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Phase I-Environmental Site Assessment

936 March Road
Ottawa, Ontario

Prepared For

Minto Communities
and 2559688 Ontario Inc.

November 26, 2018

Report: PE4343-1

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Minto Communities (Minto) to conduct a Phase I Environmental Site Assessment (ESA) of the property addressed 936 March Road. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I ESA Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

Based on the historical research conducted as part of the Phase I ESA, the Phase I Property was first developed in the late 1800's as a farmstead with the existing residential dwelling and outbuildings. The Beachburg rail corridor transects the eastern portion of the site in an approximate north-south direction. Based on the aerial review, miscellaneous items were stored in the vicinity of the outbuildings since the early 1990's. The historical use of the adjacent and neighbouring properties was primarily vacant or agricultural with occasional farmsteads or residential dwellings.

The Phase I Property is currently occupied by a residential dwelling and private garage, as well as two (2) former farm structures used for the storage of equipment and miscellaneous items. An original farm building further to the north of the residential dwelling is no longer present. Stored items noted in the aerial review, adjacent to the former farm building and northeast of the residential dwelling, were being removed at the time of the site visit. The remainder of the property is primarily occupied by soy fields farmed by the neighbour across March Road, as well as some wood areas. Shirley's Brook transects the western portion of the site in an approximate north-south direction and the aforementioned Beachburg rail line has been abandoned.

At the time of the site visit, the current uses of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. The adjacent and neighbouring properties are largely vacant or agricultural land and residential dwellings. As noted previously, the former rail line that transects the property is not currently in operation (the tracks have been removed).

Based on the historical research in combination with observations made at the time of the site visit, potentially contaminating activities which have resulted in APECs on the Phase I Property include on-site fuel storage and the storage of miscellaneous items by Fuller Construction.

Recommendations

Based on the results of the Phase I ESA, **it is our opinion that a Phase II Environmental Site Assessment is required for the property.**

Based on the age of the residential dwelling (late 1800's) possible asbestos-containing materials (ACMs) observed during the site visit include vinyl floor tiles, acoustic ceiling tiles and drywall joint compound. Possible asbestos-containing drywall joint compound may also be present in the private garage. The potential ACMs were observed to be in good condition at the time of the site visit.

Based on the age of the residential dwelling, lead-based paint may be present beneath more recent paints or on any original or older painted surfaces. Painted surfaces were generally observed to be in good condition throughout the building at the time of the site visit.

Prior to any possible future 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 Minto Communities (Minto) Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) of the property addressed 936 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 property.

Paterson was engaged to conduct this Phase I-ESA by Ms. Beth Henderson of Minto. The offices of Minto are located at 200-180 Kent Street, Ottawa, Ontario. Ms. Henderson can be reached by telephone at (613) 782-2311.

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

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

2.0 PHASE I PROPERTY INFORMATION

Address:	936 March Road, Ottawa, Ontario
Legal Description:	Part of Lot 12, Concession 4, Geographic Township of March, City of Ottawa
Property Identification Numbers:	04527-1004, 04527-1005
Location:	The subject site is located between March Road and March Valley Road, approximately 240m north of Maxwell Bridge Road, in the City of Ottawa, Ontario. For the purposes of this report, March Road is assumed to travel in a north-south direction. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	45° 22' 1" N, 75° 56' 1" W
Site Description:	
Configuration:	Irregular (2 parcels divided by a railway corridor)
Site Area:	78 hectares (approximate)
Zoning:	RU – Rural, with a floodplain overlay along Shirley's Brook, which transects the Phase I Property in an approximate north-south direction, parallel to March Road.
Current Use:	The property is currently used for residential and agricultural purposes (soy fields).
Services:	The Phase I Property has private services (a potable 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 property, and if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

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

First Developed Use Determination

According to the current tenant, Ms. Jennifer Arbuckle, the Phase I Property was first developed as a farmstead in the late 1800's.

Fire Insurance Plans and City of Ottawa Street Directories

Due to the rural setting of the Phase I Property, there are no fire insurance plans (FIPs) or city directories for the Phase I Property or for properties within the Phase I Study Area.

Draft Plan of Subdivision

A draft plan of subdivision prepared by Stantec Geomatics was reviewed as part of this assessment. The draft plan of subdivision shows the Phase I Property in its current configuration.

Previous Engineering Reports

Paterson has conducted several environmental assessments for properties within the Phase I Study Area. Based on a review of our files, no potential environmental concerns were identified with respect to the Phase I Property.

Geotechnical Investigation

A Geotechnical Investigation was conducted for the Phase I Property in June of 2018. Thirty-eight boreholes were placed across the subject land to depths ranging from approximately 1.3 to 7.8m below grade. The subsurface profile generally consisted of topsoil over sand, silty clay and/or glacial till. Fill material was not identified at any of the borehole locations. No evidence of potential contamination was noted in the soil samples during the geotechnical field program.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on June 18, 2018. The subject site and adjacent properties were not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

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

Ontario Ministry of Environment, Conservation and Parks (MECP) Instruments

A request was submitted to the MECP Freedom of Information 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. Based on the MECP response dated August 30, 2018, no records were located responsive to the request. A copy of the MECP response is provided in Appendix 2.

MECP Coal Gasification Plant Inventory

The Ontario Ministry of Environment and Climate Change document entitled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. No coal gasification plants were identified within the Phase I Study Area.

MECP Incident Reports

A request was submitted to the MECP Freedom of Information 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. Based on the MECP response dated August 30, 2018, no records were located responsive to the request. A copy of the MECP response is provided in Appendix 2.

MECP Waste Management Records

A request was submitted to the MECP Freedom of Information office for information with respect to waste management records. Based on the MECP response dated August 30, 2018, no records were located responsive to the request. A copy of the MECP response is provided in Appendix 2.

MECP Submissions

A request was submitted to the MECP Freedom of Information office for information with respect to reports related to environmental conditions that have been submitted to the MECP. Based on the MECP response dated August 30, 2018, no records were located responsive to the request. A copy of the MECP response is provided in Appendix 2.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields ESR was conducted for properties within the Phase I Study Area. According to the ESR, no Records of Site Condition (RSCs) have been filed for the Phase I Property. No RSCs were identified for properties within the Phase I 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. No active or closed waste disposal sites were identified for the Phase I Property or for any properties within the Phase I Study Area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I Study Area was conducted on the web site of the Ontario Ministry of Natural Resources (MNR) on June 18, 2018. The search did not reveal any areas of natural significance on the Phase I Property or within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on May 31, 2018 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. A response from the TSSA, dated May 31, 2018, indicated that no records were identified. 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. According to the document, there are no closed landfill sites within the Phase I Study Area.

City of Ottawa Historical Land Use Inventory (HLUI)

A request was submitted to the City of Ottawa for a search of the Historical Land Use Inventory (HLUI) database. Based on the City of Ottawa response dated August 23, 2018, there are no activities associated with the Phase I Property. The HLUI database identified 56 activities within the Phase I Study Area. Based on the nature of the activities and their separation distances from the Phase I Property, they are not considered to represent areas of potential environmental concern (APECs) on the Phase I Property. A copy of the City correspondence 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. The review period dates back to the first available air photos for the site. Based on the review, the following observations have been made:

1934 — The Phase I Property was occupied by the existing residential dwelling and farm buildings. An apparent barn or outbuilding was also present further to the north of the residential dwelling. The remainder of the subject land was occupied by agricultural lands, with some treed areas. A rail line corridor transects the eastern portion of the property in an approximate north-south direction. Adjacent and neighbouring properties were occupied by agricultural lands with occasional farmsteads or residential dwellings.

1952 — No significant changes appear to have been made to the Phase I Property or to the adjacent and neighbouring lands.

1976 — An apparent ditch transects the western portion of the Phase I Property in an approximate north-south direction. No significant changes appear to have been made to the subject land or the adjacent and neighbouring properties.

1989 The Phase I Property and neighbouring lands within the Phase I Study Area appear to remain unchanged from the previous photograph.

1991 (City of Ottawa web site) The northern most outbuilding or barn seen in the previous photographs, is no longer present. An apparent storage area is present to the east of the former barn. The stored items cannot be distinguished from the photograph. There appears to be increased activity (possible storage areas) further to the east of the residential dwelling.

Additional outbuildings are present on the adjacent farmstead to the south, along March Road. Otherwise no significant changes appear to have been made to the adjacent and neighbouring properties.

2008 (City of Ottawa, geoOttawa) The Phase I Property appears to remain unchanged from the previous photograph. A residential subdivision is under construction to the southeast of the Phase I Property.

2017 (City of Ottawa, geoOttawa) The Phase I Property appears as it currently exists, with no changes from the previous photograph. The subdivision to the southeast of the Phase I Property has been completed. Commercial development has occurred along the east side of March Road further south of the Phase I Property.

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 Phase I Property slopes down to the east, with a difference in grade of approximately 10m.

According to the maps, Shirley's Brook transects the western portion of the Phase I Property in an approximate north-south direction, while drainage ditches are present on the eastern portion of the site in an approximate east-west direction. 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 and attached mapping, the site is situated within the Ottawa Valley Clay Plains physiographic region, described as "clay plains interrupted by ridges of rock or sand".

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of interbedded sandstone and dolomite of the March Formation and dolomite of the Oxford Formation. Overburden soils are reported to consist of offshore marine sediments with erosional terraces, with drift thicknesses between 0 and 10m.

Water Well Records

The MECP well mapping website was accessed to obtain well records for all drilled wells within 250 m of the Phase I Property. A well record was identified for the Phase I Property, as well as 28 well records for domestic potable wells or well abandonments on properties within the Phase I Study Area.

The well mapping website did not identify any monitoring well records for the Phase I Property or for any properties within the Phase I Study Area. Copies of the MECP well records are provided in Appendix 2.

Water Bodies and Areas of Natural Significance

Shirley's Brook transects the western portion of the Phase I Property in an approximate north-south direction. Otherwise, no bodies of water are present on the Phase I Property or within the Phase I Study Area. No areas of natural significance are known to exist within the Phase I Study Area.

5.0 INTERVIEWS

Property Owner Representative

Ms. Jennifer Arbuckle, the current tenant, was interviewed at the time of the site visit. Ms. Arbuckle indicated that the property has been occupied by the existing farmstead for approximately 150 years and that the Fuller family has owned the property for approximately 40 years. Ms. Arbuckle indicated that the property has been occupied by soy crops for the past 8 to 10 years and that prior to soy, the land was farmed for corn. To the knowledge of Ms. Arbuckle, the land has been farmed by the neighbour, across March Road, for the past 20 years.

Ms. Arbuckle indicated that the furnace oil aboveground storage tank (AST) situated in the basement was replaced in 2012 and that to her knowledge there were no leaks or spills associated with the previous AST or the existing AST. Ms. Arbuckle also indicated that the property owner stores scrap metal and unused construction equipment (associated with Fuller Construction). Fuller was in the process of removing the waste materials and equipment at the time of the site visit.

The information obtained in this interview is consistent with site information obtained from other sources and is considered to be valid.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site visit was conducted on June 19, 2018. Weather conditions were sunny, with a temperature of approximately 20° C. Personnel from the Environmental Department of Paterson Group conducted the site visit. The uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site visit, from publicly accessible areas. Photographs of the Phase I Property and adjacent lands are provided in the Figures Section of this report.

6.2 Specific Observations at Phase I Property

Buildings and Structures

The Phase I Property is occupied by a two-storey residential dwelling with a basement level, a private garage and two (2) outbuildings associated with the original farmstead. The dwelling, reportedly constructed in the late 1800's, has a stone and mortar foundation and is finished on the exterior with red brick and a metal roof.

A wood frame private garage structure, with an asphaltic-shingled roof, is present adjacent to the east of the residential dwelling. Two other wood-framed structures with metal or shingled roofs are present to the east of the dwelling and are used for storage of lawn maintenance equipment and miscellaneous building materials.

The residential dwelling is currently heated with oil-fired equipment, while the other structures have never been heated.

Underground Utilities and Below Grade Structures

A potable well is present to the southeast of the residential dwelling, while a septic system is reportedly present on the north side of the dwelling. Otherwise there are no underground utilities or below grade structures on the Phase I Property. Telephone and Hydro services are provided via overhead wires. The approximate locations of the well and septic are shown on Drawing PE4343-1A.

Site Features

The aforementioned buildings and structures occupy the southwestern portion of the Phase I Property. Shirley's Brook transects the site in an approximate north-south direction and is situated just west of the residential dwelling. A wooded area is present to the east of the residential dwelling. The northeastern portion of the site is also wooded. The remainder of the site is occupied by soy fields, which are separated by tree lines and drainage ditches. The Beachburg rail corridor (abandoned rail line) transects the Phase I Property in an approximate north-south direction.

A slope, approximately 6m high, runs in a north-south direction within the western portion of the subject site, sloping downward to the east. The slope was noted to be stable and shaped to an approximate 8H:1V slope or less. Overall, the ground surface across the subject site slopes downward from southwest to northeast from an elevation of approximately 80m above sea level (asl) to an elevation of approximately 65m asl. Site drainage consists of surficial infiltration and sheet flow to onsite drainage ditches and Shirley's Brook.

An empty aboveground fuel storage tank (AST) was observed to the further to the east of the residential dwelling at the time of the site assessment. No tag information was noted on the AST, which was approximately 5,000L in volume and in fair condition at the time of the site visit.

Based on the apparent age, condition and location of the AST, the tank is considered to have been empty when placed on the Phase I Property by Fuller Construction and not used on the Phase I Property for the storage of fuel. The tank appears to have been recently moved from a nearby grove of trees; a hole observed in the tank, is considered to have occurred during the moving of the AST. No signs of leakage or staining were noted on the AST or on the ground surface in the vicinity of the ASTs original or current location.

No other ASTs or signs of underground storage tanks (USTs) were noted at the time of the site visit.

A potable well is present on the southeastern portion of the Phase I Property, southeast of the residential dwelling. A septic system is present further to the southwest of the residential dwelling. No other underground structures were noted on the exterior of the Phase I Property at the time of the site visit.

Pole-mounted transformers were noted on or adjacent to the Phase I Property, along March Road. No signs of leakage were noted on or around the units. The transformers are not considered to pose a concern to the Phase I Property.

Waste generated on site includes domestic waste and recycling which is collected at the curbside by the municipality. Domestic waste water generated on site is discharged to the aforementioned septic system.

Other waste materials observed on site include defunct construction equipment, wooden job shacks and scrap metal. The aforementioned waste materials were stored further to the northeast and east of the residential dwelling and outbuildings. Fuller Construction was in the process of removing the waste at the time of the site visit. As noted in the aerial photograph review, a former barn structure was present further north of the residential dwelling. Stored items adjacent to the barn were unidentifiable from the photograph and considered to have included farm implements. The barn structure was no longer present at the time of the site visit and previously stored items appeared to have been removed based on soil disturbances noted at the time of the site visit.

No evidence of fill material was noted on the Phase I Property at the time of the site visit. There were no unidentified substances on the exterior of the Phase I Property at the time of the site visit. The above-noted site features are shown on Drawing PE4343-1 - Site Plan.

Interior Assessment

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

- ❒ Floor materials consist of a combination of hardwood, ceramic floor tiles and poured concrete (basement).
- ❒ Wall materials consist of gypsum board, ceramic tile, lathe and plaster with stone and mortar walls partially covered with apparent spray-foam insulation in the basement.
- ❒ Ceiling materials consist gypsum board, stipple plaster or unfinished wood beams.
- ❒ Lighting is provided by fluorescent and incandescent fixtures.

The dwelling is currently heated with oil-fired equipment. A 682L aboveground storage tank was situated within the southwest corner of the basement. The AST was of single-wall, non-metallic construction and manufactured in 2011. The tank was situated within a drip-pan and was in good condition at the time of the site visit, with no signs of leakage or staining on or around the AST.

According to the current tenant, the previous AST had been situated at the same location. Cuts in the concrete floor slab were noted beneath the spill tray. The purpose of the cuts was unclear at the time of the site visit. It should be noted that a copper fuel line was observed protruding from the concrete floor slab in the vicinity of the furnace. The copper fuel supply line associated with the former AST and leading to the furnace, is considered to have been partially buried in the concrete floor slab. Ms. Arbuckle was unaware of any leaks or spills associated with the previous or existing AST. No visual or olfactory evidence of leaks or stains were noted in the basement of the dwelling at the time of the site visit.

No evidence of underground storage tanks (USTs) was observed on the interior of the dwelling at the time of the site visit. Chemical storage within the dwelling was limited to small quantities of commercially available cleaning chemicals. No sumps or drains were observed on the interior of the dwelling at the time of the site visit.

Outbuildings

With the exception of some gypsum board on the interior of the private garage, the interiors of the remaining structures on site are not finished.

Minor quantities of fuels (less than 20L) including fuel and lubricants, were noted in the private garage and outbuilding closest to the residential dwelling. The chemicals were properly stored with no signs of leakage or staining in the immediate vicinity noted at the time of the site visit.

Hazardous Building Materials

Based on the reported date of construction (late 1800's), possible asbestos-containing materials (ACMs) observed within the dwelling during the site visit include drywall joint compound, stipple plaster finishes and hard plaster. Any drywall joint compound present within the private garage may also contain asbestos. The potential ACMs were observed to be in very good condition at the time of the site visit.

Based on the age the dwelling, lead-based paint may be present beneath more recent paints or on any original or older painted surfaces. Painted surfaces were generally observed to be in very good condition throughout the dwelling at the time of the site visit.

Urea Formaldehyde Foam Insulation (UFFI) was not identified during the site visit, however wall cavities within the dwelling were not observed for insulation type.

Ozone-depleting substances (ODSs) noted at the time of the site visit include a kitchen refrigerator. No potential sources of polychlorinated biphenyls (PCBs) were noted at the time of the site assessment.

No evidence of mould or water damage were observed on the interior of the subject buildings.

Neighbouring Properties

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

- ❒ North – Agricultural and treed land, and Beachburg rail corridor (abandoned rail line);
- ❒ South – Residential and vacant, undeveloped land (1225 March Valley Road);
- ❒ East – March Valley Road followed by vacant land and Shirley's Brook;
- ❒ West – March Road followed by residential and agricultural.

The abandoned rail line within the corridor that transects the subject land is considered to be a PCA, however it is not considered to result in an APEC on the Phase I Property. No other PCAs were identified within the Phase I Study Area. Current land use within the Phase I Study Area is illustrated on Drawing: PE4343-2 – Surrounding Land Use Plan in the Figures section of this report, following the text.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

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

Table 1
Land Use History – 936 March Road

Time Period	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
Prior to 1998	Various private individuals	Residential and Agricultural or Other	Phase I Property was reportedly developed as a farmstead in the late 1800's.	First developed use based on personal interviews. Existing farmstead can be seen in 1934 aerial (earliest aerial available for review). No significant change in land use noted in subsequent 1952, 1976, 1989 aerials.
1998 to present	Fuller Family	Residential and Agricultural or Other	Farmstead: residential dwelling and agricultural lands.	No changes to land use observed in subsequent aerials dated 1999, 2008 and 2017.

Potentially Contaminating Activities

The following historical and/or existing PCAs were identified on the Phase I Property:

- Item 28, Table 2, O.Reg. 153/04 as amended by O.Reg. 269/11: "Gasoline and Associated Products Storage in Fixed Tanks" - this PCA was identified based on the partially buried copper fuel supply line in the concrete floor slab within the residential dwelling.

Although not listed in Table 2 the storage of scrap metal and construction equipment is considered to be a PCA. The aforementioned on-site PCAs are considered to result in APECs on the Phase I Property as further discussed in the following section.

The abandoned rail line is not considered to represent an APEC on the Phase I Property based on the distance of the former rail lines from the property (approximately 10 to 15m), no evidence of ancillary activities, spur lines, loading or fueling, in combination with the nature of potential contaminants typically associated with this activity; metals and polynuclear aromatic hydrocarbons (PAHs) have low solubility and low mobility in the subsurface.

A dry cleaning establishment is situated approximately 200m south of the Phase I Property, within the commercial development at 846 March Road and is considered to be a drop-off location only with no dry cleaning chemicals used on-site. This property is not considered to represent a concern to the Phase I Property.

Other than the Beachburg rail corridor, no existing or historical off-site PCAs were identified within the Phase I Property. As noted above, this PCA is not considered to result in an APEC on the Phase I Property.

APECs resulting from PCAs on the Phase I Property are shown in red on Drawing PE4343-1 - Site Plan.

Areas of Potential Environmental Concern

Table 2
Areas of Potential Environmental Concern

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern with respect to Phase I Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 1	In the immediate vicinity of the residential dwelling.	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	BTEX PHCs (F_1-F_4)	Soil and Groundwater
APEC 2	Area around the former barn and storage area further north of the residential dwelling.	Other: farm operations, miscellaneous storage	On-site	BTEX PHCs (F_1-F_4) metals	Soil
				BTEX PHCs (F_1-F_4)	Groundwater
APEC 3	Former storage area further northeast of the residential dwelling	Other: storage of scrap metal and construction equipment	On-site	BTEX PHCs (F_1-F_4) metals	Soil
				BTEX PHCs (F_1-F_4)	Groundwater
APEC 4	Former storage area further east of the residential dwelling	Other: storage of scrap metal and construction equipment	On-site	BTEX PHCs (F_1-F_4) metals	Soil
				BTEX PHCs (F_1-F_4)	Groundwater

Contaminants of Potential Concern (CPCs)

Based on the APECs identified above, CPCs in the soil include the following benzene, ethylbenzene, toluene and xylenes (BTEX), petroleum hydrocarbons (PHCs, Fractions F_1-F_4) and metals.

CPCs in the groundwater include BTEX and PHCs.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of interbedded sandstone and dolomite of the March Formation and dolomite of the Oxford Formation. Overburden soils are reported to consist of offshore marine sediments with erosional terraces or bedrock, with drift thicknesses between 0 and 10m.

Buildings and Structures

The Phase I Property is occupied by a two-storey residential dwelling with a basement level, a private garage and two (2) outbuildings associated with the original farmstead. No other above grade buildings or structures were present on the Phase I Property.

Water Bodies

Shirley's Brook transects the western portion of the Phase I Property in an approximate north-south direction and is considered to flow in a southerly direction before heading east to Shirley's Bay. No other water bodies are present on the Phase I Property or within the Phase I Study Area.

Areas of Natural Significance

No areas of natural significance are known to exist within the Phase I Study Area.

Potable Water Wells

The MECP well mapping website was accessed to obtain well records for all drilled wells within 250 m of the Phase I Property. A well record was identified for the Phase I Property, as well as 28 well records for domestic potable wells or well abandonments on properties within the Phase I Study Area.

Monitoring Wells

The MECP well mapping did not identify any monitoring well records for the Phase I Property or for any properties within the Phase I Study Area.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is primarily residential and agricultural or vacant land. A commercial development (various restaurants, retail and service establishments) is present further to the south of the Phase I Property. Land use is shown on Drawing PE4343-2 - Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, historical and existing PCAs resulting in APECs on the Phase I Property include the following: fuel storage on the Phase I Property and the storage of scrap metal and equipment.

The abandoned railway line that transects the eastern portion of the Phase I Property is not considered to result in an APEC on the Phase I Property based on the separation distance of the former rail lines from the subject land, in combination with the nature (low-solubility and low subsurface mobility) of potential contaminants of concern typically associated with a rail bed (polynuclear aromatic hydrocarbons and metals).

Contaminants of Potential Concern

The CPCs identified in this Phase I ESA are listed in Section 7.1 of this report.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that there are potentially contaminating activities on the subject site which have resulted in areas of potential environmental concern on the Phase I Property. The presence of potentially contaminating activities was confirmed by a variety of independent sources, including, in some cases, observations made during the Phase I site visit. 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 Minto Communities (Minto) to conduct a Phase I Environmental Site Assessment (ESA) of the property addressed 936 March Road. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I ESA Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

Based on the historical research conducted as part of the Phase I ESA, the Phase I Property was first developed in the late 1800's as a farmstead with the existing residential dwelling and outbuildings. The Beachburg rail corridor transects the eastern portion of the site in an approximate north-south direction. Based on the aerial review, miscellaneous items were stored in the vicinity of the outbuildings since the early 1990's. The historical use of the adjacent and neighbouring properties was primarily vacant or agricultural with occasional farmsteads or residential dwellings.

The Phase I Property is currently occupied by a residential dwelling and private garage, as well as two (2) former farm structures used for the storage of equipment and miscellaneous items. An original farm building further to the north of the residential dwelling is no longer present. Stored items noted in the aerial review, adjacent to the former farm building and northeast of the residential dwelling, were being removed at the time of the site visit. The remainder of the property is primarily occupied by soy fields farmed by the neighbour across March Road, as well as some wood areas. Shirley's Brook transects the western portion of the site in an approximate north-south direction and the aforementioned Beachburg rail line has been abandoned.

At the time of the site visit, the current uses of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. The adjacent and neighbouring properties are largely vacant or agricultural land and residential dwellings. As noted previously, the former rail line that transects the property is not currently in operation (the tracks have been removed).

Based on the historical research in combination with observations made at the time of the site visit, potentially contaminating activities which have resulted in APECs on the Phase I Property include on-site fuel storage and the storage of miscellaneous items by Fuller Construction.

Recommendations

Based on the results of the Phase I ESA, **it is our opinion that a Phase II Environmental Site Assessment is required for the property.**

Based on the age of the residential dwelling (late 1800's) possible asbestos-containing materials (ACMs) observed during the site visit include vinyl floor tiles, acoustic ceiling tiles and drywall joint compound. Possible asbestos-containing drywall joint compound may also be present in the private garage. The potential ACMs were observed to be in good condition at the time of the site visit.

Based on the age of the residential dwelling, lead-based paint may be present beneath more recent paints or on any original or older painted surfaces. Painted surfaces were generally observed to be in good condition throughout the building at the time of the site visit.

Prior to any possible future 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.

9.0 STATEMENT OF LIMITATIONS

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

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

This report was prepared for the sole use of Minto Communities and 2559688 Ontario Inc. Permission and notification from Minto, 2559688 Ontario Inc. and Paterson Group will be required to release this report to any other party.

Paterson Group Inc.

Karyn Munch, P.Eng., QP$_{ESA}$

Mark S. D'Arcy, P.Eng., QP$_{ESA}$

Report Distribution:

- ❒ Minto Communities
- ❒ 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 Inventory.

Municipal Records
City of Ottawa Document “Old Landfill Management Strategy, Phase I - Identification of Sites.”, prepared by Golder Associates, 2004.
The City of Ottawa eMap website.

Local Information Sources
Draft Plan of Subdivision prepared by Stantec Geomatics, 2018.
Personal Interviews.

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

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4343-1 – SITE PLAN

DRAWING PE4343-2 – SURROUNDING LAND USE PLAN

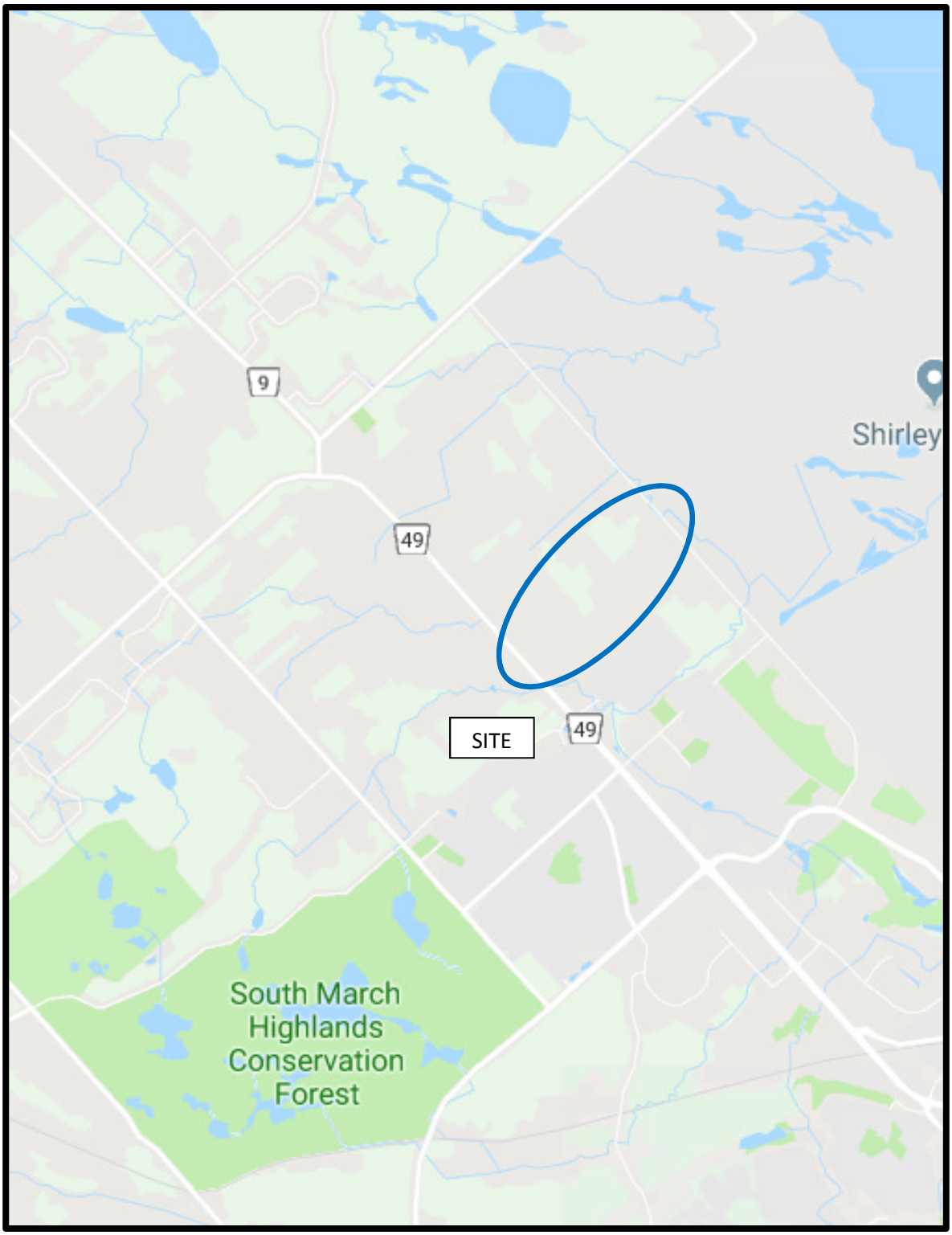


FIGURE 1

KEY PLAN

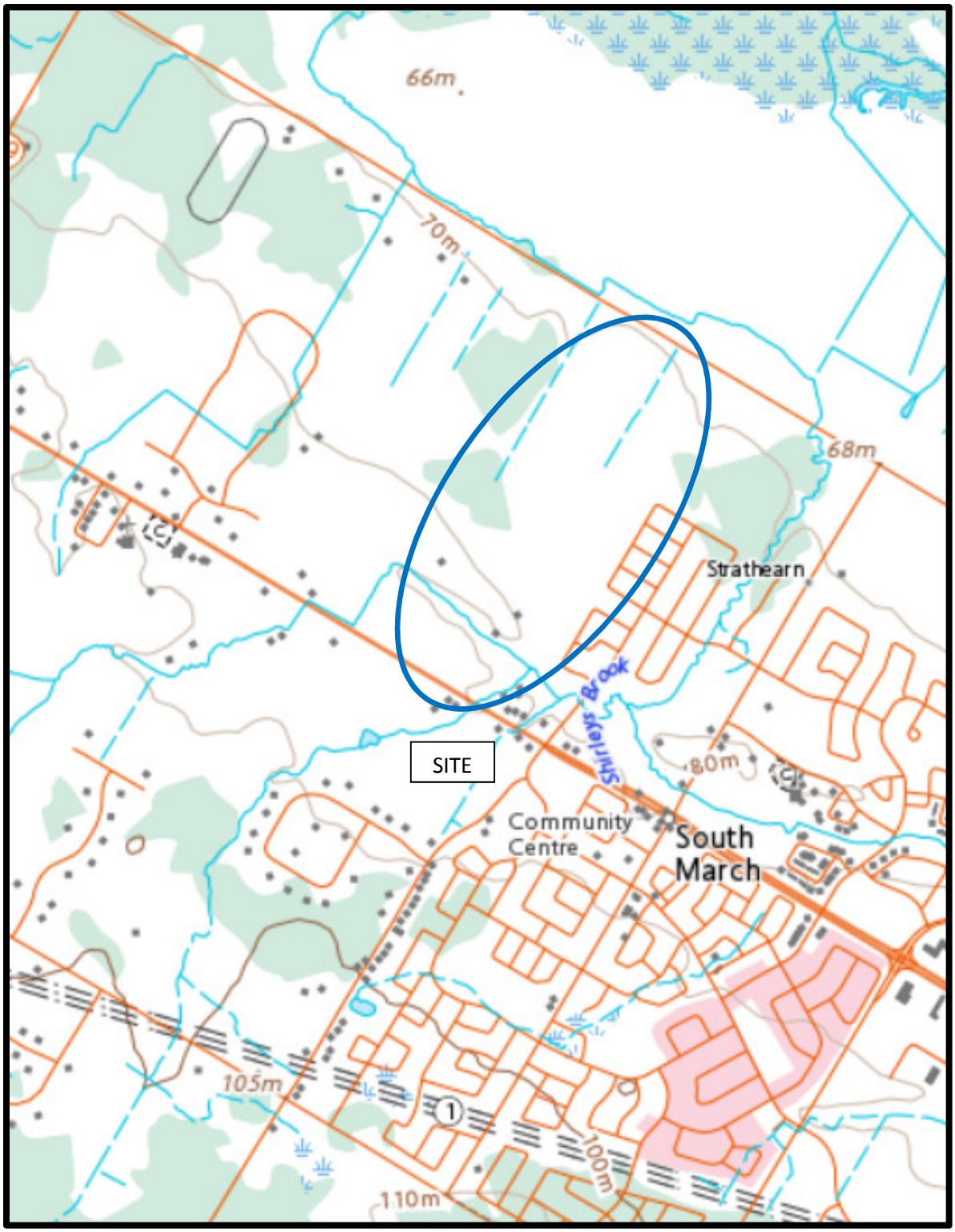
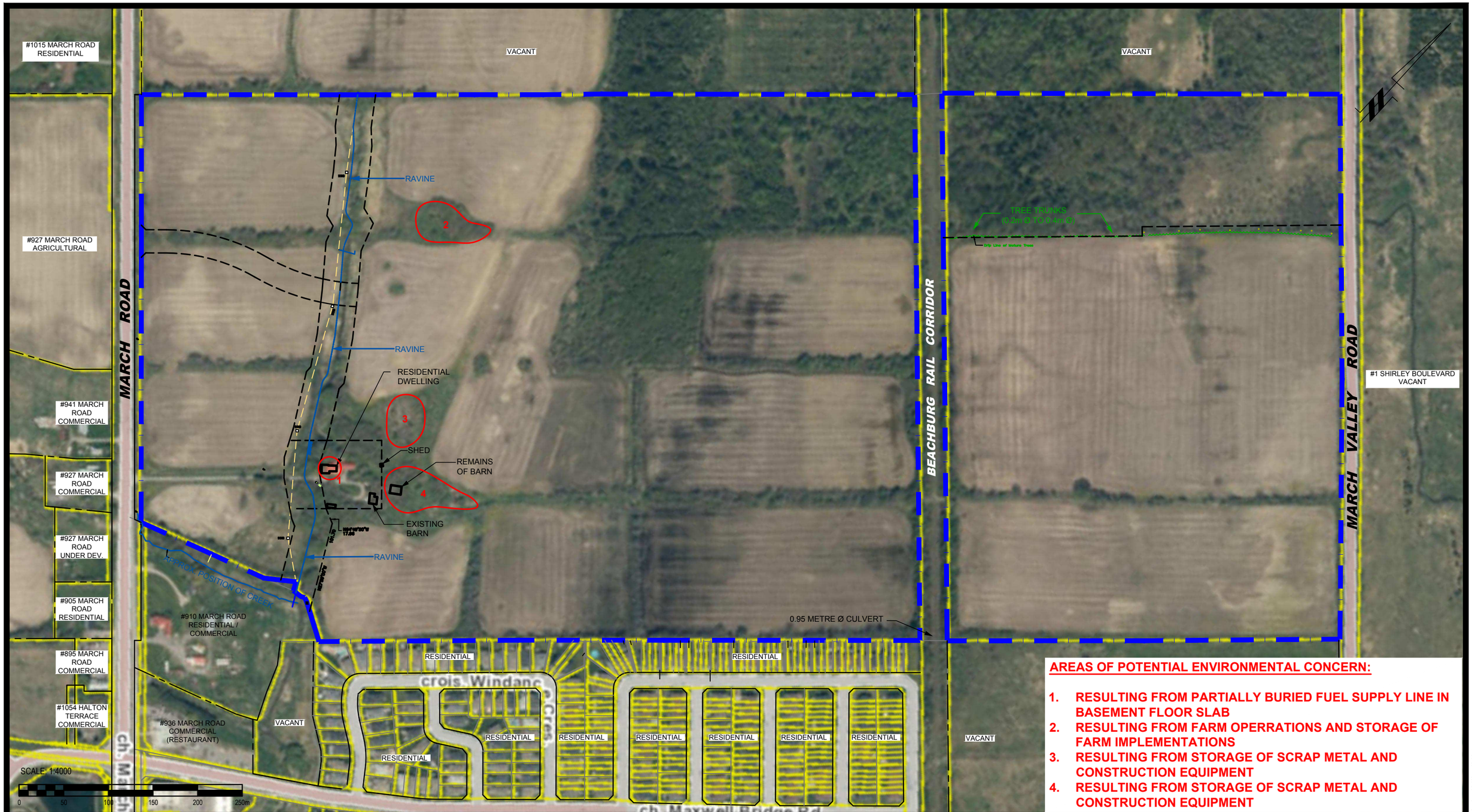


FIGURE 2

TOPOGRAPHIC MAP



AREAS OF POTENTIAL ENVIRONMENTAL CONCERN:

1. RESULTING FROM PARTIALLY BURIED FUEL SUPPLY LINE IN BASEMENT FLOOR SLAB
2. RESULTING FROM FARM OPERRATIONS AND STORAGE OF FARM IMPLEMENTATIONS
3. RESULTING FROM STORAGE OF SCRAP METAL AND CONSTRUCTION EQUIPMENT
4. RESULTING FROM STORAGE OF SCRAP METAL AND CONSTRUCTION EQUIPMENT

patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL
0			

MINTO COMMUNITIES

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
936 MARCH ROAD

OTTAWA, ONTARIO

Title: **SITE PLAN**

Scale: 1:4000	Date: 07/2018
Drawn by: RCG	Report No.: PE4343-1
Checked by: KM	Dwg. No.: PE4343-1
Approved by: MSD	Revision No.: 0

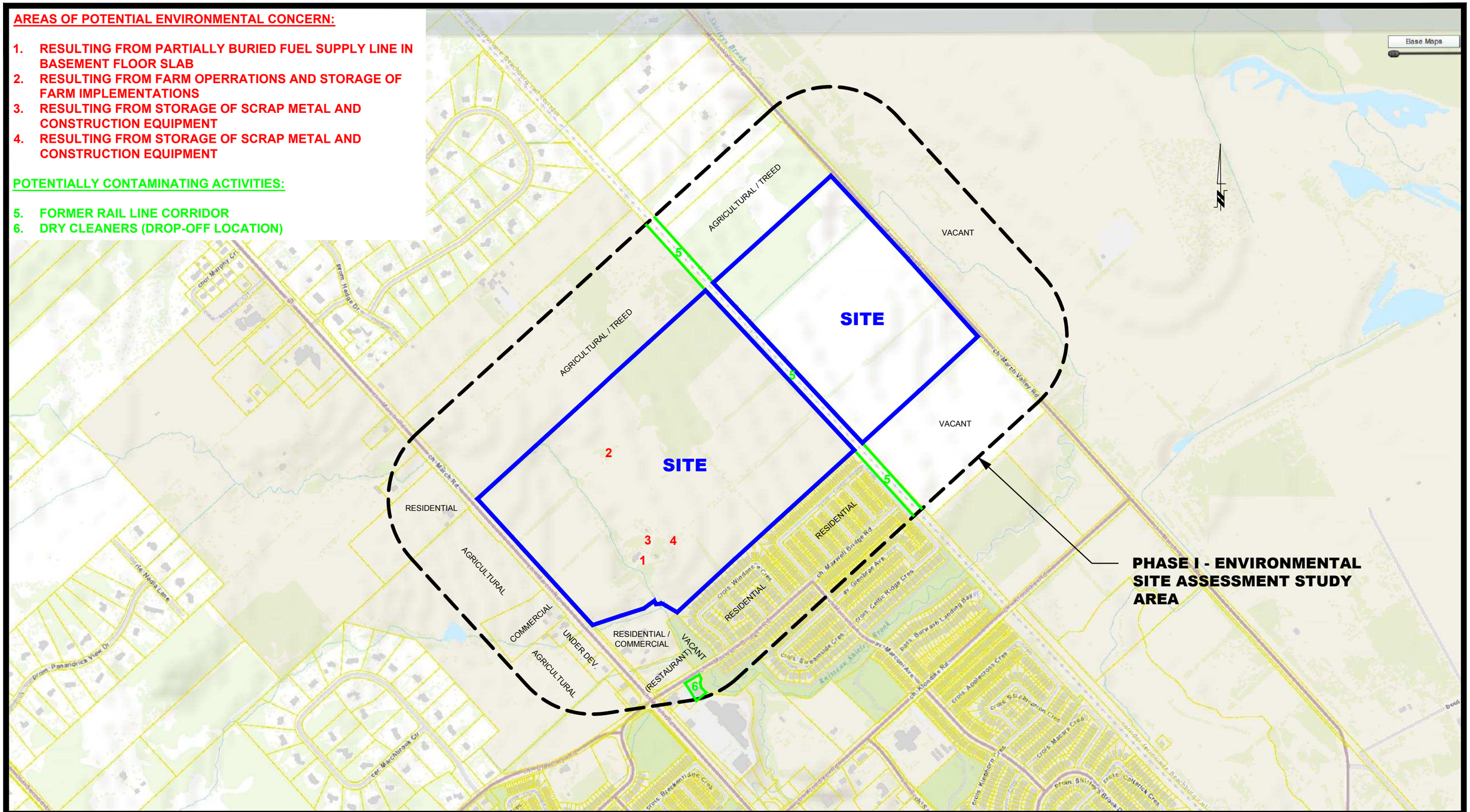
p:\autocad drawings\environmental\pe43xx\pe4343\pe4343.dwg

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN:

1. RESULTING FROM PARTIALLY BURIED FUEL SUPPLY LINE IN BASEMENT FLOOR SLAB
2. RESULTING FROM FARM OPERRATIONS AND STORAGE OF FARM IMPLEMENTATIONS
3. RESULTING FROM STORAGE OF SCRAP METAL AND CONSTRUCTION EQUIPMENT
4. RESULTING FROM STORAGE OF SCRAP METAL AND CONSTRUCTION EQUIPMENT

POTENTIALLY CONTAMINATING ACTIVITIES:

5. FORMER RAIL LINE CORRIDOR
6. DRY CLEANERS (DROP-OFF LOCATION)



patersongroup
consulting engineers

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

NO.	REVISIONS	DATE	INITIAL
0			

MINTO COMMUNITIES

PHASE I - ENVIRONMENTAL SITE ASSESSMENT
936 MARCH ROAD

OTTAWA, ONTARIO

Title:

SURROUNDING LAND USE PLAN

Scale: 1:10000	Date: 07/2018
Drawn by: RCG	Report No.: PE4343-1
Checked by: KM	Dwg. No.: PE4343-2
Approved by: MSD	Revision No.: 0

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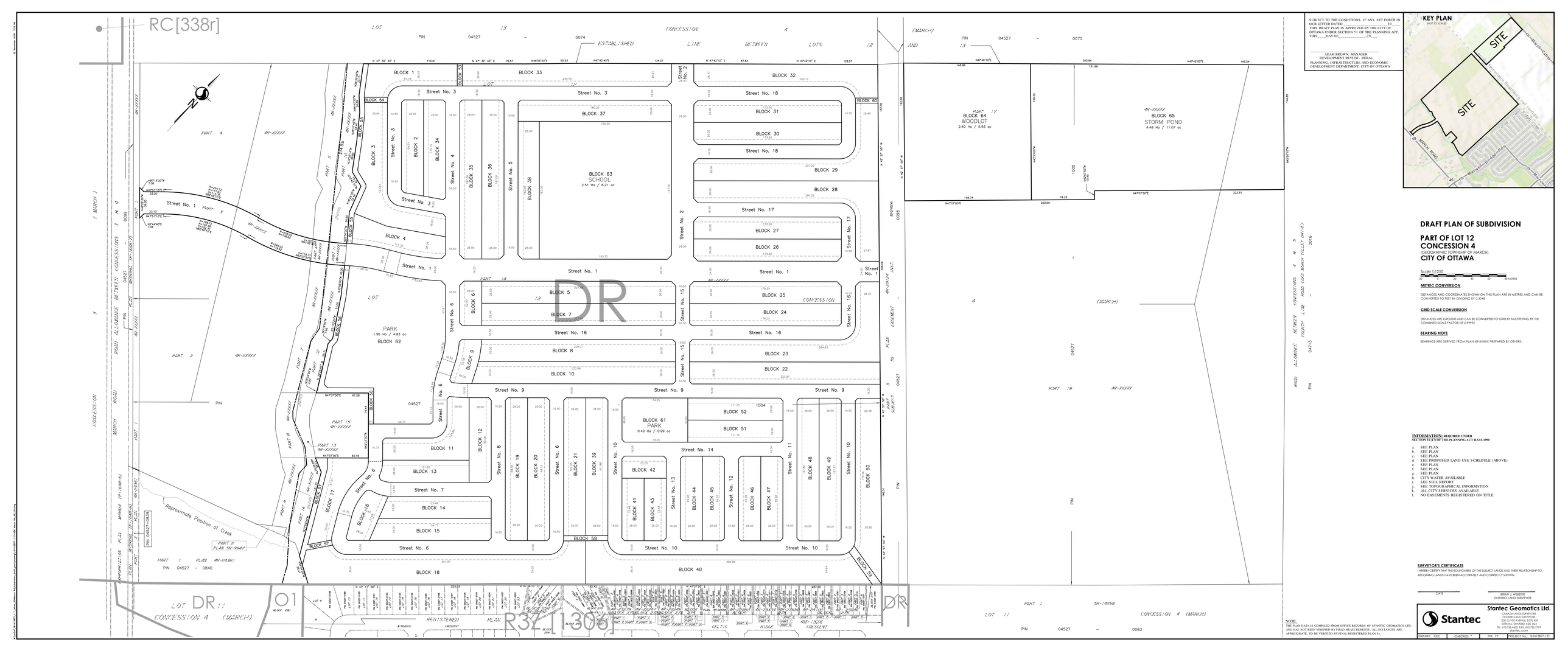
APPENDIX 1

DRAFT PLAN OF SUBDIVISION

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS



SUBJECT TO THE CONDITIONS, IF ANY, SET FORTH IN OUR LETTER DATED _____20____
THIS DRAFT PLAN IS APPROVED BY THE CITY OF OTTAWA UNDER SECTION 51 OF THE PLANNING ACT THIS ____DAY OF_____20____.

ADAM BROWN, MANAGER
DEVELOPMENT REVIEW- RURAL
PLANNING, INFRASTRUCTURE AND ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

KEY PLAN
NOT TO SCALE

DRAFT PLAN OF SUBDIVISION

PART OF LOT 12
CONCESSION 4
[GEOGRAPHIC TOWNSHIP OF MARCH]
CITY OF OTTAWA

Scale 1:1250
0 5 10 20 30 40 50 METRES

METRIC CONVERSION

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

GRID SCALE CONVERSION

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99992

BEARING NOTE

BEARINGS ARE DERIVED FROM PLAN 4R-XXXXX PREPARED BY OTHERS.

INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT R.S.O. 1990

a. SEE PLAN
b. SEE PLAN
c. SEE PLAN
d. SEE PROPOSED LAND USE SCHEDULE (ABOVE)
e. SEE PLAN
f. SEE PLAN
g. SEE PLAN
h. CITY WATER AVAILABLE
i. SEE SOIL REPORT
j. SEE TOPOGRAPHICAL INFORMATION
k. ALL CITY SERVICES AVAILABLE
l. NO EASEMENTS REGISTERED ON TITLE

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE SUBJECT LANDS AND THEIR RELATIONSHIP TO ADJOINING LANDS HAVE BEEN ACCURATELY AND CORRECTLY SHOWN.

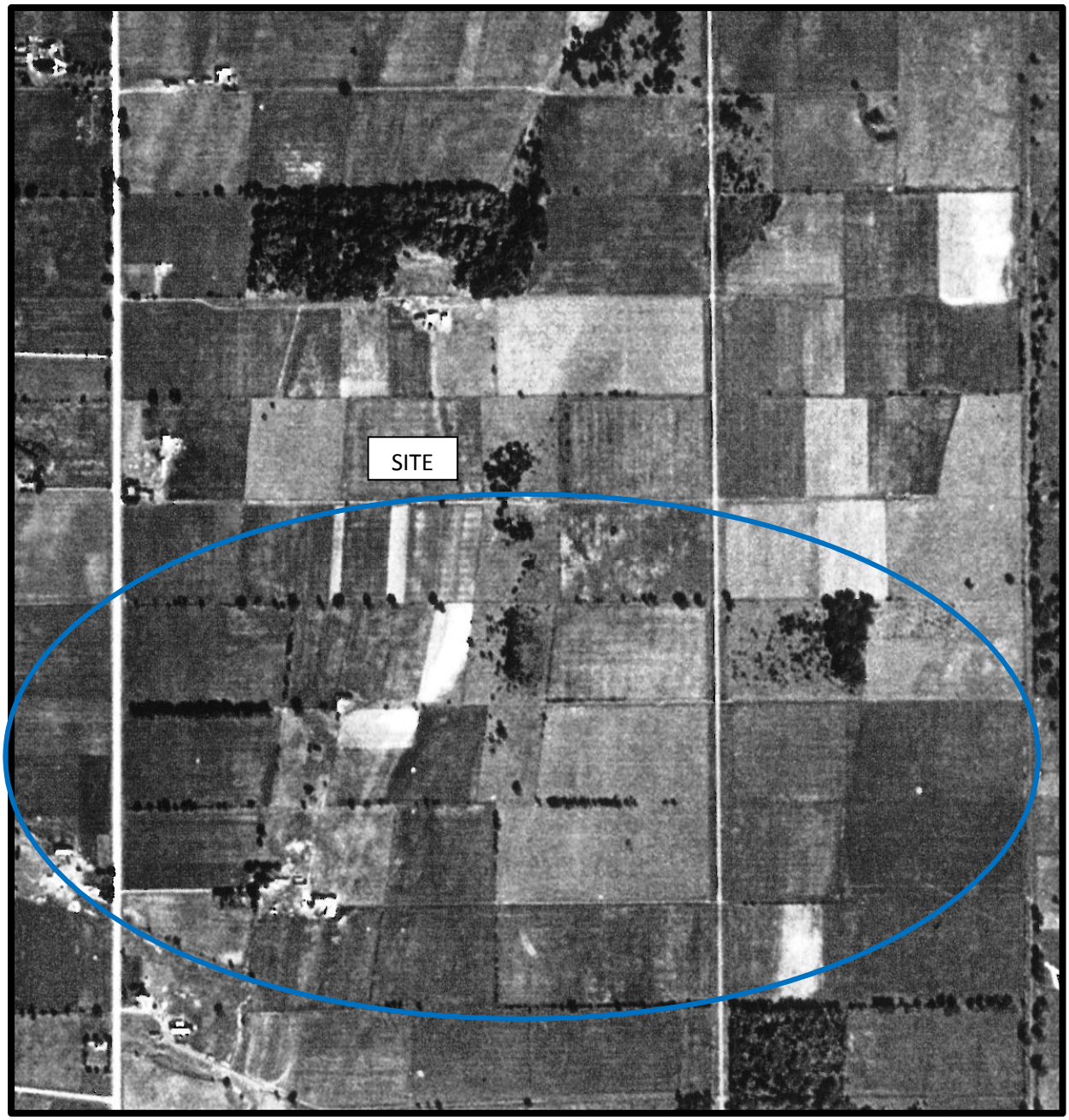
DATE

BRIAN J. WEBSTER
ONTARIO LAND SURVEYOR

NOTE:
THE PLAN DATA IS COMPILED FROM OFFICE RECORDS OF STANTEC GEOMATICS LTD. AND HAS NOT BEEN VERIFIED BY FIELD MEASUREMENTS. ALL DISTANCES ARE APPROXIMATE, TO BE VERIFIED BY FINAL REGISTERED PLAN(S).

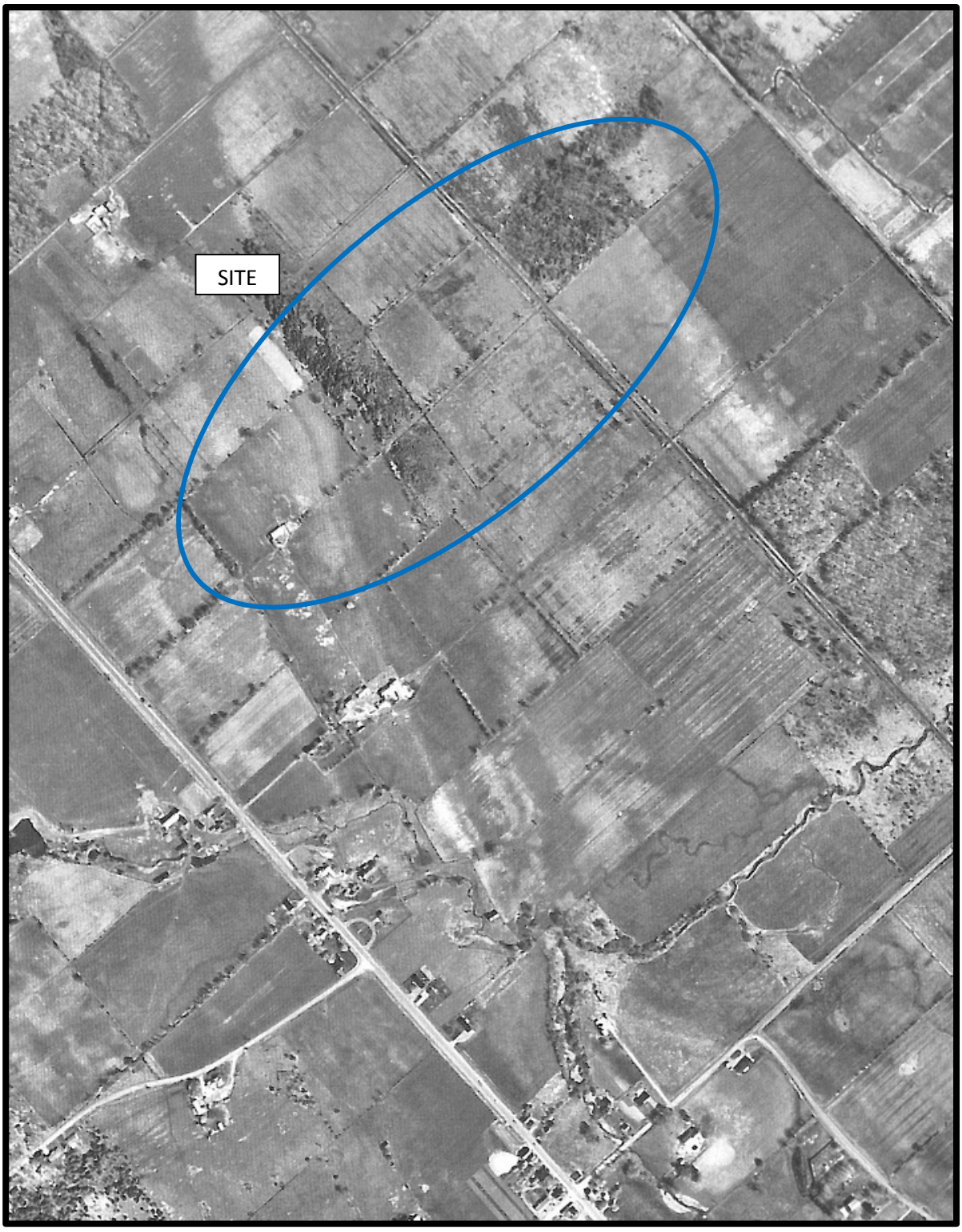
Stantec
Stantec Geomatics Ltd.
CANADA LAND SURVEYORS
ONTARIO LAND SURVEYORS
1331 CLYDE AVENUE, SUITE 400
OTTAWA, ONTARIO, K2C 3G4
TEL: 613.722.4420 FAX: 613.722.2799
stantec.com

DRAWN: CJC	CHECKED: *	PM: FP	PROJECT NO.: 161613077-131



AERIAL PHOTOGRAPH
1934

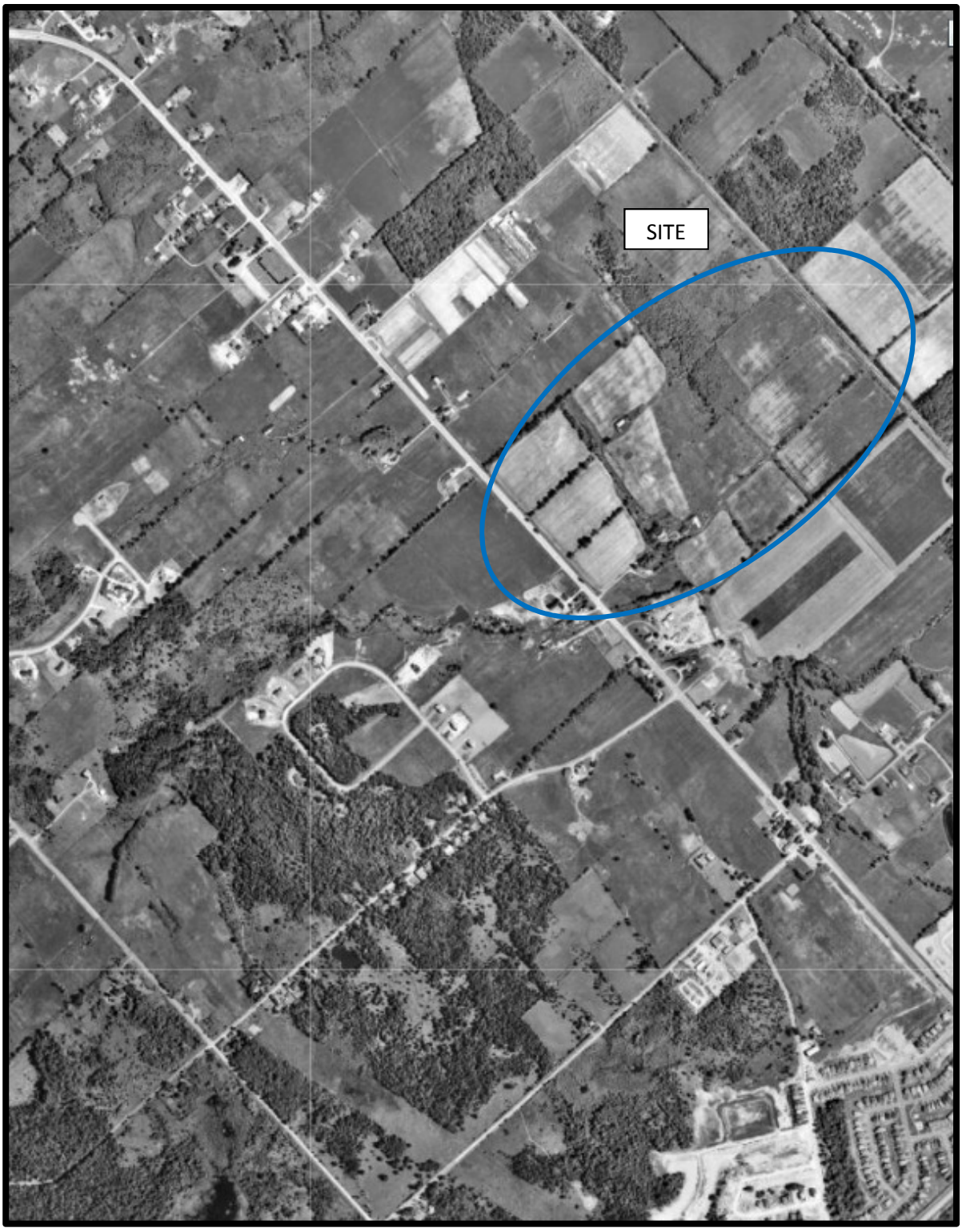
AERIAL PHOTOGRAPH
1952



AERIAL PHOTOGRAPH
1976

patersongroup

AERIAL PHOTOGRAPH
1989



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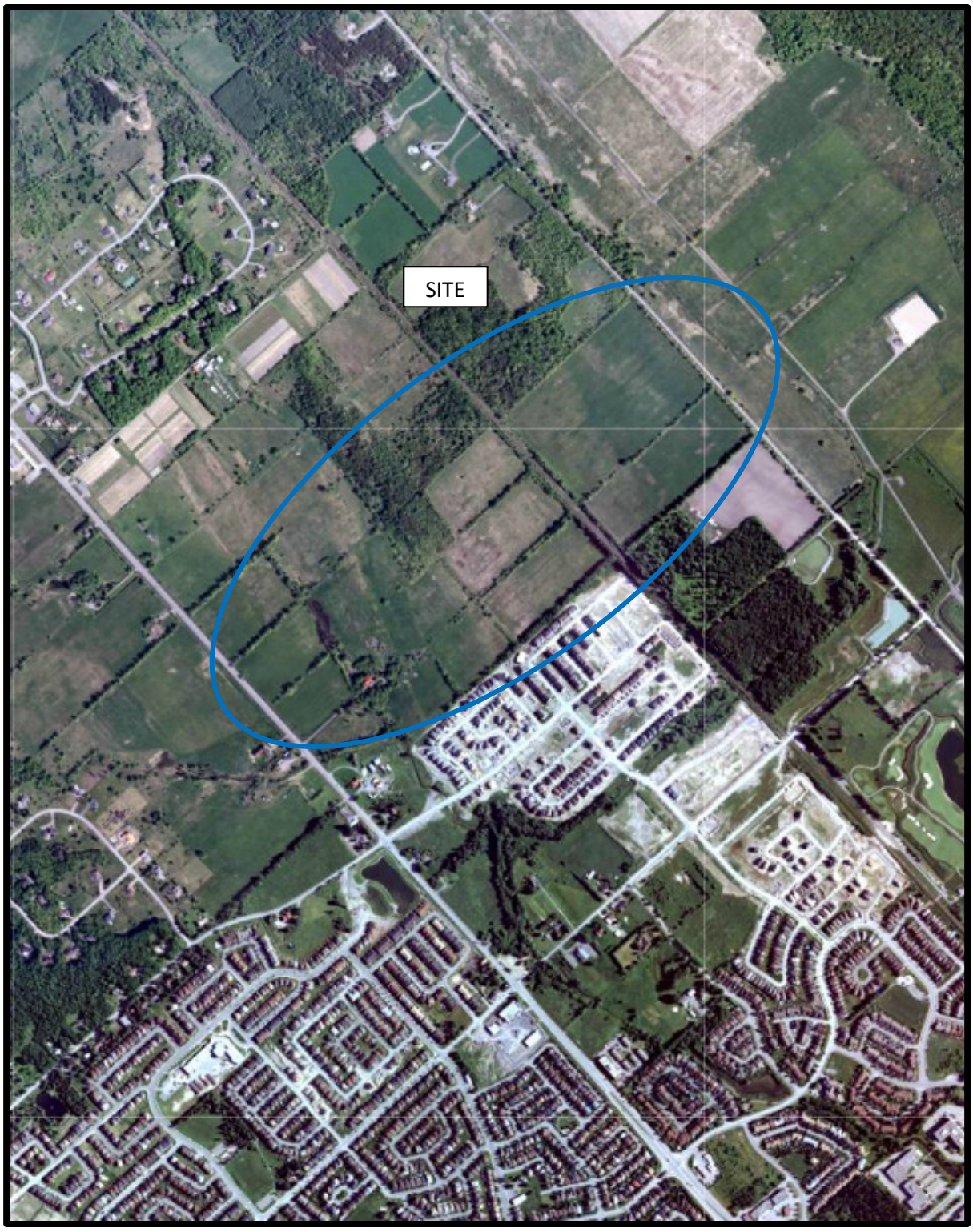
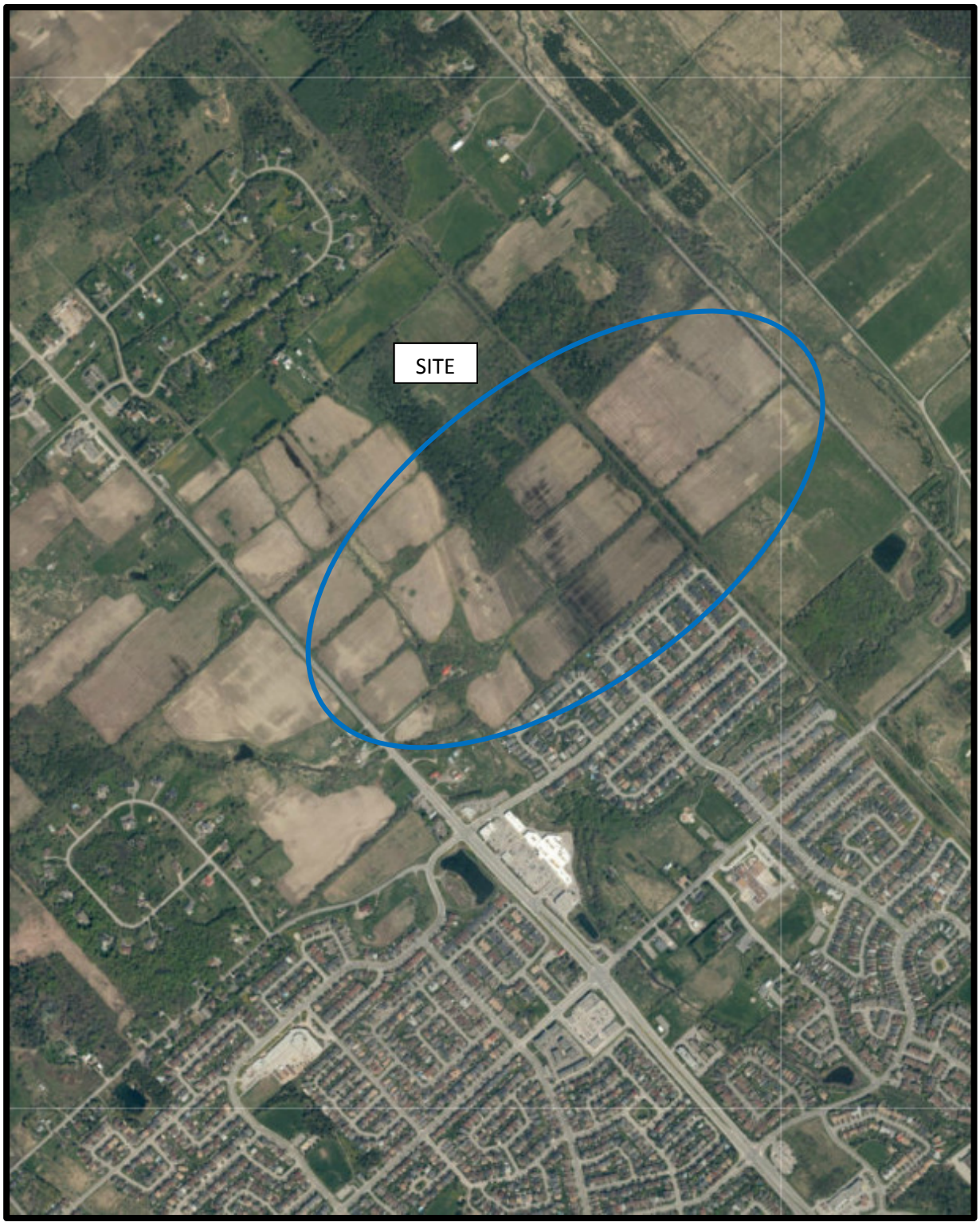
1991



AERIAL PHOTOGRAPH
2008

patersongroup



AERIAL PHOTOGRAPH
2017

patersongroup

Site Photographs

PE4343 936 March Road, Ottawa, Ontario June 19, 2018

Photograph 1: Photograph illustrates residential dwelling and private garage, facing north.

Photograph 2: Photograph illustrates Shirley's Brook on western portion of Phase I Property, facing northwest.

Site Photographs

PE4343 936 March Road, Ottawa, Ontario June 19, 2018

Photograph 3: Photograph illustrates former farm building east of residential dwelling, facing east.

Photograph 4: Photograph illustrates former farm building southeast of residential dwelling, facing west.

Photograph 5: Photograph illustrates removal of scrap metal northeast of residential dwelling, facing north.

Photograph 6: View of western-central portion of Phase I Property, facing west. Photograph illustrates access laneway, soy fields and residential farmstead across March Road.

Photograph 7: Photo illustrates area of former stored scrap metal east of residential dwelling, facing north.

Photograph 8: Photograph illustrates unused AST and equipment southeast of residential dwelling, facing northwest.

APPENDIX 2

MECP FREEDOM OF INFORMATION

TSSA CORRESPONDENCE

CITY OF OTTAWA HISTORICAL LAND USE INVENTORY

MECP WELL RECORDS

Ministry of the Environment, Conservation and Parks

Freedom of Information and Protection of Privacy Office

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

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

August 30, 2018

Karyn Munch
Paterson Group Inc.
154 Colonnade Road
Ottawa, ON K2E 7J5

Dear Karyn Munch:

RE: ***Freedom of Information and Protection of Privacy Act*** **Request**
Our File # A-2018-05201, Your Reference PE4343

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 936 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 Aaron Foster at aaron.foster@ontario.ca.

Yours truly,

FOR Janet Dadufalza
FOI Manager

Karyn Munch

From: Public Information Services <publicinformationservices@tssa.org>
Sent: May-31-18 10:20 AM
To: Karyn Munch
Subject: RE: Records Search Request - PE4343

Good morning Karyn,

Thank you for your request for confirmation of public information.

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

For a further search in our archives please complete our release of public information form found at https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?_mid_=392 and email the completed form to 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.

Kind regards,

Yalini

From: Karyn Munch <KMunch@Patersongroup.ca>
Sent: May 31, 2018 7:56 AM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: Records Search Request - PE4343

Good morning,

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 the City of Ottawa (Kanata):

886, 905, 910, 927, 936, 941, 1015, 1020 March Road
1225 March Valley Road
1 Shirley Boulevard

Thank-you very much.

Best Regards,

Karyn Munch, P.Eng.

patersongroup
solution oriented engineering

154 Colonnade Road South
Ottawa, Ontario, K2E 7J5
Tel: (613) 226-7381 Ext. 217

File Number: D06-03-18-0043

August 23, 2018

Paterson Group Inc.
154 Colonnade Road South
Ottawa, ON
K2E 7J5

Sent via email [kmunch@patersongroup.ca]

Dear Paterson Group Inc.,

Re: Information Request
936 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:

- No information was returned on the Subject Property from Departmental circulation.

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 50m of the Subject Property. The search revealed the following:

- There are 56 activities associated with properties located within 50m of the Subject Property: Activity Numbers 14509, 5801, 5751, 5753, 5754, 5762, 5767, 5769, 5770, 5772, 5774, 5837, 5838 ,5840, 5846, 5849, 5852, 5853, 5854, 5855, 5856, 5861, 5869, 5870, 5871, 5872, 5874, 5875, 5884, 5886, 5887, 5889, 5890,

City of Ottawa
Planning, Infrastructure and Economic Development Department

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 21690
Fax: (613) 560-6006
www.ottawa.ca

Ville d'Ottawa
Services de la planification, de l'infrastructure et du développement économique

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 21690
Téléc: (613) 560-6006
www.ottawa.ca

5891, 5896, 5898, 5899, 5893, 5901, 5903, 5907, 5908, 5909, 59, 3412, 6653, 3906, 5943, 5814, 5867, 5981, 6326, 6393, 6654, 6621, 9494

A site map has been included to show the location of the Subject Property as well as the location of all the activities noted above.

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 Colette Gorni at 613-580-2424 ext. 21690 or HLUI@ottawa.ca

Sincerely,

Colette Gorni

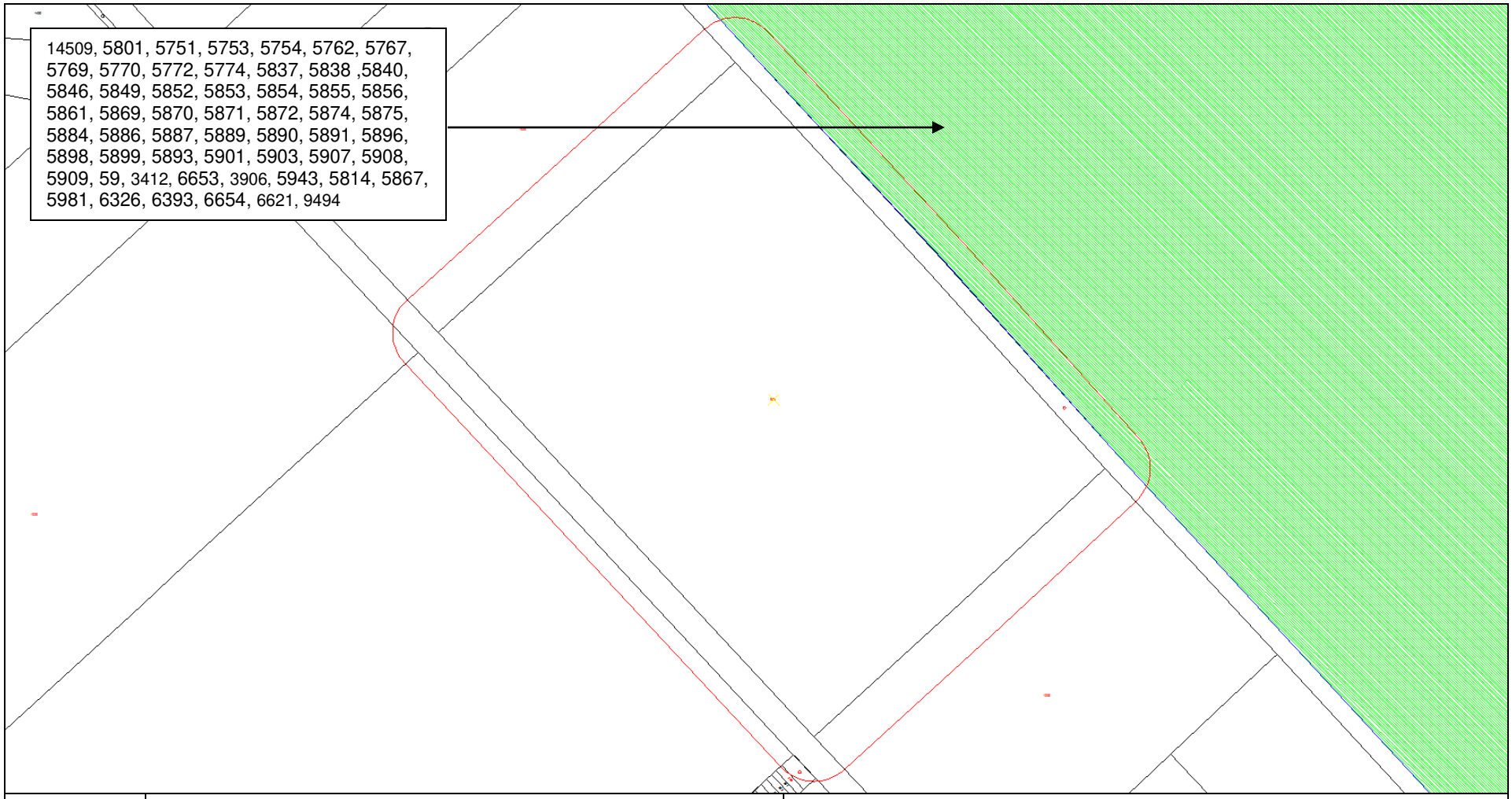
Per:

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

MB/ CG

Attach: 2

cc: File no. D06-03-18-0043



Scale 1: n/a

936 March Road
Ottawa, ON
File # D06-03-18-0043
Colette Gorni

Ottawa

Overview

ID# = Activity Identification Number

= Subject Site

CITY OF OTTAWA

HLUI ID: __670HY8

AREA (Square Metres): 12819616.556

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Activity ID: 14509

Multiple PINS: N

PIN Certainty: 1

Previous Activity ID(s) : 5801, 5751, 5753, 5754, 5762, 5767, 5769, 5770, 5772, 5774, 5837, 5838 ,5840, 5846, 5849, 5852, 5853, 5854, 5855, 5856, 5861, 5869, 5870, 5871, 5872, 5874, 5875, 5884, 5886, 5887, 5889, 5890, 5891, 5896, 5898, 5899, 5893, 5901, 5903, 5907, 5908, 5909, 59

Related PINS: 045660173

Name: UNNAMED SAND/GRAVEL PIT

Address: , WEST CARLETON

Facility Type: Sand and Gravel Pits

Comments 1: UTM = 419300E, 5034300N. Area is 150m x 100m.

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: 1922-DMD-TM-Ottawa-Sheet#14, 1948-DND-ASE-NTS-31G/5, 1967-EMR-SMB-NTS-31G/5-7th ed., 1985-EMR-SMB-NTS-31G/5-11th ed.; 1951-DND-ASE-NTS-31G/4E-4th ed., 1966-EMR-SMB-NTS-31G/4-5th ed., 1975-EMR-SMB-NTS-31G/4-6th ed., 1979-EMR-SMB-NTS-31G/4-7th ed.

HL References 2: 1951-DND-ASE-NTS-31F/8E-3rd ed., 1964-EMR-SMB-NTS-31F/8-5th ed., 1976-EMR-SMB-NTS-31F/8-7th ed., 1989-EMR-CCM-NTS-31F/8-8th ed.

HL References 3: 1991-WDSI/WMB/MOE

NAICS	SIC
221330	499
562990	499
221320	499
562920	499
212323	82
562210	499

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Company Name	Year of Operation
Unnamed Sand/Gravel Pit	c. 1975
Unamed Sand/Gravel Pit	c. 1975-1979
Unnamed Sand/Gravel Pit	c. 1948
Unnamed Sand/Gravel Pit	c. 1964-1976
Unnamed Sand/Gravel Pit	c. 1922-1948
Unamed Sand/Gravel Pit	c. 12966-1979
Unamed Sand/Gravel Pit	c. 1975
Unnamed Sand/Gravel Pit	c. 1976-1989
Unnamed sand/Gravel Pit	c. 1989
Unnamed Sand/Gravel Pit	c. 1975-1979
Unnamed Sand/Gravel Pit	c. 1985
Unamed Sand/Gravel Pit	c. 1966
Unnamed Sand/Gravel Pit	c. 1976
Unnamed Sand/Gravel Pit	c. 1951
Unnamed Sand/Gravel Pit	c. 1966
Unnamed Sand/Gravel Pit	c. 1966-1979
Unnamed Sand/Gravel Pit	c. 1951-1976
Unamed Sand/Gravel Pit	c. 1979
Unnamed Sand/Gravel Pit	c. 1971-1979
UNNAMED SAND/GRAVEL PIT	c. 1994
Unnamed Sand/Gravel Pit	c. 1967
Unnamed Sand/Gravel Pit	c. 1948-1967
Unamed Sand/Gravel Pit	c. 1951-1979
Unnamed Sand/Gravel Pit	c. 1951-1979
Unnamed Sand/Gravel Pit	c. 1953-1971
Unnamed Sand/Gravel Pit	c. 1967-1985
Unamed Sand/Gravel Pit	c. 1951
Unamed Sand/Gravel Pit	c. 1966-1979
Unnamed Sand/Gravel Pit	c. 1966-1975
Unamed Sand/Gravel Pit	c. 1966-1975
Unnamed Sand/Gravel Pit	c. 1989
Waste Disposal Site	c. 1971

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Unnamed Sand/Gravel Pit

c. 1964-1989

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Activity ID: 3412 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :** 6653

Related PINS: 047130001

Name: DEPT. OF NATIONAL DEFENCE

Address: CARLING AND HERTZBERG ROAD NORTHEAST, NEPEAN

Facility Type: Defence Services

Comments 1: CONNAUGHT RANGE & PRIMARY TRAINING CENT.

Comments 2:

Generator Number: ON0046562

Storage Tanks:

HL References 1: City of Nepean, File# D06-00-DEF

HL References 2:

HL References 3: 2000 PID

NAICS	SIC
713930	965
911110	0
911110	811

Company Name	Year of Operation
DEPT. OF NATIONAL DEFENCE - CFSU (O)	c. 2003
Connaught Rifle Ranges	c. 1970
DEPT. OF NATIONAL DEFENCE	c. 2000
NATIONAL DEFENCE CANADA	c. 2005

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Activity ID: 3906

Multiple PINS: Y

PIN Certainty: 1

Previous Activity ID(s) : 5943, 5814, 5867, 5981, 6326, 6393, 6654

Related PINS: 045660156

Name: DEPARTMENT OF NATIONAL DEFENCE

Address: , WEST CARLETON

Facility Type: Telecommunication Broadcasting Industries

Comments 1: UTM = 418200E, 5033250N. Area is 1500m x 1050m.

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: 1922-DMD-TM Ottawa-Sheet#14, 1948-DND-ASE-NTS-31G/5, 1967-EMR-SMB-NTS-31G/5-7th ed., 1985-EMR-SMB-NTS-31G/5-11th ed, 1951-DND-ASE-NTS-31F/8E-3rd ed., 1964-EMR-SMB-NTS-31F/8-5th ed., 1976-EMR-SMB-NTS-31F/8-7th ed., 1989-EMR-CCM-NTS-31F/8-8th ed.

HL References 2: City of Nepean, File# D06-00-DEF

HL References 3:

NAICS	SIC
911110	811
221330	499
562920	499
515120	481
562990	499
221320	499
562210	499
515110	481
713930	965

Company Name	Year of Operation
Department of National Defence	c. 1985
Department of National Defence	c. 1967
Department of National Defence	c. 1976-1989
Department of National Defence	c. 1922-1985
Department of National Defence	c. 1970
Department of National Defence	c. 1948-1990

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Activity ID: 6621 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 047130001

Name: GVT. OF CAN. - R.C.M.P.

Address: 3 SHIRLEY BOULEVARD, NEPEAN

Facility Type: Protective Services

Comments 1:

Comments 2:

Generator Number: ON0283162

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2000 PID

NAICS	SIC
911230	0

Company Name	Year of Operation
GVT. OF CAN. - R.C.M.P.	c. 2000

Study Year	PIN	Multi-NAIC	Multiple Activities
1998	047130001	Y	Y

Activity ID: 9494 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :**

Related PINS: 047130001

Name: NATURAL RESOURCES CANADA - GEODETIC SURVEY

Address: , OTTAWA

Facility Type: General Administrative Services

Comments 1: Connaught Ranges, Ridelle street

Comments 2: Geodetic Survey Site

Generator Number: ON6382495

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2003 PID

NAICS	SIC
911910	0

Company Name	Year of Operation
NATURAL RESOURCES CANADA - GEODETIC SURVEY	c. 2003

UTM 18 Z 4265610 E

5 R 5022940 N

Elev. 4 R 0260

Basin 25

.31G5d

WATER RESOURCES DIVISION 15 No. 3[illegible]

JUN 25 1965

ONTARIO WATER RESOURCES COMMISSION

The Ontario Water Resources Commission Act

WATER WELL RECORD

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

Con. 111 Lot Pt. of 11 Date completed 28 May (day) 1965 month year)

[redacted] ess South March, Ont.

Casing and Screen Record

Inside diameter of casing 15' of 5"

Total length of casing 15'

Type of screen nil

Length of screen nil

Depth to top of screen nil

Diameter of finished hole 5"

Pumping Test

Static level 7'

Test-pumping rate 5 GPM G.P.M.

Pumping level 17'

Duration of test pumping 1 Hour

Water clear or cloudy at end of test clear

Recommended pumping rate 5 GPM G.P.M.

with pump setting of 25' 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'	11'		
		43'	43'	
Red Granite	11'	~~50'~~	~~50'~~	fresh

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

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

Drilling or Boring Firm Blair Phillips Drilling Co. Ltd.

Address Ottawa

Licence Number ~~1079~~ 1815

Name of Driller or Borer J. Moore

Address Kars, Ont.

Date 28 May 1965

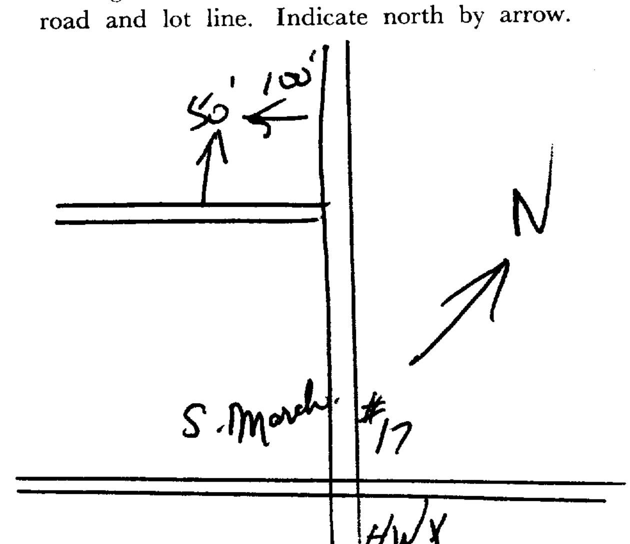
(Signature of Licensed Drilling or Boring Contractor)

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.



388A

31G5d

UTM 18 | 426430 E

Co. 5 R 5023105 N

Elev. 14 R 0260

Basin 251

The Ontario Water Resources Commission Act

WATER WELL RECORD

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

Con. 111   Lot 12   Date completed 23 (day) May (month) 1963 (year)

[redacted] ...ess 716 Edison Ave Ottawa

Casing and Screen Record

Inside diameter of casing	6 1/4"
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.	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

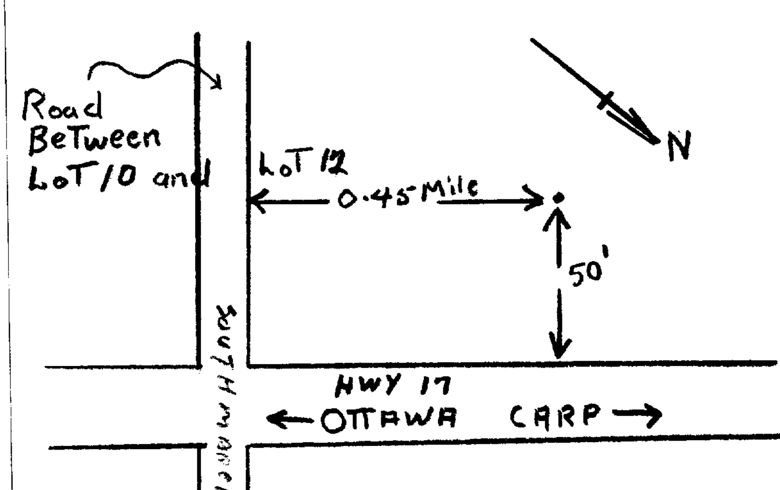
Address

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

UTM 18 Z 4216610 E
Co 5 R 5022920 N
Elev 4 R 0245
Basin 25

The Ontario Water Resources Commission Act

WATER WELL RECORD

GROUND WATER BRANCH 15 No FEB 20 1962 ONTARIO WATER RESOURCES COMMISSION

31G5d

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

Con. 4 Lot 11 Date completed 12 (day) Nov (month) 61 (year)

[redacted] Address Britannia Bay

Casing and Screen Record	
Inside diameter of casing	4"
Total length of casing	24'
Type of screen	—
Length of screen	—
Depth to top of screen	—
Diameter of finished hole	4"

Pumping Test	
Static level	10'
Test-pumping rate	6 G.P.M.
Pumping level	14'
Duration of test pumping	1/2 hr
Water clear or cloudy at end of test	clearing
Recommended pumping rate	5 G.P.M.
with pump setting of	30 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	0	16		
hardpan	16	22		
sandstone	22	38	37	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 Ben E Sparks

Address

Licence Number 244

Name of Driller or Borer Ben E Sparks

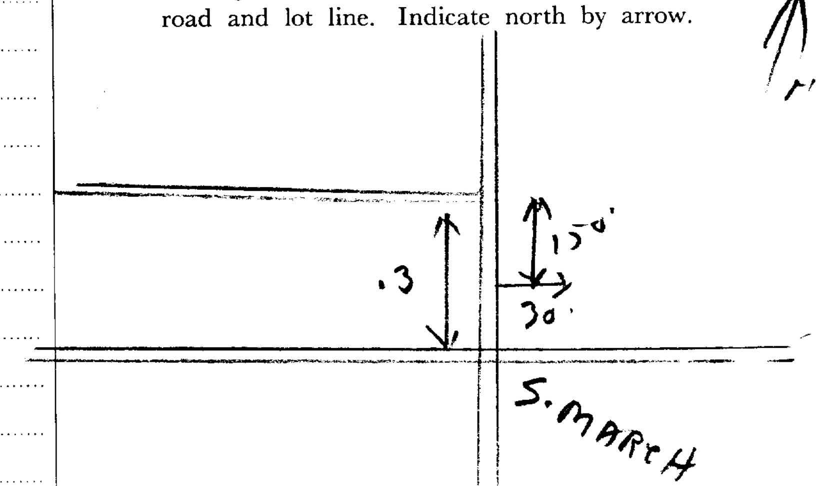
Address

Date Feb 7/62

Ben E Sparks
(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 Sets 60-5930

OWRC COPY

CSS.S8

UTM 1|18|Z 4|2|6|4|6|5|E 4 1 1
C 5|R 5|0|2|3|2|7|0|N
Elev. 14|R 0|2|6|0|
Basin 2|5| L|1|

31G5d

WATER RESOURCES DIVISION 15 JUL 6 1964 ONTARIO WATER RESOURCES COMMISSION

№ 3414 e

The Ontario Water Resources Commission Act

WATER WELL RECORD

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

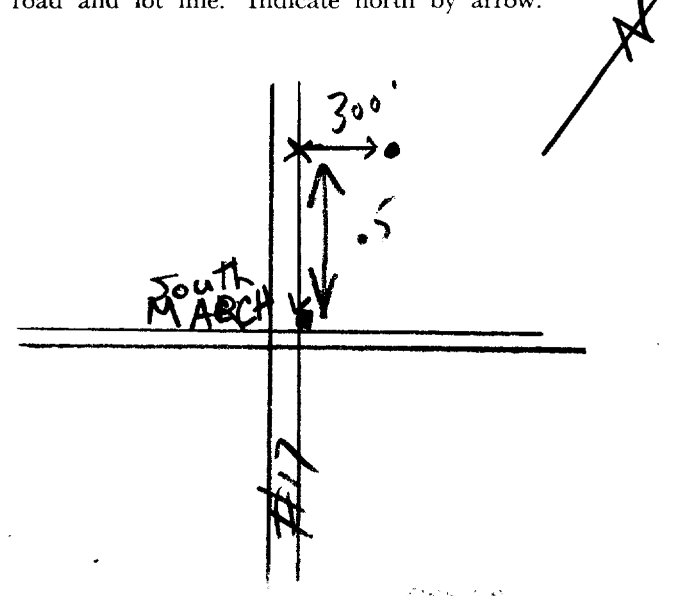
Address

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.

M 18 L 426610 Con IV Lot 11 CODED

4 R 5022970

Elev. 5 R 02516

Basin 25 Carl

1510247

The Ontario Water Resources Commission Act

WATER WELL RECORD

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

Con. IV Lot 11 Date completed 11 (day) June (month) 1969 (year)

Owner M Holitzner Ltd (print in block letters) Address Hazeldean Ont.

Casing and Screen Record

Inside diameter of casing 5"

Total length of casing 28'

Type of screen

Length of screen

Depth to top of screen

Diameter of finished hole 5"

DIVISION OF WATER RESOURCES
OCT 30 1969
ONTARIO WATER RESOURCES COMMISSION

Pumping Test

Static level 5

Test-pumping rate 10 G.P.M.

Pumping level 9

Duration of test pumping 1 hr

Water clear or cloudy at end of test

Recommended pumping rate 5 G.P.M.

with pump setting of 30 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	0	25	60	fresh
sandstone	25	61		

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

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

Drilling or Boring Firm Capital Water Supply Ltd.

Address 14 Ashford Dr Ottawa 6

Licence Number 3216

Name of Driller or Borer B Acres

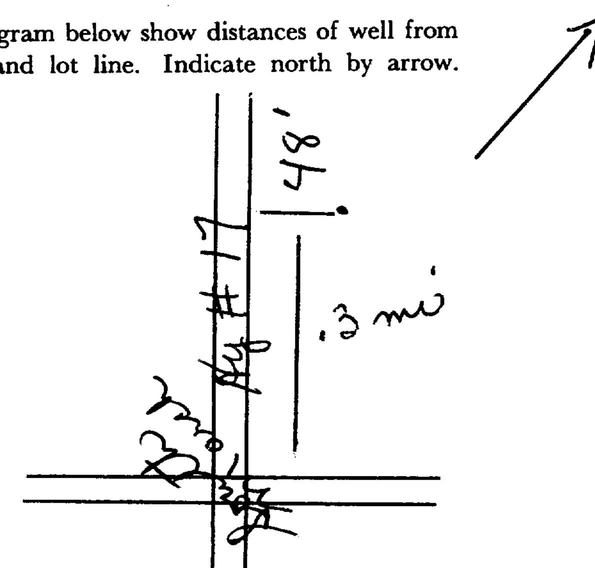
Address

Date 11 June 1969

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 5M 60-20912

OWRC COPY

Water management in Ontario

The Ontario Water Resources Commission Act

WATER WELL RECORD

3/6/9 50 1510445

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

11

MUNICIP. 15006 CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT 25-27
Carleton	March	3	011

OWNER (SURNAME FIRST) 28-47	ADDRESS	DATE COMPLETED 48-53
Marchmount Const.	South March	DAY 04 MO. 08 YR. 69

21 UTM ZONE 18 EASTING 426480 NORTHING 5022800 RC. 4 ELEVATION 0255 RC. 5 BASIN CODE 25

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	TO
Brown	Sandstone			0	65
White	Limestone			65	84

31 0065618 0084115

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0075	☒ 1 FRESH ☐ 2 SALTY ☐ 3 SULPHUR ☐ 4 MINERAL
	☐ 1 FRESH ☐ 2 SALTY ☐ 3 SULPHUR ☐ 4 MINERAL
	☐ 1 FRESH ☐ 2 SALTY ☐ 3 SULPHUR ☐ 4 MINERAL
	☐ 1 FRESH ☐ 2 SALTY ☐ 3 SULPHUR ☐ 4 MINERAL
	☐ 1 FRESH ☐ 2 SALTY ☐ 3 SULPHUR ☐ 4 MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	TO
05	☒ 1 STEEL ☐ 2 GALVANIZED ☐ 3 CONCRETE ☐ 4 OPEN HOLE	188	0	0020
	☐ 1 STEEL ☐ 2 GALVANIZED ☐ 3 CONCRETE ☒ 4 OPEN HOLE			0084
	☐ 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: ☐ 1 PUMP ☒ 2 BAILER

PUMPING RATE: 0006 GPM.

DURATION OF PUMPING: 01 HOURS 00 MINS.

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
030 FEET	070 FEET	050 FEET	070 FEET	070 FEET	070 FEET

WATER LEVELS DURING: ☒ 1 PUMPING ☐ 2 RECOVERY

IF FLOWING, GIVE RATE: GPM.

PUMP INTAKE SET AT: 70 FEET

WATER AT END OF TEST: ☒ 1 CLEAR ☐ 2 CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP

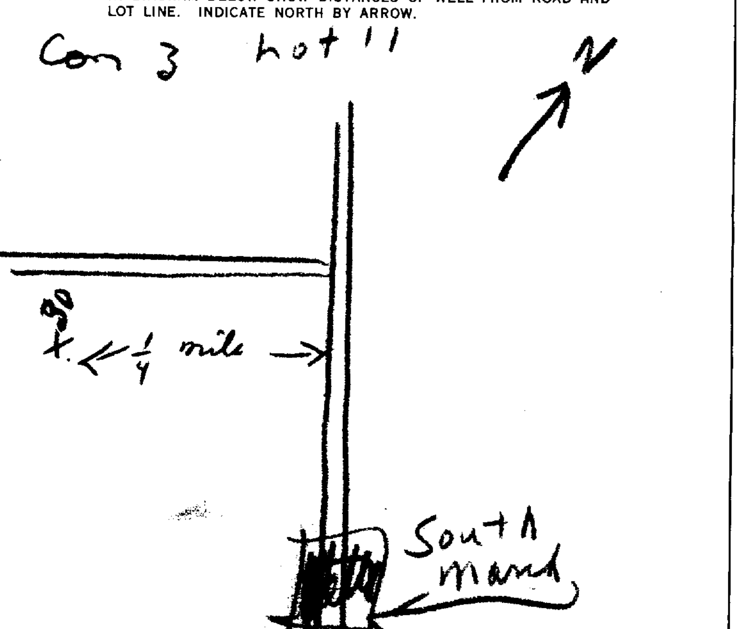
RECOMMENDED PUMP SETTING: FEET

RECOMMENDED PUMPING RATE: 0005 GPM.

0002 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

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

WATER USE 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

☒ 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
Saunders Well Drilling	3480

ADDRESS: Arnprior

NAME OF DRILLER OR BORER	LICENCE NUMBER
T Obrien	

SIGNATURE OF CONTRACTOR: Robert Saunders

SUBMISSION DATE: DAY 4 MO. AUG YR. 69

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	4724	210170

DATE OF INSPECTION: INSPECTOR:

REMARKS: CSS.SS J.B.

OWRC COPY

31Gsd

Water management in Ontario

The Ontario Water Resources Commission Act
WATER WELL RECORD

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

11 | 1511444 | MUNICIP. 15006 | CON. Con | 04

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Carleton	March	Con 4	011

[redacted] RR# 7, Ottawa — DATE COMPLETED: DAY 07 MO. 07 YR. 71

022880 | RC. 4 | ELEVATION 0255 | RC. 5 | BASIN CODE 25

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	DEPTH – FEET TO
grey	clay			0	16
white	sandstone			16	58

31 | 0016205 | 0058118

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0058	☒ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	DEPTH – FEET TO
05	☒ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	.188	0	0021 (21)
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☒ OPEN HOLE			0058
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			

SCREEN

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

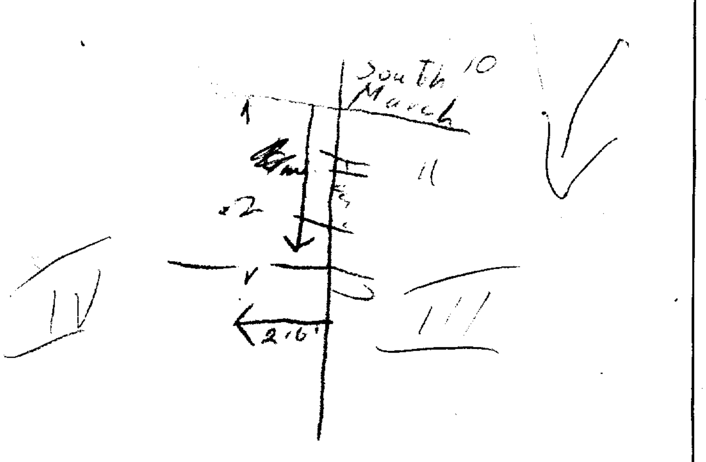
71 PUMPING TEST

PUMPING TEST METHOD	☐ PUMP ☒ BAILER
PUMPING RATE	0021 GPM.
DURATION OF PUMPING	01 HOURS 00 MINS.
STATIC LEVEL	006 FEET
WATER LEVEL END OF PUMPING	015 FEET
WATER LEVELS DURING	☒ PUMPING ☐ RECOVERY
15 MINUTES	012 FEET
30 MINUTES	015 FEET
45 MINUTES	015 FEET
60 MINUTES	015 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	020 FEET
RECOMMENDED PUMPING RATE	0010 GPM.

0023 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

☒ 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

☒ CABLE TOOL ☐ ROTARY (CONVENTIONAL) ☐ ROTARY (REVERSE) ☐ ROTARY (AIR) ☐ AIR PERCUSSION ☐ BORING ☐ DIAMOND ☐ JETTING ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	Henry Mans Well Drilling
LICENCE NUMBER	3644
ADDRESS	Box 324 Richmond
NAME OF DRILLER OR BORER	Henry Mans
LICENCE NUMBER	
SIGNATURE OF CONTRACTOR	Henry Mans
SUBMISSION DATE	DAY 2 MO. July YR. 71

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	3644	081071

DATE OF INSPECTION | INSPECTOR

REMARKS:

P

WI

OWRC COPY

316/5d

MINISTRY OF THE ENVIRONMENT

The Ontario Water Resources Act

WATER WELL RECORD

Ontario

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

11 | 1514785 | MUNICIP. 15006 | CON. CØN 04

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
West Carleton	March	4	6

[redacted] R.1 Kanata Ont.

DATE COMPLETED: DAY 01 MO. 07 YR. 75

023100 4 | ELEVATION 0255 4 | BASIN 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		soft	0	25
Gray	sandstone		Hard	25	90

31 0025 0585 | 0090 21873

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0065	1 ☑ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
0084	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"	1 ☑ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	0027
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☑ OPEN HOLE		27	0090
	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	0015 GPM	02 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
011 FEET	030 FEET	030 FEET	030 FEET	030 FEET	030 FEET

WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY

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

RECOMMENDED PUMP TYPE: ☑ SHALLOW ☐ DEEP | RECOMMENDED PUMP SETTING 030 FEET | RECOMMENDED PUMPING RATE 0005 GPM

GPM./FT. SPECIFIC CAPACITY

FINAL STATUS OF WELL 1

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

WATER USE 01

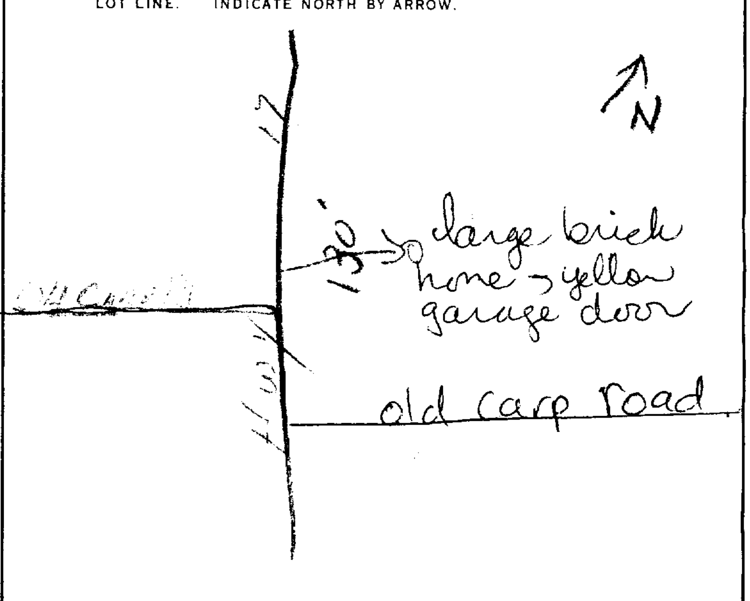
1 ☑ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF DRILLING 5

1 ☐ CABLE TOOL 2 ☐ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ROTARY (AIR) 5 ☑ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ 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: Maple Leaf Drilling | LICENCE NUMBER: 3658

ADDRESS: 2107 - 465 Richmond Road. Ottawa

NAME OF DRILLER OR BORER: R. Bisson | LICENCE NUMBER

SIGNATURE OF CONTRACTOR: Robert Bisson | SUBMISSION DATE: DAY 9 MO. 7 YR. 75

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 3658 | DATE RECEIVED 230775

DATE OF INSPECTION 10/6/77 | INSPECTOR P. Holby

REMARKS:

P

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FORM 7 07-091

MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

31G5d

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

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

[redacted] 6 Primrose Ave. Ottawa, Ontario

DATE COMPLETED DAY 04 MO 10 YR 77

UTM NG 23140 | BC 4 | ELEVATION 0260 | RC 4 | BASIN 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	9
brown	clay	boulders	packed	9	11
grey	limestone	sandstone	hard	11	35
grey	sandstone			35	115

31 0009605 79 | 0011605 1379 | 0035215 1873 | 911521 8

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0113	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
~~6~~	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	0022
06			22	~~115~~
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE			0115
	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.)
10-13	14-17	
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER | PUMPING RATE: 0015 GPM | DURATION OF PUMPING: 01 HOURS 00 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
020 FEET	070 FEET		070 FEET	070 FEET	070 FEET	070 FEET

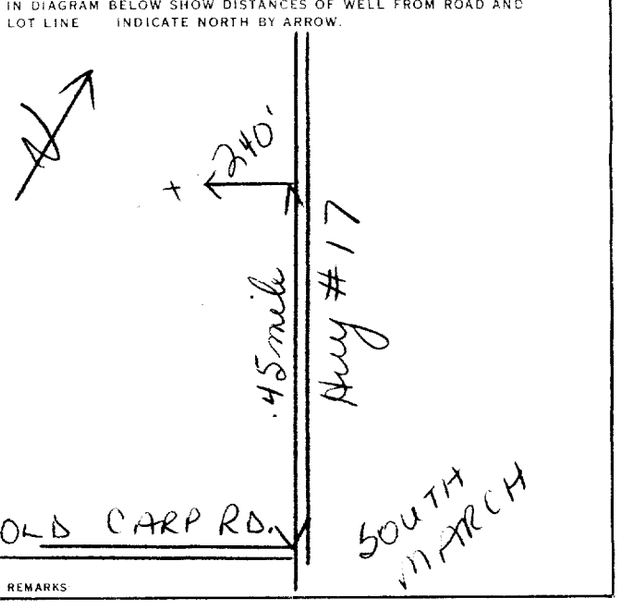
IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: FEET | WATER AT END OF TEST: 1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 075 FEET | RECOMMENDED PUMP RATE: 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: Capital Water Supply Ltd. | LICENCE NUMBER: 1558

ADDRESS: Box 490 Stittsville, Ontario

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

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

OFFICE USE ONLY

DATA SOURCE 58: 1 | CONTRACTOR 59-62: 1558 | DATE RECEIVED 63-68: 171177

DATE OF INSPECTION: 29/95/78 June 29/78 | INSPECTOR: FS DN

REMARKS: New Brunswick Bungalow

P

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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 1516836

MUNICIP. 15006 CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Carleton	March	3	01/2

[redacted] Old Carp Rd. R.R.#1

DATE COMPLETED: DAY 08 MO. 11 YR. 78

ELEVATION: 22900 Kanata, Ont.

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Brown	Sand		loose	0	2
Grey	Sandstone	white layers	hard	2	125

31 0002628777 01252187473

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0120	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	~~22~~ 0022
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		22	~~55~~ 0055
06	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE		55	~~125~~ 0125

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.)

71 PUMPING TEST

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

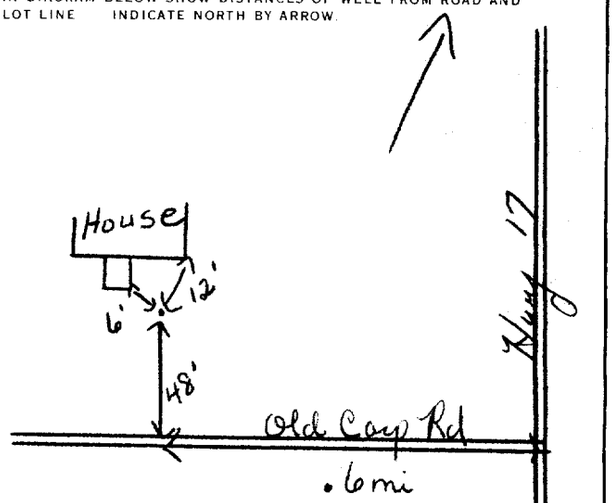
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING (1 ☐ PUMPING 2 ☐ RECOVERY)	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
025 FEET	050 FEET		050 FEET	050 FEET	050 FEET	050 FEET

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

RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
075 FEET	0005 GPM

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: 1

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

WATER USE: 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: 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
S Miller	
SIGNATURE OF CONTRACTOR	SUBMISSION DATE
H Kawanachi	DAY 9 MO. 11 YR. 78

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
1	1558	181278

DATE OF INSPECTION: 22/05/79 INSPECTOR: KM

REMARKS:

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Ontario

The Ontario Water Resources Act

WATER WELL RECORD

31 G 5d

1. PRINT ONLY IN SPACES PROVIDED
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11 1517937 MUNICIP. 15006 CON. CON 03

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON. BLOCK, TRACT, SURVEY, ETC	LOT
[redacted]	Kanata - MARCH TWP.	Conc. III	011 / 11

DATE COMPLETED: DAY 17 MO 07 YR 82

South March, Ontario.

UTM ZONE | NORTHING 022799 | RC | ELEVATION 0280 | RC | BASIN 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	Sand	Gravel	Fill	0	3
Gray	Sandstone		Medium	3	53

31 0008628111 01 0053218 78

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0050	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 1/4	1 ☒ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☐ OPEN HOLE	188	0	0022
05 1/4	1 ☐ STEEL; 2 ☐ GALVANIZED; 3 ☐ CONCRETE; 4 ☒ OPEN HOLE		22	0053
	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	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	0015 GPM	01 HOURS 00 MINS

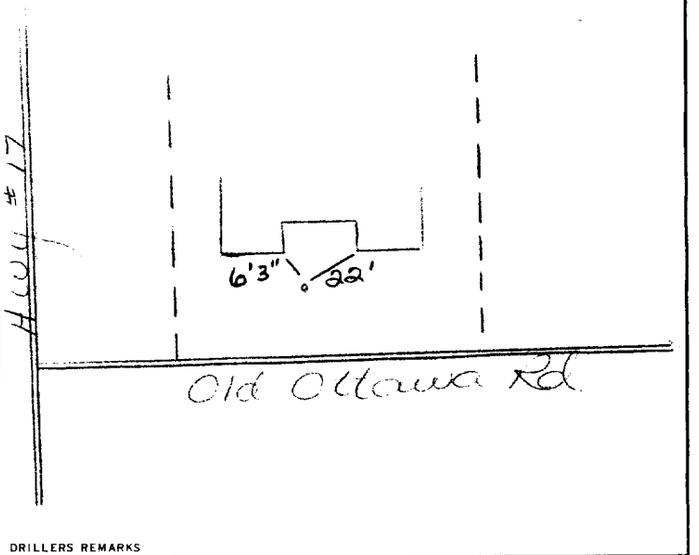
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
020 ~~19~~ FEET	030 FEET	1 ☒ PUMPING 2 ☐ RECOVERY	030 FEET	030 FEET	030 FEET	030 FEET

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	040 FEET	0005 GPM

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 1

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

WATER USE 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 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: Capital Water Supply Ltd. — LICENCE NUMBER: 1558

ADDRESS: Box 490; Stittsville, Ont. KOA 3G0

NAME OF DRILLER OR BORER: S. Miller/ W. Kavanagh — LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: W. Kavanagh — SUBMISSION DATE: DAY 21 MO 07 YR 82

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 1538 | DATE RECEIVED 05 10 82

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 1520048 1500b Con Hardwood Plains 04

COUNTY OR DISTRICT: Carleton
TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: March
CON., BLOCK, TRACT, SURVEY, ETC.: Con 4
LOT: 12
[redacted] 06 Claymor Ave. Ottawa
DATE COMPLETED: DAY 11 MO. 7 YR. 85
ELEVATION: 424 RC: 16 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
grey	sand			0	3
grey	sandstone			3	102
black	granite			102	125

31
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
85	1 ☒ FRESH 3 ☐ SULPHUR 2 ☐ SALTY 4 ☐ MINERAL
120	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
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	22
6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		22	125
	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	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
3	22	Cement grouted

71 PUMPING TEST

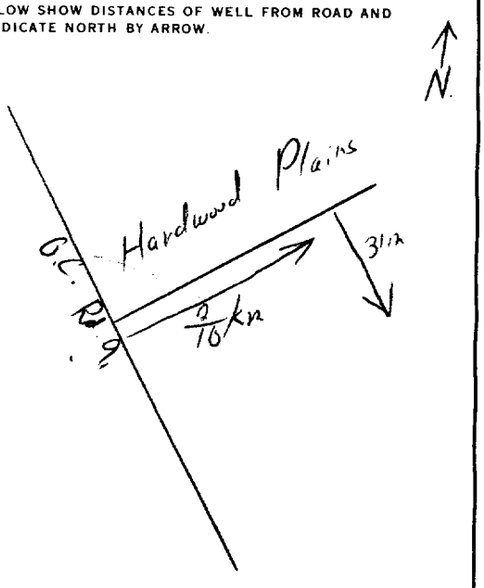
PUMPING TEST METHOD: 1 ☒ PUMP 2 ☐ BAILER
PUMPING RATE: 15 GPM
DURATION OF PUMPING: 1 HOURS 0 MINS

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

IF FLOWING, GIVE RATE: GPM
PUMP INTAKE SET AT: FEET
WATER AT END OF TEST: 1 ☐ CLEAR 2 ☒ CLOUDY
RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP
RECOMMENDED PUMP SETTING: 60 FEET
RECOMMENDED PUMPING RATE: 10 GPM

7929 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

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

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 DRILLING

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: Henry Mains Well Drilling
LICENCE NUMBER: 3644
ADDRESS: 326 Richmond Ont
NAME OF DRILLER OR BORER:
LICENCE NUMBER:
SIGNATURE OF CONTRACTOR:
SUBMISSION DATE: DAY 15 MO. 7 YR. 85

OFFICE USE ONLY

DATA SOURCE:
CONTRACTOR: 3644
DATE RECEIVED: 08 10 85
DATE OF INSPECTION:
INSPECTOR:
REMARKS: WDE

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FORM NO. 0506—4—77 FORM 7

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

1 — 1520650 Plan 4M404

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Carleton	March	Con 4, Lillian Way	11

[redacted] 13167, Kanata K2K 1X4

DATE COMPLETED: DAY 29 MO 4 YR 86

ELEVATION

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
grey	clay	stones		0	3
grey	sandstone			3	80
white	sandstone			80	95
red	granite			95	105

31
32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
98	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6½	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	22
6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		22	105
	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	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER, ETC.)
10-13	14-17	Cement grouted
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	20 GPM	1 HOURS 0 MINS

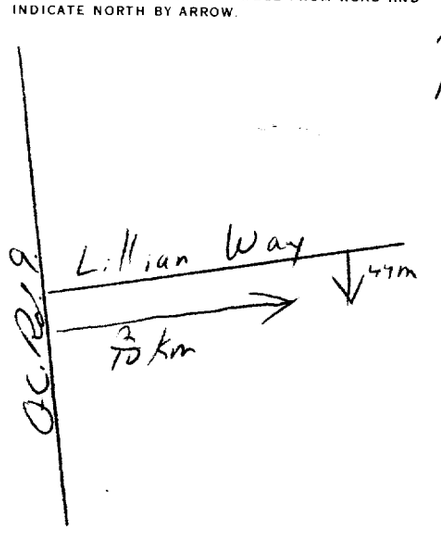
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
6 FEET	30 FEET	1 ☐ PUMPING 2 ☐ RECOVERY	30 FEET	30 FEET	30 FEET	30 FEET

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	30 FEET	8 GPM

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

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

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 DRILLING

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: A. Maura Well Drilling — LICENCE NUMBER: 3644

ADDRESS: Box 326 Richmond Ont.

NAME OF DRILLER OR BORER: [redacted] — LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: [redacted]

SUBMISSION DATE: DAY 30 MO 4 YR 86

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: 14 0886

DATE OF INSPECTION | INSPECTOR

REMARKS

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FORM NO. 0506—4—77 FORM 7

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

CARLTON

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

11 1521303

MUNICIP | CON

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Ottawa-Carleton	Kanata	Conc. 4	12

[redacted]

J. Dekok, R.R. # 1; Kanata, Ont. K2K 1X7

DATE COMPLETED: DAY 23 MO 03 YR 87

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	Clay		Packed	0	6
Gray	Clay		Packed	6	12
Gray	Limestone		Hard	12	50

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
40	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

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	.188	0	22
5 7/8	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		22	50
	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.)

PUMPING TEST

71

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	10 GPM	1 HOURS ___ MINS

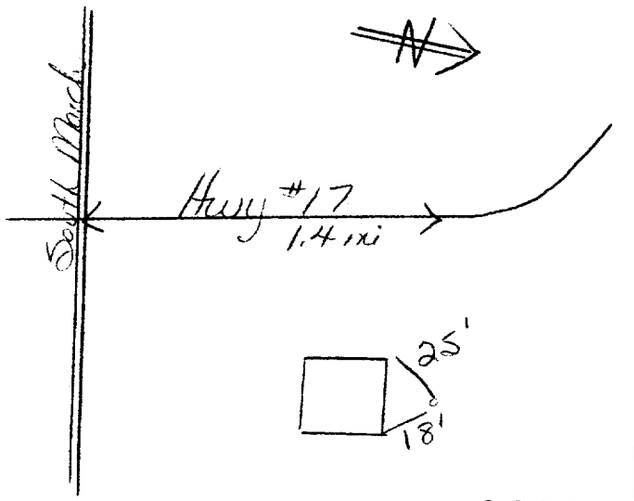
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☒ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
flowing FEET	20 FEET		20 FEET	20 FEET	20 FEET	20 FEET

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

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING 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.



DRILLERS REMARKS: 04651

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

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

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: Capital Water Supply Ltd. — LICENCE NUMBER: 1558

ADDRESS: Box 490; Stittsville, Ontario. K0A 3G0

NAME OF DRILLER OR BORER: S. Miller — LICENCE NUMBER:

SIGNATURE OF CONTRACTOR: W. Kavanagh — SUBMISSION DATE: DAY 24 MO 03 YR 87

OFFICE USE ONLY

DATA SOURCE	CONTRACTOR	DATE RECEIVED
		140487

DATE OF INSPECTION | INSPECTOR

REMARKS

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MINISTRY OF THE ENVIRONMENT
The Ontario Water Resources Act

WATER WELL RECORD

Ontario

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11 — 1524281 — MUNICIP. 16006 — CON. CON 04

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
KANATA	KANATA	LOT 17 CON 4	12

[redacted] O'HARA CRESCENT, DRIVE

DATE COMPLETED: DAY 9 MO AUG YR 89

HING — 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	SAND	STONES	LOOSE	0	4
BROWN	BEDROCK	SANDSTONE	CEMENTED	4	41
GREY	BEDROCK	GRANITE	POROUS	41	103

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
41	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
92	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
103	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6¼	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	20
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	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.)
		1 BAG CEMENT

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
15 FEET	30 FEET	25 FEET	30 FEET	30 FEET	30 FEET

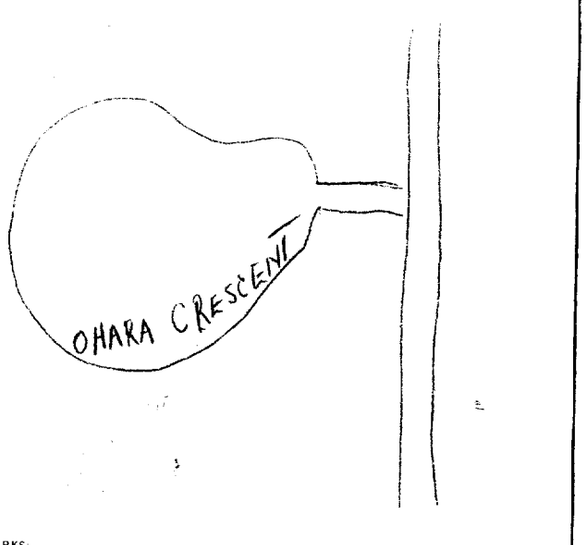
IF FLOWING, GIVE RATE: GPM — PUMP INTAKE SET AT: FEET — WATER AT END OF TEST: 1 ☐ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP — RECOMMENDED PUMP SETTING: 75 FEET — RECOMMENDED PUMPING RATE: 10 GPM

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

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

WATER USE

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

METHOD OF DRILLING

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: MCDOUGHNEY - DRILLING — LICENCE NUMBER: 3701

ADDRESS: 1110 FISHER AVE — OTTAWA

NAME OF DRILLER OR BORER — LICENCE NUMBER: T0504

SIGNATURE OF CONTRACTOR: T. McDoughney — SUBMISSION DATE: DAY ____ MO. ____ YR. ____

OFFICE USE ONLY

DATA SOURCE — CONTRACTOR: 3701 — DATE RECEIVED: FEB 26 1990

DATE OF INSPECTION — INSPECTOR

REMARKS: P WI

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Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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11 (1 2) — 1526583 — MUNICIP (10–14) 15006 — CON. (15–22) CON — (23–24) 04

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC	LOT (25-27)
[redacted]	Kanata	4	13

[redacted] Acres Road Carp, Ontario K0A 1L0

DATE COMPLETED (48-53): DAY 17 MO 9 YR 92

NG (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	Sand			0	4
Gray	Sand		wet	4	12
Gray	Sandy Clay	Stones	Wet	12	28
Gray	Limestone		Hard	28	99

31

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

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
84	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	30
6	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☒ PLASTIC		30	99
	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.)
30	5	Grouted Cement (5)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	50 GPM	1 HOURS ___ MINS

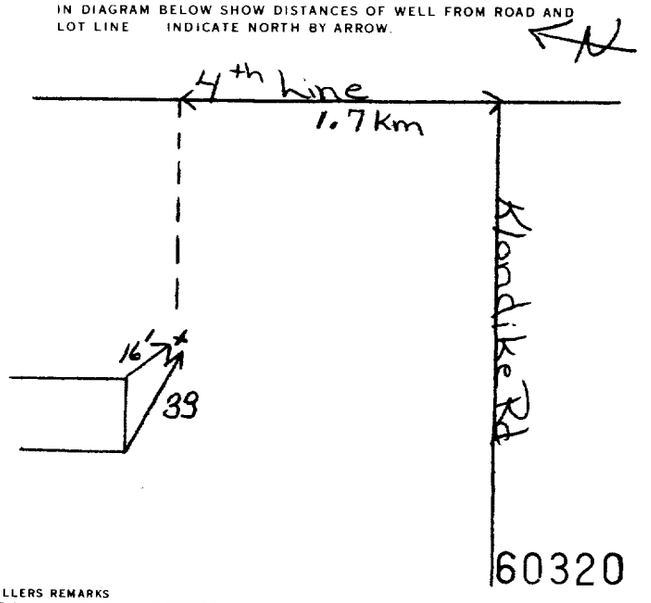
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
17 FEET	25 FEET	1 ☐ PUMPING 2 ☒ RECOVERY	18 FEET	17 FEET	17 FEET	17 FEET

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	50 FEET	10 GPM

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 ☐ DEWATERING

WATER USE (55-56)

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 (57)

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

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 21 MO 9 YR 92

OFFICE USE ONLY

DATA SOURCE (58) — CONTRACTOR (59-62): 1558 — DATE RECEIVED (63-68): OCT 22 1992

DATE OF INSPECTION — INSPECTOR

REMARKS

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Ministry of the Environment
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The Ontario Water Resources Act

WATER WELL RECORD

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11

1528691

MUNICIP. 15,006 CON. CON. 04

COUNTY OR DISTRICT: [redacted]

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE: KENATA

CON. BLOCK, TRACT, SURVEY, ETC: 4

LOT: 13

HOUSTON

DATE COMPLETED: DAY 9 MO 8 YR 95

HING | 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	SAND		FINE	0	5'
GREY	CLAY		DENSE.	5'	18'
GREY	LIMESTONE	BLACK LIMESTONE	HARD	18'	78'
GREY.	LIMESTONE	QUARTZITE	HARD	78'	85'

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
57	1 ☑ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERALS 6 ☐ GAS
80	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
6¼	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'	85'
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE 5 ☐ PLASTIC			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	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.)
0	20	CEMENT GROUT.

71 PUMPING TEST

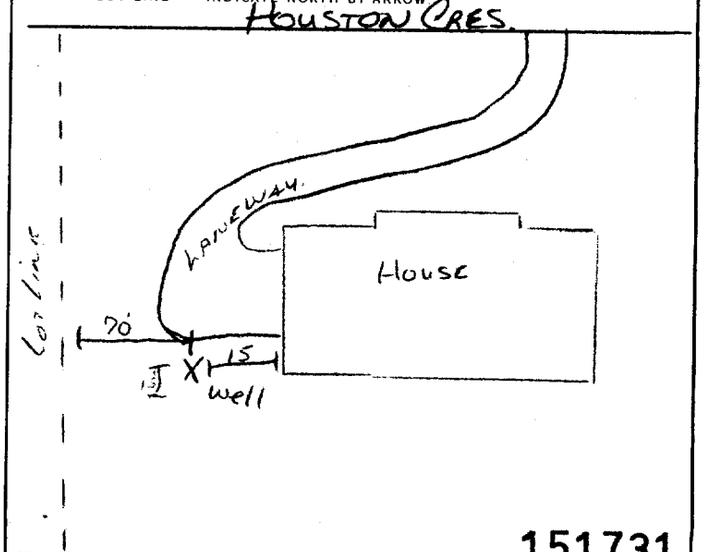
PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
AIR ☑ PUMP ☐ BAILER	8. GPM	2 HOURS ___ MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING: 1 ☑ PUMPING 2 ☐ RECOVERY	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
32 FEET	70 FEET		FEET	FEET	FEET	FEET

IF FLOWING GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
GPM	70 FEET	1 ☑ CLEAR 2 ☐ CLOUDY	☐ SHALLOW ☑ DEEP	70 FEET	6 GPM

LOCATION OF WELL

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



DRILLERS REMARKS

151731

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: VALLEY DRILLING INC

WELL CONTRACTOR'S LICENCE NUMBER: 5222

ADDRESS: P.O. Box 437 CARP, ONT

NAME OF WELL TECHNICIAN: [redacted]

WELL TECHNICIAN'S LICENCE NUMBER: T-310

SIGNATURE OF TECHNICIAN/CONTRACTOR

SUBMISSION DATE: DAY ___ MO ___ YR ___

OFFICE USE ONLY

DATA SOURCE

CONTRACTOR: 5222

DATE RECEIVED: AUG 29 1995

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.

1530542

11

1409 Houston Cr. Plan 4M849 Sub lot 17 Municipality 15006 Con. CON 04 Part of lot 14 S E Half

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

Owner's surname	First name	Address	Date completed
Gord Weima Construction		6 Kanata Ont	26 day 2 month 99 year

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
red	Sand			0	5
	clay			5	24
grey	limestone			24	160

31

32

41 WATER RECORD

Water found at – feet	Kind of water
42	1 ☒ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
47	1 ☒ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
53	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	31
8 3/4	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		0	29
6	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☒ Open hole 5 ☐ Plastic		29	60

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.)
2	60	cement grout

71 PUMPING TEST

Pumping test method	Pumping rate	Duration of pumping
1 ☒ Pump 2 ☐ Bailer	18 GPM	1 Hours Mins

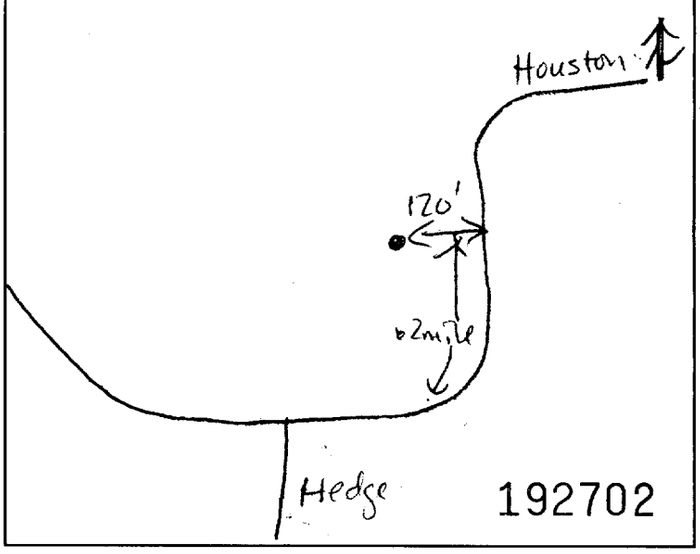
Static level	Water level end of pumping	Water levels during	15 minutes	30 minutes	45 minutes	60 minutes
13 feet	50 feet	1 ☐ Pumping 2 ☒ Recovery	13 feet	13 feet	13 feet	13 feet

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	18 feet	18 GPM

LOCATION OF WELL

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



192702

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.
Air Rock Drilling Ltd	1119
Address	
RR#2, Jasper, Ont. K6V 5W2	
Name of Well Technician	**Well Technician's Licence No.**
Shannon Purcell	T2122
Signature of Technician/Contractor	**Submission date**
	7 day 3 mo 99

MINISTRY USE ONLY

Data source	Contractor	Date received
	1119	JUN 09 1999
Date of inspection	Inspector	
Remarks		

CSS.ES9

2 - MINISTER OF ENVIRONMENT & ENERGY COPY

0506 (07/94) Front Form 9

Ontario Ministry of the Environment

Well Tag Number (Place sticker and print number below) A 035395 / A035395

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 MUN ___ CON ___ LOT ___

Well Owner's Information and Location of Well Information

[redacted]

Ottawa Carleton	LKanata	12	4
RR#/Street Number/Name	City/Town/Village		Site/Compartment/Block/Tract etc.
910 March Road	Kanata		

GPS Reading: NAD 83 | Zone 18 | Easting 42 65 67 | Northing 502 33 16 | 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	1.82
Gray	Limestone		Hard	1.82	12.19
Gray & White	Sandstone		Hard	12.19	27.43

Hole Diameter

Depth From	Metres To	Diameter Centimetres
0	7.31	22.75
7.31	27.43	15.23

Water Record

Water found at Metres / Kind of Water

24.99 ☐ 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	10.36
	☐ 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		10.36	27.43

Test of Well Yield

Pumping test method: submersible

Pump intake set at - (metres) 21.33

Pumping rate - (litres/min) 54.6

Duration of pumping 3 hrs + 30 min

Final water level end of pumping 6.60 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		6.02		
1	1	6.36	1	6.20
2	2	6.40	2	6.19
3	3	6.44	3	6.19
4	4	6.45	4	6.18
5	5	6.47	5	6.18
	10	6.50	10	6.15
	15	6.51	15	6.13
	20	6.52	20	6.13
	25	6.52	25	6.13
	30	6.53	30	6.12
	40	6.53	40	6.12
	50	6.54	50	6.12
	60	6.55	60	6.12

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)
10.36	0	Grouted - Bentonite Slurry	.42m3

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

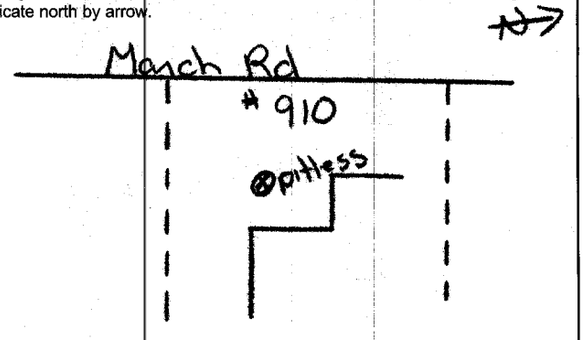
Business Address (street name, number, city etc.): Box 490 Stittsville, Ontario K2S 1A6

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

Signature of Technician/Contractor: x [signature] | 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 46997 | 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 11 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)
A 035457
A035457

Well Record
Regulation 903 Ontario Water Resources Act

page ___ of ___

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Ministry Use Only
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Well Owner's Information and Location of Well Information

[redacted]

Township	City/Town/Village	Lot	Concession
Ottawa Carleton	Kanata	3	11

RR#/Street Number/Name: 927 March Road
City/Town/Village: Kanata
Site/Compartment/Block/Tract etc.:

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	Metres To	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	1	3.73	1	4.90
2	2	3.81	2	4.85
3	3	3.81	3	4.82
4	4	3.85	4	4.78
5	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

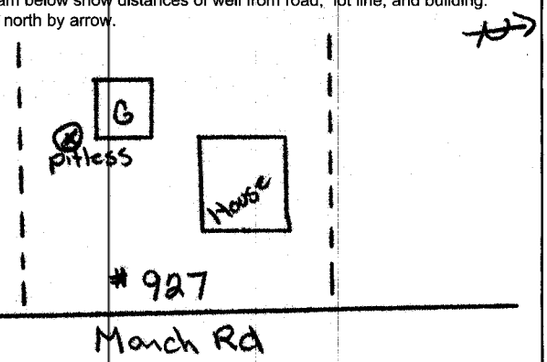
Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
9.75	0	Grouted - Bentonite Slurry	.254m3

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

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

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 6 DD 29

Ministry Use Only

Data Source
Contractor: 1558
Date Received: YYYY JUL 1 MM DD 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.

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Well Owner's Information and Location of Well Information

[redacted]

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

GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation
	83	18	426390	5023443	Garmin	☐ 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

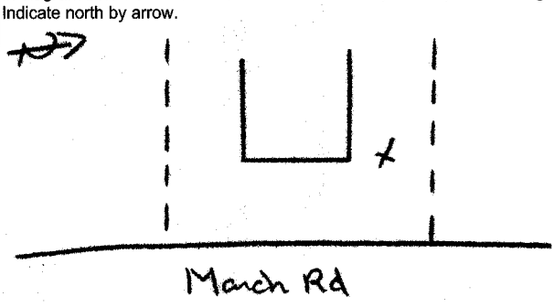
Name of Well Technician (last name, first name)	Well Technician's Licence No.
Miller Stephen	T0097

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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Ministry Use Only
MUN | CON | LOT

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

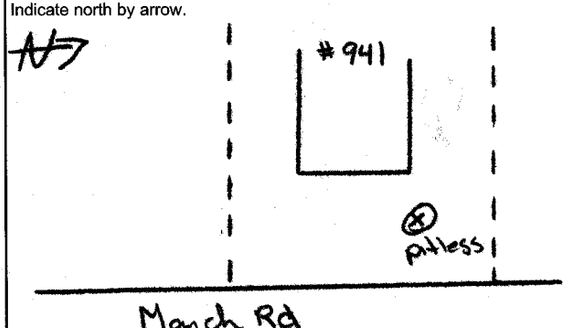
☒ Domestic ☐ Industrial ☐ Public Supply ☐ Other
☐ Stock ☐ Commercial ☐ Not used
☐ Irrigation ☐ Municipal ☐ Cooling & air conditioning

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 YYYY MM DD
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 No. *(Place Sticker and/or Print Below)* N/A

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Well Owner's Information

First Name	Last Name	E-mail Address	☐ Well Constructed by Well Owner
Minto Developments	c/o Paterson Group		

Mailing Address (Street Number/Name, RR)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
28 Concourse Gate #1	Nepean	Ont	K2E 7T7	

Part A Construction and/or Major Alteration of a Well

Address of Well Location (Street Number/Name, RR)	Township	Lot	Concession
#886 March Road	March	11	4

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

UTM Coordinates NAD 83	Zone	Easting	Northing	GPS Unit Make	Model	Mode of Operation: ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify
	18	426646	5023182	Magellan	200	

Overburden and Bedrock Materials *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From	Depth (Metres) To
	6" Drilled well		Abandonment	0	24.08

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From	To	Type of Sealant Used (Material and Type)	Volume Placed (Cubic Metres)
24.08	0.15	Hole Plug	
0.15	0	Soil	

Method of Construction

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

Water Use

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

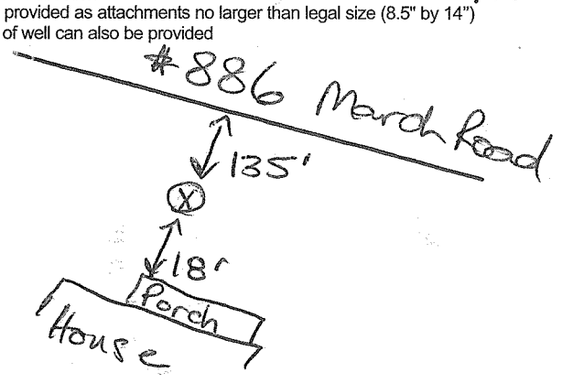
Status of Well

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

Location of Well

Please provide a map below showing:
- all property boundaries, and measurements sufficient to locate the well in relation to fixed points
- an arrow indicating the North direction
- detailed drawings can be provided as attachments no larger than legal size (8.5" by 14")
- vidigital pictures of inside of well can also be provided

N/A



Date Well Completed *(yyyy/mm/dd)*	Was the well owner's information package delivered?	Date the Well Record and Package Delivered to Well Owner *(yyyy/mm/dd)*
2007-08-02	☐ Yes ☒ No	2007-08-27

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 No./Name, number, RR)	Municipality
RR#1	RICHMOND

Province	Postal Code	Business E-mail Address
ONT	K0A 2Z0	

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
6138382170	Desaulniers, Ken

Well Technician's Licence No.	Signature of Technician	Date Submitted *(yyyy/mm/dd)*
1114		2007-09-06

Results of Well Yield Testing

Check box if after test of well yield, water was:
☐ Clear and sand free
☐ Cannot develop to sand-free state

If pumping discontinued, give reason:

Pumping test method

Pump intake set at *(Metres)*

Pumping rate *(Litres/min)*

Duration of pumping _____ hrs + _____ min

Final water level end of pumping *(Metres)*

Recommended pump type ☐ Shallow ☐ Deep

Recommended pump depth _____ Metres

Recommended pump rate *(Litres/min)*

If flowing give rate *(Litres/min)*

	Draw Down		Recovery	
	Time *(Min)*	Water Level *(Metres)*	Time *(Min)*	Water Level *(Metres)*
Static Level			Static Level	
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Water Details

Water found at Depth	Kind of Water
_____ Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
_____ Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
_____ Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

Casing Used	Screen Used
☐ Galvanized	☐ Galvanized
☐ Steel	☐ Steel
☐ Fibreglass	☐ Fibreglass
☐ Plastic	☐ Plastic
☐ Concrete	☐ Concrete

No Casing and Screen Used
☐ Open Hole

Disinfected? ☒ Yes ☐ No

Casing and Well Details
Diameter of the Hole *(Centimetres)*
Depth of the Hole *(Metres)*
Wall Thickness *(Metres)*
Inside Diameter of the Casing *(Metres)*
Depth of the Casing *(Metres)*

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Audit No.	Well Contractor No.
Z 60172	1119
Date Received *(yyyy/mm/dd)* SEP 17 2007	Date of Inspection *(yyyy/mm/dd)*
Remarks	

Ontario Ministry of the Environment

Well Tag No. *(Place Sticker and/or Print Below)*

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Well Owner's Information

First Name	Last Name	E-mail Address	☐ Well Constructed by Well Owner
McKeown Construction			

Mailing Address (Street Number/Name, RR)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
P.O. Box 296	Greely	Ontario	K4P 1N5	613 821 4808

Part A Construction and/or Major Alteration of a Well

Address of Well Location (Street Number/Name, RR)	Township	Lot	Concession
846 March Road	Kanata	10	3

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

UTM Coordinates	Zone	Easting	Northing	GPS Unit Make	Model	Mode of Operation:
NAD 83		426795	5023082		GArmin	☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify

Overburden and Bedrock Materials *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (*Metres*) From	To

Annular Space/Abandonment Sealing Record

Depth Set at (*Metres*) From	To	Type of Sealant Used *(Material and Type)*	Volume Placed *(Cubic Metres)*
16.76	0	Grouted - Bentonite, 3/4 inch Hole Plug	15 bags

Method of Construction

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

Water Use

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

Status of Well

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

Location of Well

Please provide a map below showing:
- all property boundaries, and measurements sufficient to locate the well in relation to fixed points,
- an arrow indicating the North direction
- detailed drawings can be provided as attachments no larger than legal size (8.5" by 14")
- vidigital pictures of inside of well can also be provided

Date Well Completed *(yyyy/mm/dd)*	Was the well owner's information package delivered?	Date the Well Record and Package Delivered to Well Owner *(yyyy/mm/dd)*
2008/3/3	☐ Yes ☒ No	

Well Contractor and Well Technician Information

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

Business Address (Street No./Name, number, RR)	Municipality
Box 490	Stittsville

Province	Postal Code	Business E-mail Address
Ontario	K2S 1A6	office capitalwater.ca

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
6138361766	Miller, Stephen

Well Technician's Licence No.	Signature of Technician	Date Submitted *(yyyy/mm/dd)*
0097		2008/3/3

Results of Well Yield Testing

Check box if after test of well yield, water was:
☐ Clear and sand free
☐ Cannot develop to sand-free state

If pumping discontinued, give reason:

Pumping test method

Pump intake set at *(Metres)*

Pumping rate *(Litres/min)*

Duration of pumping ____ hrs + ____ min

Final water level end of pumping *(Metres)*

Recommended pump type ☐ Shallow ☐ Deep

Recommended pump depth ____ Metres

Recommended pump rate *(Litres/min)*

If flowing give rate *(Litres/min)*

Draw Down Time (*Min*)	Draw Down Water Level (*Metres*)	Recovery Time (*Min*)	Recovery Water Level (*Metres*)
Static Level		Static Level	
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
50		50	
60		60	

Water Details

Water found at Depth	Kind of Water
____ Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth ____ Metres ☐ Gas	☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals
Water found at Depth ____ Metres ☐ Gas	*Kind of Water* ☐ Fresh ☐ Salty ☐ Sulphur ☐ Minerals

Casing Used

☐ Galvanized
☐ *Steel*
☐ Fibreglass
☐ Plastic
☐ Concrete

Screen Used

☐ Galvanized
☐ *Steel*
☐ Fibreglass
☐ Plastic
☐ Concrete

No Casing and Screen Used

☐ Open Hole

Disinfected? ☒ Yes ☐ No

Casing and Well Details

Diameter of the Hole *(Centimetres)*

Depth of the Hole *(Metres)*

Wall Thickness *(Metres)*

Inside Diameter of the Casing *(Metres)*

Depth of the Casing *(Metres)*

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Audit No.	Well Contractor No.
Z 77317	
Date Received *(yyyy/mm/dd)* JUN 02 2008	Date of Inspection *(yyyy/mm/dd)*
Remarks	

0506E (11/2006) **Ministry's Copy**

Ontario — Ministry of the Environment

Measurements recorded in: [X] Metric [ ] Imperial

Well Tag No. *(Place Sticker and/or Print Below)*

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	
McKeown Contracting			[ ] Well Constructed by Well Owner

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
2878 Stagecoach Road	Greely	Ontario	K 0 A 2 W 0	613 821 4808

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
856 March Road	Kanata	11	4

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 8 3	1 8	4 26 73 0	5 0 2 3 1 25		

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

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used *(Material and Type)*	Volume Placed (m^3/ft^3)
15.54	0	Grouted Bentonite 3/8" Hole Plug (12 bags)	

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

Construction Record - Screen

Outside Diameter *(cm/in)*	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) 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
[X] Abandoned, other, *specify*
[ ] Other, *specify*

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water	Other, specify
	[ ]	[ ] Fresh [ ] Untested	
	[ ]	[ ] Fresh [ ] Untested	
	[ ]	[ ] Fresh [ ] Untested	

Hole Diameter

Depth (m/ft) From	To	Diameter *(cm/in)*

Results of Well Yield Testing

After test of well yield, water was:
[ ] Clear and sand free
[ ] Other, *specify*

If pumping discontinued, give reason:

Pump intake set at *(m/ft)*

Pumping rate *(l/min / GPM)*

Duration of pumping ____ hrs + ____ min

Final water level end of pumping *(m/ft)*

If flowing give rate *(l/min / GPM)*

Recommended pump depth *(m/ft)*

Recommended pump rate *(l/min / GPM)*

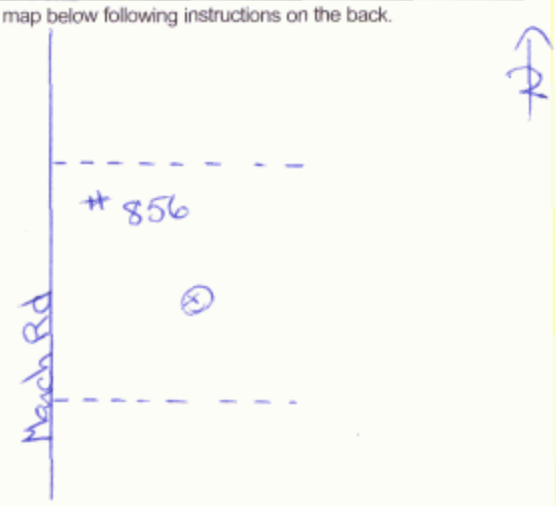
Well production *(l/min / GPM)*

Disinfected? [ ] Yes [ ] No

	Draw Down Time *(min)*	Draw Down Water Level *(m/ft)*	Recovery Time *(min)*	Recovery Water Level *(m/ft)*
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

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

Business Address (Street Number/Name)	Municipality
Box 490	Stittsville

Province	Postal Code	Business E-mail Address
Ontario	K 2 S 1 A 6	office@capitalwater.ca

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
6 1 3 8 3 6 1 7 6 6	Miller, Stephen

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
0 0 9 7		2008 09 08

Well owner's information package delivered: [ ] Yes [X] No

Date Package Delivered: Y Y Y Y M M D D

Date Work Completed: 2008 09 05

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Audit No. Z 84393

OCT 14 2008 Received

0506E (12/2007)

Ministry's Copy

Ontario Ministry of the Environment

Measurements recorded in: [X] Metric [ ] Imperial

Well Tag No. *(Place Sticker and/or Print Below)*

Well Record

Regulation 903 Ontario Water Resources Act

Page _____ of _____

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	
McKeown Contracting			[ ] Well Constructed by Well Owner

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
2878 Stagecoach Road	Greely	Ontario	K 0 A 2 W 0	613 822 2599

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
860 March Road	Kanata	11	4

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 8 3	1 8	426698	5023143		

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

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
9.44	0	Grouted Bentonite 3/8" Hole Plug (5 bags)	

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

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) 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
[X] Abandoned, other, *specify*
[ ] Other, *specify*

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water: Fresh	Untested	Other, specify

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was:
[ ] Clear and sand free
[ ] Other, *specify*

If pumping discontinued, give reason:

Pump intake set at *(m/ft)*

Pumping rate *(l/min / GPM)*

Duration of pumping _____ hrs + _____ min

Final water level end of pumping *(m/ft)*

If flowing give rate *(l/min / GPM)*

Recommended pump depth *(m/ft)*

Recommended pump rate *(l/min / GPM)*

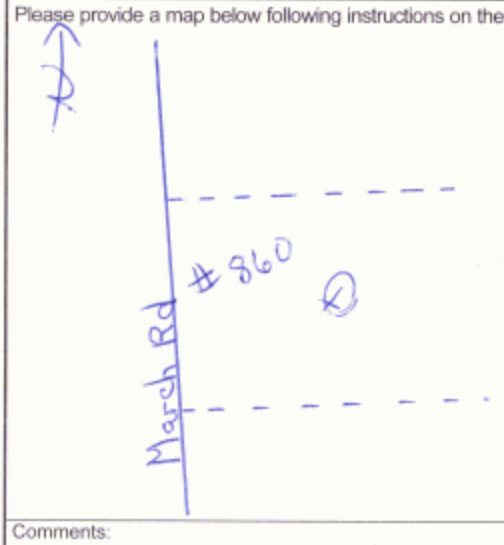
Well production *(l/min / GPM)*

Disinfected? [ ] Yes [ ] No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

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

Business Address (Street Number/Name)	Municipality
Box 490	Stittsville

Province	Postal Code	Business E-mail Address
Ontario	K2S1A6	office@capitalwater.ca

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)
6138361766	Miller, Stephen

Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
0097		20080908

Well owner's information package delivered: [ ] Yes [X] No

Date Package Delivered: Y Y Y Y M M D D

Date Work Completed: 20080905

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Audit No. Z 84392

OCT 14 2008

Received

0506E (12/2007)

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Measurements recorded in: ☐ Metric ☑ Imperial

Well Tag No. *(Place Sticker and/or Print Below)*: Abandoned

Well Record

Regulation 903 Ontario Water Resources Act

Page 1 of 1

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
	City of Ottawa		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. *(inc. area code)*
100 Constellation Crescent	Ottawa	Ontario	K2G6T8	6135810240

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
895 March Rd.			

County/District/Municipality	City/Town/Village	Province	Postal Code
	Kanata	Ontario	K2K1X7

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	18	426569	5023247		

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
	Static Water level at 21'				
	Abandoned for Road Construction				
	GPS - Garmin Etrex				

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
29'	24'	~~Hole plug~~ Sand	
24'	3'	Hole plug	
3'	0.8'	Sand	
0.8'	0	Clean Rock	

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

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) 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* Construction ☐ Other, *specify* _____

Water Details

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

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Results of Well Yield Testing

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

If pumping discontinued, give reason:

Pump intake set at *(m/ft)*

Pumping rate *(l/min / GPM)*

Duration of pumping _____ hrs + _____ min

Final water level end of pumping *(m/ft)*

If flowing give rate *(l/min / GPM)*

Recommended pump depth *(m/ft)*

Recommended pump rate *(l/min / GPM)*

Well production *(l/min / 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			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.

Comments: See Attached

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
Marathon Drilling Co. Ltd.	6894

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
6847 Hiram Dr.	Ottawa	Ontario	K4P1A2	jsbell@marathondrilling.com

Bus. Telephone No. *(inc. area code)*	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
6138212057	Foster Eric	3284		2010 10 06

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No	Y Y Y Y M M D D	Y Y Y Y M M D D

Ministry Use Only

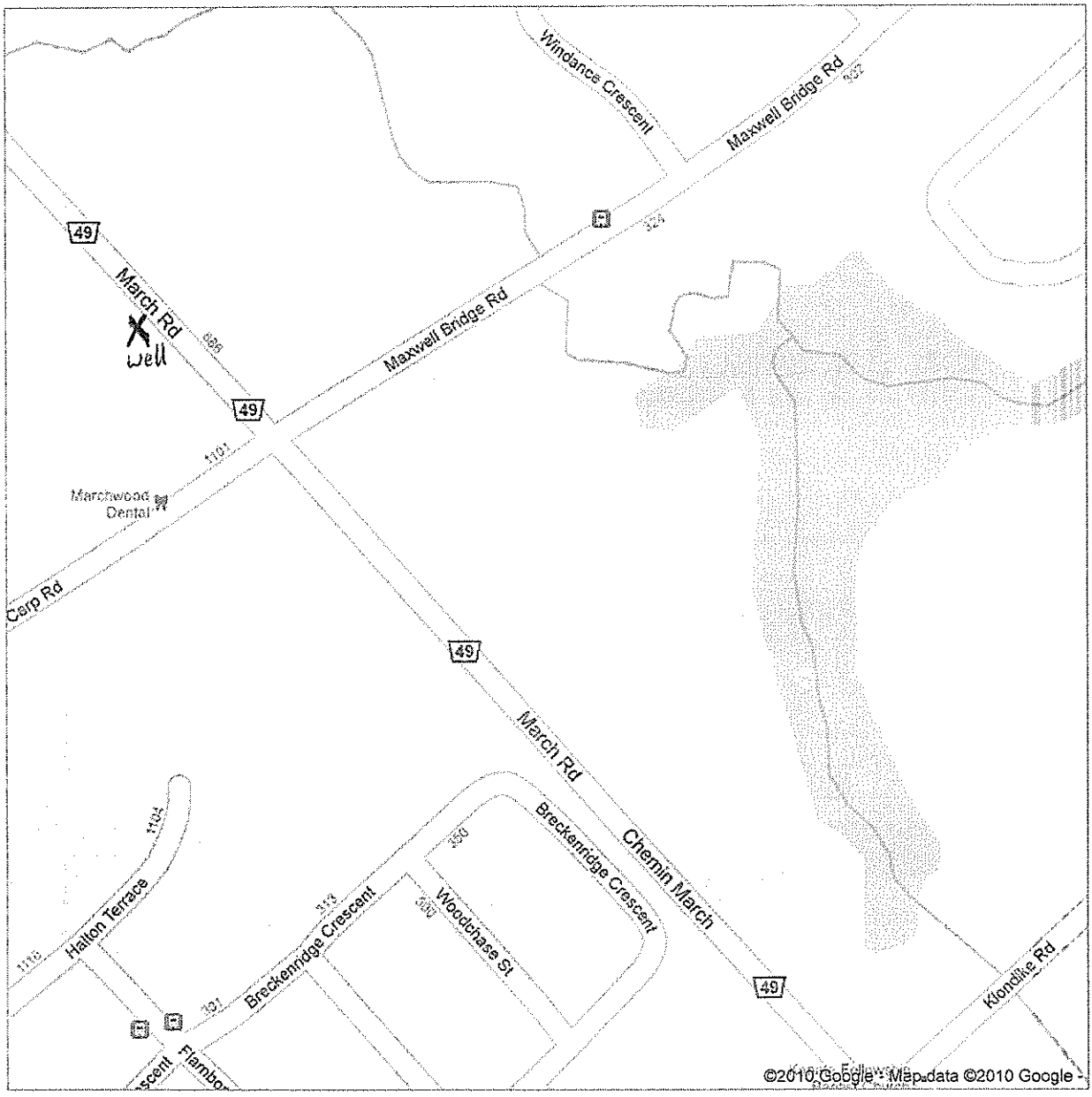
Audit No. Z096933

Received DEC 22 2010

Prir

Google maps
Canada

Notes



C-6894
Z096933

DEC 2 2 2010

Well ID

Well ID Number: 7201372
Well Audit Number: *C21215*
Well Tag Number: *A130127*

This table contains information from the original well record and any subsequent updates.

Well Location

Address of Well Location	
Township	MARCH TOWNSHIP
Lot	
Concession	
County/District/Municipality	OTTAWA-CARLETON
City/Town/Village	
Province	ON
Postal Code	n/a
UTM Coordinates	NAD83 — Zone 18 Easting: 426635.00 Northing: 5023491.00
Municipal Plan and Sublot Number	
Other	

Overburden and Bedrock Materials Interval

General Colour	Most Common Material	Other Materials	General Description	Depth From	Depth To

Annular Space/Abandonment Sealing Record

Depth From	Depth To	Type of Sealant Used (Material and Type)	Volume Placed

Method of Construction & Well Use

Method of Construction	Well Use

Status of Well

Construction Record - Casing

Inside Diameter	Open Hole or material	Depth From	Depth To

Construction Record - Screen

Outside Diameter	Material	Depth From	Depth To

Well Contractor and Well Technician Information

Well Contractor's Licence Number: 1844

Results of Well Yield Testing

After test of well yield, water was	
If pumping discontinued, give reason	
Pump intake set at	
Pumping Rate	
Duration of Pumping	
Final water level	
If flowing give rate	
Recommended pump depth	
Recommended pump rate	
Well Production	
Disinfected?	

Draw Down & Recovery

Draw Down Time(min)	Draw Down Water level	Recovery Time(min)	Recovery Water level
SWL			
1		1	
2		2	
3		3	
4		4	
5		5	
10		10	
15		15	
20		20	
25		25	
30		30	
40		40	
45		45	
50		50	
60		60	

Water Details

Water Found at Depth	Kind

Hole Diameter

Depth From	Depth To	Diameter

Audit Number: C21215

Date Well Completed: September 07, 2012

Date Well Record Received by MOE: May 09, 2013

Updated: June 28, 2018
RateRate
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Tags

- Environment and energy,
- Drinking water,

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Karyn Munch, P.ENG.

patersongroup

Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

POSITION

Intermediate Environmental Engineer

EDUCATION

Carleton University, B.Eng. 2002
Environmental Engineering

MEMBERSHIPS AND AWARDS

Professional Engineers of Ontario
Ottawa Geotechnical Society

EXPERIENCE

2011-present
Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Intermediate Engineer

2009-2010
Department of Indian and Northern Affairs
Contaminated Sites Division
Environment Officer (PC-02)

2003 to 2009
Paterson Group Inc.
Consulting Engineers
Geotechnical and Environmental Division
Intermediate Engineer

2002 to 2003
Dessau Soprin Inc.
Consulting Engineers
Environmental Division
Junior Engineer

SELECT LIST OF PROJECTS

Billings-Hurdman Interconnect Watermain - Ottawa
Telus Building Remediation - Ottawa
Block D Lands Remediation and Redevelopment – Kingston
Gladstone Avenue Reconstruction - Ottawa
Lees Avenue Coal Tar Site - City of Ottawa
Nortel Networks Environmental Monitoring Program
3W Zone Feedermain – Ottawa
Bank Street Reconstruction – Ottawa
Lees Avenue Remediation Program – Ottawa
Colonnade Road North Development – Ottawa
Montreal Road Reconstruction – Ottawa
Designated Substance Surveys – Residential and Commercial Sites - Ottawa
Phase I & II Environmental Site Assessments – Residential, Commercial and Industrial Sites – Ottawa (CSA Z768-01 and O.Reg 269/11)
Brownfields Applications and Records of Site Condition – Residential and Commercial Redevelopment

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