Ave OTTawa, Ont.

Licence Number 1090

Name of Driller or Borer A. Scharf

Address

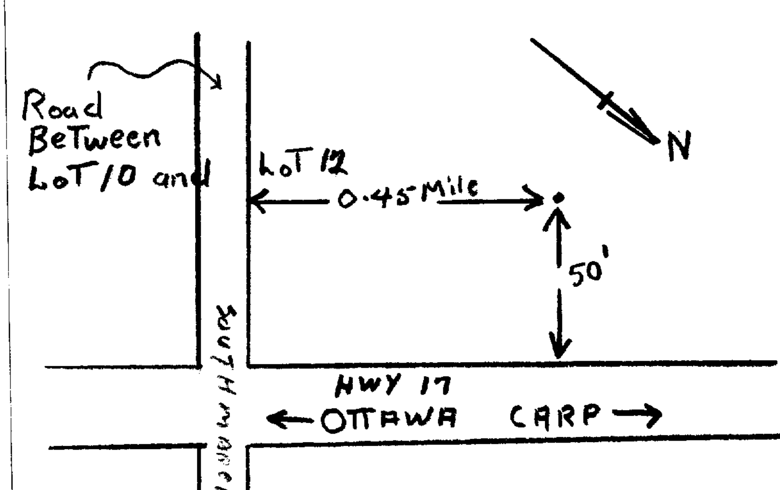
Date May 23 /63

CD McLean

(Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



Form 7 15M-60-4138

OWRC COPY

381

UTM 1 18 E 4 2 5 8 4 0 E
5 R 5 0 2 3 7 7 0 N

Elev. 4 R 0 2 8 5

Basin 25

C 15 No 3360

JUN 20 1967

The Ontario Water Resources Commission Act

WATER WELL RECORD

County or District CARLETON Township, Village, Town or City MARCH

Con. 3 Lot 13 Date completed 26 (day) MAY (month) 67 (year)

[redacted]dress BRI SOUTH MARCH

Casing and Screen Record	
Inside diameter of casing	2
Total length of casing	22
Type of screen	
Length of screen	
Depth to top of screen	
Diameter of finished hole	2

Pumping Test	
Static level	TOP
Test-pumping rate	24 G.P.M.
Pumping level	10
Duration of test pumping	1 HR
Water clear or cloudy at end of test	CLEAR
Recommended pumping rate	5 G.P.M.
with pump setting of	40 feet below ground surface

Well Log / **Water Record**

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
CLAY	0	10		
LIMESTONE & SANDSTONE	10	65	65	FRESH

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

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

Drilling or Boring Firm C DUFRESNE

Address OTTAWA

Licence Number 2676

Name of Driller or Borer SAME

Address

Date JUNE 15

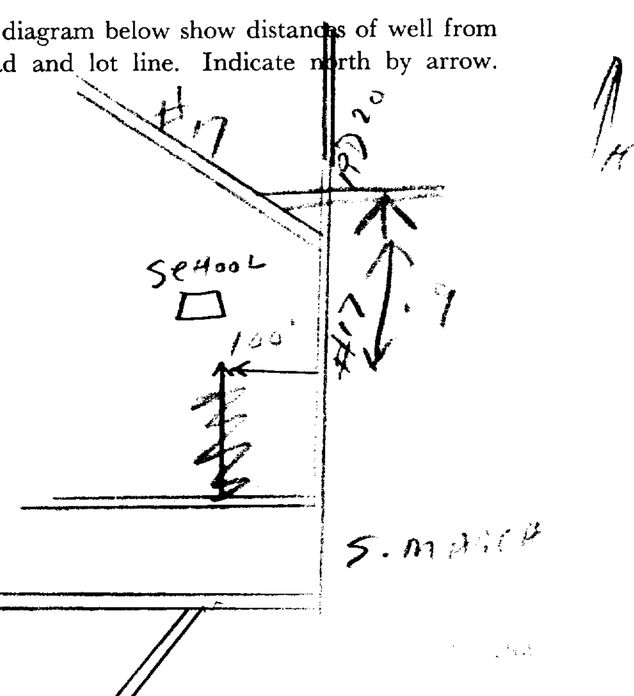
C Dufresne
(Signature of Licensed Drilling or Boring Contractor)

Form 7 15M-60-4138

OWRC COPY

Location of Well

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



UTM 1 8 Z 4 2 5 5 5 5 E

9 R 5 0 2 3 5 6 0 N

Elev. 9 R 0 2 8 0

Basin 2 5

31G5d

ONTARIO

The Water-well Drillers Act, 1954

Department of Mines

Water-Well Record

Con III
10 + 13

[redacted] ip, Village, Town or City March

[redacted] Village, Town or City)

[redacted] Address South March Ont

Date completed 22 (day) June (month) 1957 (year)

Pipe and Casing Record	
Casing diameter(s)	4"
Length(s)	13½'
Type of screen	
Length of screen	

Pumping Test	
Static level	4½'
Pumping rate	500 GPH.
Pumping level	4½'
Duration of test	½ Hr

Well Log / **Water Record**

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
Deepening from	50	72	70-72	65½	fresh
in Sandstone					

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

Is water clear or cloudy? clear

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

Drilling firm W. M. E. Sparks

Address 413 Edgeworth Ave

Name of Driller E. Cheslock

Address Britannia Bay Ont

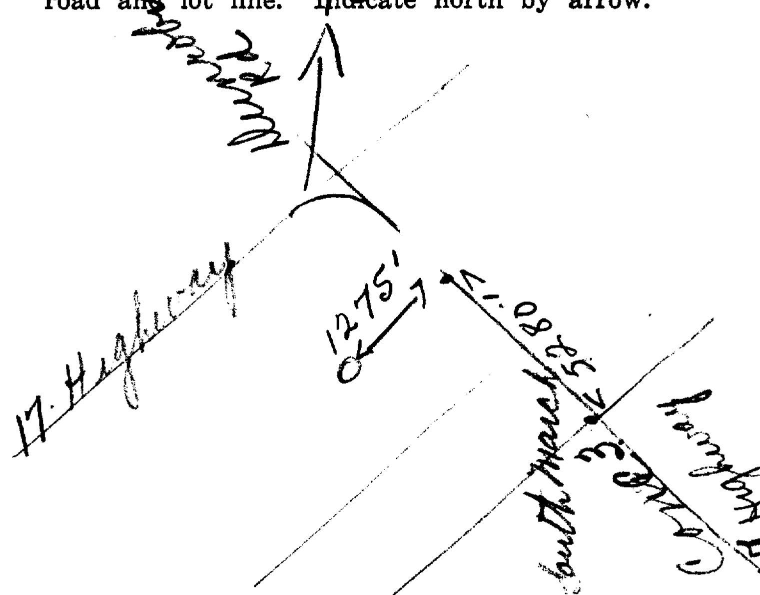
Licence Number 517

I certify that the foregoing statements of fact are true.

Date Oct 22/57 E. Cheslock
Signature of Licensee
Per A J Sparks

Location of Well

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



Form 5

UTM 1 18 Z 4 2 6 4 6 5 E

C 5 R 5 0 2 3 2 7 0 N

Elev. 4 R 0 2 6 0

Basin 2 5

3165d

The Ontario Water Resources Commission Act

WATER WELL RECORD

WATER RESOURCES DIVISION
JUL 6 1964
ONTARIO WATER RESOURCES COMMISSION

15 Nº 3414

County or District Carl   Township, Village, Town or City March

Con. 4   Lot 12   Date completed 6 (day) Feb (month) 64 (year)

[redacted] ress South March

Casing and Screen Record

Inside diameter of casing 5"

Total length of casing 18'

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 5"

Pumping Test

Static level 11'

Test-pumping rate 10 G.P.M.

Pumping level 11'

Duration of test pumping 1 hr

Water clear or cloudy at end of test cloudy

Recommended pumping rate 5 G.P.M.

with pump setting of 40' feet below ground surface

Well Log

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
clay + boulders	0	9	50	fresh
Sandstone	9	40		
granite	40	51		

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

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

Drilling or Boring Firm Capital Water Supply

Address 1243 Heron Rd Ottawa

Licence Number 1223

Name of Driller or Borer M Kavanagh

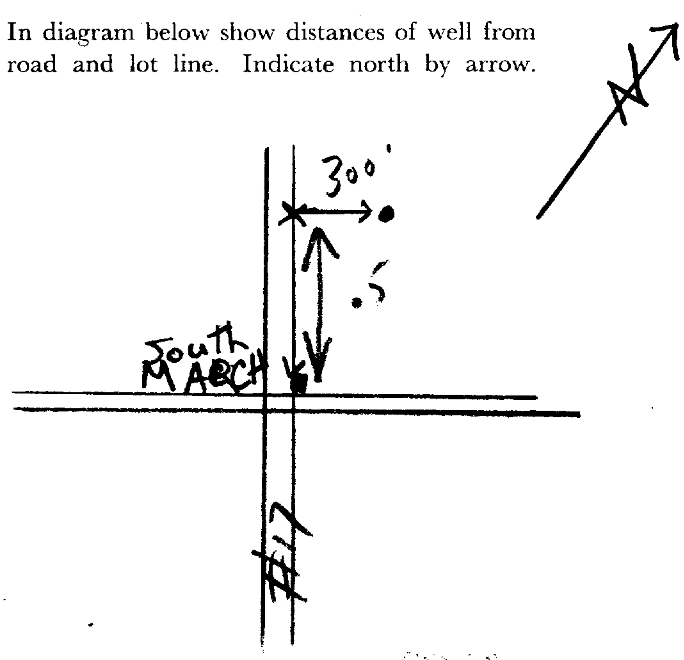
Address

Date 9/3/64

Walter Kavanagh
(Signature of Licensed Drilling or Boring Contractor)

Location of Well

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



Form 7 15M-60-4138

OWRC COPY BUNGALOW - IMITATION GREY SIDING.

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

3169/5d.

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11 | 1514134 | MUNICIP. 15006 | CON. COR 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT 013
Carleton	March	3	~~13~~ 13

OWNER (SURNAME FIRST)	ADDRESS	DATE COMPLETED
Jake Both Ltd.	Box 50 Woodlawn, Ontario	DAY 18 MO. 06 YR. 74

21 | UTM ZONE 18 | EASTING 425780 | NORTHING 5023810 | RC. 4 | ELEVATION 0275 | RC. 4 | SIC CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
brown	clay		packed	0	8
grey	limestone		medium	8	44
grey	sandstone		hard	44	98

31 | 00086579 | 00044215 | 00982187 3

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0096	1 ☒ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR / 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
06 ~~07~~	1 ☒ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE	188	0	0022
5 13/16 ~~6~~			22	98
06	1 ☐ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☒ OPEN HOLE			0098
	1 ☐ STEEL / 2 ☐ GALVANIZED / 3 ☐ CONCRETE / 4 ☐ OPEN HOLE			

SCREEN

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

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	0010 GPM	01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
009 FEET	050 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	050 FEET	050 FEET	050 FEET	050 FEET

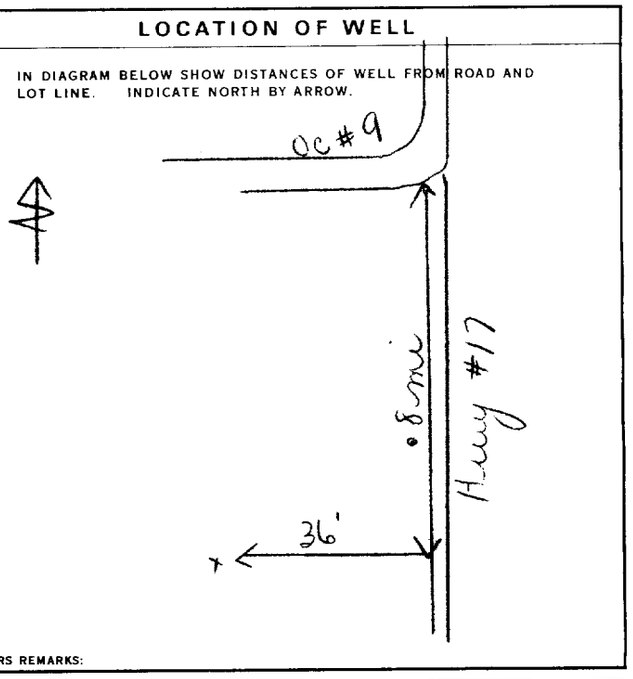
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	060 FEET	0005 GPM

50-53 ——— GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS:

FINAL STATUS OF WELL 54: 1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE 55-56: 01 — 1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING 57: 5 — 1 ☐ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☒ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	LICENCE NUMBER
Capital Water Supply Ltd.	1558
ADDRESS	
Box 490 Stittsville, Ontario	
NAME OF DRILLER OR BORER	LICENCE NUMBER
W. Kavanagh	
SIGNATURE OF CONTRACTOR	SUBMISSION DATE DAY 19 MO. 6 YR. 74

OFFICE USE ONLY

DATA SOURCE 58	CONTRACTOR 59-62	DATE RECEIVED 63-68
1	1558	080774
DATE OF INSPECTION	INSPECTOR	
June 20/77	PS	K.
REMARKS:	P PS	
	WI	

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 07-091

31G5d

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

Ontario

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11 | 1516260 | MUNICIP. 15006 | CON. CON | 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Carleton	March	3	012 12

[redacted] 6 Primrose Ave. Ottawa, Ontario

DATE COMPLETED: DAY 04 MO 10 YR. 77

23140 | 4 | ELEVATION 0260 | R.C. 4 | BASIN CODE 26

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	TO
brown	clay		packed	0	9
brown	clay	boulders	packed	9	11
grey	limestone	sandstone	hard	11	35
grey	sandstone			35	115

31 0009605 79 | 0011605 1379 | 0035 2151873 | 0115 218

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0113	☒ FRESH ☐ SULPHUR ☐ SALTY ☐ MINERAL
	☐ FRESH ☐ SULPHUR ☐ SALTY ☐ MINERAL
	☐ FRESH ☐ SULPHUR ☐ SALTY ☐ MINERAL
	☐ FRESH ☐ SULPHUR ☐ SALTY ☐ MINERAL
	☐ FRESH ☐ SULPHUR ☐ SALTY ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	TO
~~6¼~~ 06	☒ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	188	0 / 22	0022 / ~~115~~
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☒ OPEN HOLE			0115
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			

SCREEN

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

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
☒ PUMP ☐ BAILER	0015 GPM	01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
020 FEET	070 FEET	070 FEET	070 FEET	070 FEET	070 FEET

WATER LEVELS DURING: ☒ PUMPING ☐ RECOVERY

IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: ☒ CLEAR ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING 075 FEET | RECOMMENDED PUMPING RATE 0005 GPM

GPM./FT. SPECIFIC CAPACITY

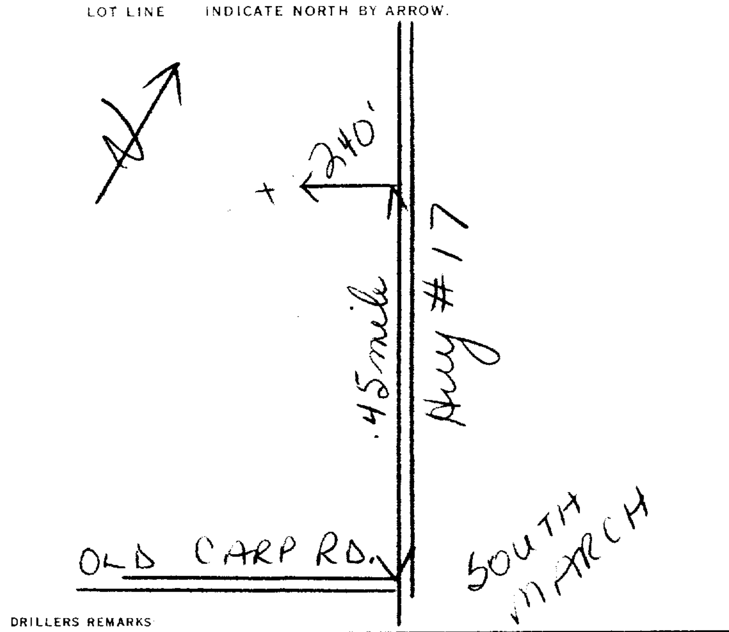
FINAL STATUS OF WELL 1: ☒ WATER SUPPLY ☐ OBSERVATION WELL ☐ TEST HOLE ☐ RECHARGE WELL ☐ ABANDONED, INSUFFICIENT SUPPLY ☐ ABANDONED POOR QUALITY ☐ UNFINISHED

WATER USE 01: ☒ DOMESTIC ☐ STOCK ☐ IRRIGATION ☐ INDUSTRIAL ☐ OTHER ☐ COMMERCIAL ☐ MUNICIPAL ☐ PUBLIC SUPPLY ☐ COOLING OR AIR CONDITIONING ☐ NOT USED

METHOD OF DRILLING 5: ☐ CABLE TOOL ☐ ROTARY (CONVENTIONAL) ☐ ROTARY (REVERSE) ☐ ROTARY (AIR) ☒ AIR PERCUSSION ☐ BORING ☐ DIAMOND ☐ JETTING ☐ DRIVING

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW.



DRILLERS REMARKS

CONTRACTOR

NAME OF WELL CONTRACTOR: Capital Water Supply Ltd. | LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario

NAME OF DRILLER OR BORER: W. Kavanagh | LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: Walter Kavanagh | SUBMISSION DATE: DAY 5 MO. 10 YR. 77

OFFICE USE ONLY

DATA SOURCE: 1 | CONTRACTOR: 1558 | DATE RECEIVED: 171177

DATE OF INSPECTION: 22/05/79 June 29/78 | INSPECTOR: DN

REMARKS: New Brown Brick Bunglow

P

WI

MINISTRY OF THE ENVIRONMENT COPY

FORM 7 MOE 07-091

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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11 — 1526402 — MUNICIP. 15006 — CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC.	LOT
[redacted]	Kanata	3	13

[redacted] Panandrick View Carp, Ontario K0A 1L0

DATE COMPLETED: DAY 16 MO 7 YR 92

RC — ELEVATION — RC — BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
10-13	1 ☐ FRESH 2 ☐ SALTY — 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
15-18	1 ☐ FRESH 2 ☐ SALTY — 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
20-23	1 ☐ FRESH 2 ☐ SALTY — 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
25-28	1 ☐ FRESH 2 ☐ SALTY — 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
30-33	1 ☐ FRESH 2 ☐ SALTY — 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
10-11	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			13-16
17-18	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			20-23
24-25	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			27-30

SCREEN

SIZE(S) OF OPENING (SLOT NO.) 31-33	DIAMETER 34-38 INCHES	LENGTH 39-40 FEET
MATERIAL AND TYPE	DEPTH TO TOP OF SCREEN 41-44 FEET	80

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
10-13 60 18-21	14-17 0 22-25	Hole Plug (15)
26-29	30-33	80

71 PUMPING TEST

PUMPING TEST METHOD 10	PUMPING RATE 11-14 GPM	DURATION OF PUMPING 15-16 HOURS 17-18 MINS
1 ☐ PUMP 2 ☐ BAILER		

STATIC LEVEL	WATER LEVEL END OF PUMPING	25 WATER LEVELS DURING 1 ☐ PUMPING 2 ☐ RECOVERY			
		15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
19-21 FEET	22-26 FEET	26-28 FEET	29-31 FEET	32-34 FEET	35-37 FEET

IF FLOWING, GIVE RATE 38-41 GPM	PUMP INTAKE SET AT FEET	WATER AT END OF TEST 42 1 ☐ CLEAR 2 ☐ CLOUDY
RECOMMENDED PUMP TYPE ☐ SHALLOW ☐ DEEP	RECOMMENDED PUMP SETTING 43-45 FEET	RECOMMENDED PUMPING RATE 46-49 GPM

50-53

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

plugged hole under indoor swimming pool

DRILLERS REMARKS: 120624

54 FINAL STATUS OF WELL

1 ☐ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☒ ABANDONED XXXXXXX; 7 ☐ UNFINISHED; ☐ DEWATERING

55-56 WATER USE

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

57 METHOD OF CONSTRUCTION

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

CONTRACTOR

NAME OF WELL CONTRACTOR: Capital Water Supply Ltd. — WELL CONTRACTOR'S LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario K2S 1A6

NAME OF WELL TECHNICIAN: Walter Kavanagh — WELL TECHNICIAN'S LICENCE NUMBER: T0095

SIGNATURE OF TECHNICIAN/CONTRACTOR: W Kavanagh — SUBMISSION DATE: DAY 13 MO 7 YR 92

OFFICE USE ONLY

DATA SOURCE 58 — CONTRACTOR 59-62: 1558 — DATE RECEIVED 63-68: AUG 18 1992 — 80

DATE OF INSPECTION — INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

11 — 1526403 — MUNICIP 15006 — CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC.	LOT
Ottawa Carleton	Kanata	3	13

[redacted] Panandrick View Carp, Ontario K0A 1L0

DATE COMPLETED: DAY 10 MO 7 YR 92

UTM — ZONE — EASTING — NORTHING — RC — ELEVATION — RC — BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Sandy Clay		Packed	0	4
Gray	Limestone		Very Hard	4	30
Gray & White	Sandstone		Very HArd	30	75

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
25	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
50	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS — NOT TESTED
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	0	21
6 1/8	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC		21	75
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

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

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD, PACKER, ETC.)
21	5	Grouted Cement (3)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	30-40 GPM	HOURS — MINS 30

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
3'10 FEET	50 FEET		3'9 FEET	3'10 FEET	3'10 FEET	3'10 FEET

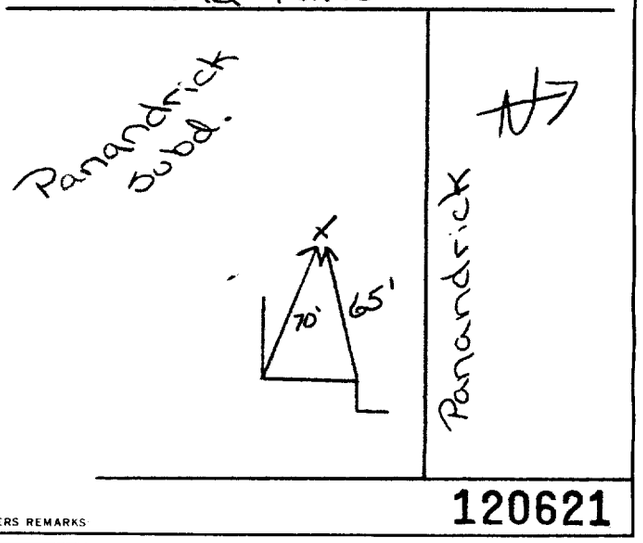
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	60 FEET	5 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

2nd line



DRILLERS REMARKS: 120621

FINAL STATUS OF WELL	1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED ☐ DEWATERING
WATER USE	1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED
METHOD OF CONSTRUCTION	1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☒ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING ☐ DIGGING ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR	WELL CONTRACTOR'S LICENCE NUMBER
Capital Water Supply Ltd.	1558
ADDRESS: Box 490 Stittsville, Ontario K2S 1A6	
NAME OF WELL TECHNICIAN: S. Miller	WELL TECHNICIAN'S LICENCE NUMBER: T0097
SIGNATURE OF TECHNICIAN/CONTRACTOR	SUBMISSION DATE: DAY 13 MO 7 YR 92

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
	1558	AUG 18 1992
DATE OF INSPECTION	INSPECTOR	
REMARKS		

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Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

11 — 1526484 — MUNICIP 15006 — CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC.	LOT
[redacted]	anata	3	13

DATE COMPLETED: DAY 19 MO 98 YR 92

[redacted] anandrick View Carp, Ontario K0A 1L0

HOLE DIAMETER — RC — ELEVATION — RC — BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Soil			0	3
Gray	Limestone		Hard	3	38
Gray & White	Sandstone		Hard	38	100

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
67	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
94	NOT TESTED

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC	.188	0	21
6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC		21	75
5 13/16	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE 5 ☐ PLASTIC		75	100

SCREEN

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

MATERIAL AND TYPE — DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
21	5	Grouted Cement (3)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	30 GPM	1 HOURS ___ MINS

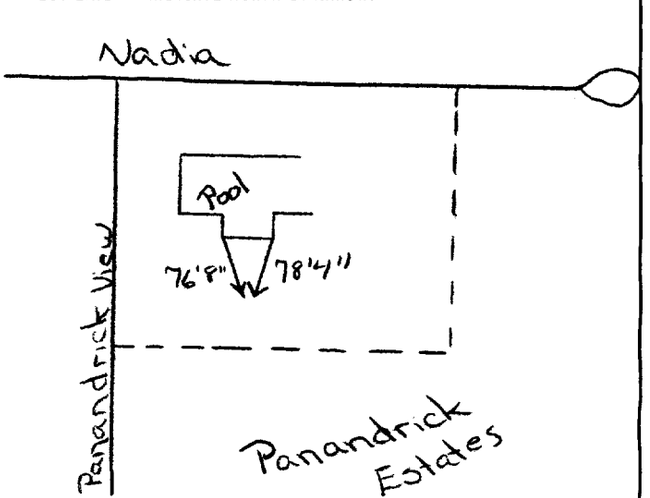
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
3 FEET	9 FEET		9 FEET	9 FEET	9 FEET	9 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	20 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	20 FEET	5 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS: 120664

FINAL STATUS OF WELL

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

WATER USE

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

METHOD OF CONSTRUCTION

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

CONTRACTOR

NAME OF WELL CONTRACTOR: Capital Water Supply Ltd. — WELL CONTRACTOR'S LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario K2S 1A6

NAME OF WELL TECHNICIAN: S. Miller — WELL TECHNICIAN'S LICENCE NUMBER: T0097

SIGNATURE OF TECHNICIAN/CONTRACTOR: [signature] — SUBMISSION DATE: DAY 20 MO 8 YR 92

OFFICE USE ONLY

DATA SOURCE — CONTRACTOR: 1558 — DATE RECEIVED: SEP 22 1992

DATE OF INSPECTION — INSPECTOR

REMARKS

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506 (11/86) FORM 9

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

11 — 1526485 — MUNICIP 15006 — CON. CON 93

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ottawa Carleton	Kanata	3	13

[redacted] anandrick View Carp, Ontario K0A 1L0

DATE COMPLETED: DAY 19 MO 8 YR 92

RING | RC | ELEVATION | RC | BASIN CODE | I | II | IV

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Soil	Stones	Packed	0	4
White	Sandstone		Very HArd	4	100

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
25	2 SALTY
64	1 FRESH
91	NOT TESTED

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 ☒ STEEL	.188	0	21
6 1/8	4 ☒ OPEN HOLE		21	75
6	4 ☒ OPEN HOLE		75	100

(1 STEEL, 2 GALVANIZED, 3 CONCRETE, 4 OPEN HOLE, 5 PLASTIC)

SCREEN

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

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13: 21	14-17: 5	Grouted Cement (3)
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	30 GPM	1 HOURS 30 MINS

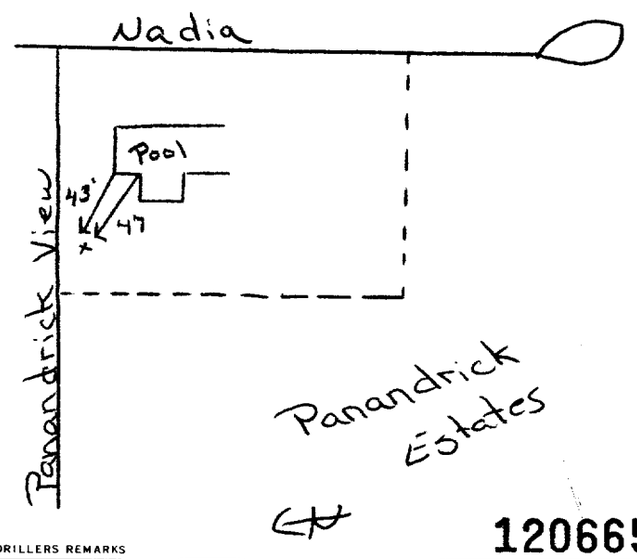
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
4 FEET	6 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	6 FEET	6 FEET	6 FEET	6 FEET

IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM	FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	20 FEET	5 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.



DRILLERS REMARKS: 120665

FINAL STATUS OF WELL

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

WATER USE

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

METHOD OF CONSTRUCTION

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

CONTRACTOR

NAME OF WELL CONTRACTOR: Capital Water Supply Ltd. — WELL CONTRACTOR'S LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario K2S 1A6

NAME OF WELL TECHNICIAN: S. Miller — WELL TECHNICIAN'S LICENCE NUMBER: T0097

SIGNATURE OF TECHNICIAN/CONTRACTOR: [signature] — SUBMISSION DATE: DAY 20 MO 8 YR 92

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR 1558 | DATE RECEIVED SEP 22 1992

DATE OF INSPECTION | INSPECTOR

REMARKS

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FORM NO. 0506 (11/86) FORM 9

Ministry of Environment and Energy
Ontario

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 — **1528887**

Municipality: 15006 — Con: CON 03

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
Ottawa Carleton	Kanata	3	13

Owner's surname	First name	Address	Date completed
Landark Construction		Box 324 Stittsville, Ontario K2S 1A4	7 day 12 month 95 year

21 — UTM: Zone — Easting — Northing — RC — Elevation — RC — Basin Code

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth – feet From	Depth – feet To
Brown	Soil		Fill	0	3
Brown	Clay		Packed	3	9
Gray & White	Sandstone		HArd	9	120

31

32

41 WATER RECORD

Water found at – feet	Kind of water
106	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
NOT TESTED	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth – feet From	Depth – feet To
6 1/4	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	0	22.5
5 7/8	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		22.5	120
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet

Material and type: — Depth at top of screen feet:

61 PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at – feet From	Depth set at – feet To	Material and type (Cement grout, bentonite, etc.)
20.5	0	Grouted Cement (3)

71 PUMPING TEST

Pumping test method: 1 ☒ Pump 2 ☐ Bailer — Pumping rate: 25 GPM — Duration of pumping: 1 Hours ..... Mins

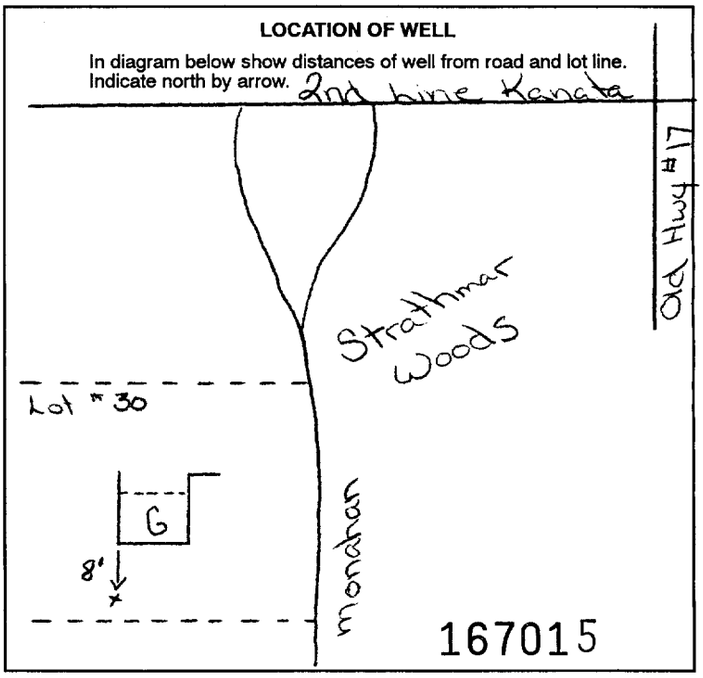
Static level	Water level end of pumping	Water levels during: 1 ☒ Pumping 2 ☐ Recovery			
		15 minutes	30 minutes	45 minutes	60 minutes
1.5 feet	20 feet	115 feet	75 feet	50 feet	20 feet

If flowing give rate	Pump intake set at	Water at end of test
GPM	feet	☐ Clear ☒ Cloudy

Recommended pump type	Recommended pump setting	Recommended pump rate
☐ Shallow ☒ Deep	30–50 feet	5 GPM

LOCATION OF WELL

In diagram below show distances of well from road and lot line. Indicate north by arrow. 2nd line Kanata



FINAL STATUS OF WELL

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not used 10 ☐ Other .....

METHOD OF CONSTRUCTION

1 ☐ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air) 5 ☒ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting 9 ☐ Driving 10 ☐ Digging 11 ☐ Other .....

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558

Address: P.O. Box 490 Stittsville, Ontario K2S 1A6

Name of Well Technician	Well Technician's Licence No.
W. Kavanagh	T0095

Signature of Technician/Contractor: W Kavanagh — Submission date: day 8 mo 12 yr 95

MINISTRY USE ONLY

Data source — Contractor: 1558 — Date received: MAR 15 1996

Date of inspection — Inspector

Remarks: CSS.ES

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Ministry of Environment and Energy
Ontario

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 1529027

Municipality 15006 Con. CON 03

County or District	Township/Borough/City/Town/Village	Con	block	tract	survey, etc.	Lot
Ottawa Carleton	Kanata		3			13

Owner's surname	First name	Address	Date completed
Racine Construction		South Mountain, Ontario K0E 1W0	3 day 6 month 96 year

21 Zone Easting Northing RC Elevation RC Basin Code i ii iii iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth – feet From	Depth – feet To
Brown	Soil	Stones	Packed	0	4
Gray	Sandstone		Very Wet	4	45

31

32

41 WATER RECORD

Water found at – feet	Kind of water
38	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	NOT TESTED
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth – feet From	Depth – feet To
6 1/4	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	0	22
6	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		22	45
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet
Material and type	Depth at top of screen feet	

61 PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at – feet From	Depth set at – feet To	Material and type (Cement grout, bentonite, etc.)
20	0	Grouted Cement (3)

71 PUMPING TEST

Pumping test method: 1 ☒ Pump 2 ☐ Bailer
Pumping rate: 15 GPM
Duration of pumping: 1 Hours ..... Mins

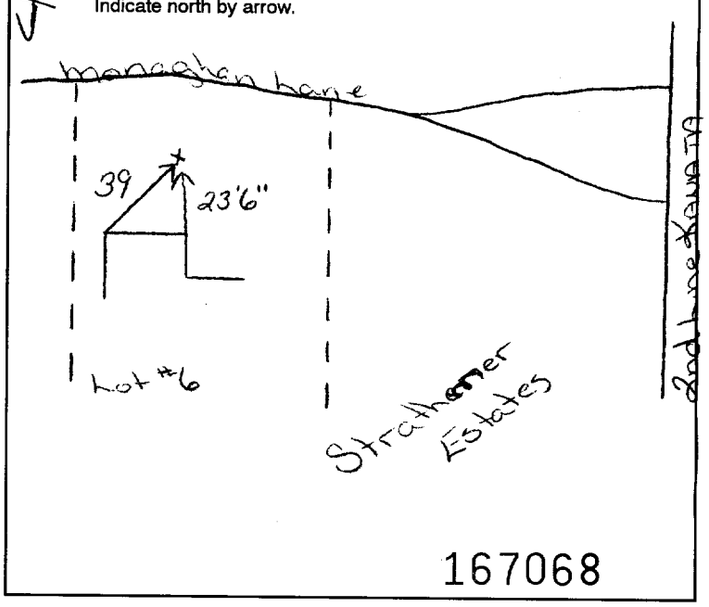
Static level	Water level end of pumping	Water levels during: 1 ☐ Pumping 2 ☐ Recovery			
		15 minutes	30 minutes	45 minutes	60 minutes
8 feet	25 feet	43 feet	40 feet	30 feet	25 feet

If flowing give rate	Pump intake set at	Water at end of test
GPM	feet	☐ Clear ☐ Cloudy

Recommended pump type	Recommended pump setting	Recommended pump rate
☐ Shallow ☒ Deep	30 feet	5 GPM

LOCATION OF WELL

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



167068

FINAL STATUS OF WELL

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not used 10 ☐ Other .....

METHOD OF CONSTRUCTION

1 ☐ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air) 5 ☒ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting 9 ☐ Driving 10 ☐ Digging 11 ☐ Other .....

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558
Address: P.O. Box 490 Stittsville, Ontario K2S 1A6	
Name of Well Technician: S. Miller	Well Technician's Licence No.: T0097
Signature of Technician/Contractor	Submission date: day 3 mo 6 yr 96

MINISTRY USE ONLY

Data source	Contractor	Date received
	1558	AUG 13 1996
Date of inspection	Inspector	
Remarks		

CSS.ES

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Ministry of Environment and Energy
Ontario

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 (1 2) **1530059**

Municipality (10–14): 15006 Con. (15–22): CON 03

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot (25–27)
Ottawa Carleton	Kanata	3	12

Owner's surname (28–47) / First name	Address	Date completed (48–53)
Gold Haven Construction Ltd.	168 Rescar Lane Carp,Ontario K0A 1L0	14 day 5 month 98 year

21 (1 2) — UTM Zone (10) Easting (12–17) Northing (18–24) RC (25) Elevation (26–30) RC (30) Basin Code (31–47) i ii iii iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth – feet From	Depth – feet To
Brown	Bandst Soil	Stones		0	6
Gray & White	Sandstone		Very Hard	6	136
Goloured	Granite		Hard	136	175

31 (10 14 15 21 32 43 54 65 75 80)
32

41 WATER RECORD

Water found at – feet (10–13)	Kind of water (14)
44	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas
77 (15–18)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas (19)
132 (20–23)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas (24)
168 (25–28)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas (29)
NOT TESTED (30–33)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 6 ☐ Gas (34) (60)

51 CASING & OPEN HOLE RECORD

Inside diam inches (10–11)	Material (12)	Wall thickness inches	Depth – feet From (13–16)	Depth – feet To
6 1/4	2 ☒ Galvanized	.188	0	22.5
5 15/16 (17–18)	4 ☒ Open hole (19)		22.5	75 (20–23)
5 7/8	5 ☒ Plastic		75	150 (27–30)
~~5 13/16~~			~~150~~	~~175~~

SCREEN

Sizes of opening (Slot No.) (31–33)	Diameter (34–38) inches	Length (39–40) feet
Material and type	Depth at top of screen (41–44) feet	(30)

61 PLUGGING & SEALING RECORD

☒ Annular space ☐ Abandonment

Depth set at – feet From (10–13)	Depth set at – feet To (14–17)	Material and type (Cement grout, bentonite, etc.)
21	0	Grouted Cement (3)
(18–21)	(22–25)	
(26–29)	(30–33) (80)	

71 PUMPING TEST

Pumping test method (10): 1 ☒ Pump 2 ☐ Bailer
Pumping rate (11–14): 20 GPM
Duration of pumping (15–16 Hours, 17–18 Mins): 1 Hours

Static level (19–21)	Water level end of pumping (22–24)	Water levels during (25): 1 ☐ Pumping 2 ☒ Recovery			
		15 minutes (26–28)	30 minutes (29–31)	45 minutes (32–34)	60 minutes (35–37)
37 feet	170 feet	39'2" feet	37'6" feet	37'2" feet	37 feet

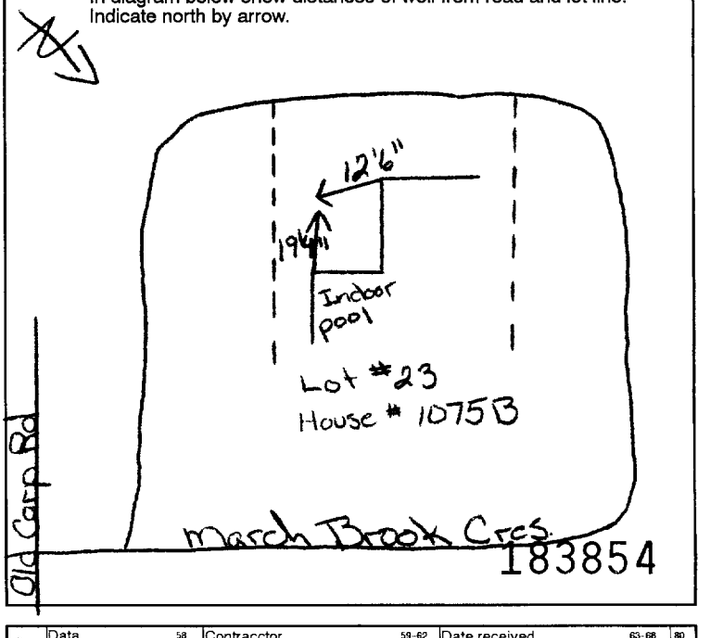
If flowing give rate (38–41)	Pump intake set at	Water at end of test (42)
GPM	feet	☐ Clear ☒ Cloudy

Recommended pump type	Recommended pump setting (43–45)	Recommended pump rate (46–49)
☐ Shallow ☒ Deep	140 feet	5 GPM

(50–53)

LOCATION OF WELL

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



FINAL STATUS OF WELL (54)

1 ☐ Water supply 2 ☒ Observation well 3 ☐ Test hole 4 ☐ Recharge well
5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering
9 ☐ Unfinished 10 ☐ Replacement well

WATER USE (55–56)

1 ☐ Domestic 2 ☒ Stock 3 ☐ Irrigation 4 ☐ Industrial
5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning
9 ☐ Not used 10 ☐ Other

METHOD OF CONSTRUCTION (57)

1 ☐ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air)
5 ☐ Air percussion 6 ☒ Boring 7 ☐ Diamond 8 ☐ Jetting
9 ☐ Driving 10 ☐ Digging 11 ☐ Other

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558

Address: P.O. Box 490 Stittsville,Ontario K2S 1A6

Name of Well Technician	Well Technician's Licence No.
S. Miller	T0097

Signature of Technician/Contractor

Submission date: day 15 mo 5 yr 98

MINISTRY USE ONLY

Data source (58)	Contractor (59–62)	Date received (63–68) (80)
	1558	JUL 2 ? 1998

Date of inspection | Inspector

Remarks: CSS. S9

0506 (07/94) Front Form 6

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Ontario **Ministry of the Environment**

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 **1530941** Municipality 15006 Con. CON 03

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
Ottawa Carleton	KAnata	3	13

Owner's surname	First Name	Address	Date completed
Gold Haven Construction		P.O. Box 72059 Kanata, Ontario K2K 2P4	18 day 11 month 99 year

99

21 Zone | Easting | Northing | RC | Elevation | RC | Basin Code | ii | iii | iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
Brown	Soil			0	2
Gray & White	Sandstone		Very Hard	2	90

31

32

41 WATER RECORD

Water found at - feet	Kind of water
80	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas — NOT TESTED
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6 1/4	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	0	22.5
5 13/16	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		22.5	90
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet
Material and type	Depth at top of screen feet	

61 PLUGGING & SEALING RECORD

☒ Annular space ☐ Abandonment

Depth set at - feet From	Depth set at - feet To	Material and type (Cement grout, bentonite, etc.)
20	0	Grouted - Cemen t(3)

71 PUMPING TEST

Pumping test method: 1 ☒ Pump 2 ☐ Bailer
Pumping rate: 20 GPM
Duration of pumping: 1 Hours ..... Mins

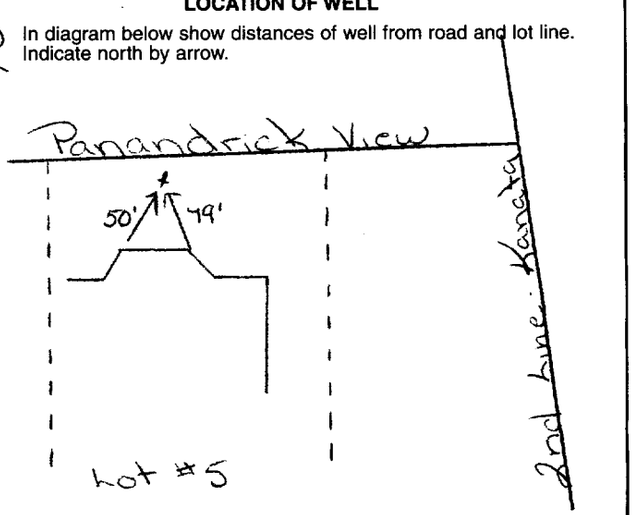
Static level	Water level end of pumping	Water levels during: 1 ☒ Pumping 2 ☐ Recovery			
		15 minutes	30 minutes	45 minutes	60 minutes
10 feet	50 feet	85 feet	75 feet	60 feet	50 feet

If flowing give rate	Pump intake set at	Water at end of test
GPM	feet	☐ Clear ☒ Cloudy

Recommended pump type	Recommended pump setting	Recommended pump rate
☐ Shallow ☒ Deep	75 feet	5 GPM

LOCATION OF WELL

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



208508

FINAL STATUS OF WELL 54

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE 55-56

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not use 10 ☐ Other .....

METHOD OF CONSTRUCTION 57

1 ☐ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air) 5 ☒ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting 9 ☐ Driving 10 ☐ Digging 11 ☐ Other .....

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558
Address: P.O. Box 490 Stittsville, Ontario K2S 1A6	
Name of Well Technician	Well Technician's Licence No.
S. Miller	T0097
Signature of Technician/Contractor	Submission date: day 19 mo 11 yr 99

MINISTRY USE ONLY

Data source 58 | Contractor 1558 59-62 | Date received DEC 07 1999 63-68 | 80

Date of inspection | Inspector

Remarks

CSS.ES0

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The Ontario Water Resources Act

WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 **1531532**

Municipality 15006 Con. CON 03

(Tract) Plan 5M509 Sub 6

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
[redacted]	City of Kanata	3	13

Address: Kanata Ont

Date completed: 11 day 10 month 90 year

21 | UTM | Northing | RC | Elevation | RC | Basin Code | ii | iii | iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
	clay			0	5
grey & white	quartz			5	64

31

32

41 WATER RECORD

Water found at - feet	Kind of water
58	1 ☒ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
39	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☒ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6 1/4	1 ☒ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	188	0	22
8 3/4	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		0	20
6	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		20	64

SCREEN

Sizes of opening (Slot No.)	Diameter inches	Length feet

Material and type | Depth at top of screen feet

61 PLUGGING & SEALING RECORD

☒ Annular space ☐ Abandonment

Depth set at - feet From	Depth set at - feet To	Material and type (Cement grout, bentonite, etc.)
0	20	Cement grout

71 PUMPING TEST

Pumping test method: 1 ☐ Pump 2 ☐ Bailer

Pumping rate: 60 GPM

Duration of pumping: 1 Hours 0 Mins

Static level: 2 feet

Water level end of pumping: 2 feet

Water levels during: 1 ☐ Pumping 2 ☒ Recovery

15 minutes	30 minutes	45 minutes	60 minutes
2 feet	2 feet	2 feet	2 feet

If flowing give rate: GPM

Pump intake set at: feet

Water at end of test: ☒ Clear ☐ Cloudy

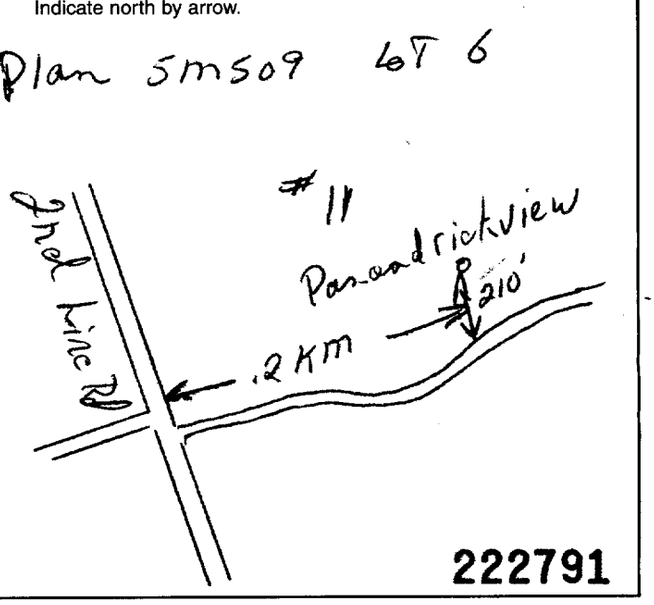
Recommended pump type: ☐ Shallow ☒ Deep

Recommended pump setting: 50 feet

Recommended pump rate: 60 GPM

LOCATION OF WELL

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



222791

FINAL STATUS OF WELL

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not use 10 ☐ Other

METHOD OF CONSTRUCTION

1 ☐ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air) 5 ☒ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting 9 ☐ Driving 10 ☐ Digging 11 ☐ Other

Name of Well Contractor	Well Contractor's Licence No.
Air Rock Drilling Ltd.	1119
Address: RR#3 Jasper ON	K0G 1G0
Name of Well Technician: Ken DeSaulniers	Well Technician's Licence No. 74
Signature of Technician/Contractor	Submission date: 22 day 10 mo 00 yr

MINISTRY USE ONLY

Data source | Contractor: 1119 | Date received: NOV 22 2000

Date of inspection | Inspector

Remarks: CSS.ES0

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Ontario Ministry of the Environment

The Ontario Water Resources Act
WATER WELL RECORD

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Mark correct box with a checkmark, where applicable.

11 (1-2) **1532148** Municipality 15006 (10-14) Con. CON (15-22) 03 (23-24)

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot (25-27)
Ottawa Carleton	Kanata	3	12

Owner's surname (28-47) First Name	Address	Date completed (48-53)
Gold Haven Construction	Box 72059, Kanata ON. K2K 2P4	31 day 07 month 01 year

21 (1-2) UTM Zone (10) Easting (12-17) Northing (18-24) RC (25) Elevation (26) RC (30) Basin Code (31) ii iii iv (47)

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
Brown	soil			0	5
Grey &	white sandstone			5	137
Coloured	granite			137	150

31 (1-2)
32 (10-14 15-21 32-43 54-65 75-80)

41 WATER RECORD

Water found at - feet	Kind of water
137 (10-13)	1 ☐ Fresh 3 ☐ Sulphur 14 2 ☐ Salty 4 ☐ Minerals 6 ☐ Gas — NOT TESTED
(15-18)	1 ☐ Fresh 3 ☐ Sulphur 19 2 ☐ Salty 4 ☐ Minerals 6 ☐ Gas
(20-23)	1 ☐ Fresh 3 ☐ Sulphur 24 2 ☐ Salty 4 ☐ Minerals 6 ☐ Gas
(25-28)	1 ☐ Fresh 3 ☐ Sulphur 29 2 ☐ Salty 4 ☐ Minerals 6 ☐ Gas
(30-33)	1 ☐ Fresh 3 ☐ Sulphur 34 2 ☐ Salty 4 ☐ Minerals 6 ☐ Gas

60

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6 1/4	1 ☒ Steel (12) 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	0	21 (13-16)
(17-18)	1 ☐ Steel (19) 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			(20-23)
6 (24-25)	1 ☐ Steel (26) 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		21	150 (27-30)

SCREEN

Sizes of opening (Slot No.) (31-33)	Diameter (34-38) inches	Length (39-40) feet

Material and type	Depth at top of screen (41-44) feet	(30)

61 PLUGGING & SEALING RECORD

☒ Annular space ☐ Abandonment

Depth set at - feet From (10-13)	Depth set at - feet To (14-17)	Material and type (Cement grout, bentonite, etc.)
21	0	Grouted cement (2)
(18-21)	(22-25)	
(26-29)	(30-33)	(80)

71 PUMPING TEST

Pumping test method (10): 1 ☒ Pump 2 ☐ Bailer
Pumping rate (11-14): 25 GPM
Duration of pumping (15-16): 1 Hours (17-18) Mins

Static level (19-21)	Water level end of pumping (22-24)	Water levels during (25): 1 ☒ Pumping 2 ☐ Recovery			
		15 minutes (26-28)	30 minutes (29-31)	45 minutes (32-34)	60 minutes (35-37)
34'6" feet	65 feet	145 feet	100 feet	75 feet	65 feet

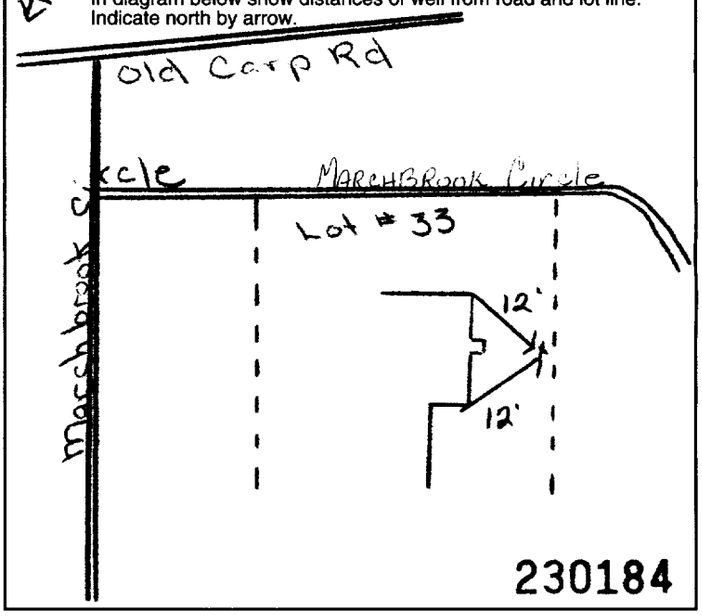
If flowing give rate (38-41)	Pump intake set at	Water at end of test (42)
GPM	feet	☐ Clear ☒ Cloudy

Recommended pump type	Recommended pump setting (43-45)	Recommended pump rate (46-49)
☐ Shallow ☒ Deep	100 feet	5 GPM

(50-53)

LOCATION OF WELL

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



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FINAL STATUS OF WELL (54)

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well
5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering
9 ☐ Unfinished 10 ☐ Replacement well

WATER USE (55-56)

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial
5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning
9 ☐ Not use 10 ☐ Other

METHOD OF CONSTRUCTION (57)

1 ☐ Cable tool 2 ☐ Rotary (conventional) 3 ☐ Rotary (reverse) 4 ☐ Rotary (air)
5 ☒ Air percussion 6 ☐ Boring 7 ☐ Diamond 8 ☐ Jetting
9 ☐ Driving 10 ☐ Digging 11 ☐ Other

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558

Address: Box 490, Stittsville, On. K2S 1A6

Name of Well Technician	Well Technician's Licence No.
S. Miller	T0097

Signature of Technician/Contractor

Submission date: day 31 mo 7 yr 01

MINISTRY USE ONLY

Data source (58)	Contractor (59-62)	Date received (63-68) (80)
	1558	AUG 21 2001

Date of inspection | Inspector

Remarks: CSS.ES1

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0506 (07/00) Front Form 9

Ontario — Ministry of the Environment

Well Tag Number A014624 / A014624

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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

Ministry Use Only

[redacted]

Address of Well Location (County/District/Municipality)	Township	Lot	Concession
Ottawa Carleton	Kanata	12	3

RR#/Street Number/Name	City/Town/Village	Site/Compartment/Block/Tract etc.
14 marchbrook Circle	Kanata	Sub Lot 7, Plan 4M-723

GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation
	83	18	425871	5023331	Magellan	☐ Undifferentiated ☑ Averaged ☐ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To
	Clay			0	1.2
grey	sandstone	grey limestone	mixed	1.2	21.3

Hole Diameter

Depth From	Depth To	Diameter Centimetres
0	21.3	15.24

Water Record

Water found at ___ Metres	Kind of Water		
15.2 m	☐ Fresh	☐ Sulphur	☐ Gas
	☐ Salty	☐ Minerals	☐ Other: NOT tested
19.2 m	☐ Fresh	☐ Sulphur	☐ Gas
	☐ Salty	☐ Minerals	☐ Other: tested
19.8	☐ Fresh	☐ Sulphur	☐ Gas
	☐ Salty	☐ Minerals	☐ Other:

After test of well yield, water was: ☑ Clear and sediment free ☐ Other, specify NOT tested

Chlorinated ☑ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To
Casing				
15.88	☑ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.48	0	7.3
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
	☑ Open hole		6.7	21.3

Test of Well Yield

Pumping test method: Submersible pump

	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level		4.71		12.29
1	1	7.20	1	7.53
2	2	8.27	2	6.24
3	3	8.95	3	6.05
4	4	9.44	4	5.99
5	5	9.80	5	5.92
10	10	10.77	10	5.77
15	15	11.29	15	5.65
20	20	11.55	20	5.56
25	25	11.84	25	5.49
30	30	11.95	30	5.44
40	40	12.0	40	5.36
50	50	12.20	50	5.25
60	60	12.29	60	5.10

Pump intake set at - (metres): ___
Pumping rate - (litres/min): 91
Duration of pumping ____ hrs + ____ min
Final water level end of pumping: 12.3 metres
Recommended pump type: ☐ Shallow ☑ Deep
Recommended pump depth: 18.3 metres
Recommended pump rate: 9 (litres/min)
If flowing give rate - (litres/min): ___
If pumping discontinued, give reason: ___

Plugging and Sealing Record

☑ Annular space ☐ Abandonment

Depth set at - Metres From	Depth set at - Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.7	0	Cement Slurry	0.2043

Method of Construction

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

Water Use

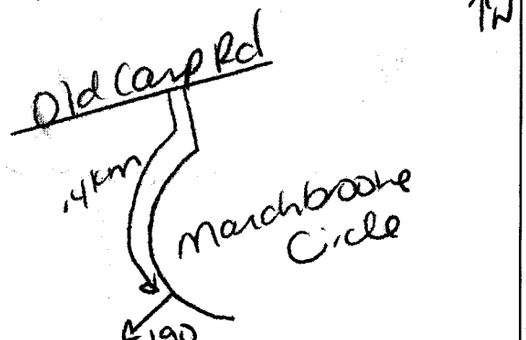
☑ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

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

Location of Well

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



Audit No. Z 14551

Date Well Completed: 2004 06 17

Was the well owner's information package delivered? ☑ Yes ☐ No

Date Delivered: 2004 06 28

Well Contractor/Technician Information

Name of Well Contractor: A-Rock Drilling Ltd — Well Contractor's Licence No.: 1119

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

Name of Well Technician (last name, first name): Pyrcell Shannon — Well Technician's Licence No.: 12122

Signature of Technician/Contractor: X [signature] — Date Submitted: 2004 07 16

Ministry Use Only

Data Source: ___ — Contractor: 1119

Date Received: JUL 21 2004 — Date of Inspection: ___

Remarks: ___ — Well Record Number: 1534795

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☑ Well Owner's Copy ☐

Cette formule est disponible en français

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below) A025611

A025611

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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- Please print clearly in blue or black ink only.

Ministry Use Only

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Well Owner's Information and Location of Well Information

[redacted]

Ottawa Carleton | Kanata | [redacted]

RR#/Street Number/Name: Lot 7 Panandrick View Dr.

City/Town/Village: Kanata

Site/Compartment/Block/Tract etc.:

GPS Reading: NAD 83 | Zone 18 | Easting 425611 | Northing 5023393

Unit Make/Model: Garmin

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	Depth To (Metres)
brown	clay		packed	0	2.43
gray & white	sandstone		very hard	2.43	22.85

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
00	6.40	22.75
6.40	22.85	15.07

Water Record

Water found at ___ Metres / Kind of Water

___ m	☐ Fresh	☐ Sulphur	
21.03	☐ Salty	☐ Minerals	☐ Gas ☐ Other:
NOT TESTED	☐ Fresh	☐ Sulphur	☐ Gas ☐ Other:
___ m	☐ Fresh	☐ Sulphur	☐ Gas ☐ Other:

After test of well yield, water was
☒ Clear and sediment free
☐ Other, specify

Chlorinated ☒ Yes ☐ No

Construction Record

Casing

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
15.86	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	0.48	+1.67	6.40
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			

Screen

Outside diam	Material	Slot No.		
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			

No Casing or Screen

15.07	☒ Open hole	6.40	22.85

Test of Well Yield

Pumping test method: submersible

Pump intake set at - (metres) 18.28

Pumping rate - (litres/min) 54.6

Duration of pumping 1 hrs + ___ min

Final water level end of pumping 3.03 metres

Recommended pump type. ☐ Shallow ☒ Deep

Recommended pump depth. 15.23 metres

Recommended pump rate. 45.5 (litres/min)

If flowing give rate - (litres/min)

If pumping discontinued, give reason.

Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level	1.85		
1	2.62	1	1.97
2	2.74	2	2.04
3	2.78	3	2.05
4	2.81	4	2.04
5	2.83	5	2.03
10	2.87	10	2.00
15	2.92	15	1.97
20	2.94	20	1.96
25	2.97	25	1.94
30	2.98	30	1.94
40	3.00	40	1.93
50	3.03	50	1.93
60		60	1.92

Plugging and Sealing Record

☒ Annular space ☐ Abandonment

Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.40	0	Grouted Bentonite Slurry	.110m3

Method of Construction

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

Water Use

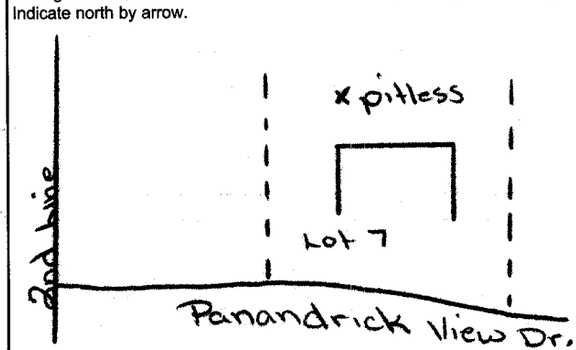
☒ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

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

Location of Well

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



Audit No. Z 26138

Was the well owner's information package delivered? ☒ Yes ☐ No

Date Well Completed YYYY MM DD: 2005 09 2[illegible]

Date Delivered YYYY MM DD: 2005 09 29

Well Contractor/Technician Information

Name of Well Contractor: Capital Water Supply Ltd.

Well Contractor's Licence No.: 1558

Business Address (street name, number, city etc.): Box 490 Stittsville, Ontario K2S 1A6

Name of Well Technician (last name, first name): Miller, Stephen

Well Technician's Licence No.: T0097

Signature of Technician/Contractor: X [signature]

Date Submitted YYYY MM DD: 2005 09 29

Ministry Use Only

Data Source | Contractor

Date Received YYYY MM DD: OCT 24 2005

Date of Inspection YYYY MM DD

Remarks | Well Record Number

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐

Cette formule est disponible en français

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below)
A 035457
A035457

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

Instructions for Completing Form

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- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

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Well Owner's Information and Location of Well Information

[redacted]

Ottawa Carleton — RR#/Street Number/Name
Kanata — City/Town/Village
Lot: 3 — Concession: 11 — Site/Compartment/Block/Tract etc.
927 March Road
Kanata

GPS Reading: NAD 83 | Zone 18 | Easting 42 63 76 | Northing 50 233 79
Unit Make/Model: Garmin
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	Depth To (Metres)
Brown	Clay		Packed	0	1.98
Gray	Limestone		Hard	1.98	12.19
Gray & White	Sandstone		Hard	12.19	22.24

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
0	9.75	22.75
9.75	22.24	15.55

Water Record

Water found at ___ Metres / Kind of Water

14.02 m	☐ Fresh	☐ Sulphur	☐ Gas ☐ Salty ☐ Minerals ☐ Other:
19.81 m	☐ Fresh	☐ Sulphur	☐ Gas ☐ Salty ☐ Minerals ☐ Other:
21.94 m	☐ Fresh	☐ Sulphur	☐ Gas ☐ Salty ☐ Minerals ☐ Other: not tested

After test of well yield, water was
☒ Clear and sediment free
☐ Other, specify

Chlorinated ☒ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
15.86	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.48	+ .45	9.75
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
15.55	☒ Open hole		9.75	22.24

Test of Well Yield

Pumping test method: submersible
Pump intake set at - (metres) 19.81
Pumping rate - (litres/min) 54.6
Duration of pumping 3 hrs + 30 min
Final water level end of pumping 5.05 metres
Recommended pump type: ☐ Shallow ☒ Deep
Recommended pump depth. 15.23 metres
Recommended pump rate. 45.5 (litres/min)
If flowing give rate - (litres/min)
If pumping discontinued, give reason.

Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level	3.60		
1	3.73	1	4.90
2	3.81	2	4.85
3	3.81	3	4.82
4	3.85	4	4.78
5	3.87	5	4.75
10	4.03	10	4.61
15	4.13	15	4.52
20	4.22	20	4.45
25	4.30	25	4.37
30	4.36	30	4.31
40	4.47	40	4.22
50	4.57	50	4.15
60	4.64	60	4.08

Plugging and Sealing Record ☒ Annular space ☐ Abandonment

Depth set at - Metres From	Depth set at - Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
9.75	0	Grouted - Bentonite Slurry	.254m3

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

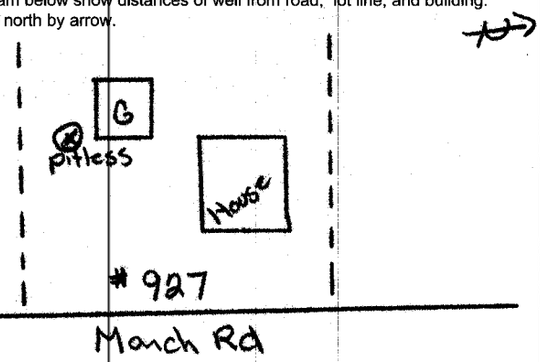
☒ Water Supply ☐ Recharge well ☐ Unfinished ☐ Abandoned, (Other)
☐ Observation well ☐ Abandoned, insufficient supply ☐ Dewatering
☐ Test Hole ☐ Abandoned, poor quality ☐ Replacement well

Well Contractor/Technician Information

Name of Well Contractor: Capital Water Supply Ltd.
Well Contractor's Licence No.: 1558
Business Address (street name, number, city etc.): Box 490 Stittsville, Ontario K2S 1A6
Name of Well Technician (last name, first name): Miller; Stephen
Well Technician's Licence No.: T0097
Signature of Technician/Contractor: x
Date Submitted YYYY MM DD: 2006 6 29

Location of Well

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



Audit No. Z 46998
Date Well Completed YYYY MM DD: 2006 6 27
Was the well owner's information package delivered? ☒ Yes ☐ No
Date Delivered YYYY MM DD: 2006 6 28

Ministry Use Only

Data Source
Contractor: 1558
Date Received YYYY MM DD: JUL 1 1 2006
Date of Inspection YYYY MM DD
Remarks
Well Record Number

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐ *Cette formule est disponible en français*

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below)

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

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- Please print clearly in blue or black ink only.

Ministry Use Only

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Well Owner's Information and Location of Well Information

[redacted]

Ottawa Carleton	Kanata	11	4
RR#/Street Number/Name	City/Town/Village	Site/Compartment/Block/Tract etc.	
941 March Rd.	Kanata		

GPS Reading: NAD 83 | Zone 18 | Easting 426390 | Northing 5023443

Unit Make/Model: Garmin

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	Depth To (Metres)

Hole Diameter

Depth From	Depth To (Metres)	Diameter Centimetres

Water Record

Water found at ___ Metres / Kind of Water

___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was
☐ Clear and sediment free
☐ Other, specify

Chlorinated ☐ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
	☐ Open hole			

Test of Well Yield

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

Plugging and Sealing Record

☐ Annular space ☒ Abandonment

Depth set at - Metres From	Depth set at - Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.09	0	Grouted Bentonite Slurry	2inch hole

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

Well Contractor/Technician Information

Name of Well Contractor	Well Contractor's Licence No.
Capital Water Supply Ltd.	1558

Business Address (street name, number, city etc.)
box 490 Stittsville Ontario K2S 1A6

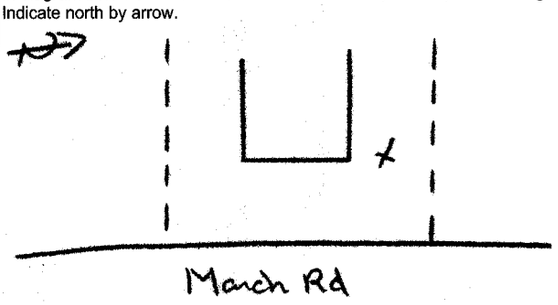
Name of Well Technician (last name, first name)	Well Technician's Licence No.
Miller Stephen	T0097

Signature of Technician/Contractor: x [signature]

Date Submitted YYYY MM DD: 2006 7 20

Location of Well

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



Audit No. Z 47023

Date Well Completed YYYY MM DD: 2006 7 20

Was the well owner's information package delivered? ☐ Yes ☒ No

Date Delivered YYYY MM DD

Ministry Use Only

Data Source

Contractor: 1558

Date Received YYYY MM DD: AUG 25 2006

Date of Inspection YYYY MM DD

Remarks

Well Record Number

0506E (09/03)

Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐

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Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below)
A041907
A 041907

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

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- Please print clearly in blue or black ink only.

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Well Owner's Information and Location of Well Information

[redacted]

Ottawa Carleton | Kanata | 11 | 4

RR#/Street Number/Name: 941 March Rd.
City/Town/Village: Kanata
Site/Compartment/Block/Tract etc.:

GPS Reading: NAD 83 | Zone 18 | Easting 426390 | Northing 5023443
Unit Make/Model: Garmin
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	Depth To (Metres)
Brown	Clay		Packed	0	2.74
grey	limestone		Hard	2.74	11.58
grey&white	sandstone			11.58	22.24

Hole Diameter

Depth From	Depth To (Metres)	Diameter (Centimetres)
0	6.40	22.75
6.40	22.24	15.23

Water Record

Water found at ___ Metres / Kind of Water
20.72 ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other: NOT TESTED
___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:
___ m ☐ Fresh ☐ Sulphur ☐ Gas ☐ Salty ☐ Minerals ☐ Other:

After test of well yield, water was
☒ Clear and sediment free
☐ Other, specify

Chlorinated ☒ Yes ☐ No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To (Metres)
Casing				
15.86	☒ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	.48	+.45	6.40
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized			
Screen				
Outside diam	☐ Steel ☐ Fibreglass ☐ Plastic ☐ Concrete ☐ Galvanized	Slot No.		
No Casing or Screen				
15.23	☒ Open hole		6.40	22.24

Test of Well Yield

Pumping test method: Submersible
Pump intake set at - (metres) 18.28
Pumping rate - (litres/min) 50.05
Duration of pumping 1 hrs + ___ min
Final water level end of pumping 7.01 metres
Recommended pump type: ☐ Shallow ☒ Deep
Recommended pump depth 15.23 metres
Recommended pump rate. 45.5 (litres/min)
If flowing give rate - (litres/min)
If pumping discontinued, give reason.

	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level				
1	5.83		1	5.46
2	6.08		2	5.41
3	6.21		3	5.39
4	6.30		4	5.36
5	6.35		5	5.34
10	6.50		10	5.23
15	6.62		15	5.16
20	6.69		20	5.14
25	6.76		25	5.12
30	6.79		30	5.10
40	6.88		40	5.07
50	6.94		50	5.04
60	7.01		60	5.02

Plugging and Sealing Record ☒ Annular space ☐ Abandonment

Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
6.40	0	Grouted Bentonite Slurry	.21m3

Method of Construction

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

Water Use

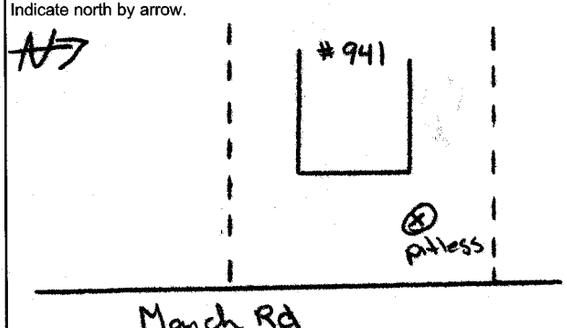
☒ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

Final Status of Well

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

Location of Well

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



Audit No. Z 47021
Date Well Completed: YYYY 2006 | MM 7 | DD 18
Was the well owner's information package delivered? ☒ Yes ☐ No
Date Delivered: YYYY 2006 | MM 7 | DD 18

Well Contractor/Technician Information

Name of Well Contractor: Capital Water Supply Ltd
Well Contractor's Licence No.: 1558
Business Address (street name, number, city etc.): Box 490 Stittsville Ontario K2S 1A6
Name of Well Technician (last name, first name): Miller Stephen
Well Technician's Licence No.: T0097
Signature of Technician/Contractor: X
Date Submitted: YYYY 2006 | MM 7 | DD 18

Ministry Use Only

Data Source
Contractor: 1558
Date Received: AUG 25 2006
Date of Inspection
Remarks
Well Record Number

0506E (09/03) Contractor's Copy ☐ Ministry's Copy ☐ Well Owner's Copy ☐ *Cette formule est disponible en français*

Ontario — Ministry of the Environment

Measurements recorded in: ☐ Metric ☑ Imperial

A 074700 (Please Print Below) A074700

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Well Owner's Information

[redacted]

1370 Nadia Lane | March | 13 | 2

County/District/Municipality: Ottawa/Carleton

City/Town/Village: Kanata

Province: Ontario

Postal Code: K2K2B9

UTM Coordinates: NAD 83 | Zone 18 | Easting 425307 | Northing 5023612

Municipal Plan and Sublot Number: /

Other: /

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
	Clay / gravel			0'	7'
black	Limestone			7'	47'
grey	Sandstone			47'	95'
grey/white	Sandstone			95'	110'
grey	sandstone (grey clay)			110'	115'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
0'	22'	2 Bags cement	0.044
		2 Bags quick grout	0.044

Method of Construction

☐ Cable Tool ☐ Diamond ☐ Rotary (Conventional) ☐ Jetting ☐ Rotary (Reverse) ☐ Driving ☐ Boring ☐ Digging ☑ Air percussion ☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used ☑ Domestic ☐ Municipal ☐ Dewatering ☐ Livestock ☐ Test Hole ☐ Monitoring ☐ Irrigation ☐ Cooling & Air Conditioning ☐ Industrial ☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
15.24cm		.48cm	0'	22'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To
6"	Steel		0'	22'

Status of Well

☑ Water Supply ☐ Replacement Well ☐ Test Hole ☐ Recharge Well ☐ Dewatering Well ☐ Observation and/or Monitoring Hole ☐ Alteration (Construction) ☐ Abandoned, Insufficient Supply ☐ Abandoned, Poor Water Quality ☐ Abandoned, other, specify ☐ Other, specify

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water	Other, specify
110'	☐	☑ Fresh ☐ Untested	
113	☐	☑ Fresh ☐ Untested	
	☐	☐ Fresh ☐ Untested	

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0'	22'	25.4cm

Results of Well Yield Testing

After test of well yield, water was: ☐ Clear and sand free ☑ Other, specify cloudy

If pumping discontinued, give reason: /

Pump intake set at (m/ft): 100'

Pumping rate (l/min / GPM): 19 gpm

Duration of pumping: 1 hrs + ____ min

Final water level end of pumping (m/ft): 5.60'

If flowing give rate (l/min-/ GPM): 0

Recommended pump depth (m/ft): 100'

Recommended pump rate (l/min / GPM): 19 gpm.

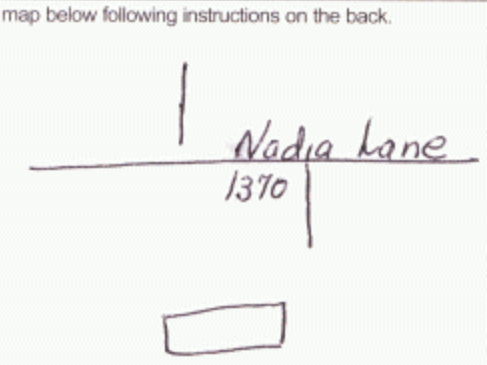
Well production (l/min / GPM): 60 gpm

Disinfected? ☑ Yes ☐ No

Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level			
1	9.90'	1	11.68'
2	12.48'	2	10.60'
3	13.88'	3	9.82'
4	1483'	4	9.25'
5	15.52'	5	8.85'
10	17.32'	10	7.68'
15	18.10'	15	7.15'
20	18.65'	20	6.83'
25	18.87'	25	6.65'
30	19.20'	30	6.50'
40	19.60'	40	6.30'
50	1991'	50	6.18'
60	20.24'	60	6.03'

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor: WILF HALL & SONS WELL DRILLING

Well Contractor's Licence No.: 2558

Business Address (Street Number/Name): RR1 260 Hall Shore Rd.

Municipality: McDonald's Corners

Province: Ont

Postal Code: K0G1M0

Business E-mail Address: wilfhallltd@bellnet.ca

Bus. Telephone No. (inc. area code): 6132782933

Name of Well Technician (Last Name, First Name): Hall Mark

Well Technician's Licence No.: T2228

Signature of Technician and/or Contractor: Mark Hall

Date Submitted: 2008 09 30

Well owner's information package delivered: ☑ Yes ☐ No

Date Package Delivered: 2008 09 30

Date Work Completed: 2008 09 30

Ministry Use Only

Audit No. Z 81216

OCT 15 2008

Received

0506E (12/2007)

Ministry's Copy

Ontario — Ministry of the Environment

Measurements recorded in: ☐ Metric ☒ Imperial

W **Tag#: A135310** (Print Below)

A135310

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

[redacted]

Address of Well Location (Street Number/Name)	Township	Lot	Concession
16 Marchbrook Circle	(West Carleton) MARCH	12	3

County/District/Municipality	City/Town/Village	Province	Postal Code
Ottawa-Carleton	Kanata	Ontario	

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	4257750	5025335	4M-723	8

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	To
	Back Fill			0'	4'
Grey	Limestone			4'	37'
Grey & White	Sandstone			37'	79'
Grey & White	Sandstone			79'	93'
Grey & White	Sandstone			93'	100'

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
20'	0'	Neat cement	12.5

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☒ Air percussion
☐ Other, *specify* _____

Well Use

☐ Public ☐ Commercial ☐ Not used
☒ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify* _____

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	To
6 1/4"	Steel	.188"	+2'	20'
6"	Open Hole		20'	100'

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	To

Status of Well

☒ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Water Details

Water found at Depth	Kind of Water	
79 (m/ft) ☐ Gas	☐ Fresh ☒ Untested	☐ Other, *specify*
93 (m/ft) ☐ Gas	☐ Fresh ☒ Untested	☐ Other, *specify*
(m/ft) ☐ Gas	☐ Fresh ☐ Untested	☐ Other, *specify*

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0'	20'	9 3/4"
20'	100'	6"

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify* Not tested

If pumping discontinued, give reason: X

Pump intake set at (m/ft): 80'

Pumping rate (l/min / GPM): 20

Duration of pumping: 1 hrs + 0 min

Final water level end of pumping (m/ft): 56' 8"

If flowing give rate (l/min / GPM): X

Recommended pump depth (m/ft): 90'

Recommended pump rate (l/min / GPM): 20

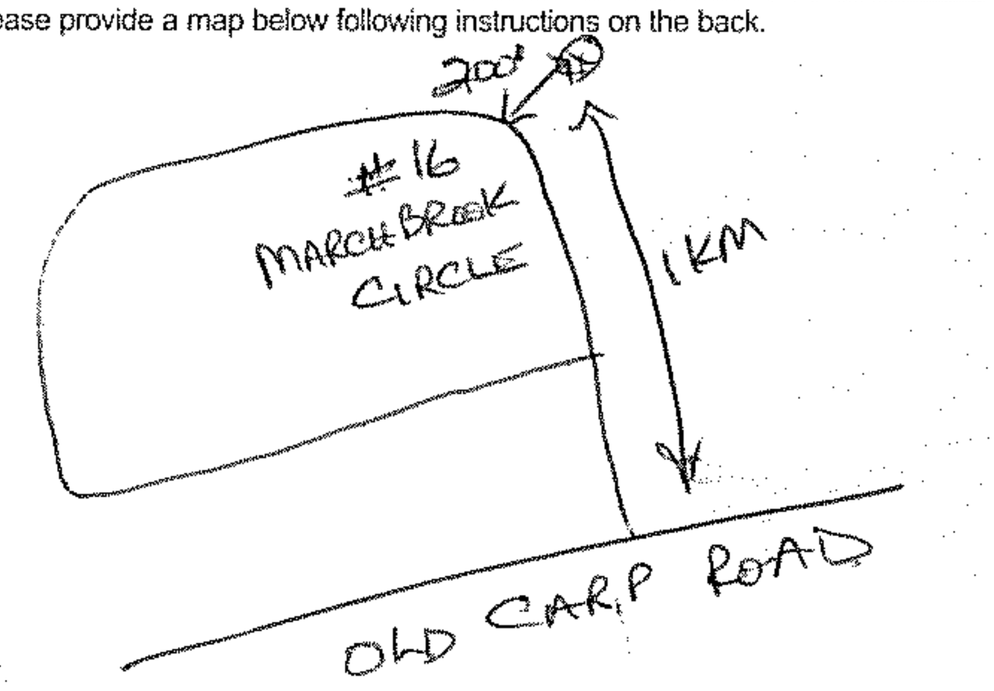
Well production (l/min / GPM): 20

Disinfected? ☒ Yes ☐ No

Draw Down Time (min)	Water Level (m/ft)	Recovery Time (min)	Water Level (m/ft)
Static Level	18.8		56.8
1	28.6	1	35.3
2	34.2	2	25.4
3	38.2	3	18.8
4	41.4	4	18.8
5	45.4	5	
10	51.4	10	
15	52.5	15	
20	53.	20	
25	53.5	25	
30	54.	30	
40	55.2	40	
50	56	50	
60	56.8	60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

1/2 HP - 10 GPM SET @ 90 FT

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Air Rock Drilling Co. Ltd.	1119

Business Address (Street Number/Name)	Municipality
6058 Franktown Road, RR#1	Richmond

Province	Postal Code	Business E-mail Address
ON	K0A 2Z0	air-rock@sympatico.ca

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
6138839170	HANNA JEREMY

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
T3632		2013 09 30

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
☒ Yes ☐ No	20130903	Audit No. Z155210
	Date Work Completed: 2013 09 29	NOV 12 2013 Received

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APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Samuel Berube, B. Eng.

patersongroup

Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

POSITION

Junior Environmental Engineer

EDUCATION

University of Guelph, B.Eng., 2019
Environmental Engineering

EXPERIENCE

2019 – Present
Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Junior Environmental Engineer

2018
Health Canada FNIHB
Proposal and Final Design Review
Student Engineer

SELECT LIST OF PROJECTS

Phase I and II – ESA Reports – Various Sites - Ottawa
Large Scale Remediation Program – Caivan Residential Development
National Capital Region (CSA Z768-01 & MECP)
Remediation Programs – Various Sites - Ottawa
Designated Substance Surveys – Various Sites – Ottawa
Geotechnical Investigations – Various Sites
Subgrade Reviews – Various Sites – Ottawa
Density Testing – Residential and Commercial Sites – Ottawa
Bearing Surface Investigations – Various Sites - Ottawa

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