

### 1184-1196 CUMMINGS AVENUE SERVICING AND STORMWATER MANAGEMENT REPORT

April 25, 2023

Prepared for: TCU Development Corporation

Prepared by: Stantec Consulting Ltd.

### 1184-1196 Cummings Avenue Servicing and Stormwater Management Report

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
0	Site Plan Control	Michael Wu	2023- 04-18	Tyler Moir	2023- 04-18	Peter Moroz	2023- 04-25

**(** 

The conclusions in the Report titled 1184-1196 Cummings Avenue Servicing and Stormwater Management Report are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from TCU Development Corporation (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by:			
, ,		Signature	_
		chael Wu, EIT	_
	F	Printed Name	
Reviewed by:	J	yler Main	
iteviewed by.	Signature		<del>_</del>
		er Moir, P.Eng. Printed Name	P MOROZ P
	Peter	Digitally signed by	PANDROZ FIN
Approved by:	Moroz	Peter Moroz Date: 2023.04.25 21:30:53 -04'00'	90493552
		Signature	POLINCE OF ONTARIO
	Pete	er Moroz, P.Eng.	_

Project Number: 160401787

**(** 

# **Table of Contents**

1	INTRODUCTION	
1.1 <b>2</b>	BACKGROUND	
3	WATER SERVICING	-
3.1 3.1	Background	
3.1.1	Potable (Domestic) Water Demands	
3.1.2	Fire Flow Demands	
3.2	Level of Servicing	
3.2.1 3.2.2	Boundary Conditions	
3.2.2 3.2.3	Fire Hydrant Coverage	
3.3	Proposed Water Servicing	
4	WASTEWATER SERVICING	
<del></del> 4.1	Design Criteria	
4.2	Wastewater Generation and Servicing Design	9
4.3	Proposed Sanitary Servicing	10
5	STORMWATER MANAGEMENT AND SERVICING	11
5.1	Objectives	11
5.2	Stormwater Management (SWM) Criteria	
5.3 5.4	Existing Conditions	
5.4.1	Allowable Release Rate	
5.4.2	Quantity Control: Storage Requirements	
5.4.3	Quality Control	
5.5	Proposed Stormwater Servicing	
6	SITE GRADING	17
7	UTILITIES	18
8	APPROVALS	19
9	EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION	20
10	GEOTECHNICAL INVESTIGATION	21
11	CONCLUSIONS	22
11.1	Water Servicing	
11.2	Sanitary Servicing	
11.3 11.4	Stormwater Servicing and Management	
11. <del>4</del> 11.5	Erosion and Sediment Control During Construction	
11.6	Geotechnical Investigation	
11.7	Utilities	23
11.8	Approvals	23



### 1184-1196 Cummings Avenue Servicing and Stormwater Management Report

LIST OF TABLES	
Table 3-1: Estimated Water Demands	6
Table 3-2: Boundary Conditions	
Table 4-1: Estimated Peak Wastewater Flow	
Table 5-1: Peak Pre-Development Flow Rates	
Table 5-2: Summary of Subcatchment Areas	
Table 5-3: Roof Subcatchment (BLDG) Stormwater Management	
Table 5-4: Schedule of Inlet Control Devices	
Table 5-5: Peak Post-Development Uncontrolled Surface Release Rates	
Table 5-6: Summary of Total 5-Year and 100-Year Event Release Rates	
Table 10-1: Pavement Structure	21
LIST OF FIGURES	2
Figure 1-1: Key Plan of Site	
LIST OF APPENDICES	
APPENDIX A WATER DEMANDS	1
A.1 Domestic Water Demands	1
A.2 Fire Flow Demands (FUS 2020)	
A.3 Correspondence with Architect on Construction Type	
A.4 Boundary Conditions	
A.5 Fire Hydrant Coverage Calculations	5
APPENDIX B SITE PLAN BY PROJECT 1 STUDIOS INC	6
APPENDIX C SANITARY	7
C.1 Sanitary Calculation Sheet	
C.2 Correspondence with City on Sanitary Sewer Capacity	
D.1 Modified Rational Method Sheet	
D.3 Storm Sewer Design Sheet	
D.4 Correspondence with City on SWM Quality Control Criteria	
D.5 Detailed Stormceptor Sizing Reports	
APPENDIX E BACKGROUND STUDIES	
E.1 Geotechnical Investigation Report by Paterson Group, March 2023	
E.2 Phase I Environmental Site Assessment by Paterson Group, March 2023	15
APPENDIX F PRE-CONSULTATION	16
APPENDIX G DRAWINGS	17



### 1 Introduction

Stantec Consulting Ltd. has been commissioned by TCU Development Corporation to prepare the following Servicing and Stormwater Management Report in support of a Site Plan Control and a Zoning By-Law Amendment application for the proposed development located at 1184-1196 Cummings Avenue in the City of Ottawa.

The 0.35 ha site is situated along the west side of Cummings Avenue, at the southwest corner of the intersection between Cummings Avenue and Weldon Drive. The site is currently zoned R3Y [708] and contains an existing two-storey residential building and two single-storey residential buildings with sheds, trees, and surface parking. The site is bound by Weldon Drive to the north, Cummings Avenue to the east, an existing commercial development to the south and an existing residential development to the west as shown in **Figure 1-1** below.



Figure 1-1: Key Plan of Site

**(** 

The proposed 0.35 ha site comprises of a six-storey medium-rise residential building and consists of 57 studio units, 102 one-bedroom units, 6 one-bedroom units with dens, and 23 two-bedroom units. Project 1 Studios Ltd. has prepared a site plan dated March 31, 2023, which defines the proposed development (see **Appendix B**).

### 1.1 Objective

This site servicing and stormwater management (SWM) report presents a servicing scheme that is free of conflicts, provides on-site servicing in accordance with City of Ottawa Design Guidelines, and uses the existing municipal infrastructure in accordance with any limitations communicated during consultation with the City of Ottawa staff. Details of the existing infrastructure located within the Cummings Avenue right of way (ROW) were obtained from available as-built drawings and site topographic survey.

Criteria and constraints provided by the City of Ottawa have been used as a basis for the detailed servicing design of the proposed development. Specific and potential development constraints to be addressed are as follows:

- Potable Water Servicing
  - Estimated water demands to characterize the proposed feed(s) for the proposed development which will be serviced from the existing 305 mm diameter watermain within the Cummings Avenue ROW.
  - Watermain servicing for the development is to be able to provide average day and maximum day (including peak hour) demands (i.e., non-emergency conditions) at pressures within the acceptable range of 345 to 552 kPa (50 to 80 psi)
  - Under fire flow (emergency) conditions, the water distribution system is to maintain a minimum pressure greater than 140 kPa (20 psi)
- Wastewater (Sanitary) Servicing
  - Define and size the sanitary service lateral which will be connected to the existing 250 mm diameter sanitary sewer within the Cummings Avenue ROW.
- Storm Sewer Servicing
  - Define major and minor conveyance systems in conjunction with the proposed grading plan.
  - Determine the stormwater management storage requirements to meet the allowable release rate for the site.
  - Define and size the proposed storm service lateral that will be connected to the existing
     600 mm diameter municipal storm sewer within the Cummings Avenue ROW.
- Prepare a grading plan in accordance with the proposed site plan and existing grades.

The drawings included in **Appendix G** of this report illustrate the proposed internal servicing scheme for the site.

**(** 

# 2 Background

Documents referenced in preparing of this stormwater and servicing report for the 1184 Cummings Avenue development include:

- City of Ottawa Sewer Design Guidelines (SDG), City of Ottawa, October 2012, including all subsequent technical bulletins
- City of Ottawa Design Guidelines Water Distribution, City of Ottawa, July 2010, including all subsequent technical bulletins
- Design Guidelines for Drinking Water Systems, Ministry of the Environment, Conservation, and Parks (MECP), 2008
- Fire Protection Water Supply Guideline for Part 3 in the Ontario Building Code, Office of the Fire Marshal (OFM), October 2020
- Water Supply for Public Fire Protection, Fire Underwriters Survey (FUS), 2020
- Geotechnical Investigation Proposed Multi-Storey, 1184, 1188, and 1196 Cummings Avenue, Ottawa, Ontario, Paterson Group, March 27, 2023
- Phase I Environmental Site Assessment, 1184, 1188 and 1196 Cummings Avenue, Ottawa, Ontario, Paterson Group, March 6, 2023

## 3 Water Servicing

### 3.1 Background

The proposed building is in Pressure Zone 1E of the City of Ottawa's Water Distribution System. The existing dwellings have water service lateral connections to the existing 305 mm diameter watermain on Cummings Avenue. The existing services will be blanked at the main by City forces, as shown in the Existing Conditions and Removals Plan (**Drawing EX-1** in **Appendix G**).

### 3.1 Water Demands

### 3.1.1 POTABLE (DOMESTIC) WATER DEMANDS

The proposed six-storey residential building consists of 57 studio units, 102 one-bedroom units, 6 one-bedroom units with dens, and 23 two-bedroom units. The City of Ottawa Water Distribution Guidelines (July 2010) and ISTB 2021-03 Technical Bulletin were used to determine water demands based on projected population densities for residential areas and associated peaking factors. The population was estimated using an occupancy of 1.4 persons per unit for studio and one-bedroom apartments and 2.1 persons per unit for one-bedroom with den and two-bedroom apartments. The proposed building was estimated to have a total projected population of 284 persons.

A daily rate of 280 L/cap/day has been used to estimate average daily (AVDY) potable water demand for the residential units. Maximum day (MXDY) demands were determined by multiplying the AVDY demands by a factor of 2.5 for residential areas, while peak hourly (PKHR) demands were determined by multiplying the MXDY by a factor of 2.2 for residential areas. The estimated demands for each residential plot is summarized in **Table 3-1** below.

Demand Type	Population	AVDY (L/s)	MXDY (L/s)	PKHR (L/s)
Studio	80	0.26	0.65	1.42
1 Bedroom	143	0.46	1.15	2.52
1 Bedroom + Den	13	0.04	0.10	0.22
2 Bedroom	48	0.16	0.41	0.90
Total Site:	284	0.92	2.30	5.07

Table 3-1: Estimated Water Demands

#### 3.1.2 FIRE FLOW DEMANDS

Fire flow requirements were estimated using Fire Underwriters Survey (FUS) methodology, as the estimated fire flow for the site exceeds 9,000 L/min (150.0 L/s) when determined through the Office of the Fire Marshal (OFM) fire protection water supply guidelines under the Ontario Building Code. The FUS

**(3**)

estimate is based on a building of ordinary construction type, as a result, the 'gross construction area' of all floor areas was used for the purpose of the FUS calculation, as per page 22 of the *Fire Underwriters Survey's Water Supply for Public Fire Protection*, 2020. Additionally, it is anticipated that the building will be equipped with an automatic sprinkler system that is fully supervised and conforms to the NFPA 13 standard. Required fire flows were determined to be 333.3 L/s (20,000 L/min). Detailed fire flow calculations per the FUS methodology are provided in **Appendix A.2**, while correspondence with the architect on the construction type are provided in **Appendix A.3**.

### 3.2 Level of Servicing

### 3.2.1 BOUNDARY CONDITIONS

The estimated domestic water and fire flow demands, were used to define the level of servicing required for the proposed development from the municipal watermain and hydrants within the Cummings Avenue ROW. The boundary conditions request was submitted to the City staff on March 30<sup>th</sup>, 2023, at of the time of authoring this report, the boundary conditions have not been received. The report will be revised as required once the boundary conditions are provided.

**Table 3-2: Boundary Conditions** 

	Connection at Weldon Drive	Connection at Cummings Avenue
Min. HGL (m)	To be provided by the City	
Max. HGL (m)		
Max. Day + Fire Flow (333.3 L/s) HGL (m)		

### 3.2.2 ALLOWABLE DOMESTIC PRESSURES

The desired normal operating pressure range in occupied areas as per the City of Ottawa 2010 Water Distribution Design Guidelines is 345 kPa to 552 kPa (50 psi to 80 psi) under a condition of maximum daily flow and no less than 276 kPa (40 psi) under a condition of maximum hourly demand. Furthermore, the maximum pressure at any point in the water distribution should not exceed 689 kPa (100 psi) as per the Ontario Building/Plumbing Code; pressure reducing measures are required to service areas where pressures greater than 552 kPa (80 psi) are anticipated in occupied areas.

The proposed finished floor elevation of the first floor, 71.7 m, will serve as the ground floor elevation for the calculation of the residual pressures at ground level, in anticipation of the receipt of the boundary conditions from the City.

#### 3.2.3 FIRE HYDRANT COVERAGE

The building will be sprinklered and a Siamese (fire department) connection is to be provided to the right of the main entrance. There are six existing hydrants in the proximity of the proposed development site, as shown in **Figure 3-1**. The distance of each hydrant from the proposed building is more than 76 m.



According to the NFPA 1 Table 18.5.4.3 in Appendix I of the City of Ottawa Technical Bulletin ISTB-2018-02, a hydrant situated less than 76 m away from a building can supply a maximum capacity of 5,678 L/min, while a hydrant situated between 76 m and 152 m away from a building can supply a maximum capacity of 3,785 L/min. Given the large fire flow demands from the site, it is proposed that a new fire hydrant be placed to be within 45 metres from the Siamese connection to reduce the number of fire hydrants needed to service the site's fire flow demand. It is suggested that the new hydrant be located to the east of Cummings Avenue within the road right of way as shown on **Drawing SSP-1** in **Appendix G**. See **Appendix A.5** for fire hydrant coverage table calculations and NFPA Table 18.5.4.3.

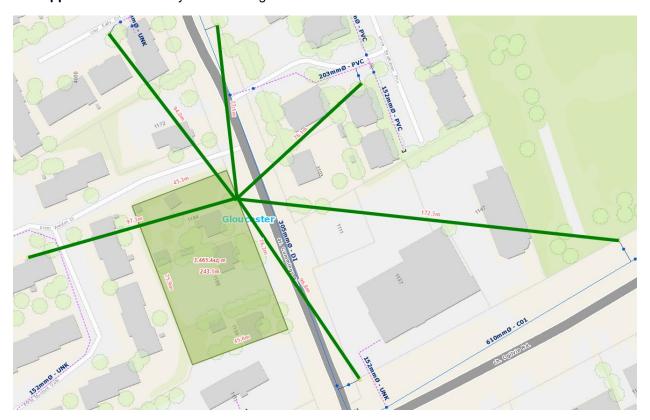


Figure 3-1: Existing Fire Hydrant Coverage Map

# 3.3 Proposed Water Servicing

The development will be serviced via a single 150 mm building service connection to the existing 305 mm diameter watermain on Cummings Avenue, where it will meet the 150 mm diameter service lateral to the new fire hydrant servicing the site. The sizing of the service connection is to be confirmed by the mechanical consultant. The proposed water servicing is shown on **Drawing SSP-1** in **Appendix G**. It is expected that the existing 305 mm diameter watermain on Cummings Avenue will provide adequate fire and domestic flows for the subject site, however this will be further examined upon receipt of the boundary conditions. The mechanical consultant or plumbing contractor will ultimately be responsible to confirm building pressures are adequate to meet building code requirements.

**3** 

## 4 Wastewater Servicing

The site will be serviced from the existing 250 mm diameter asbestos cement sanitary sewer within the Cummings Avenue ROW. The existing dwellings have sanitary service lateral connections to the municipal sewer, which will be decommissioned and abandoned as shown in **Drawing EX-1** in **Appendix G**.

### 4.1 Design Criteria

As outlined in the City of Ottawa Sewer Design Guidelines and the MECP Design Guidelines for Sewage Works, the following criteria were used to calculate the estimated wastewater flow rates and to determine the size and location of the sanitary service lateral:

- Minimum velocity = 0.6 m/s (0.8 m/s for upstream sections)
- Maximum velocity = 3.0 m/s
- Manning roughness coefficient for all smooth wall pipes = 0.013
- Minimum size of sanitary sewer service = 135 mm
- Minimum grade of sanitary sewer service = 1.0 % (2.0 % preferred)
- Average wastewater generation = 280 L/person/day (per City Design Guidelines)
- Peak Factor = based on Harmon Equation; maximum of 4.0 (residential)
- Harmon correction factor = 0.8
- Infiltration allowance = 0.33 L/s/ha (per City Design Guidelines)
- Minimum cover for sewer service connections 2.0 m
- Population density for one-bedroom and bachelor apartments 1.4 persons/apartment
- Population density for one-bedroom with den and two-bedroom apartments 2.1 persons/apartment

# 4.2 Wastewater Generation and Servicing Design

The proposed 0.35 ha development will consist of a 6-storey residential building comprising of 57 studio apartments, 102 one-bedroom units, 6 one-bedroom units with dens, and 23 two-bedroom units with a total projected population of 284. The anticipated peak wastewater flow generated from the proposed development is summarized in **Table 4-1** below.

Table 4-1: Estimated Peak Wastewater Flow

Peak R	esidential Waste	water Flow	Infiltration	Total Peak	
Population	Peak Factor	Peak Flow (L/s)	Flow (L/s)	Flow (L/s)	
284	3.27	3.01	0.12	3.12	

Detailed sanitary sewage calculations are included in **Appendix C.1**. A full port backwater valve will be required for the proposed building in accordance with the Sewer Design Guidelines and will be coordinated with the building mechanical engineers.



The anticipated peak wastewater flows for the proposed development were provided to the City of Ottawa staff on March 31<sup>st</sup>, 2023 to evaluate the adequacy of the receiving municipal sanitary sewer system in the vicinity of the site and downstream network. At the time of authoring this report, the capacity of the receiving municipal sewer has not been verified by the City of Ottawa. Any required revisions to the site design will be completed upon receipt of the boundary conditions.

### 4.3 Proposed Sanitary Servicing

A 150 mm diameter sanitary building service, complete with full port backwater valve as per City standard S14.1, is recommended to service the proposed development. Final sizing of the lateral is to be confirmed by the mechanical consultant. The sanitary lateral is be equipped with a sanitary monitor manhole, anchored as per S.P. No. F-4070, before connecting to the sewer main with a riser pipe as per City standard S11.1. The proposed sanitary servicing is shown on **Drawing SSP-1** in **Appendix G**.

**(** 

# 5 Stormwater Management and Servicing

### 5.1 Objectives

The goal of this stormwater servicing and stormwater management (SWM) plan is to determine the measures necessary to control the quantity and quality of stormwater released from the proposed development to meet the criteria established during the consultation process with City of Ottawa and Rideau Valley Conservation Authority (RVCA) staff, and to provide sufficient details required for approval.

## 5.2 Stormwater Management (SWM) Criteria

The Stormwater Management (SWM) criteria were established by combining current design practices outlined by the City of Ottawa Sewer Design Guidelines (SDG) (October 2012), review of project preconsultation notes with the City of Ottawa, and through consultation with City of Ottawa staff. The following summarizes the criteria, with the source of each criterion indicated in brackets:

#### General

- Use of the dual drainage principle (City of Ottawa SDG)
- Wherever feasible and practical, site-level measures should be used to reduce and control the volume and rate of runoff (City of Ottawa SDG)
- Assess impact of 100-year event outlined in the City of Ottawa Sewer Design Guidelines on the major and minor drainage systems (City of Ottawa SDG)

#### **Storm Sewer & Inlet Controls**

- Size storm sewers to convey 5-year storm event.
- Discharge for each storm event to be restricted to a 5-year storm event pre-development rate with a maximum pre-development C coefficient of 0.5 (City of Ottawa pre-consultation, **Appendix F**)
- Peak flows generated from events greater than the 5-year and including the 100-year storm must be detained on site (City of Ottawa pre-consultation, **Appendix F**)
- The preferred stormwater system outlet for this site is the 600 mm diameter storm sewer within Cummings Avenue
- The foundation drainage system is to be pumped to the building site storm service lateral tying to Cummings Avenue.
- T<sub>c</sub> should be not less than 10 minutes (City of Ottawa SDG).
- T<sub>c</sub> of 20 minutes for pre-development calculation as per pre-consultation requirements.

#### **Surface Storage & Overland Flow**

- Building openings to be a minimum of 0.30 m above the 100-year water level (City of Ottawa SDG)
- Maximum depth of flow under either static or dynamic conditions shall be less than 0.35 m (City of Ottawa SDG)

**(2)** 

Provide adequate emergency overflow conveyance off-site with a minimum vertical clearance of 15
cm between the spill elevation and the ground elevation at the building envelope in the proximity of
the flow route or ponding area (City of Ottawa SDG)

### 5.3 Existing Conditions

The existing site (0.349 ha) is dominated by vegetated/soft area with around 369.6 m² of roof areas and around 852.6 m² of gravel parking and driveway, as such the overall site pre-development runoff coefficient was established to be C=0.36, in which the hard surface areas use a coefficient of 0.90, the gravel areas use a coefficient of 0.60, while soft surface areas have a coefficient of 0.20. The calculated C value is less than the maximum permissible pre-development runoff coefficient of C=0.5 identified in the City of Ottawa pre-consultation for this site. Therefore, the pre-development runoff coefficient of 0.36 was used for the site analysis.

The pre-development release rates for the site have been determined using the rational method and the drainage characteristics identified above. A time of concentration for the pre-development area (20 minutes) was assigned based on the small site size and its proximity to the existing drainage outlet. The peak pre-development flow rates shown in **Table 5-1** have been calculated using the rational method as follows:

$$Q = 2.78 (C)(I)(A)$$

Where:

Q = peak flow rate, L/s

C = site runoff coefficient

I = rainfall intensity, mm/hr (per City of Ottawa IDF curves)

A = drainage area, ha

Table 5-1: Peak Pre-Development Flow Rates

Design Storm	Pre-Development Flow Rate (L/s) for C=0.36, A=0.349 ha, t <sub>c</sub> = 20 min	
5-year	24.52	
100-year	41.86	

# 5.4 Stormwater Management Design

The Modified Rational Method was employed to assess the rate and volume of runoff anticipated during post-development rainfall runoff events. The site was subdivided into sub-catchments (subareas) as defined by the proposed grades and the location, nature, or presence/absence of inlet control devices (ICDs). Each subcatchment was assigned a runoff coefficient based on the proposed finished surface. A



summary of subareas and runoff coefficients is provided in **Table 5-2** below. Further details can be found in **Appendix D.1**, while **Drawing SD-1** in **Appendix G** illustrates the proposed sub-catchments.

Catchment Areas C A (ha) Flow Type Outlet **BLDG** 0.90 0.165 Controlled CB-1 0.74 0.053 Uncontrolled CB-2 0.73 0.021 Uncontrolled Cistern CB-3 0.77 0.032 Uncontrolled **RAMP** 0.90 0.008 Uncontrolled UNC-1 0.20 0.005 Uncontrolled Adjacent property UNC-2 0.20 0.017 Uncontrolled Adjacent property UNC-3 0.20 0.012 Uncontrolled Weldon ROW UNC-4 0.63 0.035 Uncontrolled Cummings ROW **Total Site** 0.348 0.74

**Table 5-2: Summary of Subcatchment Areas** 

#### 5.4.1 ALLOWABLE RELEASE RATE

The pre-development 5-year release rate for the site was determined using the rational method to be 24.52 L/s. Consequently, the target release rate for 1184-1196 Cummings Avenue under all events up to and including the 100-year event will be 24.52 L/s. Runoff coefficient values have been increased by 25% for the post-development 100-year storm event based on the City of Ottawa SDG.

### 5.4.2 QUANTITY CONTROL: STORAGE REQUIREMENTS

The site requires quantity control measures to meet the restrictive stormwater release criteria. It is proposed that rooftop storage via restricted roof release and cistern be used to reduce the site peak outflow. A spreadsheet using the Modified Rational Method (MRM) was used to size the roof cistern storage, as shown in **Appendix D.1.** 

### 5.4.2.1 Rooftop Storage

It is proposed to retain stormwater on the building rooftop by installing restricted flow roof drains. The MRM calculations assume the roof will be equipped with six standard Watts model roof drains complete with Adjustable Accutrol Weirs. Discharge from the six controlled roof drains will be routed by the mechanical consultant through the building's internal plumbing to the proposed cistern before being pumped to the storm service lateral.

Watts Drainage Adjustable Accutrol roof drain weir data (see **Appendix D.2**) and the roof plan (see **Appendix B**) has been used to calculate a practical roof release rate and detention storage volume for the rooftop areas, with 80% of the roof area assumed to be available for storage. It should be noted that

**3** 

#### 1184-1196 Cummings Avenue Servicing and Stormwater Management Report

the Accutrol weir has been used as an example only, and that other products may be specified for use, provided that:

- the peak roof drain release rate is restricted to match the maximum rate of release indicated in **Table 5-2**.
- sufficient roof storage is provided to meet (or exceed) the required volume of detained stormwater indicated in **Table 5-2**, and
- the maximum ponding depth of 150 mm is not exceeded during a design storm event.

The proposed drain release rates and storage volumes have been calculated based on the six roof drain weirs in at 50 % opened setting. Rooftop storage volumes and controlled release rates are summarized in **Table 5-3**.

Table 5-3: Roof Subcatchment (BLDG) Stormwater Management

Design Storm	Storage Depth (mm)	Peak Discharge (L/s)	Volume Stored (m³)
5-Year (Roof)	112.70	6.16	29.08
100-Year (Roof)	149.46	7.55	65.53

### 5.4.2.2 Uncontrolled Areas

There are four uncontrolled subcatchment areas, consisting of UNC-1, UNC-2, UNC-3, and UNC-4, which drain to the south and west sides of the site and to the Weldon Drive and Cummings Avenue ROWs, respectively. While UNC-1 and UNC-2 will continue to drain as per existing conditions to the neighbouring properties, UNC-3 and UNC-4 will drain to the Weldon Drive and Cummings Avenue ROWs via surface flows and are directed toward the existing roadway catch basins (CBs). The peak post-development release rates from the uncontrolled areas are summarized in **Table 5-4**.

Table 5-4: Peak Post-Development Uncontrolled Surface Release Rates

Design		Release Rate (L/s)				
Storm	UNC-1	UNC-2	UNC-3	UNC-4	Total	
5-Year	0.32	0.98	0.72	6.38	8.39	
100-Year	0.68	2.09	1.54	13.66	17.97	

The reverse sloped ramp to the parking garage is considered a depressed driveway. A trench drain has been provided at the bottom of the ramp to provide an outlet for the driveway area (RAMP subcatchment). As per Section 5.7.6 of the City SDG (as amended), a separate stormwater service piping is proposed to connect the trench drain to the cistern, separate from the foundation draining. A plan for emergency overflow of the trench drain will be provided at the detailed design phase.

**(** 

### 5.4.2.3 Stormwater Cistern

As part of the stormwater management design of the site development, a stormwater cistern located in the underground parking area and equipped with a mechanical pump is proposed to attenuate peak flows from the catch basin, roof, and ramp drain areas. The final location of the cistern within the proposed building is to be coordinated by the architect with mechanical and structural engineers.

The stormwater cistern is to be designed to provide a minimum active storage volume of 80 m<sup>3</sup> with a maximum controlled release rate of 6.54 L/s. The stormwater cistern is to discharge at the specified controlled release rate using a pump. **Table 5-5** summarizes the respective flow rates and volume of retained stormwater in the 5-year and 100-year storm events.

Storm Return Area IDs **Drainage Q**release Vrequired Vavailable Period Area (ha)  $(m^3)$ (L/s)  $(m^3)$ CB-1 - CB-3. 27.60 5-year 0.151 6.54 80.00 RAMP, BLDG 79.80 100-year

Table 5-5: Proposed Cistern 5 and 100-Year Storage Requirement

### 5.4.2.4 Results

The proposed stormwater management plan meets the requirements identified during pre-consultation that all stormwater release under all storm events, including the 100-year storm event, are to be controlled to the 5-year pre-development target release rate. **Table 5-6** provides a summary of the peak design discharge rates calculated from the MRM analysis, shown in **Appendix D.1**.

Drainage areas	5-year Peak Discharge (L/s)	100-Year Peak Discharge (L/s)	
Uncontrolled Areas	8.39	17.97	
Cistern to Sewer	6.54		
Target (L/s)	24.52		
Total (L/s)	14.93	24.52	

Table 5-6: Summary of Total 5-Year and 100-Year Event Release Rates

### 5.4.3 QUALITY CONTROL

Through correspondence with the City of Ottawa, it was confirmed that on-site quality control with a minimum of 80 % TSS removal is required be established. As such, Contech's Stormceptor has been specified for this purpose to capture runoff from the surface drainage. Using a fine particle size distribution and the Stormceptor Sizing Tool, a Stormceptor model EFO4 has been selected for the proposed monitoring manhole at the east property limit near Cummings Avenue and will achieve 98 % TSS removal, exceeding the minimum required TSS removal level of 80 %. The detailed Stormceptor sizing report is included in **Appendix D.5**.

**(** 

While a Contech Stormceptor EFO4 has been specified for this site, the objective is to demonstrate the ability to meet the water quality requirement. Other treatment systems with equivalent TSS removal capabilities might also be used.

### 5.5 Proposed Stormwater Servicing

One 300 mm diameter stormwater building service, complete with full port backwater valve as per City standard S14.1, is proposed for the storm service lateral, as per **Drawing SSP-1** in **Appendix G**. A stormwater sump and pump are required for the proposed foundation drain, and the roof and ramp drains are to be connected to the service lateral downstream of the sump pump and full port backwater valve.

The combined foundation drain, roof drain, and subdrain flows will outlet to the cistern, which then pumps the discharge at a controlled rate and to the existing 600 mm diameter storm sewer within the Cummings Avenue ROW. The lateral is to connect to the main as per City standard S11. The proposed stormwater servicing is shown on **Drawing SSP-1** and **SD-1** in **Appendix G**.

**(** 

# 6 Site Grading

The proposed re-development site measures approximately 0.35 ha in area and consists of grassed areas with trees and three existing residential dwellings. The topography across the site generally slopes from the middle towards the northern boundary and the Cummings Avenue ROW at the south. A detailed grading plan (see **Drawing GP-1** in **Appendix G**) has been provided to satisfy the stormwater management requirements, as detailed in **Section 5**, adhere to any grade raise restrictions for the site, and provide for minimum cover requirements for storm and sanitary sewers where possible. Site grading has been established to provide emergency overland flow routes required for stormwater management. The overland escape route will follow the south curb line of the site access drive aisle, with overland flow to Cummings Avenue right of way. The elevation of onsite surface ponding will be a minimum of 0.30m below the elevations at the building openings as shown on the drawings. The proposed development will require a section of retaining wall along the west and south boundary to maintain existing property line ground conditions. The wall is expected to be less than 0.6m high and therefore, will not require railing.

**(** 

### 7 Utilities

Overhead (OH) hydro-wires run parallel to the south property line with branches servicing the existing buildings from the south. All utilities within the work area will require relocation during construction. The existing utility poles within the public right of way are to be protected during construction.

As the site is surrounded by existing residential and commercial development, Hydro Ottawa, Bell, Rogers, and Enbridge servicing is readily available through existing infrastructure to service this site. The exact size, location, and routing of utilities will be finalized after design circulation. Existing overhead wires and utility plants may need to be temporarily moved/reconfigured to allow sufficient clearance for the movement of heavy machinery required for construction. The relocation of existing utilities will be coordinated with the individual utility providers upon design circulation.

**(2)** 

### 8 Approvals

The proposed development lies on a private site under singular ownership; drains to an approved separated sewer outlet; and is not intended to service industrial land or land uses. Therefore, the site is exempt from the Ministry of the Environment, Conservation and Parks (MECP) Environmental Compliance Application (ECA) process under O.Reg. 525/98.

For ground or surface water volumes being pumped during the construction phase, typically between 50,000 to 400,000 L/day, it is required to register on the Environmental Activity and Sector Registry (EASR). It is possible that groundwater may be encountered during the foundation excavation on this site. A minimum of two to four weeks should be allotted for completion of the EASR registration and the preparation of the Water Taking and Discharge Plan by a Qualified Person as stipulated under O.Reg. 63/16. An MECP Permit to Take Water (PTTW), which is required for dewatering volumes exceeding 400,000L/day, is not anticipated for the site.

**(** 

# 9 Erosion and Sediment Control During Construction

To protect downstream water quality and prevent sediment build-up in catch basins and storm sewers, erosion and sediment control measures must be implemented during construction. The following recommendations will be included in the contract documents and communicated to the Contractor.

- 1. Implement best management practices to provide appropriate protection of the existing and proposed drainage system and the receiving water course(s).
- 2. Limit the extent of the exposed soils at any given time.
- 3. Re-vegetate exposed areas as soon as possible.
- 4. Minimize the area to be cleared and grubbed.
- 5. Protect exposed slopes with geotextiles, geogrid, or synthetic mulches.
- 6. Install silt barriers/fencing around the perimeter of the site as indicated in **Drawing ECDS-1** in **Appendix G** to prevent the migration of sediment offsite.
- 7. Install trackout control mats (mud mats) at the entrance/egress to prevent migration of sediment into the public ROW.
- 8. Provide sediment traps and basins during dewatering works.
- 9. Install sediment traps (such as SiltSack® by Terrafix) between catch basins and frames.
- 10. Schedule the construction works at times which avoid flooding due to seasonal rains.

The Contractor will also be required to complete inspections and guarantee the proper performance of their erosion and sediment control measures at least after every rainfall. The inspections are to include:

- Verification that water is not flowing under silt barriers.
- Cleaning and changing the sediment traps placed on catch basins.

Refer to **Drawing ECDS-1** in **Appendix G** for the proposed location of silt fences, sediment traps, and other erosion control measures.

**(** 

# 10 Geotechnical Investigation

A geotechnical investigation for 1184-1196 Cummings Avenue was completed by Pinchin on March 27, 2023. Field testing consisting of the advancement of four boreholes to a maximum depth of 7.6 m below existing grade was carried out throughout the subject site on March 10, 2023, with previous investigations carried out by Paterson on February 14, 2023 and by others on January 28, 2021. The borehole locations are presented in the geotechnical investigation report included in **Appendix E.1**.

The subsurface profile encountered at the test hole locations consists of topsoil and fill, underlain by a layer of silty sand to sandy silty with gravel and cobbles, overlying bedrock. The fill was noted to consist of a mixture of brown silty sand with gravel and crushed stone, trace clay, some shale, and cobbles. Bedrock was observed to consist of black shale of the Billings formation and is classified as very poor to fair in quality at the top, generally increasing in quality with depth.

Groundwater levels were measured to be at depths ranging from 2.07 m to 2.87 m below ground surface (BGS) at the four boreholes on site. Long term groundwater level is estimated to be at 2 to 3 m BGS, though seasonal variations in the water table should be expected. Clean imported granular fill should be used for grading beneath the building areas, while site-excavated soil and non-specified existing fill can be used for general landscaping fill where settlement of the ground surface is of minor concern.

The subject site is considered suitable for the proposed building, and it is recommended that it be founded using conventional shallow footings placed on clean, surface sounded bedrock. Bedrock removal could be carried out by hoe-ramming, while for sounded bedrock removal, line drilling and controlled blasting may be used, though a pre-blast or pre-construction survey must be carried out, with subsequent blasting operations planned and carried out under the supervision of an experienced blasting consultant who is a licensed professional engineer.

The pavement structure for the parking and access driveway is provided as follows in **Table 10-1**: Pavement Structure:

**Table 10-1: Pavement Structure** 

Material	Thickness (mm)			
	Parking Areas	Driveways	Underground Parking	
Rigid Concrete Pavement – 32 MPa concrete with air entrainment	-	1	125	
Wear Course – HL-3 or Superpave 12.5 Asphaltic Concrete	50	40	-	
Binder – HL-8 or Superpave 19.0 Asphaltic Concrete	-	50	-	
Base – OPSS Granular A Crushed Stone	150	150	300	
Sub-Base – OPSS Granular B Type II	300	400	-	



### 11 Conclusions

### 11.1 Water Servicing

The adjacent watermain on Cummings Avenue has sufficient capacity to sustain both the required domestic and emergency fire flow demands for the development. Booster pump(s) may be required to provide adequate pressures to the building's upper stories. The proposed development requires a 150 mm diameter water service lateral, which will be connected to the existing 305 mm diameter watermain in the Cummings Avenue ROW, and a new fire hydrant to be located within the public road right of way. Sizing of the water service and requirements for booster pump(s) are to be confirmed by the mechanical consultant.

### 11.2 Sanitary Servicing

The proposed sanitary sewer service will consist of a 150 mm diameter sanitary service lateral, a sanitary sump pit, a monitor manhole, and sump pump directing wastewater to the existing 250 mm diameter sanitary sewer on Cummings Avenue. Existing connections are to be abandoned and full port backwater valves installed on the proposed sanitary service within the site to prevent any surcharge from the downstream sewer main from impacting the proposed property. A sump pump will be required for sewage discharge from the mechanical room. Sizing of the service lateral, sump pit, and sump pump are to be confirmed by the mechanical consultant.

## 11.3 Stormwater Servicing and Management

Rooftop storage and a cistern have been proposed to limit the stormwater discharge rate for all rainfall events up to and including the 100-year event to a peak 5-year predevelopment release rate. The remaining site area drains uncontrolled, with the east and north sides drain uncontrolled to the Cummings Avenue and Weldon Drive ROWs, while the south and west landscaped sides of the site drain uncontrolled to the neighbouring properties as per existing conditions. While the proposed land use and site surfacing is not expected to be a significant source of particulates or pollutants, it is recommended that the site provides Enhanced level of stormwater quality control (80 % TSS removal).

A single 300 mm diameter storm service lateral is proposed for the building's foundation drain and internal storm sewer system, which is to be mechanically pumped and include a full port backwater valve. The roof drains and ramp drain are to be connected through internal plumbing to the cistern, which will pump discharge at a controlled rate through the service lateral and the backwater valve to the 600 mm diameter municipal storm sewer in the Cummings Avenue ROW. Sizing of the service lateral, cistern, and foundation drain pump are to be confirmed by the mechanical consultant.

**3** 

### 11.4 Grading

Site grading has been designed to provide an adequate emergency overland flow route. The east and north sides drain uncontrolled to the Cummings Avenue and Weldon Drive ROWs, while the south and west sides drain uncontrolled to the neighbouring properties as per existing conditions.

### 11.5 Erosion and Sediment Control During Construction

Erosion and sediment control measures and best management practices outlined in this report and included in the drawing set will be implemented during construction to reduce the impact on adjacent properties, the public ROW, and existing facilities.

### 11.6 Geotechnical Investigation

Based on the geotechnical investigation, the site is considered suitable for the proposed building, and it is recommended that it be founded using conventional shallow footings placed on clean, surface sounded bedrock. Long term groundwater level is estimated to be at 2 to 3 m BGS, though seasonal variations in the water table should be expected.

### 11.7 Utilities

The site is situated within an established neighbourhood, hence existing utility infrastructure is readily available to service the proposed development.

## 11.8 Approvals

This site is exempt from the Ministry of the Environment, Conservation and Parks (MECP) Environmental Compliance Application (ECA) process under O.Reg. 525/98. For the expected dewatering needs of 50,000 to 400,000 L/day, the proponent will need to register on the MECP's Environmental Activity and Sector Registry (EASR). A Permit to Take Water, for dewatering needs in excess of 400,000 L/day, is not anticipated for this site.



# **APPENDICES**

**(** 

# **Appendix A Water Demands**

### A.1 Domestic Water Demands



Project Number: 160401787

A-1

#### 1184-1196 Cummings Avenue - Domestic Water Demand Estimates

Site Plan provided by Project 1 Studios (2023-03-31) Project Number: 160401787

Population densities as per MECP Guidelines:						
Bachelor	1.4	ppu				
1 Bedroom	1.4	ppu				
2 Bedroom	2.1	ppu				



Demand conversion factors as per MECP Guidelines and Ottawa Design Guidelines - Water Distribution<sup>5</sup>:

Residential 280 L/cap/day

Building ID	Number of	Estimated Daily Rate of		Avg. Day Demand		Max. Day Demand 1		Peak Hour Demand 1	
	Apt Units <sup>2</sup>	Population	Demand <sup>4</sup>	(L/min)	(L/s)	(L/min)	(L/s)	(L/min)	(L/s)
Studio	57	80	280	15.5	0.26	38.8	0.65	85.3	1.42
1-Bedroom	102	143	280	27.8	0.46	69.4	1.16	152.7	2.55
1-Bedroom+Den <sup>3</sup>	6	13	280	2.5	0.04	6.1	0.10	13.5	0.22
2-Bedroom	23	48	280	9.4	0.16	23.5	0.39	51.7	0.86
Total Site :	188	284		55.13	0.92	137.81	2.30	303.19	5.05

#### Notes:

1 Water demand criteria used to estimate peak demand rates for residential areas are as follows:

maximum day demand rate = 2.5 x average day demand rate

peak hour demand rate = 2.2 x maximum day demand rate (as per Technical Bulletin ISD-2010-02)

- 2 Number of apartment units counted as per Project1 Studios Suite Plan (March 31, 2023).
- 3 Assumption that "1 bedroom with den" has density of 2.1 ppu
- 4 As per Table 4-2 from the City of Ottawa Water Design Guidelines and Technical Bulletin ISTB-2021-03, the average daily rate of water demand for residential areas: 280 L/cap/day

A.2 Fire Flow Demands (FUS 2020)



Project Number: 160401787

A-2

# **Stantec**

### FUS Fire Flow Calculation Sheet - 2020 FUS Guidelines

Stantec Project #: 160401787 Project Name: 1184-1196 Cummings Avenue Date: 2023-03-16 Fire Flow Calculation #: 1

Description: 6-storey residential apartment building

Notes: Site Plan provided by Project 1 Studio on March 16, 2023

Step	Task	Notes								Value Used	Req'd Fire Flow (L/min)			
1	Determine Type of Construction	Type III - Ordinary Construction / Type IV-C - Mass Timber Construction								1	-			
2	Determine Effective		Sum of All Floor Areas									-	-	
	Floor Area	2094.06	1653.7	1633.74	1621.28	1609.42	1438.99	1433.41				11484.6	-	
3	Determine Required Fire Flow		(F = $220 \times C \times A^{1/2}$ ). Round to nearest 1000 L/min								-	24000		
4	Determine Occupancy Charge		Limited Combustible								-15%	20400		
		Conforms to NFPA 13								-30%				
5	Determine Sprinkler Reduction					Standard W	ater Supply					-10%	-10200	
		Fully Supervised									-10%	-10200		
		% Coverage of Sprinkler System									100%			
	Determine Increase	Direction	Exposure Distance (m)	Exposed Length (m)	Exposed Height (Stories)	Length-Height Factor (m x stories)	Construction W		Fire	wall / Sprinkle	red ?	-	-	
		North	10.1 to 20	36.77	1	21-49	Тур	e V		NO		11%		
6	for Exposures (Max. 75%)	East	20.1 to 30	63	2	> 100	Тур	e V		NO		10%	9588	
	7 5701	South	10.1 to 20	36.77	1	21-49	Тур	e V		NO		11%	7300	
		West	10.1 to 20	63	2	> 100	Тур	e V		NO		15%		
		Total Required Fire Flow in L/min, Rounded to Nearest 1000L/min										20000		
7	Determine Final	Total Required Fire Flow in L/s										333.3		
	Required Fire Flow	Required Duration of Fire Flow (hrs)										4.50		
		Required Volume of Fire Flow (m³)									5400			

A.3 Correspondence with Architect on Construction Type



Project Number: 160401787

A-3

### Wu, Michael

From: Sent: To: Cc: Subject:	Ryan Koolwine <koolwine@project1studio.ca> Monday, 27 March, 2023 15:44 Moir, Tyler Kilborn, Kris; Wu, Michael RE: 2231 - 1184 Cummings</koolwine@project1studio.ca>						
Hi Tyler,							
The building will be sprinklered.							
The building is to be wood framed. That said, every exterior wall will have a fire resistance rating of 1hr, the floors will have a 1hr FRR and so will demising walls. We would propose that the building be considered 'ordinary construction' for the purpose of the FUS calculation.							
Ryan Koolwine							
<b>project1studio</b>   613 884-3939 x1							
From: Moir, Tyler <tyler.moir@st Sent: March 27, 2023 3:03 PM To: Ryan Koolwine <koolwine@pr Cc: Kilborn, Kris <kris.kilborn@sta Subject: RE: 2231 - 1184 Cummin</kris.kilborn@sta </koolwine@pr </tyler.moir@st 	roject1studio.ca> Intec.com>; Wu, Michael <michael.wu@stantec.com></michael.wu@stantec.com>						
Hi Ryan,							
To complete the boundary conditions request for the 1184 Cummings Ave project, we will need to confirm the proposed construction classification and confirm that the building is sprinklered. Can you provide this information at your earliest convenience?							
Thanks, Tyler							
Tyler Moir P.Eng. Project Manager, Community Development							
Direct: 902 620-0250 Mobile: 902 388-0100 Tyler.Moir@stantec.com							
Stantec 165 Maple Hills Avenue Charlottetown PE C1C 1N9							
The content of this condition tip I property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted and difficult extremental and according to the confidential property of Stoptes and should not be assisted as a second and according to the confidential property of Stoptes and should not be assisted as a second according to the confidential property of Stoptes and according to the confidential p							

intended recipient, please delete all copies and notify us immediately.

From: Ryan Koolwine <koolwine@project1studio.ca>

Sent: Thursday, March 16, 2023 8:19 AM
To: Kilborn, Kris <kris.kilborn@stantec.com>
Cc: Moir, Tyler <Tyler.Moir@stantec.com>

Subject: RE: 2231 - 1184 Cummings

Hi Kris,

Odd... just tried it an it worked. Either way, I've attached the two files.

#### Ryan Koolwine

project1studio | 613 884-3939 x1

From: Kilborn, Kris < kris.kilborn@stantec.com>

Sent: March 16, 2023 7:02 AM

To: Ryan Koolwine < koolwine@project1studio.ca>

Cc: Moir, Tyler < Tyler.Moir@stantec.com > Subject: RE: 2231 - 1184 Cummings

Good morning Ryan

I clicked the attached link and it indicates that the files do not exist. Could you try resending or resetting the link

#### Sincerely

#### Kris Kilborn

Principal, Community Development Business Center Practice Leader

Mobile: 613 297-0571 Fax: 613 722-2799 kris.kilborn@stantec.com Stantec 300 - 1331 Clyde Avenue Ottawa ON K2C 3G4

The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the

intended recipient, please delete all copies and notify us immediately.

The Ottawa office is open however many staff are working remotely. To contact me please use email, or my mobile and leave a message.

Please note our reception is on the 3<sup>rd</sup> floor.

From: Ryan Koolwine < koolwine@project1studio.ca>

Sent: Wednesday, March 15, 2023 5:52 PM

To: Kilborn, Kris < <a href="mailto:kris.kilborn@stantec.com">kris.kilborn@stantec.com</a>; Mike Lennox < <a href="mailto:ml@jbla.ca">ml@jbla.ca</a>; James Lennox < <a href="mailto:jl@jbla.ca">jl@jbla.ca</a>; Timothy Beed

<br/><beed@fotenn.com>

Cc: Dylan Desjardins <D.Desjardins@tcudevcorp.com>; Bailey Haskins <haskins@project1studio.ca>

Subject: 2231 - 1184 Cummings

Hi All,

Please see the link below for the current version of the site plan in PDF and CAD. https://www.dropbox.com/home/NASRevit/2231%20-%201184%20Cummings/Sent/230315%20Site%20Plan

Cheers,

#### Ryan Koolwine

Principal

### project1studio

260 St. Patrick Street - Suite 300 | project1studio.ca | 613 884-3939 x1



Please consider the environment before printing this email

Caution: This email originated from outside of Stantec. Please take extra precaution.

**Attention:** Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

Caution: This email originated from outside of Stantec. Please take extra precaution.

Attention: Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

Caution: This email originated from outside of Stantec. Please take extra precaution.

Attention: Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

# A.4 Boundary Conditions



Project Number: 160401787

A-4

#### Wu, Michael

From: Polyak, Alex <alex.polyak@ottawa.ca>

**Sent:** Monday, 17 April, 2023 12:11 **To:** Moir, Tyler; Wu, Michael

Subject: RE: 1184-1196 Cummings Avenue Boundary Condition Request

Hello Tyler,

I am expecting to receive the BC's some time next week. Approximately 2-3 weeks from request submission

Regards,

#### Oleksandr (Alex) Polyak, B.Eng., P.Eng

Project Manager, Infrastructure Approvals, Development Review East Branch | Gestionnaire de projet, Direction de l'examen des projets d'aménagement – Est.

Planning, Real Estate and Economic Development Department | Direction générale de la planification, des biens immobiliers et du développement économique

City of Ottawa | Ville d'Ottawa 110 Laurier Ave., 4th Fl East, Ottawa ON K1P 1J1 Email: alex.polyak@ottawa.ca www.Ottawa.ca



From: Moir, Tyler <Tyler.Moir@stantec.com>

**Sent:** April 17, 2023 11:24 AM

To: Wu, Michael <Michael.Wu@stantec.com>; Polyak, Alex <alex.polyak@ottawa.ca>

Subject: RE: 1184-1196 Cummings Avenue Boundary Condition Request

CAUTION: This email originated from an External Sender. Please do not click links or open attachments unless you recognize the source.

ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Hi Alex,

Sorry to continue pushing you on this but is it possible to get an ETA on when we can expect the Boundary Conditions for this site? I'm also new to the Ottawa market so if there is a typical expected turnaround time on boundary conditions, that would be great info to help manage client expectations moving forward.

Thanks, Tyler

#### Tyler Moir P.Eng.

Project Manager, Community Development

Direct: 902 620-0250 Mobile: 902 388-0100 Tyler.Moir@stantec.com

Stantec

165 Maple Hills Avenue Charlottetown PE C1C 1N9





The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Please consider the environment before printing this email.

From: Wu, Michael < Michael. Wu@stantec.com >

Sent: Tuesday, April 11, 2023 11:07 AM

To: Alex.Polyak@ottawa.ca

Cc: Moir, Tyler <Tyler.Moir@stantec.com>

Subject: RE: 1184-1196 Cummings Avenue Boundary Condition Request

Good morning, Alex, just checking in to see if you have any further updates on when we can expect the boundary conditions and the confirmation of the sanitary sewer capacity?

#### Thanks,

#### Michael Wu, EIT

Civil Engineering Intern, Community Development

Work: (613) 738-6033 Mobile: (613) 858-0548 michael.wu@stantec.com

Stantec

300 - 1331 Clyde Avenue Ottawa ON K2C 3G4



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

From: Wu, Michael

Sent: Thursday, 30 March, 2023 16:12

To: Alex.Polyak@ottawa.ca

Cc: Moir, Tyler <Tyler.Moir@stantec.com>

Subject: 1184-1196 Cummings Avenue Boundary Condition Request

#### Good afternoon, Alex:

We would like to request hydraulic boundary conditions for the proposed development on 1184-1196 Cummings Avenue comprising of 188 apartment units (57 studio units, 101 one-bedroom units, 6 one-bedroom units with dens, and 24 two-bedroom units) projected to serve 284 residents.

The proposed site is expected to be serviced via connections to the existing 305 mm diameter watermain in Cummings Avenue, although we would also like to request boundary conditions for the 610 mm diameter watermain in Ogilvie Road, all circled in green in the attached map.

Estimated domestic demands based on the City of Ottawa guidelines and fire flow requirements for the site are as follows:

- Domestic demands:
  - Average Day Demand: 0.92 L/s (55.26 L/min) (79.488 m³/day)
  - Maximum Day Demand: 2.3 L/s (138.15 L/min)
  - o Peak Hour Demand: 5.07 L/s (303.94 L/min)
- Fire Flow Demand per FUS methodology: 333.3 L/s (20,000 L/min)

Attached are the boundary condition map, draft site plan, and water demand and fire flow calculations for your information.

We appreciate your time looking into this for us, and please do not hesitate to contact me if you have any questions or comments.

#### Michael Wu, EIT

Civil Engineering Intern, Community Development

Work: (613) 738-6033 Mobile: (613) 858-0548 michael.wu@stantec.com

Stantec

300 - 1331 Clyde Avenue Ottawa ON K2C 3G4



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

This e-mail originates from the City of Ottawa e-mail system. Any distribution, use or copying of this e-mail or the information it contains by other than the intended recipient(s) is unauthorized. Thank you.

Le présent courriel a été expédié par le système de courriels de la Ville d'Ottawa. Toute distribution, utilisation ou reproduction du courriel ou des renseignements qui s'y trouvent par une personne autre que son destinataire prévu est interdite. Je vous remercie de votre collaboration.

Caution: This email originated from outside of Stantec. Please take extra precaution.

Attention: Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

### A.5 Fire Hydrant Coverage Calculations





Project:	1184-119	6 Cummings Avenue		160401787
		FIRE H	TABLE 1: DRANT COVERAGE 1	ΓABLE
Revision:	1	Prepared By:	MW	
Revision Date:	202	23-04-18 Checked By:		

			Hyd	rants <sup>1</sup>			Total Available	Total Required
Description	HYD-01	HYD-02	HYD-03	HYD-04	HYD-05	HYD-06	Fire Flow (L/min)	Fire Flow <sup>2</sup> (L/min)
			1184-1196 Cummi	ngs Avenue				
Distance from building (m)	97.3	94.0	77.1	76.1	172.5	96.8	-	-
Maximum fire flow capacity <sup>3</sup> (L/min)	3,785	3,785	3,785	3,785	2,839	3,785	21,764	20,000

NFPA 1 Tabl	le 18.5.4.3
Distance to	Maximum
Building	Capacity
(m)	(L/min)
≤ 76	5,678
> 76 and ≤ 152	3,785
> 152 and ≤ 305	2,839

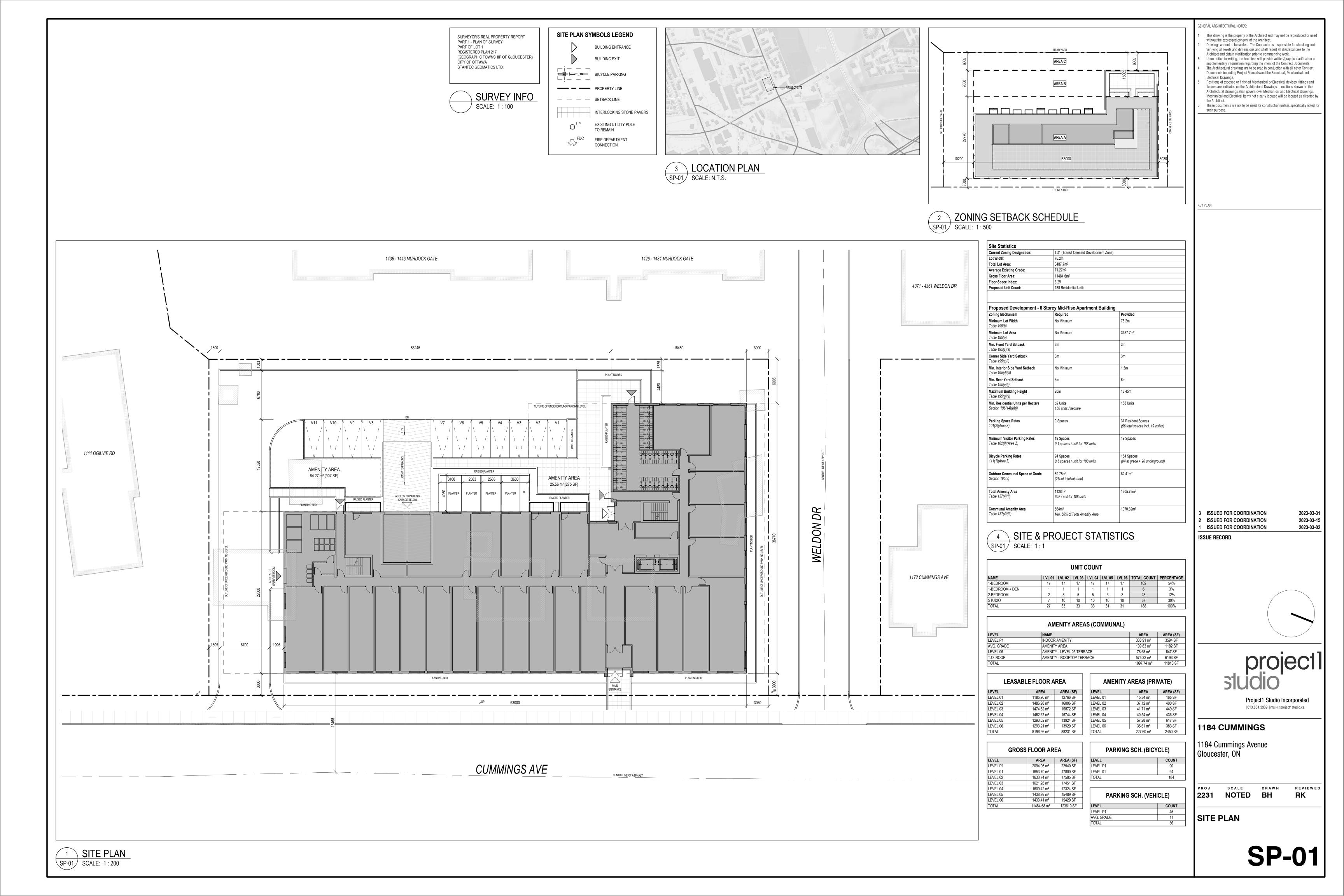
#### Notes:

- 1. Hydrant locations as per GeoOttawa accessed April 18, 2023. Refer to fire hydrant coverage sketch (Figure 3-1).
- 2. See OBC Calculations, Appendix A.2 for fire flow requirements.
- 3. See NFPA 1 Table 18.5.4.3 (and Appendix I of ISTB-2018-02 Technical Bulletin) for maxiumim fire flow capacity of hydrants by distance to building.

1184-1196 Cummings Avenue Servicing and Stormwater Management Report Site Plan by Project 1 Studios Inc.

Appendix B Site Plan by Project 1 Studios Inc.





### **Appendix C Sanitary**

### C.1 Sanitary Calculation Sheet



Stant	EC DA		ON BY:	3/30/2023 1 MW TM	FILE NUMBER:					EET				MAX PEAK F MIN PEAK F, PEAKING FA PEAKING FA PERSONS / PERSONS /	ACTOR (RES. CTOR (INDU: CTOR (ICI >2 I BEDROOM BEDROOM	)= STRIAL): 0%):	4.0 2.0 2.4 1.5 1.4 2.1		AVG. DAILY COMMERCIA INDUSTRIAL INDUSTRIAL INSTITUTION INFILTRATIO	(HEAVY) (LIGHT)	ON	28,000 55,000 35,000 28,000	I/p/day I/ha/day I/ha/day I/ha/day I/ha/day I/ha/day I/ha/day I/ha/day I/s/Ha		MINIMUM VE MAXIMUM VE MANNINGS II BEDDING CL MINIMUM CC HARMON CC	ELOCITY ASS	ACTOR	0.80 3.00 0.013 B 2.50	m/s					
LOCATION					RESIDENTIAL AREA A	AND POPU	LATION				COMM	AMENITY	INDUS	TRIAL (L)	INDUST	RIAL (H)	INSTITU	TIONAL	GREEN /	UNUSED	C+I+I		NFILTRATION	_	TOTAL				PIP	E				
AREA ID NUMBER	FROM M.H.	TO M.H.	AREA 1 BEDR (ha)	DOM 2 BEDROOM	3 BEDROOM	POP.	CUMUI AREA (ha)	POP.	PEAK FACT.	PEAK FLOW (I/s)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	AREA (ha)	ACCU. AREA (ha)	PEAK FLOW (Vs)	TOTAL AREA (ha)	ACCU. AREA (ha)	INFILT. FLOW (I/s)	FLOW (I/s)	LENGTH (m)	(mm)	MATERIAL	CLASS	SLOPE (%)	CAP. (FULL) I (I/s)	CAP. V PEAK FLOW (%)	VEL. (FULL) (m/s)	VEL. (ACT.) (m/s)
PROPOSED BLDG	BLDG E	X SAN	0.165 159	29		284	0.165	284	3.27	3.01	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.183	0.18	0.00	0.349	0.35	0.12	3.12	8.9	150	PVC	SDR 35	1.00	15.3	20.36%	0.86	0.56

Notes

1. Unit breakdown for proposed 6-storey residential building provided by Project 1 Studios Inc. in March 2023

2. Site to outlet to existing 250 mm dis. sanitary sewer on Curminings Avenue.

3. Entire site area considered as potential source of infiltration.

C.2 Correspondence with City on Sanitary Sewer Capacity



#### Wu, Michael

From: Wu, Michael

**Sent:** Friday, 31 March, 2023 14:01 **To:** Alex.Polyak@ottawa.ca

**Cc:** Moir, Tyler

**Subject:** 1184-1196 Cummings Avenue Sanitary Sewer Capacity Confirmation

Attachments: 1184-1196 Cummings Sanitary Map.pdf; 1184-1196 Cummings Sanitary Sheet.pdf

#### Good afternoon, Alex:

In addition to the hydraulic boundary conditions, as part of the servicing for the proposed development on 1184-1196 Cummings Avenue, we would like to confirm if there is sufficient capacity downstream of the 250 mm diameter sanitary sewer in Cummings Avenue to receive an additional peak flow of 3.13 L/s from the proposed development.

Please find our sanitary design sheet and location map attached for your information.

#### Thank you,

#### Michael Wu, EIT

Civil Engineering Intern, Community Development

Work: (613) 738-6033 Mobile: (613) 858-0548 michael.wu@stantec.com

Stantec

300 - 1331 Clyde Avenue Ottawa ON K2C 3G4



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

### Appendix D Stormwater Servicing

### D.1 Modified Rational Method Sheet



#### Project #160401787, 1184-1196 Cummings Avenue Roof Drain Design Sheet, Area BLDG Standard Watts Roof Drain with Adjustable Accutrol Weir

	Rating	Curve			Volume E	stimation		
Elevation	Discharge Rate	Outlet Discharge	Storage	Elevation	Area	Volume	(cu. m)	Water Depth
(m)	(cu.m/s)	(cu.m/s)	(cu. m)	(m)	(sq. m)	Increment	Accumulated	(m)
0.000	0.000000	0.0000	0.00	0.000	0	0.00	0.00	0.000
0.025	0.000315	0.0019	0.31	0.025	36.74	0.31	0.31	0.025
0.050	0.000631	0.0038	2.45	0.050	146.95	2.14	2.45	0.050
0.075	0.000789	0.0047	8.27	0.075	330.63	5.82	8.27	0.075
0.100	0.000946	0.0057	19.59	0.100	587.79	11.33	19.59	0.100
0.125	0.001104	0.0066	38.27	0.125	918.43	18.67	38.27	0.125
0.150	0.001262	0.0076	66.13	0.150	1322.54	27.86	66.13	0.150

	Drawdown	n Estimate	1
Total	Total	Louinato	'
	Time	Vol	Datastias
Volume			Detention
(cu.m)	(sec)	(cu.m)	Time (hr)
0.0	0.0	0.0	0
2.1	566.2	2.1	0.15727
8.0	1229.4	5.8	0.49878
19.3	1995.1	11.3	1.05298
38.0	2819.4	18.7	1.83613
65.8	3680.2	27.9	2.85841

Total Building Area (sq.m)		1653.17
Assume Available Roof Area (sq.	80%	1322.536
Roof Imperviousness		0.99
Roof Drain Requirement (sq.m/Notch)		232
Number of Roof Notches*		6
Max. Allowable Depth of Roof Ponding (m)		0.15
Max. Allowable Storage (cu.m)		66
Estimated 100 Year Drawdown Time (h)		2.8

<sup>\*</sup> As per Ontario Building Code section OBC 7.4.10.4.(2)(c).

#### Calculation Results

sults	5yr	100yr	Available
Qresult (cu.m/s)	0.006	0.008	-
Depth (m)	0.113	0.149	0.150
Volume (cu.m)	29.1	65.5	66.1
Draintime (hrs)	1.5	2.8	

Adj	justable A	ccutrol W	eir Flow R	ate Setting	gs
	From	ı Watts Dı	rain Catalo	gue	
Head (m)	L/s				
	Open	75%	50%	25%	Closed
0.025	0.3154	0.3154	0.3154	0.3154	0.3154
0.05	0.6308	0.6308	0.6308	0.6308	0.3154
0.075	0.9462	0.8674	0.7885	0.7097	0.3154
0.1	1.2617	1.104	0.9462	0.7885	0.3154
0.125	1.5771	1.3405	1.104	0.8674	0.3154
0.15	1.8925	1.5771	1.2617	0.9462	0.3154

<sup>\*</sup> Note: Number of drains can be reduced if multiple-notch drain used.

File No: 160401787

Project: 1184-1196 Cummings Avenue

Date: 29-Mar-23

SWM Approach: Post-development to Pre-development flows

#### Post-Development Site Conditions:

#### Overall Runoff Coefficient for Site and Sub-Catchment Areas

Sub-catchn		Runoff C	oefficient Table		Runoff			Overall
Sub-catchin Area	nent		Area (ha)		Coefficient			Runoff
Catchment Type	ID / Description		"A"		"C"	"А	x C"	Coefficient
Roof	BLDG	Hard	0.165		0.9	0.149		
		Soft	0.000		0.2	0.000		
	Su	ubtotal		0.165317			0.1487853	0.900
Uncontrolled - Tributary	CB-3	Hard	0.026		0.9	0.023		
•		Soft	0.006		0.2	0.001		
	Sı	ubtotal		0.031546			0.0242904	0.770
Uncontrolled - Tributary	CB-2	Hard	0.016		0.9	0.014		
		Soft	0.005		0.2	0.001		
	Sı	ubtotal		0.021152			0.015441	0.730
Uncontrolled - Tributary	CB-1	Hard	0.041		0.9	0.037		
		Soft	0.012		0.2	0.002		
	Sı	ubtotal		0.052802			0.0390735	0.740
Uncontrolled - Ramp to Cistern	RAMP	Hard	0.008		0.9	0.007		
		Soft	0.000		0.2	0.000		
	Sı	ubtotal		0.008158			0.0073422	0.900
Uncontrolled - Non-Tributary	UNC-4	Hard	0.021		0.9	0.019		
		Soft	0.013		0.2	0.003		
	Sı	ubtotal		0.034937			0.0220103	0.630
Uncontrolled - Non-Tributary	UNC-3	Hard	0.000		0.9	0.000		
		Soft	0.012		0.2	0.002		
	Sı	ubtotal		0.012446			0.0024892	0.200
Uncontrolled - Non-Tributary	UNC-2	Hard	0.000		0.9	0.000		
	_	Soft	0.017	0.0400:-	0.2	0.003		0.005
	Sı	ubtotal		0.016848			0.0033696	0.200
Uncontrolled - Non-Tributary	UNC-1	Hard	0.000		0.9	0.000		
	•	Soft	0.005	0.005400	0.2	0.001		
	Sı	ubtotal		0.005482			0.0010964	0.200
Total				0.349			0.264	
Overall Runoff Coefficient= C:								0.76

**Total Roof Areas** 0.165 ha Total Tributary Surface Areas (Controlled and Uncontrolled)
Total Tributary Area to Outlet 0.106 ha 0.271 ha Total Uncontrolled Areas (Non-Tributary) 0.078 ha Total Site 0.349 ha

### Project #160401787, 1184-1196 Cummings Avenue Modified Rational Method Calculations for Storage

5	yr Intens	ity	$I = a/(t + b)^{c}$	a =	998.071	t (min)	I (mm/hr)
	City of Otta			b =	6.053	10	104.19
	,			c =	0.814	20	70.25
						30	53.93
						40	44.18
						50	37.65
						60	32.94
						70	29.37
						80	26.56
						90	24.29
						100	22.41
						110	20.82
						120	19.47
,	Area (ha): C:	Predevelop 0.3487 0.36 ne of Conce	oment Tributar	y Area to Outl	et		
_							
	tc	I (5 yr)	Qtarget				
	(min)	(mm/hr)	(L/s)				
	20	70 2E	24 52				
	20 5 YEAR I	70.25 Modified R	24.52 ational Meth	nod for Entir	e Site		
Subdraina	5 YEAR I	Modified R				rage Denth:	Roc
Subdraina	5 YEAR I	Modified R				rage Depth:	
Subdraina	5 YEAR II age Area: Area (ha): C:	BLDG 0.17 0.90	ational Meth	M Qrelease	aximum Sto  Qstored	Vstored	Depth
Subdraina	5 YEAR II age Area: Area (ha): C: tc (min)	BLDG 0.17 0.90 I (5 yr) (mm/hr)	Qactual	Qrelease (L/s)	aximum Sto  Qstored (L/s)	Vstored (m^3)	Depth (mm)
Subdraina	5 YEAR II age Area: Area (ha): C: tc (min) 10	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19	Qactual (L/s) 43.10	Qrelease (L/s) 5.82	Qstored (L/s) 37.28	Vstored (m^3) 22.37	Depth (mm) 103.7
Subdraina	5 YEAR I	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25	Qactual (L/s) 43.10 29.06	Qrelease (L/s) 5.82 6.08	Qstored (L/s) 37.28 22.98	Vstored (m^3) 22.37 27.57	Depth (mm) 103.7 110.7
Subdraina	5 YEAR II age Area: Area (ha):	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93	Qactual (L/s) 43.10 29.06 22.31	Qrelease (L/s) 5.82 6.08 6.16	Qstored (L/s) 37.28 22.98 16.15	Vstored (m^3) 22.37 27.57 29.07	Depth (mm) 103.7 110.7 112.7
Subdraina	5 YEAR I age Area: Area (ha): C: tc (min) 10 20 30 40	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18	Qactual (L/s) 43.10 29.06 22.31 18.28	Qrelease (L/s) 5.82 6.08 6.16 6.16	Qstored (L/s) 37.28 22.98 16.15 12.12	Vstored (m^3) 22.37 27.57 29.07 29.08	Depth (mm) 103.7 110.7 112.7 112.7
Subdraina	5 YEAR I age Area: Area (ha): C: tc (min) 10 20 30 40 50	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57	M Qrelease (L/s) 5.82 6.08 6.16 6.16 6.12	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36	Depth (mm) 103.7 110.7 112.7 112.7 111.7
Subdraina	5 YEAR II age Area: Area (ha):	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63	M Qrelease (L/s) 5.82 6.08 6.16 6.16 6.12 6.06	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2
Subdraina	age Area: Area (ha): C: tc (min) 10 20 30 40 50 60 70	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15	M Qrelease (L/s) 5.82 6.08 6.16 6.16 6.12 6.06 5.99	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85	Depth (mm) 103.7 110.7 112.7 111.7 110.2 108.4
Subdraina	age Area: Area (ha): C: tc (min) 10 20 40 50 60 70 80	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37 26.56	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.99	Qrelease (L/s) 5.82 6.08 6.16 6.12 6.06 5.99 5.92	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15 5.07	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2 108.4 106.3
Subdraina	age Area: Area (ha):	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37 26.56 24.29	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.99 10.05	M Qrelease (L/s) 5.82 6.08 6.16 6.16 6.12 6.06 5.99 5.99 5.84	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15 5.07 4.21	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2 108.4 106.3 104.2
Subdraina	5 YEAR II  age Area: Area (ha):	BLDG 0.17 0.90 1 (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37 26.56 24.29	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.99 10.05 9.27	Qrelease (L/s) 5.82 6.08 6.16 6.12 6.06 5.99 5.92 5.84 5.75	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15 5.07 4.21 3.51	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73 21.09	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2 108.4 106.3 104.2 102.0
Subdraina	age Area: Area (ha): C: tc (min) 10 20 30 40 50 60 70 80 90 100 110	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37 26.56 24.29 22.41 20.82	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.05 9.27 8.61	Orelease (L/s) 5.82 6.08 6.16 6.16 6.12 6.06 5.99 5.84 5.75 5.67	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15 5.07 4.21 3.51 2.95	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73 21.09 19.45	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2 108.4 106.3 104.2 102.0 99.7
Subdraina	5 YEAR II  age Area: Area (ha):	BLDG 0.17 0.90 1 (5 yr) (mm/hr) 104.19 70.25 53.93 44.18 37.65 32.94 29.37 26.56 24.29	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.99 10.05 9.27	Qrelease (L/s) 5.82 6.08 6.16 6.12 6.06 5.99 5.92 5.84 5.75	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15 5.07 4.21 3.51	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73 21.09	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2 108.4 106.3 104.2 102.0
Subdraina	age Area: Area (ha): C: tc (min) 10 20 30 40 50 60 70 80 90 100 110	BLDG 0.17 0.90 I (5 yr) (mm/hr) 104.19 53.93 44.18 37.65 32.94 29.37 26.56 24.29 22.41 20.82 19.47	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.05 9.27 8.61	Orelease (L/s) 5.82 6.08 6.16 6.16 6.12 6.06 5.99 5.84 5.75 5.67	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 7.56 6.15 5.07 4.21 3.51 2.95	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73 21.09 19.45	Depth (mm) 103.7 110.7 112.7 112.7 111.7 110.2 108.4 106.3 104.2 102.0 99.7
Subdraina	age Area: Area (ha): C: tc (min) 10 20 40 50 60 70 80 90 100 110 120	BLDG 0.17 0.90 I (5 yr) 104.19 70.25 53.29 44.18 37.65 32.94 29.37 24.29 22.41 20.82 19.47 ge	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.99 10.05 9.27 8.61 8.05	M Qrelease (L/s) 5.82 6.08 6.16 6.12 6.06 5.99 5.92 5.84 5.75 5.55	Qstored (L/s) 37.28 22.98 16.15 12.12 9.45 9.45 5.07 4.21 3.51 2.95 2.50	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73 21.09 19.45 18.04	Depth (mm) 103.7 110.7 112.7 111.7 110.2 108.4 106.3 104.2 102.0 99.7 96.6
Subdrains /	age Area: Area (ha): C: tc (min) 10 20 40 50 60 70 80 90 100 110 120	BLDG 0.17 0.90 1 (5 yr) (mm/hr) 104.19 70.25 32.94 29.37 26.56 24.29 22.41 20.82 19.47 ge Depth (mm)	Qactual (L/s) 43.10 29.06 22.31 18.28 15.57 13.63 12.15 10.05 9.27 8.61 8.05	Qrelease (L/s) 5.82 6.08 6.16 6.16 6.12 5.99 5.99 5.84 5.67 5.55	Qstored (L/s) 37.28 22.98 16.15 12.12 .50 6.15 5.07 4.21 2.95 2.50	Vstored (m^3) 22.37 27.57 29.07 29.08 28.36 27.22 25.85 24.33 22.73 21.09 19.45 18.04	Depth (mm) 103.7 110.7 112.7 111.7 111.7 110.2 108.4 106.3 104.2 102.0 99.7

### Project #160401787, 1184-1196 Cummings Avenue Modified Rational Method Calculations for Storage

	100 yr Inte	nsity	$I = a/(t + b)^{0}$	a =	1735.688	t (min)	I (mm/hr)	
	City of Ott			b =	6.014	10	178.56	ł
	City of Ott	awa		C =	0.820	20	119.95	
				C -	0.020	30	91.87	
						40	75.15	
						50	63.95	
						60	55.89	
						70	49.79	
						80	44.99	
						90	41.11	
						100	37.90	
						110	35.20	
						120	32.89	
	100 YE	AR Prede	velopment 1	Farget Relea	se from P	ortion of S	ite	
			•	•		011.0.1 0. 0		
Subdra			ment Tributar	ry Area to Out	let			
	Area (ha): C:	0.3487 0.36						
	C:	0.36						
	Fetimated 1	Time of Cor	centration of	er Developme	ent			
	Latinated	Time or Cor	icentiation an	ei Developille	1111			
	tc	I (100 yr)	Q100yr					
	ic	i (ioo yi)						
	(min)	(mm/hr)	(L/s)					
	(min) 20	(mm/hr) 119.95	(L/s) 41.86					
	(min) 20	(mm/hr) 119.95	(L/s) 41.86	ethod for En	tire Site			
	(min) 20	(mm/hr) 119.95	(L/s) 41.86	ethod for En	itire Site			
Subdra	(min) 20	(mm/hr) 119.95	(L/s) 41.86	ethod for En	tire Site		Roof	
Subdra	(min) 20 100 YEAR	(mm/hr) 119.95 R Modified	(L/s) 41.86		itire Site	age Depth:	Roof 150	
Subdra	(min) 20 100 YEAR ainage Area:	(mm/hr) 119.95 R Modified	(L/s) 41.86			age Depth:		
Subdra	(min) 20 100 YEAR ainage Area: Area (ha): C:	(mm/hr) 119.95 R Modified BLDG 0.17 1.00	(L/s) 41.86 Rational Me	Ma	aximum Stor		150	
Subdra	(min) 20 100 YEAR ainage Area: Area (ha): C:	(mm/hr) 119.95 R Modified BLDG 0.17 1.00	(L/s) 41.86 Rational Me	M: Qrelease	aximum Stor	Vstored	150	
Subdra	(min) 20  100 YEAF  alinage Area: Area (ha): C: tc (min)	(mm/hr) 119.95 R Modified BLDG 0.17 1.00	(L/s) 41.86 Rational Mo	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	Depth (mm)	mm
Subdra	(min) 20  100 YEAF  alinage Area: Area (ha): C: tc (min) 10	(mm/hr)   119.95     Modified     BLDG   0.17   1.00     I (100 yr)   (mm/hr)   178.56	(L/s) 41.86  Rational Me Qactual (L/s) 82.06	Qrelease (L/s) 6.86	Qstored (L/s) 75.21	Vstored (m^3) 45.12	Depth (mm) 131.2	mm 0.0
Subdra	(min) 20  100 YEAR  ninage Area: Area (ha): C: tc (min) 10 20	(mm/hr)   119.95	(L/s) 41.86  Rational Me Qactual (L/s) 82.06 55.13	Qrelease (L/s) 6.86 7.27	Qstored (L/s) 75.21 47.85	Vstored (m^3) 45.12 57.42	Depth (mm) 131.2 142.2	mm 0.0 0.0
Subdra	(min) 20  100 YEAR  ainage Area: Area (ha): C: tc (min) 10 20 30	(mm/hr)   119.95     Modified     BLDG   0.17   1.00     I (100 yr)   (mm/hr)   178.56   119.95   91.87	(L/s) 41.86 Rational Mo Qactual (L/s) 82.06 55.13 42.22	Qrelease (L/s) 6.86 7.27 7.45	Qstored (L/s) 75.21 47.85 34.77	Vstored (m^3) 45.12 57.42 62.59	Depth (mm) 131.2 142.2 146.8	0.0 0.0 0.0
Subdra	(min) 20 100 YEAR alinage Area: Area (ha): C: tc (min) 10 20 30 40	(mm/hr)   119.95   Modified   BLDG   0.17   1.00   I (100 yr)   (mm/hr)   178.56   119.95   91.87   75.15	(L/s) 41.86 Rational Mo Qactual (L/s) 82.06 55.13 42.22 34.54	Qrelease (L/s) 6.86 7.27 7.45 7.53	Qstored (L/s) 75.21 47.85 34.77 27.01	Vstored (m^3) 45.12 57.42 62.59 64.82	Depth (mm) 131.2 142.2 146.8 148.8	0.0 0.0 0.0 0.0
Subdra	(min) 20 100 YEAR 1100 YEAR Area (ha): C: tc (min) 10 20 30 40 50	mm/hr/   119.95   Modified   BLDG   0.17   1.00   yr   mm/hr   178.56   119.95   91.87   75.15   63.95	(L/s) 41.86 Rational Mo Qactual (L/s) 82.06 55.13 42.22 34.54 29.39	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53	Depth (mm) 131.2 142.2 146.8 148.8 149.5	0.0 0.0 0.0 0.0 0.0
Subdra	(min) 20  100 YEAF  ainage Area: Area (ha): C: (min) 10 20 30 40 50 60	mm/hr   119.95   Modified	(L/s) 41.86 Rational Mo Qactual (L/s) 82.06 55.13 42.22 34.54 29.39 25.69	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32	150  Depth (mm) 131.2 142.2 146.8 148.8 149.5 149.3	0.0 0.0 0.0 0.0 0.0
Subdra	(min) 20  100 YEAF  tinage Area: Area (ha):	BLDG 0.17 1.09 yr) (mm/hr) 178.56 119.95 91.87 75.15 63.95 55.89 32.89	(L/s) 41.86 Rational Me (L/s) 82.06 55.13 42.22 34.54 29.39 25.69 15.12	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.66	150  Depth (mm)  131.2  142.2  146.8  148.8  149.5  149.3  141.5	0.0 0.0 0.0 0.0 0.0 0.0
Subdra	(min) 20  100 YEAR minage Area: Area (ha): C: tc (min) 10 20 30 40 50 60 120 180	(mm/hr)   119.95   Modified   BLDG   0.17   1.00     1 (100 yr)   (mm/hr)   178.56   119.95   91.87   75.15   63.95   55.89   32.89   23.90   23.90	(L/s) 41.86 Rational Mo (L/s) 82.06 55.13 42.22 34.54 29.39 25.69 15.12	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25 6.84	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87 4.14	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.66 44.73	150  Depth (mm)  131.2  142.2  146.8  149.5  149.3  141.5  130.8	0.00 0.00 0.00 0.00 0.00 0.00
Subdra	(min) 20  100 YEAF  Area (ha): C: tc (min) 10 20 30 40 50 60 120 180 240	(mm/hr)   119.95   R Modified   BLDG   0.17   1.00   yr)   1.78.56   119.95   91.87   75.15   63.95   55.89   32.89   23.90   19.01	Qactual (L/s) 41.86  Rational Mo (L/s) 82.06 82.06 82.06 95.13 42.22 934.54 29.39 15.12 10.99 8.73	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87 4.14 2.34	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.66 44.73 33.72	150  Depth (mm) 131.2 142.2 146.8 148.8 149.5 149.3 141.5 130.8 118.9	0.00 0.00 0.00 0.00 0.00 0.00 0.00
Subdra	(min) 20 100 YEAF tinage Area (ha):	(mm/hr) 119.95 R Modified 8LDG 0.17 1.00 I (100 yr) (mm/hr) 178.56 119.95 91.87 75.15 63.95 55.89 32.89 23.90 19.01 15.89	(L/s) 41.86 Rational Md (L/s) 82.06 55.13 42.22 34.54 29.39 25.69 15.12 10.99 8.73 7.30	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39 5.93	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87 4.14 2.34 1.37	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.66 44.73 33.72 24.65	150  Depth (mm)  131.2  142.2  146.8  148.8  149.5  149.3  141.5  130.8  118.9  106.8	0.00 0.00 0.00 0.00 0.00 0.00 0.00
Subdra	(min) 20  100 YEAF  Area (ha): C: tc (min) 10 20 30 40 50 60 120 180 240	(mm/hr)   119.95   R Modified   BLDG   0.17   1.00   yr)   1.78.56   119.95   91.87   75.15   63.95   55.89   32.89   23.90   19.01	Qactual (L/s) 41.86  Rational Mo (L/s) 82.06 82.06 82.06 95.13 42.22 934.54 29.39 15.12 10.99 8.73	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87 4.14 2.34	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.66 44.73 33.72	150  Depth (mm) 131.2 142.2 146.8 148.8 149.5 149.3 141.5 130.8 118.9	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
	(min) 20 100 YEAF linage Area: Area (ha): C: tc (min) 10 20 30 40 50 120 180 240 300 360	(mm/hr) 119.95 R Modified BLDG 0.17 1.00 1 (100 yr) (mm/hr) 178.56 119.87 75.15 63.95 53.95 23.90 19.01 15.89 32.89 13.72 12.12	(L/s) 41.86  Rational Ma  Qactual (L/s) 82.06 55.13 42.22 34.54 29.39 15.12 10.99 8.73 7.30 6.31	M: Crelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39 5.93 5.50	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87 4.14 2.34 1.37 0.81	Vstored (m^3) 45.12 57.42 62.59 64.82 65.32 56.66 44.73 33.72 24.65 17.45	Depth (mm) 131.2 142.2 146.8 148.8 149.5 149.3 141.5 130.8 118.9 106.8 95.3	0.C 0.C 0.C 0.C 0.C 0.C 0.C 0.C 0.C
	(min) 20 100 YEAF innage Area: Area (ha): C: tc (min) 10 20 30 40 50 60 120 180 360 420	(mm/hr) 119.95  R Modified  BLDG 0.17 1.00  I (100 yr) 178.56 119.95 91.87 75.15 63.95 55.89 32.89 23.90 19.01 15.89 13.72 12.12	(L/s) 41.86  Rational Md (L/s) 82.06 55.13 42.22 34.54 29.39 25.69 15.12 10.99 8.73 7.30 6.31 5.57	Arelease (L/s) 6.88 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39 5.93 5.50 6.08	Qstored (L/s) 75.21 47.85 47.85 47.87 27.01 21.84 18.15 7.8.14 2.34 1.37 0.81 0.49	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.63 44.73 33.72 24.65 17.45 12.40	Depth (mm) 131.2 142.2 146.8 149.5 149.5 149.3 141.5 130.8 110.8 95.3 84.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
	(min) 20 100 YEAF innage Area: Area (ha): C: tc (min) 10 20 30 40 50 60 120 180 360 420	(mm/hr) 119.95  R Modified  BLDG 0.17 1.00 1 (100 yr) 178.56 119.95 91.87 75.15 63.95 923.90 19.01 15.89 13.72 12.12 ge	Qactual (L/s) 82.06 55.08 82.08 55.09 15.12 10.99 8.73 7.30 6.31 5.57	Qrelease (L/s) 6.86 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39 5.90 5.90 5.08	Qstored (L/s) 75.21 47.85 34.77 27.01 21.84 18.15 7.87 4.14 2.34 1.37 0.81 0.49	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.66 44.73 33.72 24.65 17.45 12.40	150  Depth (mm)  131.2 142.2 146.8 148.8 149.5 149.3 141.5 130.8 118.9 106.8 95.3 84.1	0.C 0.C 0.C 0.C 0.C 0.C 0.C 0.C 0.C
Storage:	(min) 20 100 YEAF innage Area: Area (ha): C: tc (min) 10 20 30 40 50 60 120 180 360 420	(mm/hr) 119.95  R Modified  BLDG 0.17 1.00  I (100 yr) 178.56 119.95 91.87 75.15 63.95 55.89 32.89 23.90 19.01 15.89 13.72 12.12 ge  Depth (mm)	(L/s) 41.86  Rational Md (L/s) 82.06 55.13 42.22 34.54 29.39 25.69 15.12 10.99 8.73 7.30 6.31 5.57	Arelease (L/s) 6.88 7.27 7.45 7.53 7.55 7.54 7.25 6.84 6.39 5.93 5.50 6.08	Qstored (L/s) 75.21 47.85 47.85 47.87 27.01 21.84 18.15 7.8.14 2.34 1.37 0.81 0.49	Vstored (m^3) 45.12 57.42 62.59 64.82 65.53 65.32 56.63 44.73 33.72 24.65 17.45 12.40	Depth (mm) 131.2 142.2 146.8 149.5 149.5 149.3 141.5 130.8 110.8 95.3 84.1	0.C 0.C 0.C 0.C 0.C 0.C 0.C 0.C 0.C

#### Project #160401787, 1184-1196 Cummings Avenue Modified Rational Method Calculations for Storage

Subdrainage Area: CB-3	Woulled	Rational N	vietnoa Ca	alculations	for Storag	е		
Area (fn3):		_						
C: 0.77   Ct	Subdrai						Uncontrolle	d - Tributary
Te   1 (5 yr)   Qactual   Qrelease   Qstored   Vstored   (mm)   (mm/hr)   (1/s)   (1								
(min) (mm/hr)		G:	0.77					
(min) (mm/hr)		tc	1 (5 yr)	Oactual	Orelease	Ostored	Vstored	
10   104.19   7.04   7.04   0.00   0.00								
30				7.04		0.00	0.00	
40			70.25	4.74	4.74	0.00	0.00	
Subdrainage Area: CB-2								
Record   R								
To   29.37   1.98   1.98   0.00   0.00								
Subdrainage Area:   CB-1								
90								
100								
Subdrainage Area: CB-2								
Subdrainage Area:   CB-2								
Subdrainage Area: CB-2								
Area (ha): 0.02   C: 0.73		120	13.41	1.51	1.01	0.00	0.00	
Area (ha): 0.02   C: 0.73								
Area (ha): 0.02   C: 0.73	Subdrai	nage Area:	CB-2				Uncontrolle	d - Tributary
The color of the		Area (ha):	0.02					
(min)   (mm/hr)   (L/s)   (L/s)   (L/s)   (m³3)			0.73					
(min)   (mm/hr)   (L/s)   (L/s)   (L/s)   (m³3)								
10								
20				(L/S)	(L/S)	(L/S)		
Subdrainage Area:   CB-1								
August   A								
Subdrainage Area:   CB-1								
Subdrainage Area: CB-1								
To   29.37   126   1.26   0.00   0.00								
Subdrainage Area: CB-1								
Subdrainage Area:   CB-1		80	26.56	1.14	1.14	0.00	0.00	
100   22.41   0.96   0.89   0.80   0.00   0.00		90	24.29	1.04	1.04	0.00	0.00	
Subdrainage Area: CB-1		100						
CB-1								
Area (ha): 0.05   C: 0.74     C: 0.75     C: 0.75     C: 0.76		120	19.47	0.84	0.84	0.00	0.00	
Area (ha): 0.05   C: 0.74     C: 0.75     C: 0.75     C: 0.76								
Area (ha): 0.05   C: 0.74     C: 0.75     C: 0.75     C: 0.76	Subdrai	nano Aroa.	CR-1				Uncontrolle	d - Tributany
C:         0.74           tc (min)         I (5 yr) (mm/hr)         Qactual (L/s)         Qstored (L/s)         Vstored (L/s)           10         104.19         11.32         11.32         0.00         0.00           30         53.93         5.86         5.86         0.00         0.00           40         44.18         4.80         4.80         0.00         0.00           50         37.65         4.09         4.09         0.00         0.00           60         32.94         3.58         3.58         0.00         0.00           70         29.37         3.19         3.19         0.00         0.00           80         26.56         2.89         2.89         0.00         0.00           90         24.29         2.64         2.64         0.00         0.00           1100         22.41         2.43         2.43         0.00         0.00           120         19.47         2.11         2.11         0.00         0.00           120         19.47         2.11         2.11         0.00         0.00           120         10.419         3.07         6.54         24.23         1.454	Suburan						Oncommone	u - Hibutary
Text		C:						
(min)   (mm/hr)   (L/s)   (L/s)   (L/s)   (m³3)			•					
10		tc						
20								
30 53.93 5.86 5.86 0.00 0.00 44.18 4.80 4.80 0.00 0.00 50 37.65 4.09 4.09 0.00 0.00 60 32.94 3.58 3.58 0.00 0.00 70 29.37 3.19 3.19 0.00 0.00 80 26.56 2.89 2.89 0.00 0.00 100 22.41 2.43 2.43 0.00 0.00 110 22.41 2.43 2.43 0.00 0.00 110 22.41 2.43 2.43 0.00 0.00 110 22.41 2.43 2.43 0.00 0.00 110 22.41 2.43 2.43 0.00 0.00 110 20.80 2.26 2.26 0.00 0.00 110 20.80 2.26 2.26 0.00 0.00 110 10 10 10 10 10 10 10 10 10 10 10 10								
Adv								
Subdrainage Area: RAMP Area (ha):   C: 0.90								
Subdrainage Area: RAMP   Area (ha): 0.01								
To   29.37   3.19   3.19   0.00   0.00			37.00					
Subdrainage Area: RAMP								
90 24.29 2.64 2.64 0.00 0.00 1100 22.41 2.43 2.43 0.00 0.00 1110 20.82 2.26 2.26 0.00 0.00 120 19.47 2.11 2.11 0.00 0.00  Subdrainage Area: RAMP Area (ha): 0.01 C: 0.90    tc   I(5 yr)   Qactual   Qrelease   Qstored   Vstored   (mm/hr)   (L/s)   (L/s)   (L/s)   (mm/s)   (mm/hr)   (L/s)   (L/s)   (1.54								
100   22.41   2.43   2.43   0.00   0.00   0.00   110   20.82   2.26   2.26   0.00   0.00   0.00   120   19.47   2.11   2.11   0.00								
Subdrainage Area: RAMP   C:   C:   O.90		100		2.43	2.43	0.00	0.00	
Subdrainage Area: RAMP		110	20.82	2.26	2.26	0.00	0.00	
Area (ha): 0.01 C: 0.90  tc   I(5 yr)   Qactual   Qrelease   Question   QL/s  (L/s)   QL/s  (		120	19.47	2.11	2.11	0.00	0.00	
Area (ha): 0.01 C: 0.90  tc   I(5 yr)   Qactual   Qrelease   Question   QL/s  (L/s)   QL/s  (								
Area (ha): 0.01 C: 0.90  tc   I(5 yr)   Qactual   Qrelease   Question   QL/s  (L/s)   QL/s  (	Subdrai	nage Ares.	RAMP			Unco	ntrolled - Ros	nn to Cistern
C:         0.90           tc (min)         I (5 yr) (mm/hr)         Qactual (L/s)         Qrelease (L/s)         Vstored (L/s)           10         104.19         30.77         6.54         24.23         14.54           20         70.25         22.91         6.54         16.36         19.64           30         53.93         19.07         6.54         12.53         22.55           40         44.18         16.74         6.54         10.20         24.47           50         37.85         15.14         6.54         8.60         25.79           60         32.94         13.95         6.54         7.41         26.68           70         29.37         13.03         6.54         6.74         27.54           80         26.56         12.28         6.54         7.41         26.68           70         29.37         13.03         6.54         5.74         27.54           90         24.29         11.65         6.54         5.11         27.60           100         22.24         11.12         6.54         4.58         27.46           110         20.82         10.65         6.54         4.11	Oubulai					Onco	nuonea - rea	iip to disterii
tc (min)         I (5 yr) (mm/hr)         Qactual (L/s)         Qrelease (L/s)         Qstored (L/s)         Vstored (m/s)           10         104.19         30.77         6.54         24.23         14.54           20         70.25         22.91         6.54         16.36         19.64           30         53.93         19.07         6.54         10.20         24.47           50         37.65         15.14         6.54         8.60         25.79           60         32.94         13.95         6.54         7.41         26.68           70         29.37         13.03         6.54         5.74         27.54           80         26.56         12.28         6.54         5.74         27.54           90         24.29         11.65         6.54         5.11         27.60           100         22.41         11.12         6.54         4.58         27.46           110         20.82         10.65         6.54         4.11         27.13           120         19.47         10.21         6.54         3.67         26.40								
(min)   (mm/hr)   (Us)   (Us)   (Us)   (m*3)								
10 104.19 30.77 6.54 24.23 14.54 20 70.25 22.91 6.54 16.36 19.64 30 53.93 19.07 6.54 12.53 22.55 40 44.18 16.74 6.54 10.20 24.47 50 37.65 15.14 6.54 8.60 25.79 60 32.94 13.95 6.54 7.41 26.68 70 29.37 13.03 6.54 6.49 27.24 80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.17 27.60 100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40    Stage   Head   Discharge   Vreq   Vavail   Volume   (m) (/s/s) (cu, m)   (cu, m)   Check								
20								
30 53.93 19.07 6.54 12.53 22.55 40 44.18 16.74 6.54 10.20 24.47 50 37.65 15.14 6.54 8.60 25.79 60 32.94 13.95 6.54 7.41 26.68 70 29.37 13.03 6.54 6.49 27.24 80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.11 27.60 100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40 Stage Head Discharge Vreq Vavail Volume (m) (/ys) (cu, m) Check								
40 44.18 16.74 6.54 10.20 24.47 50 37.65 15.14 6.54 8.60 25.79 60 32.94 13.95 6.54 7.41 26.68 70 29.37 13.03 6.54 6.49 27.24 80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.74 27.60 100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40 State of the control of								
50 37.65 15.14 6.54 8.60 25.79 60 32.94 13.95 6.54 7.41 26.68 70 29.37 13.03 6.54 6.49 27.24 80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.11 27.60 100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40 Stage Head Discharge Vreq Vavail Volume (m) (Us) (cu. m) (cu. m) Check								
60 32.94 13.95 6.54 7.41 26.68 70 29.37 13.03 6.54 6.49 27.24 80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.11 27.60 1100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40 See See See See See See See See See Se			37.65					
70 29.37 13.03 6.54 6.49 27.24 80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.11 27.60 1100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40 Stage Head Discharge Vreq Vavail Volume (m) (Us) (cu. m) (cu. m) Check								
80 26.56 12.28 6.54 5.74 27.54 90 24.29 11.65 6.54 5.11 27.60 100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40								
90 24.29 11.65 6.54 5.11 <b>27.60</b> 100 22.41 11.12 6.54 4.58 27.46 110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40  Stage Head Discharge Vreq Vavail Volume (m) ( <i>Us</i> ) (cu. m) (cu. m) Check		80		12.28	6.54	5.74	27.54	
110 20.82 10.65 6.54 4.11 27.13 120 19.47 10.21 6.54 3.67 26.40 Stage Head Discharge Vreq Vavail Volume (m) ( <i>Us</i> ) (cu. m) (cu. m) Check		90						
120 19.47 10.21 6.54 3.67 26.40  Stage Head Discharge Vreq Vavail Volume (m) ( <i>Us</i> ) (cu. m) (cu. m) Check								
Stage Head Discharge Vreq Vavail Volume (m) ( <i>Us</i> ) (cu. m) (cu. m) Check								
(m) (L/s) (cu. m) (cu. m) Check		120	19.47	10.21	6.54	3.67	26.40	
(m) (L/s) (cu. m) (cu. m) Check								
		ı	Stane	Head	Discharge	\/rea	Vavail	Volume
			Stage					
	5-year V	Vater Level		(m)	(L/s)	(cu. m)	(cu. m)	Check

#### Project #160401787, 1184-1196 Cummings Avenue

Subdrainage Area					Uncontrolle	ed - Tributary
to (mi			Qrelease	Qstored (L/s)	Vstored (m^3)	
10			(L/s) 15.07	0.00	0.00	
20			10.12	0.00	0.00	
3(			7.75	0.00	0.00	
50			6.34 5.40	0.00	0.00 0.00	
60			4.72	0.00	0.00	
12	20 32.89	2.78	2.78	0.00	0.00	
18 24			2.02 1.60	0.00	0.00 0.00	
30			1.34	0.00	0.00	
36	0 13.72	1.16	1.16	0.00	0.00	
42	20 12.12	1.02	1.02	0.00	0.00	
Subdrainage A Area					Uncontrolle	ed - Tributary
to		r) Qactual	Qrelease	Qstored	Vstored	
(mi			(L/s) 9.58	(L/s) 0.00	(m^3) 0.00	
20	0 119.9	5 6.44	6.44	0.00	0.00	
3(			4.93	0.00	0.00	
40 50			4.03 3.43	0.00	0.00 0.00	
60	0 55.89	3.00	3.00	0.00	0.00	
12	20 32.89	1.77	1.77	0.00	0.00	
18 24			1.28 1.02	0.00	0.00 0.00	
30			0.85	0.00	0.00	
36	0 13.72	0.74	0.74	0.00	0.00	
42	20 12.12	0.65	0.65	0.00	0.00	
Subdrainage A	Area: CB-1					
Area					Uncontrolle	ed - Tributary
Area	(ha): 0.05 C: 0.93	rr) Qactual	Qrelease	Qstored	Vstored	ed - Tributary
Area to	(ha): 0.05 C: 0.93 c I (100 y in) (mm/h	rr) Qactual r) (L/s)	Qrelease (L/s)	(L/s)	Vstored (m^3)	∍d - Tributary
Area to (mi	(ha): 0.05 C: 0.93 c I (100 y in) (mm/h 0 178.56	r) (L/s) 3 24.24	(L/s) 24.24	(L/s) 0.00	Vstored (m^3) 0.00	ed - Tributary
to (mi	(ha): 0.05 C: 0.93 c   I (100 y in) (mm/h 0 178.56 0 119.99 0 91.87	r) (L/s) 6 24.24 5 16.29 12.47	(L/s) 24.24 16.29 12.47	0.00 0.00 0.00 0.00	Vstored (m^3) 0.00 0.00 0.00	ed - Tributary
to (mi) 110 22 33 44	(ha): 0.05 C: 0.93 c   1 (100 y in)   (mm/h 0 178.56 0 119.99 0 91.87 0 75.15	r) (L/s) 6 24.24 5 16.29 12.47 10.20	(L/s) 24.24 16.29 12.47 10.20	0.00 0.00 0.00 0.00 0.00	Vstored (m^3) 0.00 0.00 0.00 0.00	ed - Tributary
tt (mi 11 21 31 44 51	(ha): 0.05 C: 0.93 c   1 (100 y in) (mm/h 0 178.56 0 91.87 0 95.15 0 63.95	r) (L/s) 6 24.24 5 16.29 12.47 10.20 8.68	(L/s) 24.24 16.29 12.47 10.20 8.68	0.00 0.00 0.00 0.00 0.00 0.00	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00	ed - Tributary
to (mi) 110 22 33 44	(ha): 0.05 C: 0.93 c   I (100 y (mm/h) 0 178.56 0 91.87 0 75.15 0 63.95 0 55.89	r) (L/s) 6 24.24 5 16.29 12.47 10.20 8.68 7.59	(L/s) 24.24 16.29 12.47 10.20	0.00 0.00 0.00 0.00 0.00	Vstored (m^3) 0.00 0.00 0.00 0.00	ed - Tributary
to (mi) 11 20 34 40 51 60 11 18	(ha): 0.05 C: 0.93 c I (100 y in) (mm/h 0 178.5 0 91.87 0 91.87 0 63.95 0 55.89 0 32.88 00 23.90	r) (L/s) 6 24.24 5 16.29 12.47 10.20 8.68 7.59 4.47 3.25	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	ed - Tributary
to (mi) 11 21 33 44 56 61 12 188	(ha): 0.05 C: 0.93 c: 1 (100 y (mm/h) 0 178.50 0 119.91 0 91.87 75.15 0 63.95 0 55.89 00 32.89 300 23.90 00 19.01	r) (L/s) 6 24.24 6 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	∍d - Tributary
tt (mi) 11 21 31 44 56 61 12 18 24 30 36	(ha): 0.05 C: 0.93 c (100 y (mm/h) 178.56 0 178.56 0 119.96 0 75.15 0 63.95 0 55.89 20 32.89 20 23.90 10 19.01 15.89	r) (L/s) 6 24.24 16.29 1.2.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	∍d - Tributary
tt (mi) 11 22 33 44 55 66 12 18 24 30 30	(ha): 0.05 C: 0.93 c (100 y (mm/h) 178.56 0 178.56 0 119.96 0 75.15 0 63.95 0 55.89 20 32.89 20 23.90 10 19.01 15.89	r) (L/s) 6 24.24 16.29 1.2.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	∍d - Tributary
tt (mi) 11 21 31 44 51 61 12 18 24 30 36	(ha): 0.05 C: 0.93 C: 0.93 (in) (mm/h 0 178.56 0 191.87 75.15 0 63.95 0 63.95 0 23.90 19.01 100 15.89 10 13.72 10.12 12.12	r) (L/s) 24.24 5 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.65	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	ed - Tributary
tt (mi) 11 21 33 44 56 61 12 18 24 30 36 42 Subdrainage A	(ha): 0.05 C: 0.93 C:	(L/s) (L/s) (24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.65	(L/s) 24,24 16,29 12,47 10,20 8,68 7,59 4,47 3,25 2,58 2,16 1,86 1,85	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
to (m)	(ha): 0.05   C: 0.93   C:	r) (Us) 5 24.24 45 16.29 12.47 10.20 8.88 7.59 4.47 3.25 2.58 2.16 1.86 1.65	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86	(Us) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
to (m)	(ha): 0.05   C: 0.93   C: 0.94   C: 0.95   C:	r) (Us) (5 2424 (47 10.20 10.24 (17 10.20 10.24 (17 10.20 10.24 (17 10.20 10.24 (17 10.25 (17 10	(L/s) 24.24 24.24 12.47 10.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.65	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
to (mi) 11 21 33 34 44 55 61 12 18 24 30 36 42  Subdrainage A Area  to (mi) 11 21 33 34 34 35 36 36 36 36 36 36 36 36 36 36 36 36 36	(ha): 0.05 C: 0.93 C:	r) (Us) 5 2424 5 16.29 12.47 10.20 8.88 7.59 2.258 2.16 1.85 1.85 6 59.80 5 42.84 34.69 34.69 34.69 34.69	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.65	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
tr   tr   tr   tr   tr   tr   tr   tr	(ha): 0.05 C: 0.93 C:	r) (Us) (5 2424 (47 10.20 10.2	(Us) 24.24 24.24 24.24 24.24 24.24 24.24 24.24 24.25 24.24 24.25 24.26 2.26 2.36 2.36 2.36 2.36 2.36 2.36 2	Us) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m^3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
to   to   to   to   to   to   to   to	(ha): 0.05 C: 0.93 C:	r) (Us) 6 2424 6 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.85 1.85 1.85 4.24 34.69 2.98 1 34.89 2.98 1 34.89 2.98 1 36.51 1.86 1.85 1.85 1.85 1.85 1.85 1.85 1.85 1.85	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.65	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
tropic   t	(ha): 0.05 C: 0.93 C:	r) (Us) 6 2424 6 16.29 12.47 10.20 8.88 7.59 2.58 2.16 1.86 1.85 1.65 1.86 3.469 2.981 2.65 1.24.12 17.00	(Us) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.65  Crelease (Us) 6.54 6.54 6.54 6.54 6.54 6.54 6.54	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
transport	(ha): 0.05 C: 0.93 C:	r) (Us) 6 2424 6 16.29 12.47 10.20 8.88 7.59 4.447 3.25 2.58 2.16 1.85 1.85 6 59.80 2.98 12.41 24.12 17.00 13.93	(Us) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.65  Qrelease (Us) 6.54 6.54 6.54 6.54 6.54 6.54	Qstored (Ls) Qstored (Ls) Qstored (Ls) Qstored (19, 19, 19, 19, 19, 19, 19, 19, 19, 19,	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
tropic   t	(ha): 0.05 C: 0.93 C:	r) (Us) 6 2424 65 16.29 12.47 10.20 8.88 7.59 4.47 3.25 2.58 2.58 1.86 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.85  Crelease (L/s) 6.54 6.54 6.54 6.54 6.54 6.54 6.54	Uncoi  Qstored (L/s)  Qstored (L/s)  Qstored (L/s)  53.26  63.30  28.15  23.27  17.57  10.46  7.39  5.49	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
to (mi) 11 21 33 44 55 66 12 18 24 30 36 42  Subdrainage A Area  tt (mi) 11 12 23 34 44 55 66 12 18 24 30 36 36 36	(ha): 0.05 C: 0.93 C:	r) (Us) 6 2424 6 16.29 12.47 10.20 8.88 7.59 2.16 1.86 1.05 1.86 1.86 1.05 1.86 1.86 1.86 1.86 1.86 1.86 1.86 1.86	(L/s) 24.24 24.24 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.65	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
tropic   t	(ha): 0.05 C: 0.93 C:	r) (Us) 6 2424 6 16.29 12.47 10.20 8.88 7.59 2.16 1.86 1.05 1.86 1.86 1.05 1.86 1.86 1.86 1.86 1.86 1.86 1.86 1.86	(L/s) 24.24 16.29 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.65  Crelease (L/s) 6.54 6.54 6.54 6.54 6.54 6.54 6.54 6.54	Uncol  Castored (L/s)  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
to (mi) 11 21 33 44 55 66 12 18 24 30 36 42  Subdrainage A Area  tt (mi) 11 12 23 34 44 55 66 12 18 24 30 36 36 36	(ha): 0.05 C: 0.93 C:	r) (Us) 5 2424 5 16.29 12.47 10.20 8.68 7.59 2.16 1.86 1.65 1.65 1.86 3.25 42.84 34.69 29.81 24.12 17.00 13.93 12.03 10.65 9.57 8.67	(L/s) 24.24 24.24 12.47 10.20 8.68 7.59 4.47 3.25 2.58 2.16 1.86 1.65	(L/s) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Vstored (m*3) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	

#### Project #160401787, 1184-1196 Cummings Avenue

Subdrain	age Area: Area (ha): C: tc (min) 10 20 30 40 50	UNC-4 0.03 0.63 I (5 yr) (mm/hr) 104.19 70.25	Qactual (L/s)	Qrelease	Und Qstored	controlled - I	Non-Tributary
Subdrain	(min) 10 20 30 40	(mm/hr) 104.19 70.25	(L/s)		Qstored	Vstored	r
Subdrain	10 20 30 40	(mm/hr) 104.19 70.25					
Subdrain	20 30 40	70.25		(L/s)	(L/s)	(m^3)	l
Subdrain	30 40		6.38 4.30	6.38 4.30			
Subdrain		53.93	3.30	3.30			
Subdrain		44.18 37.65	2.70 2.30	2.70 2.30			
Subdrain	60	32.94	2.02	2.02			
Subdrain	70	29.37	1.80	1.80			
Subdrain	80 90	26.56 24.29	1.63 1.49	1.63 1.49			
Subdrain	100	22.41	1.37	1.37			
Subdrain	110 120	20.82 19.47	1.27 1.19	1.27 1.19			
	age Area:	UNC-3 0.01			Une	controlled - I	Non-Tributary
_	Area (ha): C:	0.20					_
	tc (min)	l (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	
	10 20	104.19 70.25	0.72 0.49	0.72 0.49			
	30	53.93	0.37	0.37			
	40 50	44.18 37.65	0.31 0.26	0.31 0.26			
	60	32.94	0.23	0.23			
	70 80	29.37 26.56	0.20 0.18	0.20 0.18			
	90	24.29	0.17	0.17			
	100 110	22.41 20.82	0.16 0.14	0.16 0.14			
	120	19.47	0.13	0.13			
Subdrain	age Area: Area (ha): C:	UNC-2 0.02 0.20			Uno	controlled - I	Non-Tributary
	tc (min)	l (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	Ï
_	10	104.19	0.98	0.98			
	20 30	70.25 53.93	0.66 0.51	0.66 0.51			
	40	44.18	0.41	0.41			
	50 60	37.65 32.94	0.35 0.31	0.35 0.31			
	70	29.37	0.28	0.28			
	80 90	26.56 24.29	0.25 0.23	0.25 0.23			
	100	22.41	0.21	0.21			
	110 120	20.82 19.47	0.20 0.18	0.20 0.18			
Subdrain	age Area: Area (ha): C:	UNC-1 0.01 0.20			Und	controlled - 1	Non-Tributary
Ī	tc (min)	l (5 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	
L	10	104.19	0.32	0.32	(E/3)	(111 3)	*
	20 30	70.25 53.93	0.21 0.16	0.21 0.16			
	40	44.18	0.13	0.13			
	50 60	37.65 32.94	0.11 0.10	0.11 0.10			
	70	29.37	0.09	0.09			
	80 90	26.56 24.29	0.08 0.07	0.08 0.07			
	100	22.41	0.07	0.07			
	110 120	20.82 19.47	0.06 0.06	0.06 0.06			
	120	19.47	0.06	0.06			
UMMARY T	O OUTLET						
Roo			Orain Areas		ha	Vrequired	
		otal 5yr Flow from Cister	v to Cistern rn to Sewer	28.98 6.54		56.68	157.86 m <sup>3</sup>
	T-4-1		outary Area	0.070 8.39			
	iotai	. ,					
	iotai		Total Area	0.341 14.93			

#### Project #160401787, 1184-1196 Cummings Avenue

	age Area: Area (ha): C:	UNC-4 0.03 0.79			Ur	ncontrolled - No	n-Tributary
ſ	tc	I (100 yr)	Qactual	Qrelease	Qstored		
L	(min) 10	(mm/hr) 178.56	(L/s) 13.66	(L/s) 13.66	(L/s)	(m^3)	
	20	119.95	9.17	9.17			
	30	91.87	7.03	7.03			
	40	75.15	5.75	5.75			
	50	63.95	4.89	4.89			
	60	55.89	4.28	4.28			
	70 80	49.79 44.99	3.81 3.44	3.81 3.44			
	90	41.11	3.14	3.14			
	100	37.90	2.90	2.90			
	110	35.20	2.69	2.69			
	120	32.89	2.52	2.52			
	age Area: Area (ha): C:	UNC-3 0.01 0.25			Ur	ncontrolled - No	n-Tributary
	tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	
	10	178.56	1.54	1.54	,,	/	
	20	119.95	1.04	1.04			
	30	91.87	0.79	0.79			
	40 50	75.15 63.95	0.65 0.55	0.65 0.55			
	60	55.89	0.48	0.48			
	70	49.79	0.43	0.43			
	80	44.99	0.39	0.39			
	90 100	41.11	0.36 0.33	0.36 0.33			
	110	37.90 35.20	0.33	0.33			
	120	32.89	0.28	0.28			
	age Area: Area (ha):	UNC-2 0.02			Ur	ncontrolled - No	n-Tributary
	C:	0.25					
	tc (min)	l (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	
_	10	178.56	2.09	2.09			
	20	119.95	1.40	1.40			
	30 40	91.87 75.15	1.08 0.88	1.08 0.88			
	50	63.95	0.75	0.75			
	60	55.89	0.65	0.65			
	70	49.79	0.58	0.58			
	80	44.99	0.53	0.53			
	90 100	41.11 37.90	0.48 0.44	0.48 0.44			
	110	35.20	0.44	0.44			
	120	32.89	0.39	0.39			
	age Area: Area (ha): C:	UNC-1 0.01 0.25			Ur	ncontrolled - No	n-Tributary
Ī	tc (min)	I (100 yr) (mm/hr)	Qactual (L/s)	Qrelease (L/s)	Qstored (L/s)	Vstored (m^3)	
L	10	178.56	0.68	0.68	(2.0)	( <u>0)  </u>	
	20 30	119.95 91.87	0.46 0.35	0.46 0.35			
	40	75.15	0.29	0.29			
	50	63.95	0.24	0.24			
	60	55.89	0.21	0.21			
	70 80	49.79 44.99	0.19 0.17	0.19 0.17			
	90	44.99	0.17	0.17			
	100	37.90	0.14	0.14			
	110	35.20	0.13	0.13			
	120	32.89	0.13	0.13			
MMARY T	O OUTLET	,				Vrequired V	available*
Roof, Ca		and Ramp D		0.279			
		I 100yr Flow from Cister		63.28 6.54		145.32	146.13 m <sup>3</sup>
				0.070	ho		
	Total 10	Non-Trib Oyr Flow Ur	outary Area acontrolled	17.97			
	Total 10	00yr Flow Ur			L/s ha		

D.2 Watts Drainage Adjustable Accutrol Weir Detail (2016)





# Adjustable Accutrol Weir

# Adjustable Flow Control for Roof Drains

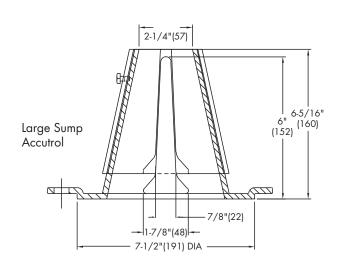
#### ADJUSTABLE ACCUTROL (for Large Sump Roof Drains only)

For more flexibility in controlling flow with heads deeper than 2", Watts Drainage offers the Adjustable Accutrol. The Adjustable Accutrol Weir is designed with a single parabolic opening that can be covered to restrict flow above 2" of head to less than 5 gpm per inch, up to 6" of head. To adjust the flow rate for depths over 2" of head, set the slot in the adjustable upper cone according to the flow rate required. Refer to Table 1 below. Note: Flow rates are directly proportional to the amount of weir opening that is exposed.

#### **EXAMPLE:**

For example, if the adjustable upper cone is set to cover 1/2 of the weir opening, flow rates above 2"of head will be restricted to 2-1/2 gpm per inch of head.

Therefore, at 3" of head, the flow rate through the Accutrol Weir that has 1/2 the slot exposed will be: [5 gpm (per inch of head)  $\times$  2 inches of head] + 2-1/2 gpm (for the third inch of head) = 12-1/2 gpm.



Upper Cone

Fixed Weir

Adjustable

1/2 Weir Opening Exposed Shown Above

TABLE 1. Adjustable Accutrol Flow Rate Settings

Weir Onenin -	1"	2"	3"	4"	5"	6"					
Weir Opening Exposed	Flow Rate (gallons per minute)										
Fully Exposed	5	10	15	20	25	30					
3/4	5	10	13.75	17.5	21.25	25					
1/2	5	10	12.5	15	17.5	20					
1/4	5	10	11.25	12.5	13.75	15					
Closed	5	5	5	5	5	5					

Job Name	Contractor
Job Location	Contractor's P.O. No.
Engineer	Representative
5	-1

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

**WATTS** 

A Watts Water Technologies Company

**USA:** Tel: (800) 338-2581 • Fax: (828) 248-3929 • Watts.com **Canada:** Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.ca

Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • Watts.com

D.3 Storm Sewer Design Sheet



Project Number: 160401787

A-11

Stant	'O.C		JOB NA	AME					SEWER SHEET			DESIGN I = a / (t+l			(As per C	ity of Otta	awa Guide	lines, 2012	')				•		•			
Juant	D/	ATE:		2023-	04-25			(City of	Ottawa)				1:2 yr	1:5 yr	,	1:100 yr	4											
Ì		EVISION:	.,	1	l				_			a =	732.951				MANNING		0.013		BEDDING	CLASS =	В					
		ESIGNED B' HECKED BY		-		FILE NUM	BER:	16040178	7			b = c =	6.199 0.810	6.053 0.814	6.014 0.816		MINIMUM TIME OF		2.00 10	m min								
LOC	ATION	I ILCKLD D	i. 									C =	0.610	0.014		AINAGE AF		CIVITAT	10	111111								
AREA ID		FROM	то	AREA	AREA	AREA	AREA	AREA	С	С	С	С	AxC	ACCUM	AxC	ACCUM.	AxC	ACCUM.	AxC	ACCUM.	T of C	I <sub>2-YEAR</sub>	I <sub>5-YEAR</sub>	I <sub>10-YEAR</sub>	I <sub>100-YEAR</sub>	Q <sub>CONTROL</sub>	ACCUM.	Q <sub>ACT</sub>
NUMBER		M.H.	M.H.	(2-YEAR)	(5-YEAR)	(10-YEAR)	(100-YEAR)	(ROOF)	(2-YEAR)	(5-YEAR)	(10-YEAR)	(100-YEAR)	(2-YEAR)	AxC (2YR)	(5-YEAR)	AxC (5YR)	(10-YEAR)	AxC (10YR)	(100-YEAR)	AxC (100YR)							Q <sub>CONTROL</sub>	(CIA/360)
				(ha)	(ha)	(ha)	(ha)	(ha)	(-)	(-)	(-)	(-)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(min)	(mm/h)	(mm/h)	(mm/h)	(mm/h)	(L/s)	(L/s)	(L/s)
		STM1	STM2	0.00	0.05	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.000	0.000	0.039	0.039	0.000	0.000	0.000	0.000	10.00	76.81	104.19	122.14	178.56	0.0	0.0	11.4
		STM2 STM3	STM3 BLDG	0.00	0.02	0.00	0.00	0.00	0.00	0.73 0.77	0.00	0.00	0.000	0.000	0.015 0.025	0.055 0.079	0.000	0.000	0.000	0.000	10.62 11.04	74.52 73.04	101.05 99.01	118.44 116.04	173.11 169.60	0.0 0.0	0.0	15.3 21.8
		311/13	BLDG	0.00	0.03	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.000	0.000	0.025	0.079	0.000	0.000	0.000	0.000	11.04	73.04	99.01	110.04	109.00	0.0	0.0	21.0
	RC	OOF/RAMP	OGS	0.00	0.17	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.000	0.000	0.156	0.156	0.000	0.000	0.000	0.000	10.00	76.81	104.19	122.14	178.56	0.0	0.0	45.1
		OGS	STREET																							6.5	6.5	66.8

Stantec														
LOCATION							F	PIPE SELEC	TION					
AREA ID	FROM	то	LENGTH	PIPE WIDTH	PIPE	PIPE	MATERIAL	CLASS	SLOPE	Q <sub>CAP</sub>	% FULL	VEL.	VEL.	TIME OF
NUMBER	M.H.	M.H.		OR DIAMETER	HEIGHT	SHAPE				(FULL)		(FULL)	(ACT)	FLOW
			(m)	(mm)	(mm)	(-)	(-)	(-)	%	(L/s)	(-)	(m/s)	(m/s)	(min)
	STM1	STM2	22.6	250	250	CIRCULAR	PVC		0.50	42.7	26.58%	0.86	0.61	0.62
	STM2	STM2 STM3	16.7	250	250	CIRCULAR	PVC		0.50	42.7	26.56% 35.85%	0.86	0.66	0.62
	STM3	BLDG	8.3	250	250	CIRCULAR	PVC	-	0.50	42.7	51.00%	0.86	0.74	0.42
	STIVIS	DLDG	0.0	230	230	CIRCODAIX	1 10	-	0.50	42.1	31.00 /6	0.00	0.74	0.15
	ROOF/RAMP	OGS	2.0	300	300	CIRCULAR	PVC	-	1.00	96.2	46.87%	1.37	1.15	0.03
	ogs	STREET	9.4	300	300	CIRCULAR	PVC	-	5.22	219.7	30.43%	3.12	2.28	0.07

D.4 Correspondence with City on SWM Quality Control Criteria



#### Wu, Michael

From: Polyak, Alex <alex.polyak@ottawa.ca>

**Sent:** Monday, 17 April, 2023 13:57

To: Wu, Michael Cc: Moir, Tyler

**Subject:** RE: 1184-1196 Cummings Avenue Boundary Condition Request

#### Hello Michael,

That is correct, SWM quality control requirements will be responsibility of the City going forward. The following criteria must be met for development scenarios:

#### General:

- i) Characterize the water quality to be protected and Stormwater Contaminants (e.g., suspended solids, nutrients, bacteria, water temperature) for potential impact on the Natural Environment, and control as necessary, **OR**
- ii) As per the watershed/subwatershed plan, similar area-wide Stormwater study, or Stormwater management plan to minimize, or where possible, prevent increases in Contaminant loads and impacts to receiving waters.

#### **Suspended Solids:**

iii) Provide Enhanced level of protection (80%) for suspended solids removal.

#### Water Balance:

- iv) Provide a water balance analysis as per the conservation authority guidelines for development applications.
  - a) Control the recharge to meet Pre-development conditions on property.

Let me know if you have any questions regarding the above.

#### Regards,

#### Oleksandr (Alex) Polyak, B.Eng., P.Eng

Project Manager, Infrastructure Approvals, Development Review East Branch | Gestionnaire de projet, Direction de l'examen des projets d'aménagement – Est.

Planning, Real Estate and Economic Development Department | Direction générale de la planification, des biens immobiliers et du développement économique

City of Ottawa | Ville d'Ottawa 110 Laurier Ave., 4th Fl East, Ottawa ON K1P 1J1 Email: alex.polyak@ottawa.ca www.Ottawa.ca



From: Wu, Michael < Michael. Wu@stantec.com>

**Sent:** April 17, 2023 11:40 AM

**To:** Polyak, Alex <alex.polyak@ottawa.ca> **Cc:** Moir, Tyler <Tyler.Moir@stantec.com>

Subject: RE: 1184-1196 Cummings Avenue Boundary Condition Request

CAUTION: This email originated from an External Sender. Please do not click links or open attachments unless you recognize the source.

ATTENTION : Ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.

Morning Alex, thanks for the update.

On a side note, I have been informed by Eric Lalande at the RVCA that as a result of Bill 23, stormwater quality control criteria will be provided by the City.

As such, below is a list of some key site information for our request for the stormwater quality control criteria for the site:

- Stormwater quantity control for the site is anticipated to be provided via a combination of rooftop storage and surface storage in the surface parking and access driveway, while the remaining site will drain via uncontrolled surface flow towards the Cummings Avenue and Weldon Drive ROWs.
- 2. The proposed storm service lateral will be connected to the existing 600 mm diameter separated concrete storm sewer fronting the site on Cummings Avenue. This local sewer discharges to the 600 mm diameter storm sewer on Ogilvie Road.
- 3. In the preconsultation, the City indicated that the allowable stormwater release rate is to be calculated using:
  - Allowable Runoff Coefficient (C): 0.5 or the existing C coefficient, whichever is more restricted
  - b. Allowable Flowrate: Control the 100-year storm event to the 5-year predevelopment storm event. The remainder of the site is to be left to drain uncontrolled towards the rights of way.

Attached is the latest Site Plan (provided by Project 1 Studios Inc.), preliminary storm drainage plan, and a site map for your review.

Please let me know if you have any questions or require any additional information from our end.

Thanks,

#### Michael Wu, EIT

Civil Engineering Intern, Community Development

Work: (613) 738-6033 Mobile: (613) 858-0548 michael.wu@stantec.com

Stanted

300 - 1331 Clyde Avenue Ottawa ON K2C 3G4



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

This e-mail originates from the City of Ottawa e-mail system. Any distribution, use or copying of this e-mail or the information it contains by other than the intended recipient(s) is unauthorized. Thank you.

Le présent courriel a été expédié par le système de courriels de la Ville d'Ottawa. Toute distribution, utilisation ou reproduction du courriel ou des renseignements qui s'y trouvent par une personne autre que son destinataire prévu est interdite. Je vous remercie de votre collaboration.

Caution: This email originated from outside of Stantec. Please take extra precaution.

Attention: Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.

D.5 Detailed Stormceptor Sizing Reports







# STORMCEPTOR® ESTIMATED NET ANNUAL SEDIMENT (TSS) LOAD REDUCTION

04/21/2023

Province:	Ontario
City:	Ottawa
Nearest Rainfall Station:	OTTAWA CDA RCS
Climate Station Id:	6105978
Years of Rainfall Data:	20
Site Name:	otal CB Area

Site Name: Total CB Area

Drainage Area (ha): 0.12
Runoff Coefficient 'c': 0.75

Particle Size Distribution: Fine

Target TSS Removal (%): 80.0

Required Water Quality Runoff Volume Capture (%):	90.00
Estimated Water Quality Flow Rate (L/s):	2.90
Oil / Fuel Spill Risk Site?	Yes
Upstream Flow Control?	No
Peak Conveyance (maximum) Flow Rate (L/s):	
Site Sediment Transport Rate (kg/ha/yr):	

Project Name:	1184 Cummings Avenue
Project Number:	160401787
Designer Name:	Michael Wu
Designer Company:	Stantec
Designer Email:	Michael.Wu@stantec.com
Designer Phone:	613-738-6033
EOR Name:	
EOR Company:	
EOR Email:	
EOR Phone:	

### Net Annual Sediment (TSS) Load Reduction Sizing Summary

	<del>-</del>
Stormceptor Model	TSS Removal Provided (%)
EFO4	98
EFO6	100
EFO8	100
EFO10	100
FFO12	100

Recommended Stormceptor EFO Model: EFO4

Estimated Net Annual Sediment (TSS) Load Reduction (%):

Water Quality Runoff Volume Capture (%):

98 > 90







#### THIRD-PARTY TESTING AND VERIFICATION

► Stormceptor® EF and Stormceptor® EFO are the latest evolutions in the Stormceptor® oil-grit separator (OGS) technology series, and are designed to remove a wide variety of pollutants from stormwater and snowmelt runoff. These technologies have been third-party tested in accordance with the Canadian ETV Procedure for Laboratory Testing of Oil-Grit Separators and performance has been third-party verified in accordance with the ISO 14034 Environmental Technology Verification (ETV) protocol.

#### **PERFORMANCE**

▶ Stormceptor® EF and EFO remove stormwater pollutants through gravity separation and floatation, and feature a patent-pending design that generates positive removal of total suspended solids (TSS) throughout each storm event, including high-intensity storms. Captured pollutants include sediment, free oils, and sediment-bound pollutants such as nutrients, heavy metals, and petroleum hydrocarbons. Stormceptor is sized to remove a high level of TSS from the frequent rainfall events that contribute the vast majority of annual runoff volume and pollutant load. The technology incorporates an internal bypass to convey excessive stormwater flows from high-intensity storms through the device without resuspension and washout (scour) of previously captured pollutants. Proper routine maintenance ensures high pollutant removal performance and protection of downstream waterways.

#### **PARTICLE SIZE DISTRIBUTION (PSD)**

► The Canadian ETV PSD shown in the table below was used, or in part, for this sizing. This is the identical PSD that is referenced in the Canadian ETV Procedure for Laboratory Testing of Oil-Grit Separators for both sediment removal testing and scour testing. The Canadian ETV PSD contains a wide range of particle sizes in the sand and silt fractions, and is considered reasonably representative of the particle size fractions found in typical urban stormwater runoff.

Particle	Percent Less	Particle Size	Percent		
Size (µm)	Than	Fraction (µm)			
1000	100	500-1000	5		
500	95	250-500	5		
250	90	150-250	15		
150	75	100-150	15		
100	60	75-100	10		
75	50	50-75	5		
50	45	20-50	10		
20	35	8-20	15		
8	20	5-8	10		
5	10	2-5	5		
2	5	<2	5		





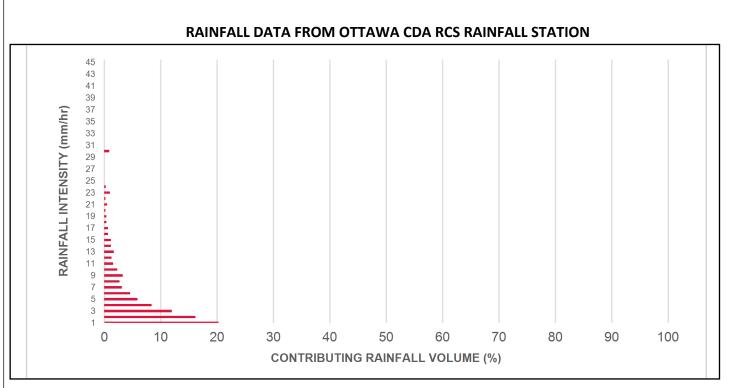
Rainfall Intensity (mm / hr)	Percent Rainfall Volume (%)	Cumulative Rainfall Volume (%)	Flow Rate (L/s)	Flow Rate (L/min)	Surface Loading Rate (L/min/m²)	Removal Efficiency (%)	Incremental Removal (%)	Cumulative Removal (%)
0.5	8.6	8.6	0.13	8.0	6.0	100	8.6	8.6
1	20.3	29.0	0.25	15.0	13.0	100	20.3	29.0
2	16.2	45.2	0.50	30.0	25.0	100	16.2	45.2
3	12.0	57.2	0.75	45.0	38.0	100	12.0	57.2
4	8.4	65.6	1.00	60.0	50.0	100	8.4	65.6
5	5.9	71.6	1.25	75.0	63.0	100	5.9	71.6
6	4.6	76.2	1.50	90.0	75.0	100	4.6	76.2
7	3.1	79.3	1.75	105.0	88.0	98	3.0	79.2
8	2.7	82.0	2.00	120.0	100.0	96	2.6	81.8
9	3.3	85.3	2.25	135.0	113.0	95	3.2	85.0
10	2.3	87.6	2.50	150.0	125.0	93	2.1	87.1
11	1.6	89.2	2.75	165.0	138.0	92	1.4	88.6
12	1.3	90.5	3.00	180.0	150.0	89	1.2	89.8
13	1.7	92.2	3.25	195.0	163.0	88	1.5	91.3
14	1.2	93.5	3.50	210.0	175.0	87	1.1	92.3
15	1.2	94.6	3.75	225.0	188.0	86	1.0	93.3
16	0.7	95.3	4.00	240.0	200.0	83	0.6	93.9
17	0.7	96.1	4.25	255.0	213.0	83	0.6	94.5
18	0.4	96.5	4.50	270.0	225.0	82	0.3	94.9
19	0.4	96.9	4.75	285.0	238.0	82	0.3	95.2
20	0.2	97.1	5.00	300.0	250.0	81	0.2	95.4
21	0.5	97.5	5.25	315.0	263.0	80	0.4	95.7
22	0.2	97.8	5.50	330.0	275.0	80	0.2	95.9
23	1.0	98.8	5.75	345.0	288.0	79	0.8	96.7
24	0.3	99.1	6.00	360.0	300.0	78	0.2	96.9
25	0.0	99.1	6.26	375.0	313.0	78	0.0	96.9
30	0.9	100.0	7.51	450.0	375.0	75	0.7	97.6
35	0.0	100.0	8.76	525.0	438.0	72	0.0	97.6
40	0.0	100.0	10.01	600.0	500.0	69	0.0	97.6
45	0.0	100.0	11.26	676.0	563.0	66	0.0	97.6
Estimated Net Annual Sediment (TSS) Load Reduction =								

Climate Station ID: 6105978 Years of Rainfall Data: 20

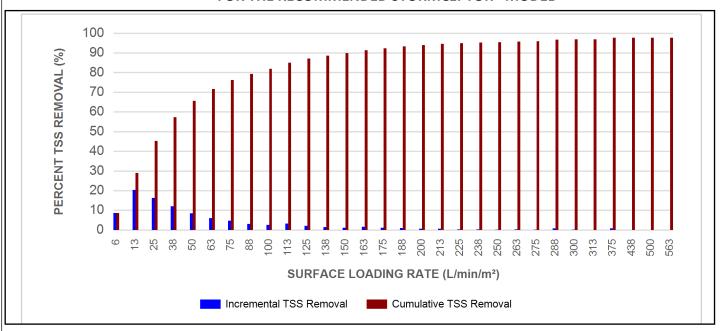








# INCREMENTAL AND CUMULATIVE TSS REMOVAL FOR THE RECOMMENDED STORMCEPTOR® MODEL







#### **Maximum Pipe Diameter / Peak Conveyance**

Stormceptor EF / EFO	Model Diameter		Min Angle Inlet / Outlet Pipes	Max Inlet Pipe Diameter		Max Outl	•	Peak Conveyance Flow Rate	
	(m)	(ft)		(mm)	(in)	(mm)	(in)	(L/s)	(cfs)
EF4 / EFO4	1.2	4	90	609	24	609	24	425	15
EF6 / EFO6	1.8	6	90	914	36	914	36	990	35
EF8 / EFO8	2.4	8	90	1219	48	1219	48	1700	60
EF10 / EFO10	3.0	10	90	1828	72	1828	72	2830	100
EF12 / EFO12	3.6	12	90	1828	72	1828	72	2830	100

#### SCOUR PREVENTION AND ONLINE CONFIGURATION

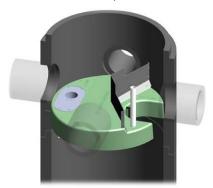
► Stormceptor® EF and EFO feature an internal bypass and superior scour prevention technology that have been demonstrated in third-party testing according to the scour testing provisions of the Canadian ETV Procedure for Laboratory Testing of Oil-Grit Separators, and the exceptional scour test performance has been third-party verified in accordance with the ISO 14034 ETV protocol. As a result, Stormceptor EF and EFO are approved for online installation, eliminating the need for costly additional bypass structures, piping, and installation expense.

#### **DESIGN FLEXIBILITY**

► Stormceptor® EF and EFO offers design flexibility in one simplified platform, accepting stormwater flow from a single inlet pipe or multiple inlet pipes, and/or surface runoff through an inlet grate. The device can also serve as a junction structure, accommodate a 90-degree inlet-to-outlet bend angle, and can be modified to ensure performance in submerged conditions.

#### **OIL CAPTURE AND RETENTION**

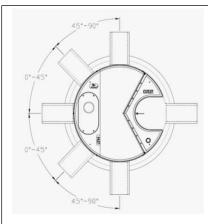
► While Stormceptor® EF will capture and retain oil from dry weather spills and low intensity runoff, **Stormceptor® EFO** has demonstrated superior oil capture and greater than 99% oil retention in third-party testing according to the light liquid reentrainment testing provisions of the Canadian ETV **Procedure for Laboratory Testing of Oil-Grit Separators**. Stormceptor EFO is recommended for sites where oil capture and retention is a requirement.











#### **INLET-TO-OUTLET DROP**

Elevation differential between inlet and outlet pipe inverts is dictated by the angle at which the inlet pipe(s) enters the unit.

 $0^{\circ}$  -  $45^{\circ}$  : The inlet pipe is 1-inch (25mm) higher than the outlet pipe.

45° - 90°: The inlet pipe is 2-inches (50mm) higher than the outlet pipe.

#### **HEAD LOSS**

The head loss through Stormceptor EF is similar to that of a 60-degree bend structure. The applicable K value for calculating minor losses through the unit is 1.1. For submerged conditions the applicable K value is 3.0.

#### **Pollutant Capacity**

Stormceptor EF / EFO	Mod Diam		Depth Pipe In Sump		Oil Vo	Oil Volume Recommended Sediment Maintenance Depth *		Maximum Sediment Volume *		Maximum Sediment Mass **		
	(m)	(ft)	(m)	(ft)	(L)	(Gal)	(mm)	(in)	(L)	(ft³)	(kg)	(lb)
EF4 / EFO4	1.2	4	1.52	5.0	265	70	203	8	1190	42	1904	5250
EF6 / EFO6	1.8	6	1.93	6.3	610	160	305	12	3470	123	5552	15375
EF8 / EFO8	2.4	8	2.59	8.5	1070	280	610	24	8780	310	14048	38750
EF10 / EFO10	3.0	10	3.25	10.7	1670	440	610	24	17790	628	28464	78500
EF12 / EFO12	3.6	12	3.89	12.8	2475	655	610	24	31220	1103	49952	137875

<sup>\*</sup>Increased sump depth may be added to increase sediment storage capacity

\*\* Average density of wet packed sediment in sump = 1.6 kg/L (100 lb/ft³)

#### STANDARD STORMCEPTOR EF/EFO DRAWINGS

For standard details, please visit http://www.imbriumsystems.com/stormwater-treatment-solutions/stormceptor-ef

STANDARD STORMCEPTOR EF/EFO SPECIFICATION

For specifications, please visit http://www.imbriumsystems.com/stormwater-treatment-solutions/stormceptor-ef



Feature Benefit Feature Appeals To Patent-pending enhanced flow treatment Superior, verified third-party Regulator, Specifying & Design Engineer and scour prevention technology performance Third-party verified light liquid capture Proven performance for fuel/oil hotspot Regulator, Specifying & Design Engineer, and retention for EFO version locations Site Owner Functions as bend, junction or inlet Design flexibility Specifying & Design Engineer structure Minimal drop between inlet and outlet Site installation ease Contractor Large diameter outlet riser for inspection Easy maintenance access from grade Maintenance Contractor & Site Owner and maintenance







# STANDARD PERFORMANCE SPECIFICATION FOR "OIL GRIT SEPARATOR" (OGS) STORMWATER QUALITY TREATMENT DEVICE

#### PART 1 - GENERAL

#### 1.1 WORK INCLUDED

This section specifies requirements for selecting, sizing, and designing an underground Oil Grit Separator (OGS) device for stormwater quality treatment, with third-party testing results and a Statement of Verification in accordance with ISO 14034 Environmental Management – Environmental Technology Verification (ETV).

#### 1.2 REFERENCE STANDARDS & PROCEDURES

ISO 14034:2016 Environmental management – Environmental technology verification (ETV)

Canadian Environmental Technology Verification (ETV) Program's **Procedure for Laboratory Testing of Oil-Grit Separators** 

#### 1.3 SUBMITTALS

- 1.3.1 All submittals, including sizing reports & shop drawings, shall be submitted upon request with each order to the contractor then forwarded to the Engineer of Record for review and acceptance. Shop drawings shall detail all OGS components, elevations, and sequence of construction.
- 1.3.2 Alternative devices shall have features identical to or greater than the specified device, including: treatment chamber diameter, treatment chamber wet volume, sediment storage volume, and oil storage volume.
- 1.3.3 Unless directed otherwise by the Engineer of Record, OGS stormwater quality treatment product substitutions or alternatives submitted within ten days prior to project bid shall not be accepted. All alternatives or substitutions submitted shall be signed and sealed by a local registered Professional Engineer, based on the exact same criteria detailed in Section 3, in entirety, subject to review and approval by the Engineer of Record.

#### **PART 2 - PRODUCTS**

#### 2.1 OGS POLLUTANT STORAGE

The OGS device shall include a sump for sediment storage, and a protected volume for the capture and storage of petroleum hydrocarbons and buoyant gross pollutants. The minimum sediment & petroleum hydrocarbon storage capacity shall be as follows:

2.1.1 4 ft (1219 mm) Diameter OGS Units: 1.19 m³ sediment / 265 L oil
6 ft (1829 mm) Diameter OGS Units: 3.48 m³ sediment / 609 L oil
8 ft (2438 mm) Diameter OGS Units: 8.78 m³ sediment / 1,071 L oil
10 ft (3048 mm) Diameter OGS Units: 17.78 m³ sediment / 1,673 L oil
12 ft (3657 mm) Diameter OGS Units: 31.23 m³ sediment / 2,476 L oil

#### **PART 3 - PERFORMANCE & DESIGN**

#### 3.1 GENERAL

The OGS stormwater quality treatment device shall be verified in accordance with ISO 14034:2016 Environmental management – Environmental technology verification (ETV). The OGS stormwater quality treatment device shall







remove oil, sediment and gross pollutants from stormwater runoff during frequent wet weather events, and retain these pollutants during less frequent high flow wet weather events below the insert within the OGS for later removal during maintenance. The Manufacturer shall have at least ten (10) years of local experience, history and success in engineering design, manufacturing and production and supply of OGS stormwater quality treatment device systems, acceptable to the Engineer of Record.

#### 3.2 SIZING METHODOLOGY

The OGS device shall be engineered, designed and sized to provide stormwater quality treatment based on treating a minimum of 90 percent of the average annual runoff volume and a minimum removal of an annual average 60% of the sediment (TSS) load based on the Particle Size Distribution (PSD) specified in the sizing report for the specified device. Sizing of the OGS shall be determined by use of a minimum ten (10) years of local historical rainfall data provided by Environment Canada. Sizing shall also be determined by use of the sediment removal performance data derived from the ISO 14034 ETV third-party verified laboratory testing data from testing conducted in accordance with the Canadian ETV protocol Procedure for Laboratory Testing of Oil-Grit Separators, as follows:

- 3.2.1 Sediment removal efficiency for a given surface loading rate and its associated flow rate shall be based on sediment removal efficiency demonstrated at the seven (7) tested surface loading rates specified in the protocol, ranging 40 L/min/m² to 1400 L/min/m², and as stated in the ISO 14034 ETV Verification Statement for the OGS device.
- 3.2.2 Sediment removal efficiency for surface loading rates between 40 L/min/m<sup>2</sup> and 1400 L/min/m<sup>2</sup> shall be based on linear interpolation of data between consecutive tested surface loading rates.
- 3.2.3 Sediment removal efficiency for surface loading rates less than the lowest tested surface loading rate of 40 L/min/m² shall be assumed to be identical to the sediment removal efficiency at 40 L/min/m². No extrapolation shall be allowed that results in a sediment removal efficiency that is greater than that demonstrated at 40 L/min/m².
- 3.2.4 Sediment removal efficiency for surface loading rates greater than the highest tested surface loading rate of 1400 L/min/m² shall assume zero sediment removal for the portion of flow that exceeds 1400 L/min/m², and shall be calculated using a simple proportioning formula, with 1400 L/min/m² in the numerator and the higher surface loading rate in the denominator, and multiplying the resulting fraction times the sediment removal efficiency at 1400 L/min/m².

The OGS device shall also have sufficient annual sediment storage capacity as specified and calculated in Section 2.1.

#### 3.3 CANADIAN ETV or ISO 14034 ETV VERIFICATION OF SCOUR TESTING

The OGS device shall have Canadian ETV or ISO 14034 ETV Verification of third-party scour testing conducted in accordance with the Canadian ETV Program's **Procedure for Laboratory Testing of Oil-Grit Separators**.

3.3.1 To be acceptable for on-line installation, the OGS device must demonstrate an average scour test effluent concentration less than 10 mg/L at each surface loading rate tested, up to and including 2600 L/min/m<sup>2</sup>.

#### 3.4 <u>LIGHT LIQUID RE-ENTRAINMENT SIMULATION TESTING</u>

The OGS device shall have Canadian ETV or ISO 14034 ETV Verification of completed third-party Light Liquid Re-entrainment Simulation Testing in accordance with the Canadian ETV **Program's Procedure for Laboratory Testing of Oil-Grit Separators,** with results reported within the Canadian ETV or ISO 14034 ETV verification. This reentrainment testing is conducted with the device pre-loaded with low density polyethylene (LDPE) plastic beads as a surrogate for light liquids such as oil and fuel. Testing is conducted on the same OGS unit tested for sediment removal to







assess whether light liquids captured after a spill are effectively retained at high flow rates. For an OGS device to be an acceptable stormwater treatment device on a site where vehicular traffic occurs and the potential for an oil or fuel spill exists, the OGS device must have reported verified performance results of greater than 99% cumulative retention of LDPE plastic beads for the five specified surface loading rates (ranging 200 L/min/m<sup>2</sup> to 2600 L/min/m<sup>2</sup>) in accordance with the Light Liquid Re-entrainment Simulation Testing within the Canadian ETV Program's Procedure for Laboratory Testing of Oil-Grit Separators. However, an OGS device shall not be allowed if the Light Liquid Re-entrainment Simulation Testing was performed with screening components within the OGS device that are effective at retaining the LDPE plastic beads, but would not be expected to retain light liquids such as oil and fuel.



### Appendix E Background Studies

E.1 Geotechnical Investigation Report by Paterson Group, March 2023





# Geotechnical Investigation Proposed Multi-Storey Building

1184, 1188, and 1196 Cummings Avenue Ottawa, Ontario

Prepared for TCU Development





# **Table of Contents**

1.0	Introduction	PAGE
1.0 2.0	Proposed Development	
2.0 3.0	Method of Investigation	
3.1	Field Investigation	
3.2	-	
3.3	•	
3.4	•	
4.0	Observations	
4.1	Surface Conditions	
4.2	Subsurface Profile	5
4.3	Groundwater	6
5.0	Discussion	7
5.1	Geotechnical Assessment	7
5.2	Site Grading and Preparation	7
5.3	Foundation Design	9
5.4	Design for Earthquakes	10
5.5	Basement Slab	10
5.6	Basement Wall	11
5.7	Pavement Design	12
6.0	Design and Construction Precautions	14
6.1	Foundation Drainage and Backfill	14
6.2	Protection Against Frost Action	15
6.3	Excavation Side Slopes	16
6.4	Pipe Bedding and Backfill	18
6.5	Groundwater Control	18
6.6	Winter Construction	19
6.7	Corrosion Potential and Sulphate	20
7.0	Recommendations	21
8.0	Statement of Limitations	22



# **Appendices**

Appendix 1 Soil Profile and Test Data Sheets

Symbols and Terms

Test Hole Logs by Others Analytical Testing Results

**Appendix 2** Figure 1 – Key Plan

Drawing PG6604-1 – Test Hole Location Plan



#### Introduction 1.0

Paterson Group (Paterson) was commissioned by TCU Development to prepare a geotechnical investigation report for the proposed multi-storey building to be located at 1184, 1188, and 1196 Cummings Avenue, Ottawa, Ontario (refer to Figure 1 - Key Plan presented in Appendix 2 of this report).

The objective of the geotechnical investigation was to:

	letermine the subsoil and groundwater conditions at the site by means of est holes	)f
П	provide geotechnical recommendations for the design of the propose	Ы

provide geotechnical recommendations for the design of the proposed development including construction considerations which may affect its design.

The following report has been prepared specifically and solely for the aforementioned project which is described herein. It contains our findings and includes geotechnical recommendations pertaining to the design and construction of the subject development as they are understood at the time of writing this report.

#### **Proposed Development** 2.0

Based on the available conceptual drawings, it is understood that the proposed multi-storey building will consist of six floors and one underground parking structure occupying the majority of the site area. Access lanes, at-grade parking and landscaped areas are also anticipated as part of the development. It is further understood that the proposed residential building will be municipally serviced.



# 3.0 Method of Investigation

# 3.1 Field Investigation

### Field Program

The field program for the current investigation was carried out on March 9 and March 10, 2023 and consisted of advancing a total of four (4) boreholes to a maximum depth of 7.6 m below existing grade. A previous investigation was also carried out by Paterson on February 14, 2023. At that time, a total of thirteen (13) test pits were excavated to a maximum depth of 2.1 m below existing grade. The test holes were placed in a manner to provide general coverage of the subject site taking into consideration site features and underground utilities. Historical investigations were also completed by others at the subject site in 2021. The test hole locations for the current and previous investigations are presented on Drawing PG6604-1 - Test Hole Location Plan included in Appendix 2.

The boreholes were completed using a track mounted drill rig operated by a twoperson crew. The test pits were completed using a hydraulic shovel at the selected locations across the site. All fieldwork was conducted under the full-time supervision of Paterson personnel under the direction of a senior engineer from the geotechnical division. The drilling and excavation procedure consisted of augering to the required depth at the selected locations, sampling and testing the overburden, and coring in bedrock.

# Sampling and In Situ Testing

The soil samples were recovered from the auger flights and using a 50 mm diameter split-spoon sampler. The samples were initially classified on site, placed in sealed plastic bags and transported to our laboratory. The depths at which the auger, split-spoon and grab samples were recovered from the test holes are shown as AU, SS, and G respectively, on the Soil Profile and Test Data sheets in Appendix 1.

The Standard Penetration Test (SPT) was conducted in conjunction with the recovery of the split-spoon samples. The SPT results are recorded as "N" values on the Soil Profile and Test Data sheets. The "N" value is the number of blows required to drive the split-spoon sampler 300 mm into the soil after a 150 mm initial penetration using a 63.5 kg hammer falling from a height of 760 mm.



Rock samples were recovered from BH1-23, BH 2-23, BH 3-23, and BH 4-23 using a core barrel and diamond drilling techniques. The bedrock samples were classified on site, placed in hard cardboard core boxes and transported to Paterson's laboratory. The depths at which rock core samples were recovered from the boreholes are presented as RC on the Soil Profile and Test Data sheets in Appendix 1.

The recovery value and a Rock Quality Designation (RQD) value were calculated for each drilled section of bedrock and are presented on the borehole logs. The recovery value is the length of the bedrock sample recovered over the length of the drilled section. The RQD value is the total length of intact rock pieces longer than 100 mm over the length of the core run. The values indicate the bedrock quality.

The subsurface conditions observed in the test holes were recorded in detail in the field. The soil profiles are logged on the Soil Profile and Test Data sheets in Appendix 1 of this report.

#### Groundwater

A groundwater monitoring well was installed in borehole BH 2-23 to monitor the groundwater level subsequent of the sampling program. Also, flexible polyethylene standpipes were installed in boreholes BH 1-23, BH 3-23, and BH 4-23. The groundwater observations are discussed in subsection 4.3 and presented in the Soil Profile and Test Data Sheets in Appendix 1.

# **Monitoring Well Installation**

Typical monitoring well construction details are described below:

- > 3.0 m of slotted 51 mm diameter PVC screen at the base of the boreholes.
- > 51 mm diameter PVC riser pipe from the top of the screen to the ground surface.
- No. 3 silica sand backfill within annular space around screen.
- > 300 mm thick bentonite hole plug directly above PVC slotted screen.
- Clean backfill from top of bentonite plug to the ground surface.

Refer to the Soil Profile and Test Data sheets in Appendix 1 for specific well construction details.



# **Sample Storage**

All samples will be stored in the laboratory for a period of one (1) month after issuance of this report. They will then be discarded unless we are otherwise directed.

# 3.2 Field Survey

The test hole locations were selected by Paterson to provide general coverage of the subject site. The test hole locations and ground surface elevation at each test hole location were surveyed by Paterson using a high precision GPS and referenced to a geodetic datum. The location of the test holes is presented on Drawing PG6604-1 - Test Hole Location Plan in Appendix 2.

# 3.3 Laboratory Review

Soil samples were recovered from the subject site and visually examined in our laboratory to review the results of the field logging.

# 3.4 Analytical Testing

One (1) soil sample was submitted for analytical testing to assess the corrosion potential for exposed ferrous metals and the potential of sulphate attacks against subsurface concrete structures by others. The sample was submitted to determine the concentration of sulphate and chloride, the resistivity, and the pH of the samples. The results are presented in Appendix 1 and discussed further in Subsection 6.7.



# 4.0 Observations

### 4.1 Surface Conditions

The subject site consists of three residential properties, each occupied by a single-family dwelling and associated asphalt/gravel-covered driveways and backyards. Several mature trees were observed in the grass-covered backyards. In addition, the properties were observed to have a fence. The ground surface across the site is generally flat and approximately at grade with the neighbouring roads and properties.

The site is bordered to the north by Weldon Drive, to the east by Cummings Avenue, to the west by residential properties, and to the south by a gas/service station.

### 4.2 Subsurface Profile

#### Overburden

Generally, the subsurface profile observed at the test hole locations consists of a topsoil and fill, underlain by a layer of silty sand to sandy silty with gravel and cobbles, overlying bedrock. The fill was observed to consist of a mixture of brown silty sand with gravel and crushed stone, trace clay, some shale and cobbles. The silty sand/sandy silt formation was observed to be compact to dense.

Practical refusal to excavation/augering was encountered at all test holes at depths ranging between approximately 0.8 and 2.5m below the existing ground surface.

Reference should be made to the Soil Profile and Test Data sheets in Appendix 1 for specific details of the soil profiles encountered at each test hole location.

#### **Bedrock**

Bedrock was cored at BH 1-23, BH 2-23, BH 3-23 and BH 4-23, beginning at approximate depths of 1.83 to 2.54 m, and extending down to the final depth of the test holes. The bedrock was observed to consist of black shale of the Billings formation. Based on the RQDs of the recovered rock core, the bedrock can be classified as very poor to fair in quality at the top, generally increasing in quality with depth.



### 4.3 Groundwater

Groundwater levels were measured in the installed monitoring well and piezometers during the current investigation. The groundwater readings obtained from the current field program are summarised in Table 1 below and are also presented on the Soil Profile and Test Data sheets in Appendix 1.

Table 1 – Summary of Groundwater Levels							
Test Hole	Ground Surface		Groundwater evel	Data Basardad			
rest noie	Elevation (m)	Depth (m)	Elevation (m)	Date Recorded			
BH 1-23	71.36	2.80	68.56	March 21, 2023			
BH 2-23	71.39	2.59	68.80	March 21, 2023			
BH 3-23	70.66	2.07	68.59	March 21, 2023			
BH 4-23	71.73	2.87	68.86	March 21, 2023			

**Note:** The ground surface elevation at each borehole location was surveyed using a high precision GPS and referenced to a geodetic datum.

Based on the observed groundwater level measurements and our knowledge of the groundwater conditions within the area, the long-term groundwater level is estimated to be at **2** to **3 m** depth below the existing grade.

It should be noted that groundwater levels are subject to seasonal fluctuations. Therefore, the groundwater level could vary at the time of construction.



# 5.0 Discussion

# 5.1 Geotechnical Assessment

From a geotechnical perspective, the subject site is considered suitable for the proposed multi-storey building. It is recommended that the proposed six-floor building, and one underground parking structure be founded using conventional shallow footings placed on clean, surface sounded bedrock.

Depending on the final founding depth, bedrock removal may be required within the subject site to complete the underground parking level. Bedrock removal can be accomplished by hoe ramming where only a small quantity of the bedrock needs to be removed. Sound bedrock may be removed by line drilling and controlled blasting and/or hoe ramming. The blasting operations should be planned and conducted under the guidance of a professional engineer with experience in blasting operations.

Due to the expansive nature of the shale bedrock encountered at the subject site, precautions should be taken during construction to reduce the risks associated with heaving of the shale bedrock. The bedrock surface should be protected from excessive dewatering and exposure to ambient air. Therefore, a 50mm thick concrete mud slab consisting of a minimum of 15 MPA lean concrete, should be placed on the exposed bedrock surface within 48-hour period of being exposed. The excavated side slopes of the bedrock surface should be sprayed with bituminous emulsion to seal bedrock from exposure to air and dewatering.

Removal of concrete elements is likely to be encountered due to the demolition of the existing structures on site. In addition, tree roots may also be encountered at the west and east ends of the site, and these shall be removed as well.

Temporary shoring will be required where excavation is to be completed in close proximity to existing properties and roads.

The above and other considerations are further discussed in the following sections.

# 5.2 Site Grading and Preparation

# **Stripping Depth**

Topsoil and deleterious fill, such as those containing significant amounts of organic materials, should be stripped from under any buildings, paved areas, pipe bedding and other settlement sensitive structures.



Due to the relatively shallow depth of the bedrock surface and the anticipated founding level for the proposed building, all existing overburden material should be excavated from within the proposed building footprint.

Existing foundation walls, and other construction debris should be entirely removed from within proposed building perimeters. Under paved areas, existing construction remnants such as foundation walls should be excavated to a minimum of 1 m below final grade.

#### **Fill Placement**

Fill used for grading beneath the building areas should consist, unless otherwise specified, of clean imported granular fill, such as Ontario Provincial Standard Specifications (OPSS) Granular A, Granular B Type II. This material should be tested and approved prior to delivery to the site. The fill should be placed in lifts no greater than 300 mm thick and compacted using suitable compaction equipment for the lift thickness. Fill placed beneath the building areas should be compacted to at least 98% of its standard Proctor maximum dry density (SPMDD).

Non-specified existing fill, along with site-excavated soil, can be used as general landscaping fill where settlement of the ground surface is of minor concern. These materials should be spread in thin lifts and at least compacted by the tracks of the spreading equipment to minimize voids. If these materials are to be used to build up the subgrade level for areas to be paved, they should be compacted in thin lifts to a minimum density of 95% of their respective SPMDD. Site-excavated soils are not suitable for use as backfill against foundation walls unless a composite drainage blanket connected to a perimeter drainage system is provided.

Non-specified existing fill and site-excavated soils are not suitable for use as backfill against foundation walls unless used in conjunction with a geocomposite drainage membrane, such as Miradrain G100N or Delta Drain 6000.

#### **Bedrock Removal**

Bedrock removal could be carried out by hoe-ramming where only small quantities of bedrock need to be removed. Sound bedrock may be removed by line drilling and controlled blasting and/or hoe ramming.

Prior to considering blasting operations, the blasting effects on the existing services, buildings and other structures should be addressed. A pre-blast or pre-construction survey of the existing structures located in proximity of the blasting operations should be completed prior to commencing site activities.



The extent of the survey should be determined by the blasting consultant and should be sufficient to respond to any inquiries/claims related to the blasting operations. As a general guideline, peak particle velocities of 25 mm/sec (measured at the structures) should not be exceeded during the blasting program to reduce the risks of damage to the existing structures.

The blasting operations should be planned and carried out under the supervision of a licensed professional engineer who is also an experienced blasting consultant.

#### **Vibration Considerations**

Construction operations are the cause of vibrations, and possibly, sources of nuisance to the community. Therefore, means to reduce the vibration levels as much as possible should be incorporated in the construction operations to maintain, as much as possible, a cooperative environment with the residents.

The following construction equipment could be the source of vibrations: hoe ram, compactor, dozer, crane, truck traffic, etc. Vibrations, whether caused by blasting operations or by construction operations, could be the source of detrimental vibrations on the nearby buildings and structures. Therefore, all vibrations are recommended to be limited.

Two parameters are used to determine the permissible vibrations, namely, the maximum peak particle velocity and the frequency. For low frequency vibrations, the maximum allowable peak particle velocity is less than that for high frequency vibrations. As outlined by City of Ottawa S.P. No: F-1201, vibrations limits should be limited to 20 mm/s for frequencies below or equal to 40 Hz and 50 mm/s for frequencies greater than 40 Hz. Considering that these guidelines are above perceptible human level and, in some cases, could be very disturbing to some people, a pre-construction survey is recommended be completed to minimize the risks of claims during or following the construction of the proposed building.

Should blasting be utilized a pre-blast survey must be completed for the surrounding area per City of Ottawa S.P. No: F-1201 and blast notices must be distributed 15 business days prior to the commencement of blasting work.

# 5.3 Foundation Design

### **Bearing Resistance Values (Conventional Shallow Footings)**

Footings placed on a clean, surface sounded bedrock surface can be designed using a bearing resistance value at ultimate limit states (ULS) of **1,000 kPa**, incorporating a geotechnical resistance factor of 0.5.



A clean, surface-sounded bedrock bearing surface should be free of loose materials, and have no near surface seams, voids, fissures or open joints which can be detected from surface sounding with a rock hammer.

#### Settlement

Footings bearing on an acceptable bedrock bearing surface and designed using the bearing resistance values provided herein will be subjected to negligible potential post-construction total and differential settlements.

# **Lateral Support**

The bearing medium under footing-supported structures is required to be provided with adequate lateral support with respect to excavations and different foundation levels. Adequate lateral support is provided to a sound bedrock bearing medium when a plane extending down and out from the bottom edge of the footing at a minimum of 1H:6V passes only through sound bedrock. Slopes of 1H:1V or shallower can be used for fractured bedrock.

# 5.4 Design for Earthquakes

The site class for seismic site response can be taken as **Class C** for foundations constructed at the subject site, according to Table 4.1.8.4.A of the 2012 Ontario Building Code (OBC 2012). Footings supporting on sound bedrock are not susceptible to liquefaction. Reference should be made to the latest revision of the 2012 Ontario Building Code for a full discussion of the earthquake design requirements.

### 5.5 Basement Slab

For the proposed building, all overburden soil will be removed from the building footprint, leaving the bedrock as the founding medium for the basement floor slab. The basement area for the proposed building will be mostly parking and the recommended pavement structure noted in Subsection 5.7 will be applicable. However, if storage or other uses of the lower level where a concrete floor slab will be constructed, the upper 200 mm of sub-slab fill is recommended to consist of 19 mm clear crushed stone.

Any soft areas in the basement slab subgrade should be removed and backfilled with appropriate backfill material prior to placing any fill. OPSS Granular A or Granular B Type II, with a maximum particle size of 50 mm, are recommended for backfilling below the floor slab.



All backfill material within the footprint of the proposed building(s) should be placed in maximum 300 mm thick loose layers and compacted to a minimum of 98% of the SPMDD.

Furthermore, a subfloor drainage system, consisting of lines of perforated drainage pipe subdrains connected to a positive outlet, should be provided in the subfloor fill under the lower basement floor (discussed further in Subsection 6.1). A modulus of subgrade reaction of **100 MPa/m** should be utilized for the design of the basement floor.

### 5.6 Basement Wall

There are several combinations of backfill materials and retained soils that could be applicable for the basement walls of the subject structure. However, the conditions can be well-represented by assuming the retained soil consists of a material with an angle of internal friction of 30 degrees and a drained unit weight of 20 kN/m<sup>3</sup>.

However, undrained conditions are anticipated (i.e. below the groundwater level). Therefore, the applicable effective (undrained) unit weight of the retained soil can be taken as 13 kN/m³, where applicable. A hydrostatic pressure should be added to the total static earth pressure when using the effective unit weight.

#### **Lateral Earth Pressures**

The static horizontal earth pressure ( $p_0$ ) can be calculated using a triangular earth pressure distribution equal to  $K_0 \cdot y \cdot H$  where:

 $K_0$  = at-rest earth pressure coefficient of the applicable retained soil (0.5)

y = unit weight of fill of the applicable retained soil (kN/m<sup>3</sup>)

H = height of the wall (m)

An additional pressure having a magnitude equal to  $K_0$ -q and acting on the entire height of the wall should be added to the above diagram for any surcharge loading, q (kPa), that may be placed at ground surface adjacent to the wall. The surcharge pressure will only be applicable for static analyses and should not be used in conjunction with the seismic loading case.

Actual earth pressures could be higher than the "at-rest" case if care is not exercised during the compaction of the backfill materials to maintain a minimum separation of 0.3 m from the walls with the compaction equipment.



#### **Seismic Earth Pressures**

The total seismic force ( $P_{AE}$ ) includes both the earth force component ( $P_0$ ) and the seismic component ( $\Delta P_{AE}$ ). The seismic earth force ( $\Delta P_{AE}$ ) can be calculated using  $0.375 \cdot a_c \cdot \gamma \cdot H^2/g$  where:

 $a_c = (1.45-a_{max}/g)a_{max}$ 

 $\gamma$  = unit weight of fill of the applicable retained soil (kN/m<sup>3</sup>)

H = height of the wall (m)

 $g = gravity, 9.81 \text{ m/s}^2$ 

The peak ground acceleration,  $(a_{max})$ , for the site area is 0.32 g according to OBC 2012. Note that the vertical seismic coefficient is assumed to be zero.

The earth force component ( $P_o$ ) under seismic conditions can be calculated using  $P_o = 0.5 \text{ K}_o \text{ y H}^2$ , where  $K_o = 0.5$  for the soil conditions noted above.

The total earth force (PAE) is considered to act at a height, h (m), from the base of the wall, where:

$$h = \{P_0 \cdot (H/3) + \Delta P_{AE} \cdot (0.6 \cdot H)\} / P_{AE}$$

The earth forces calculated are unfactored. For the ULS case, the earth loads should be factored as live loads, as per OBC 2012.

# 5.7 Pavement Design

For design purposes, the rigid pavement structure presented in Table 4 could be used for the design of the lower level of the parking garage:

Thickness (mm)	nmended Rigid Pavement Structure – Underground Parking  Material Description
125	Rigid Concrete Pavement - 32 MPa concrete with air entrainment
300	BASE - OPSS Granular A Crushed Stone
SUBGRADE - Eitl rock.	ner fill, OPSS Granular B Type II material placed over in situ soil, fill or

The flexible pavement structure presented in Tables 5 and 6 could be used for the design of the pavement structure for car only parking, access lanes, and heavy truck parking areas.



Table 4 - Recommended Pavement Structure – Car Only Parking Areas						
Thickness (mm)	Material Description					
50	Wear Course - HL-3 or Superpave 12.5 Asphaltic Concrete					
150	BASE - OPSS Granular A Crushed Stone					
300	SUBBASE - OPSS Granular B Type II					

**SUBGRADE** Either in situ soils, fill approved by the geotechnical consultant or OPSS Granular B Type I or II material placed over in situ soil.

Table 5 - Recommended Pavement Structure – Access Lanes and Heavy Truck Parking Areas						
Thickness (mm)	Material Description					
40	Wear Course - HL-3 or Superpave 12.5 Asphaltic Concrete					
50	Binder Course - HL-8 or Superpave 19.0 Asphaltic Concrete					
150	BASE - OPSS Granular A Crushed Stone					
400	SUBBASE - OPSS Granular B Type II					
SUBGRADE – Either in situ soils, fill approved by the geotechnical consultant or OPSS Granular B Type I or II material placed over in situ soil.						

Granular B Type I or II material placed over in situ soil.

Minimum Performance Graded (PG) 58-34 asphalt cement should be used for this project.

If soft spots develop in the subgrade during compaction or due to construction traffic, the affected areas should be excavated and replaced with OPSS Granular B Type I or II material. The pavement granular base and subbase should be placed in maximum 300 mm thick lifts and compacted to a minimum of 100% of the material's SPMDD using suitable vibratory equipment.

Where the subgrade is observed to be in a loose state of compactness, proof rolling should be completed, under dry conditions and above freezing temperatures, using suitably sized equipment to achieve desired levels of compactness.



# 6.0 Design and Construction Precautions

# 6.1 Foundation Drainage and Backfill

# **Foundation Drainage**

Based on the preliminary information provided, it is expected that a portion of the proposed building foundation walls will be located below the long-term groundwater table. To limit long-term groundwater lowering, it is recommended that a groundwater infiltration control system be designed for the proposed building. Also, a perimeter foundation drainage system will be required as a secondary system to account for any groundwater which breaches the primary ground infiltration control system. The system should consist of a 150 mm diameter perforated corrugated plastic pipe, surrounded on all sides by 150 mm of 10 mm clear crushed stone, placed at the footing level around the exterior perimeter of the structure. The pipe should have a positive outlet, such as a gravity connection to the sump pump pit or storm sewer.

The groundwater infiltration control system should extend at least 1 m above the long-term groundwater level and the following is suggested for preliminary design purposes:

- Place a suitable waterproofing membrane against the temporary shoring surface, such as a bentomat liner system or equivalent. The membrane liner should extend down to footing level. The membrane liner should also extend horizontally a minimum of 600 mm below the footing at underside of footing level.
- Place a composite drainage layer, such as Delta Drain 6000 or equivalent, over the membrane, as a secondary system. The composite drainage layer should extend from finished grade to underside of footing level.
- ➤ Pour the foundation wall against the composite drainage system.

It is recommended that the composite drainage system (such as Delta Drain 6000 or equivalent) extend down to the footing level. It is recommended that 150 mm diameter sleeves at 3-6 m centres be cast in the footing or at the foundation wall/footing interface to allow the infiltration of water to flow to the interior perimeter drainage pipe. The perimeter drainage pipe and underfloor drainage system should direct water to sump pit(s) within the lower basement area.

It is important to note that the building's sump pit and elevator pit be considered for waterproofing in a similar fashion. A detail can be provided by Paterson once the design drawings are available for the elevator and sump pits.



# Foundation Backfilling – Double Side Pour Areas

Backfill against the exterior sides of the foundation walls should consist of free-draining non frost susceptible granular materials. The greater part of the site excavated materials will be frost susceptible and, as such, are not recommended for re-use as backfill against the foundation walls, unless used in conjunction with a drainage geocomposite, such as Miradrain G100N or Delta Drain 6000, connected to the perimeter foundation drainage system. Imported granular materials, such as clean sand or OPSS Granular B Type I granular material, should otherwise be used for this purpose.

# **Underfloor Drainage**

Underfloor drainage is recommended to control water infiltration for the proposed structure. For preliminary design purposes, we recommend that 150 mm diameter perforated PVC pipes be placed below the floor slab at 3 to 6m center spacings. The spacing of the underfloor drainage system should be confirmed at the time of completing the excavation when water infiltration can be better assessed.

# **Adverse Effects of Dewatering on Adjacent Properties**

Based on the subsurface conditions and on the anticipated excavation depth, any minor dewatering will be considered temporary and limited to the local area of the proposed building during the construction period. Therefore, adverse effects to the surrounding buildings or properties are not expected with respect to any groundwater lowering.

### **Concrete Sidewalks and Walkways**

Backfill material below sidewalks and walkway subgrade areas throughout the subject site, including along the building, should be provided with a minimum 300 mm thick layer of OPSS Granular A or OPSS Granular B Type II crushed stone. This material should be placed in maximum 300 mm thick loose lifts and compacted to a minimum of 98% of the materials SPMDD. The subgrade for walkway structures against the building should be shaped to promote drainage towards the buildings perimeter drainage system.

# **6.2 Protection Against Frost Action**

Perimeter footings of heated structures are required to be insulated against the deleterious effect of frost action. A minimum of 1.5 m thick soil cover (or equivalent) should be provided in this regard.



Exterior unheated footings, such as those for isolated exterior piers, are more prone to deleterious movement associated with frost action than the exterior walls of the structure proper and require additional protection, such as soil cover of 2.1 m or a combination of soil cover and foundation insulation.

It has been our experience that insufficient soil cover is typically provided to footings located in areas where minimal soil cover is available, such as entrance ramps to underground parking garages. Paterson requests permission to review design drawings prior to construction to ensure proper frost protection is provided.

# 6.3 Excavation Side Slopes

The side slopes of excavations in the overburden materials should either be cut back at acceptable slopes or should be retained by shoring systems from the start of the excavation until the structure is backfilled. It is assumed that insufficient room will be available for the greater part of the excavation to be undertaken by open-cut methods (i.e. unsupported excavations) and temporary shoring will likely be required.

# **Unsupported Excavations**

The excavation side slopes above the groundwater level extending to a maximum depth of 3 m should be cut back at 1H:1V or flatter. The flatter slope is required for excavation below groundwater level. The subsoil at this site is considered to be mainly a Type 2 and 3 soil according to the Occupational Health and Safety Act and Regulations for Construction Projects.

Excavated soil should not be stockpiled directly at the top of excavations and heavy equipment should be kept away from the excavation sides.

Slopes in excess of 3 m in height should be periodically inspected by the geotechnical consultant in order to detect if the slopes are exhibiting signs of distress.

It is recommended that a trench box be used at all times to protect personnel working in trenches with steep or vertical sides. It is expected that services will be installed by "cut and cover" methods and excavations will not be left open for extended periods of time.



# **Temporary Shoring**

Temporary shoring will be required to support the overburden soils. The design and implementation of these temporary systems will be the responsibility of the excavation contractor or the shoring contractor and their design team. Inspections and approval of the temporary system will also be the responsibility of the designer.

Geotechnical information provided below is to assist the designer in completing a suitable and safe shoring system. The designer should take into account the potential for a fully saturated condition following a significant precipitation event. Any changes to the approved shoring design system should be reported immediately to the owner's representative prior to implementation.

For design purposes, the temporary system may consist of soldier pile and lagging system or interlocking steel sheet piling. Any additional loading due to street traffic, construction equipment, adjacent structures and facilities, etc., should be added to the earth pressures described below. These systems can be cantilevered, anchored or braced. The earth pressures acting on the shoring system may be calculated using the following parameters.

Table 7 - Soil Parameters for Shoring System Design							
Parameters	Values						
Active Earth Pressure Coefficient (Ka)	0.33						
Passive Earth Pressure Coefficient (K <sub>p</sub> )	3						
At-Rest Earth Pressure Coefficient (K₀)	0.5						
Unit Weight (γ), kN/m³	20						
Submerged Unit Weight (γ), kN/m <sup>3</sup>	13						

The active earth pressure should be calculated where wall movements are permissible while the at-rest pressure should be calculated if no movement is permissible. The dry unit weight should be calculated above the groundwater level while the effective unit weight should be calculated below the groundwater level.

The hydrostatic groundwater pressure should be included to the earth pressure distribution wherever the effective unit weights are calculated for earth pressures. If the groundwater level is lowered, the dry unit weight for the soil should be calculated full weight, with no hydrostatic groundwater pressure component.

For design purposes, the minimum factor of safety of 1.5 should be calculated.



# 6.4 Pipe Bedding and Backfill

Bedding and backfill materials should be in accordance with the most recent Material Specifications & Standard Detail Drawings of the OPSD.

At least 150 mm of OPSS Granular A should be used for pipe bedding for sewer and water pipes. The bedding should extend to the spring line of the pipe. Cover material, from the spring line to at least 300 mm above the obvert of the pipe, should consist of OPSS Granular A or Granular B Type II with a maximum size of 25 mm. The bedding layer should be increased to a minimum thickness of 300 mm where the subgrade consists of grey silty clay. The bedding and cover materials should be placed in maximum 225 mm thick lifts compacted to 95% of the material's standard Proctor maximum dry density.

It should generally be possible to re-use the upper portion of the dry to moist (not wet) sandy silt above the cover material if the excavation and filling operations are carried out in dry weather conditions. Any stones greater than 200 mm in their longest dimension should be removed from these materials prior to placement.

The backfill material within the frost zone (about 1.8 m below finished grade) should match the soils exposed at the trench walls to reduce potential differential frost heaving. The backfill should be placed in maximum 300 mm thick loose lifts and compacted to a minimum of 95% of the material's SPMDD.

### 6.5 Groundwater Control

### **Groundwater Control for Building Construction**

Based on our observations, it is anticipated that groundwater infiltration into the excavations should be moderate and controllable using open sumps. Pumping from open sumps should be sufficient to control the groundwater influx through the sides of shallow excavations above the groundwater level.

If excavation below the groundwater level will be completed, consideration may need to given to undertaking a dewatering program taking place outside the excavation footprints. The system would require the use of deep wells or well points to temporarily lower the local groundwater table below the depth of future excavations. The contractor should be prepared to direct water away from all bearing surfaces and subgrades, regardless of the source, to prevent disturbance to the founding medium.



# **Permit to Take Water**

A temporary Ministry of the Environment, Conservation and Parks (MECP) permit to take water (PTTW) may be required for this project if more than 400,000 L/day of ground and/or surface water is to be pumped during the construction phase. A minimum 4 to 5 months should be allowed for completion of the PTTW application package and issuance of the permit by the MECP. For typical ground or surface water volumes being pumped during the construction phase, typically between 50,000 to 400,000 L/day, it is required to register on the Environmental Activity and Sector Registry (EASR). A minimum of two to four weeks should be allotted for completion of the EASR registration and the Water Taking and Discharge Plan to be prepared by a Qualified Person as stipulated under O.Reg. 63/16.

# **Impacts to Neighbouring Properties**

It is understood that one level of underground parking is planned for the proposed building. Any groundwater encountered along the building's perimeter or underslab drainage system will be directed to the proposed building's cistern/sump pit. Provided the proposed groundwater infiltration control system is properly implemented and approved by the geotechnical consultant at the time of construction, long-term groundwater lowering is anticipated to be negligible for the area. Therefore, no adverse effects to neighbouring properties are expected.

### 6.6 Winter Construction

Precautions must be taken if winter construction is considered for this project. The subsoil conditions at this site mostly consist of frost susceptible materials. In the presence of water and freezing conditions, ice could form within the soil mass. Heaving and settlement upon thawing could occur.

In the event of construction during below zero temperatures, the founding stratum should be protected from freezing temperatures by the use of straw, propane heaters and tarpaulins or other suitable means. In this regard, the base of the excavations should be insulated from sub-zero temperatures immediately upon exposure and until such time as heat is adequately supplied to the building and the footings are protected with sufficient soil cover to prevent freezing at founding level.

Trench excavations and pavement construction are also difficult activities to complete during freezing conditions without introducing frost in the subgrade or in the excavation walls and bottoms. Precautions should be taken if such activities are to be carried out during freezing conditions.

Page 20



#### **Corrosion Potential and Sulphate** 6.7

The results of analytical testing show that the sulphate content is less than 0.1%. This result is indicative that Type GU (General Use) cement would be appropriate for this site. The chloride content and the pH of the sample indicate that they are not significant factors in creating a corrosive environment for exposed ferrous metals at this site, whereas the resistivity is indicative of a moderate to very aggressive corrosive environment.



# 7.0 Recommendations

that the following material testing and observation program be performed by the geotechnical consultant. Review of the grading and site servicing plans from a geotechnical perspective. Review of the proposed excavation activities Once structural and architectural drawings are available, it is recommended that Paterson provide a damp-proofing, waterproofing and drainage plan for the subject building. Periodic inspections of the damp-proofing of the foundation walls and waterproofing of the mechanical pits from a geotechnical perspective. Observation of all bearing surfaces prior to the placement of concrete. Sampling and testing of the concrete and fill materials. Periodic observation of the condition of unsupported excavation side slopes in excess of 3 m in height, if applicable. Observation of all subgrades prior to backfilling. Field density tests to ensure that the specified level of compaction has been achieved. Sampling and testing of the bituminous concrete including mix design

It is a requirement for the foundation design data provided herein to be applicable

All excess soils generated by construction activities should be handled as per *Ontario Regulation 406/19: On-Site and Excess Soil Management.* 

A report confirming that these works have been conducted in general accordance with our recommendations could be issued upon the completion of a satisfactory inspection program by the geotechnical consultant.

Report: PG6604-1 March 27, 2023

reviews.



# 8.0 Statement of Limitations

The recommendations provided are in accordance with the present understanding of the project. Paterson requests permission to review the recommendations when the drawings and specifications are completed.

A soils investigation is a limited sampling of a site. Should any conditions at the site be encountered which differ from those at the test locations, Paterson requests immediate notification to permit reassessment of our recommendations.

The recommendations provided herein should only be used by the design professionals associated with this project. They are not intended for contractors bidding on or undertaking the work. The latter should evaluate the factual information provided in this report and determine the suitability and completeness for their intended construction schedule and methods. Additional testing may be required for their purposes.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than TCU Development or their agent(s) is not authorized without review by Paterson Group for the applicability of our recommendations to the altered use of the report.

Paterson Group Inc.

March 27, 2023

M. SALEH

100507739

Maha K. Saleh, M.A.Sc., P.Eng.

☐ TCU Development (email copy)

☐ Paterson Group (1 copy)



# **APPENDIX 1**

SOIL PROFILE AND TEST DATA SHEETS
SYMBOLS AND TERMS
ANALYTICAL TESTING RESULTS
TEST HOLE LOGS BY OTHERS

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 & 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **BH 1-23** BORINGS BY CME-55 Low Clearance Drill **DATE** March 9, 2023 **SAMPLE** Pen. Resist. Blows/0.3m PLOT Piezometer Construction **DEPTH** ELEV. **SOIL DESCRIPTION** 50 mm Dia. Cone (m) (m) RECOVERY N VALUE or RQD STRATA NUMBER TYPE Water Content % **GROUND SURFACE** 80 20 0+71.36FILL: Crushed stone 0.10 1 Ö FILL: Topsoil, some crushed stone, gravel and sand 1.07 1+70.36SS 2 58 12 Compact to dense, brown SILTY SAND to SANDY SILT, trace shale SS 3 67 21 Ó 2+69.362.54 SS 4 100 45 O 3+68.36RC 1 89 27 4+67.36**BEDROCK:** Poor to fair quality, black shale 5+66.362 RC 100 52 6+65.36 - good to excellent quality by 6.0m depth. RC 3 100 90 7 + 64.367.57 End of Borehole (GWL @ 2.80m - March 21, 2023) 20 40 60 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 & 1196 Cummings Ave., Ottawa, Ontario

9 Auriga Drive, Ottawa, Ontario K2E 7T9 **DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **BH 2-23** BORINGS BY CME-55 Low Clearance Drill **DATE** March 9, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Monitoring Well Construction STRATA PLOT **DEPTH** ELEV. **SOIL DESCRIPTION** 50 mm Dia. Cone (m) (m) RECOVERY N VALUE or RQD NUMBER TYPE **Water Content % GROUND SURFACE** 80 20 0+71.39**TOPSOIL** 0.15 ΑU 1 O FILL: Brown silty sand with gravel, crushed stone, trace clay, topsoil and concrete 1+70.39SS 2 67 12 1.45 Compact, brown SILTY SAND with SS 3 83 20 Ó gravel 2+69.392.29 SS 4 80 50 +RC 1 62 0 3+68.39RC 2 47 93 4+67.39**BEDROCK:** Very poor to fair quality, black shale 5+66.393 RC 100 68 6+65.396.10 End of Borehole (GWL @ 2.59m - March 21, 2023) 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

**Geotechnical Investigation Proposed Multi-Storey Building** 1184, 1188 & 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **BH 3-23** BORINGS BY CME-55 Low Clearance Drill **DATE** March 9, 2023 **SAMPLE** Pen. Resist. Blows/0.3m PLOT Construction DEPTH ELEV. Piezometer **SOIL DESCRIPTION** 50 mm Dia. Cone (m) (m) RECOVERY N VALUE or RQD STRATA NUMBER Water Content % **GROUND SURFACE** 80 20 0+70.66FILL: Crushed stone 0.10 FILL: Topsoil with silty clay, trace 0.36 1 Q gravel and organics Compact, brown SILTY SAND, trace 1 + 69.66SS 2 gravel, clay, shale, cobbles and 75 11 Ō boulders 1.83 2+68.66RC 1 100 0 3+67.66RC 2 100 24 4+66.66 **BEDROCK:** Very poor to fair quality, black shale 5 + 65.66RC 3 24 100 6 + 64.6672 RC 4 100 7 + 63.66<u>7</u>.54 End of Borehole (GWL @ 2.07m - March 21, 2023) 40 60 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

**Geotechnical Investigation Proposed Multi-Storey Building** 1184, 1188 & 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **BH 4-23** BORINGS BY CME-55 Low Clearance Drill **DATE** March 10, 2023 **SAMPLE** Pen. Resist. Blows/0.3m STRATA PLOT Construction **DEPTH** ELEV. Piezometer **SOIL DESCRIPTION** 50 mm Dia. Cone (m) (m) RECOVERY N VALUE or RQD NUMBER TYPE Water Content % **GROUND SURFACE** 80 20 0+71.73FILL: Crushed stone, some sand 0.10 1 FILL: Dark brown silty sand with 0.30 2 Ö asphalt, crushed stone and gravel FILL: Brown silty sand, some gravel and crushed stone 0.97 1+70.73SS 3 100 31 O SS 4 83 50 +Ō. 2+69.73BEDROCK: Very poor to poor quality, black shale 5 SS 100 50 +0 3+68.73- fair quality by 3.0m depth RC 1 100 36 4+67.735 + 66.73RC 2 51 100 5.97 End of Borehole (GWL @ 2.87m - March 21, 2023) 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

DATUM Geodetic					1			_	FILE NO. PG6604	
REMARKS			DATE February 14, 2023					HOLE NO.		
BORINGS BY Excavator	PLOT				ATE I	-ebruary	14, 2023		TP 1-23	
SOIL DESCRIPTION		SAMPLE		25 Q	DEPTH ELEV. (m)	Pen. Resist. Blows/0.3m  • 50 mm Dia. Cone				
	STRATA	TYPE	NUMBER	% RECOVERY	N VALUE or RQD			0 W	Piezometer Construction	
GROUND SURFACE				2	N	0-	71.44	20	40 60 80	
FILL: Crushed stone 0.10										
FILL: Brown silty sand with gravel, trace organics		G	1							
FILL: Brown silty sand with gravel		 _ G	2							
<u>0</u> .80										
Brown <b>SANDY SILT</b> with gravel, occasional cobbles		_ G _	3			1-	-70.44			
1.60 End of Test Pit		– G –-	4							
TP terminated on bedrock surface at 1.60m depth.										
(TP dry upon completion)										
								20	40 60 80 1	00
								Shea	ur Strength (kPa)	

**SOIL PROFILE AND TEST DATA** 

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**Geotechnical Investigation Proposed Multi-Storey Building** 

1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario **DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 2-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Piezometer Construction STRATA PLOT DEPTH ELEV. **SOIL DESCRIPTION**  50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER Water Content % **GROUND SURFACE** 80 20  $0 \pm 71.44$ **TOPSOIL** 0.10 **FILL:** Brown silty sand with gravel, trace organics G 1 0.50 **FILL:** Brown silty sand, trace clay, gravel and concrete blocks G 2 0.80 1+70.44Brown SILTY SAND with gravel, some clay G 3 G 4 2.00 2 + 69.44End of Test Pit TP terminated on bedrock surface at 2.00m depth. (TP dry upon completion) 20 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

**SOIL PROFILE AND TEST DATA** 

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**Geotechnical Investigation Proposed Multi-Storey Building** 

1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 3-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m STRATA PLOT Piezometer Construction DEPTH ELEV. **SOIL DESCRIPTION**  50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER Water Content % **GROUND SURFACE** 80 20 0 + 71.52FILL: Crushed stone 0.10 FILL: Brown silty sand, some shale and gravel G 1 G 2 FILL: Brown silty sand, some cobbles, trace brick and shale 1.00 1+70.52G 3 Brown SILTY SAND, trace clay and gravel, occasional cobbles G 4 End of Test Pit TP terminated on bedrock surface at 1.70m depth. 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 4-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Piezometer Construction STRATA PLOT **DEPTH** ELEV. **SOIL DESCRIPTION** • 50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER **Water Content % GROUND SURFACE** 80 20 0 + 70.97FILL: Crushed stone 0.10 FILL: Brown silty sand, trace gravel G 1 0.30 G 2 Brown SILTY SAND with gravel, occasional cobbles 1 + 69.97G 3 1.60 End of Test Pit TP terminated on bedrock surface at 1.60m depth.. (TP dry upon completion) 20 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation
Proposed Multi-Storey Building
1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 5-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Piezometer Construction STRATA PLOT DEPTH ELEV. **SOIL DESCRIPTION**  50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER Water Content % **GROUND SURFACE** 80 20 0 + 70.87<u>0.10</u> FILL: Crushed stone Brown SILTY SAND, some clay, G 1 trace organics (possible topsoil) 0.40 Brown **SANDY SILT** with gravel G 2 0.70 1 + 69.87Brown SILTY SAND with gravel and cobbles G 3 End of Test Pit TP terminated on bedrock surface at 1.70m depth. (TP dry upon completion) 20 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 6-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Piezometer Construction STRATA PLOT DEPTH ELEV. **SOIL DESCRIPTION**  50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER Water Content % **GROUND SURFACE** 80 20  $0 \pm 70.74$ <u>0.10</u> FILL: Crushed stone **TOPSOIL** 1 0.50 G 2 Brown SILTY SAND with gravel 1 + 69.74G 3 1.50 Brown SILTY SAND with shale fragments G 4 End of Test Pit TP terminated on bedrock surface at 1.70m depth. 20 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation
Proposed Multi-Storey Building
1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 7-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m STRATA PLOT Piezometer Construction DEPTH ELEV. **SOIL DESCRIPTION**  50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER **Water Content % GROUND SURFACE** 80 20 40 0+70.86FILL: Crushed stone 0.10 FILL: Brown silty sand, trace silt and organics G 1 <u>0.50</u> G 2 1 + 69.86Brown SILTY SAND with gravel, occasional cobbles G 3 2 + 68.864 2.10 End of Test Pit TP terminated on bedrock surface at 2.10m depth. (TP dry upon completion) 40 60 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

<b>DATUM</b> Geodetic								,	FILE	NO. <b>6604</b>		-
REMARKS									HOL	E NO.		
BORINGS BY Excavator				D	ATE	February	14, 2023			8-23		
SOIL DESCRIPTION	PLOT			/IPLE	м .	DEPTH (m)	ELEV. (m)			Blows/6		Piezometer Construction
	STRATA	TYPE	NUMBER	% RECOVERY	N VALUE or RQD			0 V	Vater	Content	%	Piezon
GROUND SURFACE	02		Z	ES.	z o	0-	71.40	20	40	60	80	
FILL: Crushed stone	)   						71.40					
FILL: Brown silty sand, some cobbles, trace shale and organics		G	1									
Brown <b>SILTY SAND</b> with gravel		_ G	2									
<u>0.80</u> End of Test Pit												
TP terminated on bedrock surface at 0.80m depth.												
(TP dry upon completion)												
										60 ength (kl △ Rem	Pa)	00

9 Auriga Drive, Ottawa, Ontario K2E 7T9

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation
Proposed Multi-Storey Building
1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

**DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP 9-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Piezometer Construction STRATA PLOT DEPTH ELEV. **SOIL DESCRIPTION**  50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER Water Content % **GROUND SURFACE** 80 20 0 + 71.42FILL: Crushed stone 0.10 FILL: Brown silty sand, some cobbles, trace shale, organics and G 1 brick 0.50 G 2 Brown SILTY SAND with gravel 1.00 1+70.42Brown SILTY SAND with gravel, cobbles and shale fragments G 3 1.30 End of Test Pit TP terminated on bedrock surface at 1.30m depth. (TP dry upon completion) 40 60 80 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

**SOIL PROFILE AND TEST DATA** 

**Geotechnical Investigation Proposed Multi-Storey Building** 

1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

9 Auriga Drive, Ottawa, Ontario K2E 7T9 Geodetic FILE NO. DATUM PG6604 **REMARKS** HOLE NO.

	PLOT			SAMPLE DEPTH ELEV.						Pen. Resist. Blows/0.3m		
SOIL DESCRIPTION		Ęi	ER	ERY	VALUE r RQD	(m)	(m)		) mm Dia.		Piezometer	
GROUND SURFACE	STRATA	TYPE	NUMBER	% RECOVERY	N VA.			○ W 20	Vater Content % 40 60 80		Piez	
FILL: Crushed stone 0.10						0-	70.76					
FILL: Brown silty sand, some clay and organics		 G 	1									
FILL: Brown silty sand with cobbles, race shale		G -	2									
1.00		 G	3			1-	-69.76					
Brown <b>SILTY SAND</b> with gravel		- - G	4									
End of Test Pit  P terminated on bedrock surface at 1.50m depth.												
TP dry upon completion)												
								20 Shea ▲ Undistu	40 60 r Strength		00	

**SOIL PROFILE AND TEST DATA** 

▲ Undisturbed

△ Remoulded

Geotechnical Investigation Proposed Multi-Storey Building 1184, 1188 and 1196 Cummings Ave., Ottawa, Ontari

9 Auriga Drive, Ottawa, Ontario K2E 7T9 1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario **DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP11-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m Piezometer Construction STRATA PLOT DEPTH ELEV. **SOIL DESCRIPTION** • 50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER Water Content % **GROUND SURFACE** 80 20  $0 \pm 71.50$ FILL: Crushed stone 0.10 G 1 FILL: Brown sitly sand with clay, shale, trace gravel and organics 0.60 FILL: Brown silty sand with gravel, 2 trace clay 0.90 1 + 70.50Brown SILTY SAND with gravel G 3 2+69.50G 4 2.10 End of Test Pit TP terminated on bedrock surface at 2.10m depth. (TP dry upon completion) 20 40 60 80 100 Shear Strength (kPa)

**SOIL PROFILE AND TEST DATA** 

9 Auriga Drive, Ottawa, Ontario K2E 7T9

Geotechnical Investigation
Proposed Multi-Storey Building
1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

DATUM Geodetic					'				FILE NO. PG6604	
REMARKS  BORINGS BY Excavator				п	ΔTE	February	14 2023	3	HOLE NO. <b>TP12-23</b>	
DONINGS BY LACAVAIO	H		SAN	/IPLE	AIL	Boldary	14, 2020		esist. Blows/0.3m	
SOIL DESCRIPTION	PLOT					DEPTH (m)	ELEV. (m)		0 mm Dia. Cone	Piezometer Construction
	STRATA	TYPE	NUMBER	» RECOVERY	N VALUE or RQD	(,	()	0 W	/ater Content %	zom
GROUND SURFACE	STE	Į.	NON	RECC	N Or C			20	40 60 80	<del> </del>   8
TOPSOIL						0-	71.08			
0.10		 _ G _	1							
Brown <b>SILTY SAND</b> with gravel, trace shale fragments		G	2							
		G	3			1-	-70.08			
Brown <b>SILTY SAND</b> with gravel and cobbles		G	4							
										-
TP terminated on bedrock surface at 1.80m depth.  (TP dry upon completion)										
								20 Shea ▲ Undist	r Strength (kPa)	00

**SOIL PROFILE AND TEST DATA** 

Geotechnical Investigation
Proposed Multi-Storey Building
1184, 1188 and 1196 Cummings Ave., Ottawa, Ontario

9 Auriga Drive, Ottawa, Ontario K2E 7T9 **DATUM** Geodetic FILE NO. **PG6604 REMARKS** HOLE NO. **TP13-23 BORINGS BY** Excavator DATE February 14, 2023 **SAMPLE** Pen. Resist. Blows/0.3m STRATA PLOT Piezometer Construction DEPTH ELEV. **SOIL DESCRIPTION** • 50 mm Dia. Cone (m) (m) N VALUE or RQD RECOVERY NUMBER TYPE **Water Content % GROUND SURFACE** 80 20 0 + 71.10**TOPSOIL** 0.30 FILL: Brown silty sand with cobbles, trace shale G 1 0.50 G 2 1 + 70.10G 3 Brown SILTY SAND with gravel and cobbles G 4 5 2 + 69.10G <u>2.1</u>0 End of Test Pit TP terminated on bedrock surface at 2.10m depth. (TP dry upon completion) 20 40 60 100 Shear Strength (kPa) ▲ Undisturbed △ Remoulded

#### **SYMBOLS AND TERMS**

#### **SOIL DESCRIPTION**

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the strength of cohesionless soils is the relative density, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm.

Relative Density	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Consistency	Undrained Shear Strength (kPa)	'N' Value		
Very Soft	<12	<2		
Soft	12-25	2-4		
Firm	25-50	4-8		
Stiff	50-100	8-15		
Very Stiff	100-200	15-30		
Hard	>200	>30		

#### **SYMBOLS AND TERMS (continued)**

#### **SOIL DESCRIPTION (continued)**

Cohesive soils can also be classified according to their "sensitivity". The sensitivity is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil.

Terminology used for describing soil strata based upon texture, or the proportion of individual particle sizes present is provided on the Textural Soil Classification Chart at the end of this information package.

#### **ROCK DESCRIPTION**

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NXL size core. However, it can be used on smaller core sizes, such as BX, if the bulk of the fractures caused by drilling stresses (called "mechanical breaks") are easily distinguishable from the normal in situ fractures.

RQD %	ROCK QUALITY
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

DOCK OHALITY

#### SAMPLE TYPES

DOD o/

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube
PS	-	Piston sample
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size AXT, BXL, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.

#### SYMBOLS AND TERMS (continued)

#### **GRAIN SIZE DISTRIBUTION**

MC% - Natural moisture content or water content of sample, %

Liquid Limit, % (water content above which soil behaves as a liquid)
 PL - Plastic limit, % (water content above which soil behaves plastically)

PI - Plasticity index, % (difference between LL and PL)

Dxx - Grain size which xx% of the soil, by weight, is of finer grain sizes

These grain size descriptions are not used below 0.075 mm grain size

D10 - Grain size at which 10% of the soil is finer (effective grain size)

D60 - Grain size at which 60% of the soil is finer

Cc - Concavity coefficient =  $(D30)^2 / (D10 \times D60)$ 

Cu - Uniformity coefficient = D60 / D10

Cc and Cu are used to assess the grading of sands and gravels:

Well-graded gravels have: 1 < Cc < 3 and Cu > 4 Well-graded sands have: 1 < Cc < 3 and Cu > 6

Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.

Cc and Cu are not applicable for the description of soils with more than 10% silt and clay

(more than 10% finer than 0.075 mm or the #200 sieve)

#### **CONSOLIDATION TEST**

p'<sub>o</sub> - Present effective overburden pressure at sample depth

p'c - Preconsolidation pressure of (maximum past pressure on) sample

Ccr - Recompression index (in effect at pressures below p'c)
Cc - Compression index (in effect at pressures above p'c)

OC Ratio Overconsolidaton ratio =  $p'_c/p'_o$ 

Void Ratio Initial sample void ratio = volume of voids / volume of solids

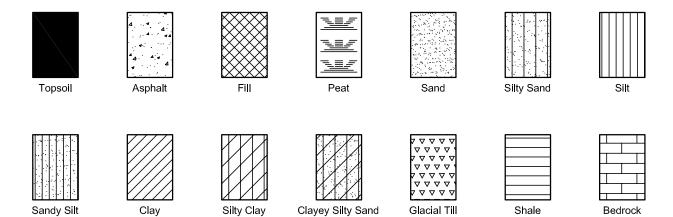
Wo - Initial water content (at start of consolidation test)

#### PERMEABILITY TEST

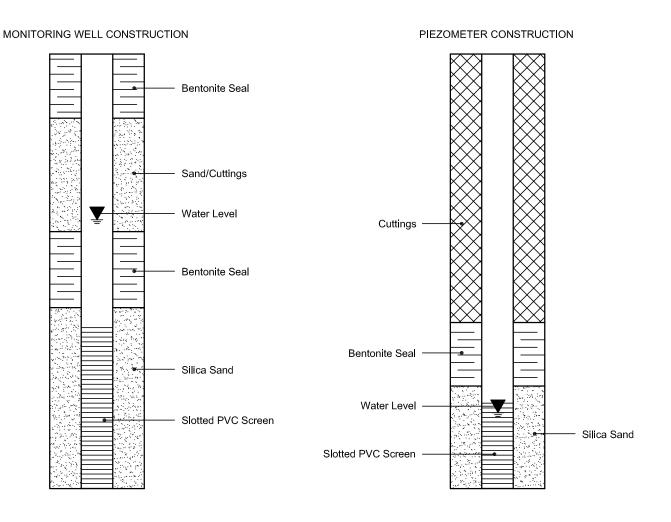
Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.

#### SYMBOLS AND TERMS (continued)

#### STRATA PLOT



#### MONITORING WELL AND PIEZOMETER CONSTRUCTION





Order #: 2310483

Certificate of Analysis

Client: Paterson Group Consulting Engineers

Client PO: 56998

Report Date: 16-Mar-2023

Order Date: 10-Mar-2023

Project Description: PG6604

	Client ID:	BH1-23-SS4	-	-	-
	Sample Date:	09-Mar-23 09:00	-	-	-
	Sample ID:	2310483-01	-	-	-
	MDL/Units	Soil	-	-	-
Physical Characteristics			•		
% Solids	0.1 % by Wt.	86.3	-	-	-
General Inorganics			•	•	,
рН	0.05 pH Units	7.85	-	-	-
Resistivity	0.1 Ohm.m	29.9	-	-	-
Anions					
Chloride	10 ug/g dry	80	-	-	-
Sulphate	10 ug/g dry	68	-	-	-



Project #: 286278

Logged By: WT

Project: Geotechnical Investigation

Client: Siacku Limited

Location: 1188 and 1196 Cummings Avenue, Ottawa, Ontario

Drill Date: January 28, 2021

Project Manager: WT

	SUBSURFACE PROFILE			SAMPLE							
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-values	SPT N-values  Shear Strength kPa 50 100 150 200	Moisture (%)	
1		Ground Surface	98.63	4200							
		Brown sand and gravel, trace silt, trace organics, frozen  Brown sand, trace silt, trace shale bedrock, compact, damp	98.17	Med ————	SS	1	80	8			
1			07.44	No Monitoring Well Installed	SS	2	80	13			
There are seen to be		Shale Bedrock Blackish brown highly weathered shale bedrock	97.11		SS	3	100	>50			
3-		End of Borehole  Borehole terminated at approximately 2.13 mbgs due to auger refusal on weathered shale bedrock. No groundwater was encountered at drilling completion.	96.50	*							

Contractor: Strata Drilling Group

Drilling Method: Hollow Stem Auger / Split Spoon

Well Casing Size: N/A

Grade Elevation: 98.63 m

Top of Casing Elevation: N/A



Project #: 286278

Logged By: WT

Project: Geotechnical Investigation

Client: Siacku Limited

Location: 1188 and 1196 Cummings Avenue, Ottawa, Ontario

Drill Date: January 28, 2021

Project Manager: WT

SAMPLE	SUBSURFACE PROFILE				
SPT N-values SPT N-values SPT N-values SPT N-values SPT N-values SPT N-values We a strength kPa kPa Moisture (%)	Sample Type	Monitoring Well Details	Description (m)	Symbol	Depth (m)
		Q.	Ground Surface 98.66	~~~	0-
100 15	ss		Brown sand and gravel, trace silt, rozen  Glacial Till  Brown silty sand and gravel, ompact, damp		
100 19	SS	No Monitoring Well Installed	97.90 Srown sand, trace gravel, trace silt, ompact, damp		1-
		No.	97.14	4	-
100 38	SS		race weathered shale bedrock		
		•	96.53 End of Borehole	1	2-
			orehole terminated at oproximately 2.13 mbgs due to uger refusal on weathered hale bedrock. No groundwater as encountered at drilling ompletion.		3-
			nale bedrock. No groundwater as encountered at drilling		3-

Contractor: Strata Drilling Group

Drilling Method: Hollow Stem Auger / Split Spoon

Well Casing Size: N/A

Grade Elevation: 98.66 m

Top of Casing Elevation: N/A



Project #: 286278

Logged By: WT

Project: Geotechnical Investigation

Client: Siacku Limited

Location: 1188 and 1196 Cummings Avenue, Ottawa, Ontario

Drill Date: January 28, 2021

Project Manager: WT

	SUBSURFACE PROFIL	E .		SAMPLE							
Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-values	SPT N-values Shear Strength kPa 50 100 150 200  SPT N-values (%)			
-	Ground Surface	98.81									
	Fill Brown sand and gravel, trace silt, frozen  Glacial Till Brown silty sand and gravel, loose, damp	98.61		SS	1	100	7				
- 7	Brown sand, trace gravel, trace silt, loose, damp	98.05	Vell Installed	SS	2	100	9				
	Trace weathered shale bedrock	97.29	No Monitoring Well Installed	SS	3	80	13				
- 4		96,52			8						
	Shale Bedrock Blackish brown highly weathered shale bedrock, wet	96.07		SS	4	80	<50				
	End of Borehole  Borehole terminated at approximately 2.74 mbgs due to auger refusal on weathered shale bedrock. Groundwater measured at approximately 2.30 mbgs, at drilling completion.										

Contractor: Strata Drilling Group

Drilling Method: Hollow Stem Auger / Split Spoon

Well Casing Size: N/A

Grade Elevation: 98.81 m

Top of Casing Elevation: N/A



Project #: 286278

Logged By: WT

Project: Geotechnical Investigation

Client: Siacku Limited

Location: 1188 and 1196 Cummings Avenue, Ottawa, Ontario

Drill Date: January 28, 2021

Project Manager: WT

SUBSURFACE PROFILE					SAMPLE							
Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-values	SPT N-values Shear Strength kPa 50 100 150 200	Lab Analysis	Moisture (%)	Plasticity Index	
)- XX	Ground Surface	99.43	*									
	Brown silty sand, trace gravel, trace clay, frozen  Glacial Till  Brown sand and silt some clay, trace gravel, damp, compact	99.23	nstalled	SS	3	100	22		Hyd.	18.1		
1	Shale Bedrock	98.67	Well I	-								
	Blackish brown highly weathered shale bedrock		— No Monitoring Well Installed	ss	2	100	40	•				
		97.45	•	SS	3	100	>50					
	End of Borehole  Borehole terminated at approximately 1.98 mbgs due to auger refusal on weathered shale bedrock. No groundwater was encountered at drilling completion.											
-												

Contractor: Strata Drilling Group

Drilling Method: Hollow Stem Auger / Split Spoon

Well Casing Size: N/A

Grade Elevation: 99.43 m

Top of Casing Elevation: N/A



Project #: 286278

Logged By: WT

Project: Geotechnical Investigation

Client: Siacku Limited

Location: 1188 and 1196 Cummings Avenue, Ottawa, Ontario

Drill Date: January 28, 2021

Project Manager: WT

		SUBSURFACE PROFIL	E						SAMPLE
Depth (m)	Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-values	SPT N-values Shear Strength KPa 50 100 150 200 Shear Strength KPa 50 100 150 200 Shear Strength KPa Shear St
0-		Ground Surface	99.44	<b>T</b>					
		Asphalt ~ 40 mm  Fill Brown sand and gravel, trace silt, frozen	00.00		SS	1	100	47	
1-	<del>}</del>	Glacial Till Brown silty sand and gravel, loose, damp	98.68	installed ———	SS	2	100	5	•
2-	/ / /	Very dense, moist	97.92	No Monitoring Well Installed	SS	3	30	>50	
+	#		97.15					. 14	, M
- Indiana de la company		Shale Bedrock Blackish brown higly weathered shale bedrock, wet			SS	4	100	58	
3-	****	End of Borehole	96.39	¥					
4-		Borehole terminated at approximately 3.05 mbgs due to auger refusal on weathered shale bedrock. Groundwater measured at approximately 2.30 mbgs, at drilling completion.							

Contractor: Strata Drilling Group

Drilling Method: Hollow Stem Auger / Split Spoon

Well Casing Size: N/A

Grade Elevation: 99.44 m

Top of Casing Elevation: N/A



Project #: 286278

Logged By: WT

Project: Geotechnical Investigation

Client: Siacku Limited

Location: 1188 and 1196 Cummings Avenue, Ottawa, Ontario

Drill Date: January 28, 2021

Project Manager: WT

SUBSURFACE PROFILE					SAMPLE							
Symbol	Description	Elevation (m)	Monitoring Well Details	Sample Type	Sampler #	Recovery (%)	SPT N-values	SPT N-values Shear Strength kPa 50 100 150 200	Lab Analysis	Moisture (%)	Plasticity Index	
	Ground Surface	99.27	-									
$\widetilde{}$	Organics ~ 100 mm	99.17	1									
	Glacial Till Brown silty sand, some gravel, some clay, frozen			SS	1	80	10					
1		98.51										
	Compact, damp	1	tallec									
- X			No Monitoring Well Installed	SS	2	90	10		Hyd.	17.8		
-			onito	1								
- X - X - X	Brown sand, trace silt, trace gravel, damp	97.44	No Mc	SS	3	80	20	•				
	Shale Bedrock Blackish brown higly weathered shale bedrock	96.98	*	SS	4	30	>50					
1	End of Borehole	1 1										
	Borehole terminated at approximately 2.44 mbgs due to auger refusal on weathered shale bedrock. No groundwater was encountered at drilling completion.											

Contractor: Strata Drilling Group

Drilling Method: Hollow Stem Auger / Split Spoon

Well Casing Size: N/A

Grade Elevation: 99.27 m

Top of Casing Elevation: N/A

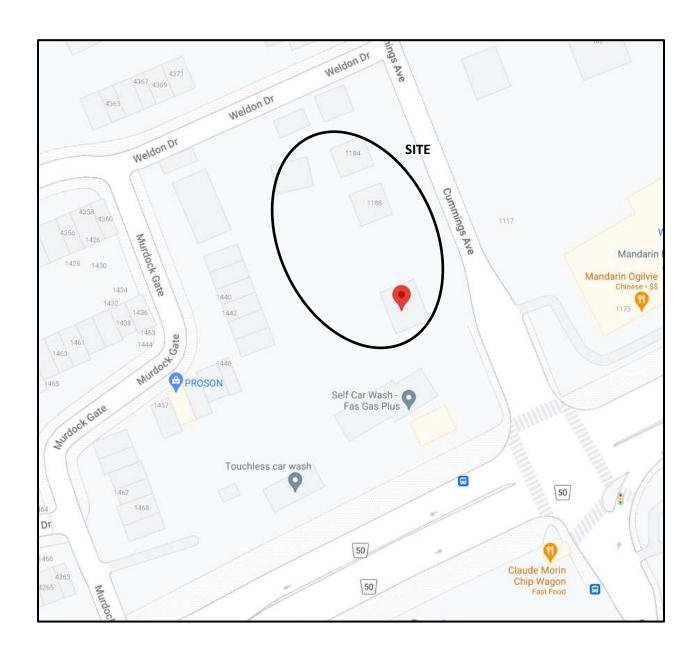


## **APPENDIX 2**

FIGURE 1 - KEY PLAN

DRAWING PG6604-1 - TEST HOLE LOCATION PLAN

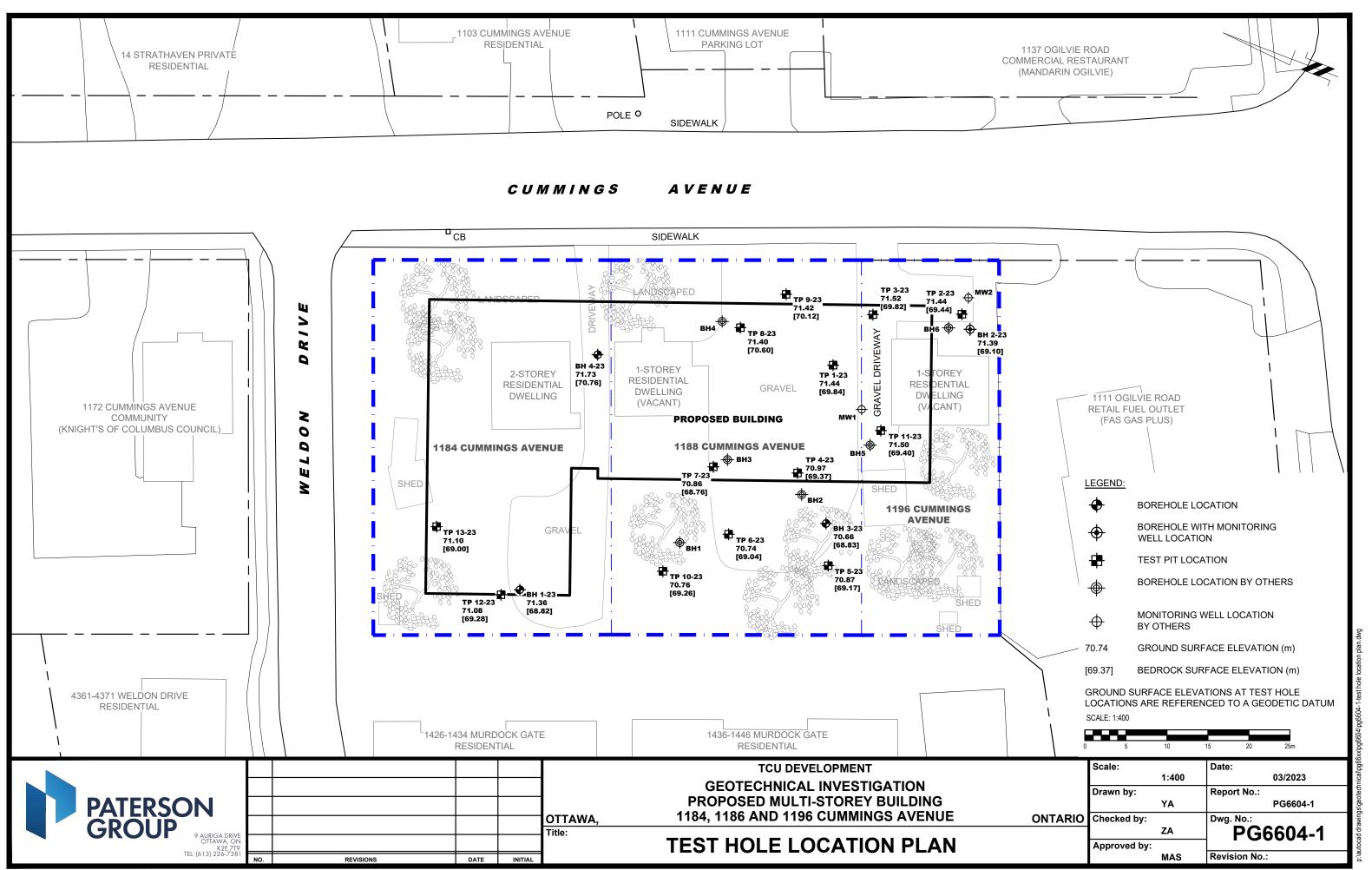
Report: PG6604-1 March 27, 2023



## FIGURE 1

**KEY PLAN** 





E.2 Phase I Environmental Site Assessment by Paterson Group, March 2023





## Phase I Environmental Site Assessment

1184, 1188 and 1196 Cummings Avenue Ottawa, Ontario

Prepared for TCU Development Corporation

**Report: PE5990-1 Date: March 8, 2023** 





#### **TABLE OF CONTENTS**

EXE(	CUTIV	'E SUMMARY	i
1.0		RODUCTION	
2.0		SE I PROPERTY INFORMATION	
3.0		PE OF INVESTIGATION	
4.0	REC	ORDS REVIEW	2
	4.1	General	
	4.2	Environmental Source Information	8
	4.3	Physical Setting Sources	13
5.0	INTE	RVIEWS	16
6.0	SITE	RECONNAISSANCE	17
	6.1	General Requirements	17
	6.2	Specific Observations at the Phase I Property	17
7.0	REV	IEW AND EVALUATION OF INFORMATION	23
	7.1	Current and Past Uses	23
	7.2	Conceptual Site Model	24
8.0	CON	CLUSIONS	28
	8.1	Assessment	28
9.0	STA	TEMENT OF LIMITATIONS	30
10.0	REF	ERENCES	31

#### **List of Figures**

Figure 1 - Key Plan

Figure 2 - Topographic Map Drawing PE5990-1 - Site Plan

Drawing PE5990-2 - Surrounding Land Use Plan

### **List of Appendices**

Appendix 1 Plan of Survey

Aerial Photographs Site Photographs

MECP Freedom of Information Response Appendix 2

> TSSA Correspondence City of Ottawa HLUI Search

**ERIS Report** 

Appendix 3 Qualifications of Assessors

Page i



#### **EXECUTIVE SUMMARY**

#### Assessment

Paterson Group was retained by TCU Development Corporation to conduct a Phase I-Environmental Site Assessment (ESA) for the properties addressed 1184, 1188 and 1196 Cummings Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the Phase I Property and 250m Phase I Study Area, and to identify any environmental concerns with the potential to have impacted the Phase I Property.

According to the historical research and personal interviews, the Phase I Property was first developed with the existing residential dwellings circa 1952. No historical potentially contaminating activities (PCAs) were identified on the Phase I Property.

Based on available historical information, adjacent and surrounding properties within the Phase I Study Area were primarily used for residential and commercial purposes. Historical off-site PCAs include former retail fuel outlets, an automotive service garage and a contractors yard (with an associated underground storage tank). Based on the separation distances and/or down/cross-gradient orientation with respect to the Phase I Property, these PCAs are not considered to result in areas of potential environmental concern (APEC) on the Phase I Property.

Following the historical research, a site visit was conducted. The Phase I Property is currently occupied by a two-storey residential duplex (1184 Cummings Avenue), two vacant one-storey residential dwellings (1188 and 1194 Cummings Avenue) and five outbuildings of various uses. No concerns were identified with the current use of the Phase I Property.

The current uses of the adjacent and neighbouring properties within the Phase I Study Area consists of residential use to the west and north and commercial use to the east and south. A retail fuel outlet was identified at the property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property. The retail fuel outlet is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA conducted on the 1188 and 1196 portions of the Phase I Property. Based on the separation distances and/or down/cross-gradient orientation with respect to the Phase I Property, remaining existing PCAs in the Phase I Study Area are not considered to result in areas of potential environmental concern (APEC) on the Phase I Property.

Based on the findings of the Phase I ESA, it is **our opinion that a Phase II-Environmental Site Assessment is not required for the Phase I Property.** 

Report: PE5990-1 Page ii

Ottawa, Ontario



#### 1.0 INTRODUCTION

At the request of the TCU Development Corporation, Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) for the properties addressed 1184, 1188 and 1196 Cummings Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the Phase I Property and properties within the Phase I Study Area to identify any potentially contaminating activities (PCAs) that would result in areas of potential environmental concern (APECs) on the subject land.

Paterson was engaged to conduct this Phase I-ESA by Mr. Dylan Desjardins with TCU Development Corporation. Mr. Desjardins can be reached by telephone at (613)-725-4722.

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

This Phase I-ESA report has been prepared in general accordance with Ontario Regulation (O.Reg.) 153/04, as amended, under the Environmental Protection Act, and CSA Z768-01 (reaffirmed 2022). 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.

Report: PE5990-1 Page 1





#### 2.0 PHASE I PROPERTY INFORMATION

Address: 1184, 1188 and 1196 Cummings Avenue, Ottawa,

Ontario.

Legal Description: Part of Lot 1, Registered Plan 4R-26865; in the City of

Ottawa, Ontario.

**Property Identification** 

Number (PIN): 04265-0025, 04265-0026, 04265-0027

Location: The Phase I Property is located on the west side of

Cummings Avenue, approximately 45 m north of Ogilvie Road, in the City of Ottawa, Ontario. For the purposes of this report, Cummings Avenue is assumed to run north-south. Refer to Figure 1 - Key Plan in the

Figures section following the text.

Latitude and Longitude: 45° 25' 36" N, 75° 37' 57" W

**Site Description:** 

Configuration: Rectangular

Area: 0.35 ha (approximate)

Zoning: R3 – Residential Third Density Zone

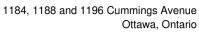
Current Use: The Phase I Property is currently occupied by three

residential dwellings, two of which are vacant.

Services: The Phase I Property is situated in a municipally

serviced area.

Report: PE5990-1 Page 2





### 3.0 SCOPE OF INVESTIGATION

e scope of work for this Phase I – Environmental Site Assessment was as lows:
Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases, and regulatory agencies;
Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
Conduct interviews with persons knowledgeable of current and historic operations on the subject properties, and if warranted, neighbouring properties;
Present the results of our findings in a comprehensive report in general accordance with the requirements of O.Reg. 153/04, as amended, under the Environmental Protection Act, and CSA Z768-01 (reaffirmed 2022);
Provide a preliminary environmental site evaluation based on our findings;
Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

Report: PE5990-1 Page 3

Ottawa, Ontario



#### 4.0 RECORDS REVIEW

#### 4.1 General

#### Phase I-ESA Study Area Determination

A radius of approximately 250m was determined to be appropriate as a Phase I Study Area for this assessment. Properties outside the 250m radius are not considered to have impacted the Phase I Property, based on their significant distance from the Phase I Property.

#### First Developed Use Determination

Based on a review of available historical information, the Phase I Property was first developed for residential purposes circa 1952.

#### **Fire Insurance Plans**

Fire insurance plans (FIPs) are not available for the area of the Phase I Property or the surrounding lands.

#### **City of Ottawa Street Directories**

City directories at the National Archives were reviewed in approximate 10-year intervals from 1935 to 2011 as part of the Phase I-ESA.

The three parcels that comprise the Phase I Property were first listed in 1970 as residential dwellings and have remained as such since that time. No concerns were identified with the historical use of the Phase I Property.

Surrounding properties in the Phase I Study Area were historically listed as residential dwellings and commercial businesses.

Potentially contaminating activities identified from a review of the City Directories are listed in Table 1.

Report: PE5990-1 Page 4



Table 1 - Potentially Contaminating Activities City Directories Review Summary									
Listing	Address	Approx. Distance from Phase I Property	Years Listed	Potentially Contaminating Activity	Represents an Area of Potential Environmental Concern (Y/N)				
Calex Service Station / Global Fuels Inc.	1111 Ogilvie Road	Adjacent to South	1975, 1980, 1990, 2000, 2011	"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"	N				
Atlas Welding and Equipment Rentals	1091 Cummings Avenue	20 m E	1970, 1980, 1992	"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"	N				
Top Value Gas Mart / Pioneer Petroleums	1134 Ogilvie Road	80 m SE	1980, 1990, 2000, 2011	"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"	N				
Kenoco Gas Mart	1110 Ogilvie Road	80 m S	1970	"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"	N				
Latremouille Fuels	1151 Ogilvie Road	85 m E	1980	"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"	N				
Top Stop Gas Station	1154 Ogilvie Road (present day 1150 Ogilvie Road)	105 m SE	1990	"Item 28: Gasoline and Associated Products Storage in Fixed Tanks"	N				
Tremblay Auto Repair / Auto Choice 417 Inc.	1129 - 1133 Cyrville Road	165 m S	1980, 2011	"Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems"	N				
One Stop Laundromat & Dry Cleaner	1099 Cyrville Road	175 m SW	2011	"Item 37: Operation of Dry Cleaning Equipment (where chemicals are used)"	N				
Manis Metal Manufacturing Ltd.	1120 Cummings Avenue	180 m N	1970, 1980, 1992	"Item N/A: Commercial Machine Shop"	N				
Sk Auto Repair	1057 Cyrville Road	210 m SW	2011	"Item 52: Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems"	N				

Report: PE5990-1 Page 5



The property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, has been listed as various retail fuel outlets since the mid 1970's. As further discussed in the Previous Engineering Reports section of this report, the historic/existing function of the 1111 Ogilvie Road property is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property).

The property addressed 1091 Cummings Avenue, approximately 20 m east of the Phase I Property, was listed as Atlas Welding and Equipment Rental from the 1970's to the mid 1990's. As further discussed in the Environmental Risk Information Service (ERIS) Report section of this report, an underground fuel storage tank was historically present on the 1091 Cummings Avenue property, however based on the separation distance of the activities of concern and the extensive redevelopment of the property, the former use of the 1091 Cummings Avenue property is not considered to represent an environmental concern on the Phase I Property.

The remaining off-site historical PCAs are not considered to represent areas of potential environmental concern (APECs) based on the separation distances and/or down-or-cross gradient orientation with respect to the Phase I Property. Historical PCAs identified in the City of Ottawa Street Directories review are shown on Drawing PE5990-2- Surrounding Land Use Plan.

#### **Chain of Title**

Given the available information, it was determined that the results of a chain of title search would not contribute to the environmental assessment for the Phase I Property. Therefore, a chain of title search was not completed as part of this assessment.

#### Plan of Survey

A plan of survey for the Phase I Properly, prepared by Annis, O'Sullivan Vollebekk Limited was reviewed as part of the Phase I ESA. The plan shows the Phase I Property in its current configuration. A copy of the topographic plan of survey is provided in Appendix 1.

Report: PE5990-1 Page 6



#### **Previous Environmental Reports**

"Phase I Environmental Site Assessment, 1188 and 1196 Cummings Avenue, Ottawa, Ontario", prepared by Pinchin Ltd., dated August 29, 2019.

A Phase I ESA was conducted on the portions of the Phase I Property addressed 1188 and 1196 Cummings Avenue in August of 2019. The Phase I ESA did not identify any environmental concerns with regard to the historical or current use of the Phase I Property. A retail fuel outlet was identified on the property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property. Pinchin recommended a Phase II ESA to address potential impacts resulting from the retail fuel outlet located at 1111 Ogilvie Road, adjacent to the south of the Phase I Property.

"Phase II Environmental Site Assessment, 1188 and 1196 Cummings Avenue, Ottawa, Ontario", prepared by Pinchin Ltd., dated October 3, 2019.

A Phase II ESA was conducted on the portions of the Phase I Property addressed 1188 and 1196 Cummings Avenue in September and October of 2019. As part of the Phase II ESA, two boreholes outfitted with monitoring wells (MW1 and MW2) were drilled on the 1196 Cummings Avenue property. Soil and groundwater samples were submitted for analysis of petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs) and/or polycyclic aromatic hydrocarbons (PAHs). Test results were compared to and comply with the MECP Table 3 Standards for residential/parkland/institutional land use. Based on the findings of the 2019 Phase II ESA, no further work was recommended.

Report: PE5990-1 Page 7



"Phase I Environmental Site Assessment, 1184, 1188 and 1196 Cummings Avenue, Ottawa, Ontario", prepared by Pinchin Ltd., dated January 20, 2023.

At the time of the assessment, the Phase I Property was developed with two, single-storey residential dwellings and a two-storey multi-tenant residential dwelling. The Phase I ESA did not identify any environmental concerns with regard to the historical or current use of the Phase I Property. The retail fuel outlet previously identified on the property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property was not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property). A second retail fuel outlet was identified at the property addressed 1134 Ogilvie Road, approximately 80 m southeast of the Phase I Property. Based on the separation distance and down-gradient orientation with respect to the Phase I Property, the retail fuel outlet located at 1134 Ogilvie Road was not considered to represent an environmental concern to the Phase I Property. No further work was recommended as a result of the 2023 Phase I ESA.

#### 4.2 Environmental Source Information

#### **Environment Canada**

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on February 27, 2023. No records were found in the NPRI database for properties within the Phase I Study Area.

#### **PCB Inventory**

A search of provincial PCB waste storage sites was conducted. No PCB waste storage sites were identified within the Phase I Study Area.

#### **Areas of Natural Significance**

A search for areas of natural significance and features within the Phase I Study Area was conducted on the website of the Ontario Ministry of Natural Resources (MNR) on February 27, 2023. The search did not reveal any areas of natural significance within the Phase I Study Area.

Report: PE5990-1 Page 8



## Ministry of the Environment, Conservation and Parks Freedom of Information Request

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the properties. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

#### **MECP Instruments**

A request was submitted to the MECP Freedom of Information (FOI) office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

#### **MECP Waste Management Records**

A request was submitted to the MECP FOI office for information with respect to waste management records. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

#### **MECP Submissions**

A request was submitted to the MECP FOI office for information with respect to reports related to environmental conditions for the Phase I Property. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

#### **MECP Incident Reports**

A request was submitted to the MECP FOI office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants, inspections maintained by the MECP the for Phase I Property or neighbouring properties. At the time of issuing this report, a response had not been received from the MECP. A copy of the response will be forwarded to the client if it contains any pertinent information.

Report: PE5990-1 Page 9



#### **MECP Brownfields Environmental Site Registry**

A search of the MECP Brownfields Environmental Site Registry (ESR) was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No record of site condition (RSC) was identified for the Phase I Property or 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. There are no former waste disposal sites listed in this document within the Phase I Study Area.

#### **Technical Standards and Safety Authority (TSSA)**

The TSSA, Fuels Safety Branch in Toronto, was contacted electronically on February 27, 2023 to inquire about current and former underground/aboveground storage tanks, spills, and incidents for the subject and neighbouring properties. response from the TSSA indicated that no records were identified pertaining to the Phase I Property.

The property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, contains three records for expired full-service retail fuel outlets, one record for an active self-serve retail fuel outlet and six records for active liquid fuel tanks. Given the results of the Phase II ESA conducted on the 1188 and 1196 Cummings Avenue in 2019, the presence of the existing retail fuel outlet at 1111 Ogilvie Road, adjacent to the south of the Phase I Property, is not considered to represent an environmental concern to the Phase I Property.

#### City of Ottawa Historical Land Use Inventory (HLUI)

A request for a search of the City of Ottawa's Historical Land Use Inventory (HLUI) database was submitted to the City of Ottawa. A response had not been received at the time of issuing this report. A copy of the search results will be forwarded to the client upon receipt. A copy of the HLUI request form is provided in Appendix 2.

#### **City of Ottawa Landfill Document**

The document prepared by Golder Associates entitled "Old Landfill Management Strategy, Phase I - Identification of Sites, City of Ottawa", was reviewed. No former landfills were identified within the Phase I Study Area.

Report: PE5990-1 Page 10



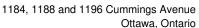
#### **Environmental Risk Information Service (ERIS) Report**

An ERIS (Environmental Risk Information Service) Report was obtained for the Phase I Property and surrounding lands. The ERIS report includes information that can normally be obtained through the MECP FOI, a TSSA search, MECP well records search as well as several other records (i.e., incident reports, waste generators, etc.). The ERIS search identified two records for the Phase I Property (one of which is a previous ERIS search) and 170 records for the surrounding properties within the Phase I Study Area (11 of which are previous ERIS searches), several of which are associated with the properties addressed 1111 Ogilvie Road (adjacent to the south), 1134 Ogilvie Road (80 m southeast) and 1154 Ogilvie Road (105 m southeast) and their historic/existing functions as retail fuel outlets.

The ERIS report identified one well record for the Phase I Property. The well records for the Phase I Property and for properties within the Phase I Study Area are further discussed in the Water Well Records section of this assessment.

The ERIS report identified 51 Waste Generator records for properties within the Phase I study area, several of which are associated with the properties addressed 1111 Ogilvie Road (adjacent to the south), 1134 Ogilvie Road (80 m southeast) and 1154 Ogilvie Road (alternatively addressed 1150 Ogilvie Road) (105 m southeast) and their historic/existing functions as retail fuel outlets. The waste classes documented include light fuels, oil skimmings, waste oils and lubricants, etc. As previously discussed, the historic/existing function of the 1111 Ogilvie Road property is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property). Several remaining waste generator records are associated with PCAs previously identified within the Phase I Study Area, however, due to their respective separation distances and/or cross/downgradient orientation with respect to the Phase I Property these PCAs are not considered to represent APECs. Remaining waste generator records identified in the ERIS report are not considered to represent PCAs based on information contained within the records.

Report: PE5990-1 Page 11

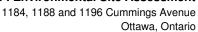




The ERIS report identified four Scott's Manufacturing Directory records for properties within the Phase I Study Area. Three of which pertain to the property addressed 1120 Cummings Avenue, approximately 180 m north of the Phase I Property. The records list a metal window and door manufacturing facility. Based on the separation distance and cross-gradient orientation with respect to the Phase I Property, the function of the 1120 Cummings Avenue property is not considered to represent an environmental concern on the Phase I Property. The remaining Scott's Manufacturing Directory record identified in the ERIS report is not considered to represent a PCA based on information contained within the record.

The ERIS report identified various records pertaining to both current and historic fuel oil tanks. Several records for underground fuel storage tanks were identified for the property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, all of which pertain to its function as a retail fuel outlet since as early as 1977 (based on the records in the ERIS report). As previously discussed, the historic/existing function of the 1111 Ogilvie Road property is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property). Historic fuel tank records were identified for the property addressed 1091 Cummings Avenue, 20 m east of the Phase I Property, stating that a liquid fuel single wall underground storage tank installed in 1985 was removed in August, 2007. Based on aerial photos from this time, the activities of concern on the 1091 Cummings Avenue property would have occurred a minimum of 40 m from the Phase I Property, therefore, based on the separation distance of the activities of concern and the extensive redevelopment of the property, the former use of the 1091 Cummings Avenue property is not considered to represent an environmental concern on the Phase I Property. Several records for underground fuel storage tanks were identified for the property addressed 1134 Ogilvie Road, approximately 80 m southeast of the Phase I Property, all of which pertain to its function as a retail fuel outlet since as early as 1991 (based on the records in the ERIS report). Several records for underground fuel storage tanks were identified for the property addressed 1154 Ogilvie Road, approximately 105 m southeast of the Phase I Property, all of which pertain to its former function as a retail fuel outlet since as early as 1990 (based on the records in the ERIS report). Based on the listed separation distance and/or cross/down-gradient orientation with respect to the Phase I Property, the function of the properties associated with the various fuel records are not considered to pose an environmental concern to the Phase I Property

Report: PE5990-1 Page 12





The ERIS report identified five Ontario Spill records for properties within the Phase I study area. Two of the records identified pertain to unknown addresses on Cummings Avenue south of Ogilvie Road. The two records dated June 1992 and February 2004 pertain to minimal spills of hydraulic oil and diesel fuel, respectively. Based on the listed description of the spills and the unknown specific location, these records are not considered to pose a concern to the Phase I Property. One Ontario spill record was identified for the property addressed 1111 Ogilvie Road (adjacent to the south), occurring in August, 2016, the record is for a 0.5 L spill of coolant to a catch basin. Two Ontario spill records were identified for the property addressed 1134 Ogilvie Road (80 m southeast), occurring in March, 2001 and June, 2014, both records were for minimal spills of diesel fuel to the ground. Due to the listed description of the Ontario spill records, the respective separation distance and/or the down/cross-gradient orientation with respect to the Phase I Property, these records are not considered to pose an environmental concern to the Phase I Property.

The ERIS report identified three various incident records. Two of which pertain to natural gas leaks and are not considered to represent an environmental concern. The remaining incident record pertains to a gasoline spill of an unknown amount on the 1134 Ogilvie Road property, approximately 80 m southeast of the Phase I Property, in October of 2014. No remaining pertinent information was listed in the record. Given the lack of information contained in the record in combination with the separation distance from the Phase I Property, the Fuel Oil Spills and Leaks record for the 1134 Ogilvie Road property is not considered to represent an environmental concern.

The ERIS report identified 23 well records (and one borehole record), which are further discussed in the water well records section of this report.

The ERIS report identified seven certificates of approval and environmental compliance approvals for properties within the Phase I Study Area. The records are limited to air, sewer and water works and are not considered to pose an environmental risk to the Phase I Property.

# 4.3 Physical Setting Sources

### **Aerial Photographs**

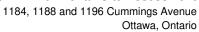
Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. Based on the review, the following observations have been made:

Report: PE5990-1 Page 13



1945	(Poor Quality) The Phase I Property appears to be vacant and undeveloped land at this time. Surrounding properties consist primarily of vacant and agricultural land with occasional farmsteads to the east and further south. Ogilvie Road has been developed approximately 40 m south of the Phase I Property at this time.
1952	(Poor Quality) The Phase I Property has been developed with the three existing residential dwellings. Residential development has occurred on the surrounding properties. Cummings Avenue has been developed adjacent to the east of the Phase I Property at this time.
1965	(City of Ottawa website) No significant changes are apparent with respect to the Phase I Property or the surrounding properties.
1976	(City of Ottawa website) No significant changes are apparent with respect to the Phase I Property. A retail fuel outlet has been developed on the property adjacent to the south of the Phase I Property (1111 Ogilvie Road). A commercial plaza has been developed approximately 20 m east of the Phase I Property.
1991	(City of Ottawa website) An outbuilding has been developed on the west portion of the 1196 Cummings Avenue portion of the Phase I Property. The property approximately 75 m southeast of the Phase I Property, across Ogilvie Road, has been developed with a retail fuel outlet. Significant residential development has occurred further north and west of the Phase I Property with some commercial development further to the southwest and southeast.
2002	(City of Ottawa website) The 1188 Cummings Avenue portion of the Phase I Property appears to have been stripped of topsoil and a granular parking area is present to the west and south of the residential dwelling. No significant changes are apparent with respect to the surrounding properties.
2011	(City of Ottawa website) An outbuilding has been developed on the north portion of the 1188 Cummings Avenue portion of the Phase I Property. The retail fuel outlet adjacent to the south of the Phase I Property has been further developed with a car wash. Residential development has continued to the northeast of the Phase I Property.
2021	(City of Ottawa website) No significant changes are apparent with respect to the Phase I Property or the surrounding properties.

Report: PE5990-1 Page 14





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

#### **Physiographic Maps**

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website. According to this physiographic map, the site is located in the St. Lawrence Lowlands. According to the mapping description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." The Phase I Property is located in the Central St. Lawrence Lowland, which is generally less than 150 m above sea level.

#### **Topographic Maps**

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic map depicts topography in the area of the Phase I Property sloping gently downward to the west towards the Rideau River. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

#### **Geological Maps**

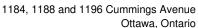
The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on the information from NRCAN, bedrock in the area of the site consists of shale of the Billings Formation. Based on the maps, the surficial geology consists of till with an overburden thickness ranging from 1 to 5 m.

#### **Water Well Records**

A search of the MECP's web site for all drilled well records within 250 m of the Phase I Property was conducted on February 27, 2023. The search identified two well records for the portion of the Phase I Property addressed 1196 Cummings Avenue. The monitoring wells were drilled in 2019 to depths ranging from 6.1 to 7.0 m below ground surface (mbgs). The soil profile was reported to consist of topsoil underlain by sand with stones. Shale bedrock was encountered at a depth of 2.4 m below ground surface in both wells. The wells were installed as part of the 2019 Phase II ESA as discussed in the Previous Engineering Reports section of this assessment.

A total of 40 well records were identified for surrounding properties within the Phase I Study Area. The reported wells records were dated between 1948 and 2020.

Report: PE5990-1 Page 15





Five records were identified for monitoring wells drilled in 2014, at the property addressed 1134 Ogilvie Road, approximately 80 m southeast of the Phase I Property, where an existing retail was identified. The wells were drilled to depths ranging from 2.8 to 4.6 m below ground surface (mbgs). The soil profile was generally reported to consist of gravel fill, underlain by a silty clay. Bedrock was not encountered at these depths. No other pertinent information was provided in these records.

Four well records were identified at the property addressed 1150 Ogilvie Road, approximately 105 m southeast of the Phase I Property, adjacent to the east of the aforementioned existing retail fuel outlet (at 1134 Ogilvie Road). Two of the records pertain to domestic wells installed in the late 1950's. The remaining two records pertain to monitoring wells installed in 2010. The wells were drilled to depths ranging from 3.1 to 4.3 m below ground surface (mbgs). The soil profile was reported to consist of sand with clay and gravel underlain by sand. Bedrock was not encountered at these depths. No other pertinent information was provided in these records.

The remaining records were identified as domestic wells or pertain to wells approximately 100 m or more away from the Phase I Property and are not considered to pose an environmental concern to the Phase I Property. Given the introduction of municipal water services since the installation of these domestic wells, it is our opinion that there are no domestic supply wells in service within the Phase I Study Area. Based on the well records, the stratigraphy in the general area of the Phase I Property consists of silty sand or clay underlain by shale bedrock encountered at depths ranging from approximately 0.61 to 7.6m below grade. A copy of the well records has been included in Appendix 2.

# 5.0 INTERVIEWS

#### **Property Owner Representatives**

Mr. Brendan Kuffner, with TCU Development Corporation, was interviewed via email correspondence as part of this assessment. Mr. Kuffner indicated that to his knowledge the Phase I Property was developed with the existing residential dwellings in the early 1950's and that the property has been used strictly for residential purposes since that time. Mr. Kuffner stated that he was unaware of any environmental concerns with regard to the Phase I Property, besides those addressed as part of previous environmental investigations. Mr. Kuffner was unaware of any asbestos/hazardous building materials assessment previously conducted for the subject buildings.

Report: PE5990-1 Page 16





The information obtained through the interview with Mr. Kuffner is considered to be consistent with site information obtained from other sources (aerial photos, ERIS Database Report and site observations) and is considered to be valid.

#### 6.0 SITE RECONNAISSANCE

# 6.1 General Requirements

A site visit was conducted on March 7, 2023, by Mr. Jeremy Camposarcone with the Environmental Department of Paterson Group. In addition to the site, the uses of neighbouring properties within the Phase I Study Area were assessed at the time of the site visit from publicly accessible areas.

# 6.2 Specific Observations at the Phase I Property

# **Buildings and Structures**

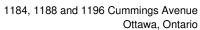
The Phase I Property is currently occupied by a two-storey residential duplex (1184 Cummings Avenue), two vacant one-storey residential dwellings (1188 and 1194 Cummings Avenue) and five outbuildings of various uses.

The two-storey residential duplex addressed 1184 Cummings Avenue is finished on the exterior with brick, and vinyl siding in addition to a sloped and shingled style roof. Constructed circa 1952, the building is constructed with a concrete foundation and is currently heated and cooled via a combination of natural gas-and electric means.

A storage shed is present to the west of the residential duplex on the 1184 Cummings Avenue property. The storage shed is constructed with a wood frame, plywood walls and flooring, in addition to a sloped weather-proof membrane roof. The storage shed has been outfitted to be used as a leisure space with full electricity.

A second storage shed is present on the northwest corner of the 1184 Cummings Avenue property. The second storage shed is constructed with a wood frame, plywood walls and a sloped and shingled style roof. The second storage shed was used to store various household items and yard maintenance equipment at the time of the site inspection.

Report: PE5990-1 Page 17





The vacant one-storey (with one basement level) residential dwelling addressed 1188 Cummings Avenue is finished on the exterior with vinyl siding and concrete block in addition to a sloped and shingled style roof. Constructed circa 1952, the building is constructed with a concrete foundation and is not currently serviced. However, natural gas services were noted to be present on the exterior of the subject building and assumed to be the most recent means of heating and cooling for the building.

The vacant one-storey (with one basement level) residential dwelling addressed 1196 Cummings Avenue is finished on the exterior with vinyl siding and pebble stucco in addition to a sloped and shingled style roof. Constructed circa 1952, the building is constructed with a concrete foundation and is not currently serviced. However, natural gas services were noted to be present on the exterior of the subject building and assumed to be the most recent means of heating and cooling for the building.

A storage shed is present to the west of the residential duplex on the 1196 Cummings Avenue property. The storage shed is constructed with a wood frame and is finished on the exterior with vinyl siding in addition to sloped and shingled style roof. The storage shed has been outfitted to be used as a leisure space with full electricity. The storage shed was used for the storage of miscellaneous items at the time of the site inspection.

Two small storage sheds are present on the southwest corner of the 1196 Cummings Avenue property. Both of which are constructed with metal siding and sloped and shingled style roofs. The two storage sheds were used for the storage of miscellaneous items at the time of the site inspection.

No other buildings or permanent structures are present on the Phase I Property.

#### **Subsurface Structures and Utilities**

The Phase I Property is situated in a municipally serviced area. Underground utility services on the subject land include natural gas, electricity, cable, water and sewer services. Services enter the Phase I Property from Cummings Avenue.

No subsurface structures, potable wells or private sewage systems were observed on the Phase I Property at the time of the site visit.

Report: PE5990-1 Page 18



#### **Site Features**

The subject buildings occupy the northeast, east-central and southeast portions of the Phase I Property, with the remainder consisting of gravel parking areas and landscaped areas. At the time of the site visit, no evidence of fill material, spills, staining, stressed vegetation, or visual or olfactory evidence of contamination were noted.

No other fuels or chemicals, or signs of ASTs or USTs were observed on the exterior of the property at the time of the site inspection.

Site drainage typically occurs through infiltration and sheet flow to catch basins located along Cummings Avenue. The Phase I Property has a gentle slope to the east and is slightly above the grade of Cummings Avenue. The regional topography slopes down to the west towards the Rideau River. Groundwater within the Phase I Study Area is generally expected to flow towards the west.

Site features are presented on Drawing PE5990-1 – Site Plan, provided in the Figures section following the text.

#### **Potential Environmental Concerns**

# □ Fuels and Chemical Storage

No aboveground storage tanks (ASTs) or signs of underground storage tanks (USTs) were observed on the exterior of the Phase I Property at the time of the site inspection.

# ■ Waste Management

Solid, non-hazardous waste is stored in containers along the exterior of the west face of the 1184 Cummings Avenue property and is collected by a licensed contractor on a regular basis. No waste is currently generated on the 1188 and 1196 Cummings Avenue portions of the Phase I Property. No environmental concerns were identified with respect to waste management practices on the Phase I Property.

#### ☐ Fill Material

No evidence of fill material was observed on the exterior of the Phase I Property at the time of the site inspection.

Report: PE5990-1 Page 19



□ Polychlorinated Biphenyls (PCBs) and Transformer (	]	Polychlorinated	Biphenvis	(PCBs)	and	Transformer	Oi
--	---	-----------------	-----------	--------	-----	-------------	----

No potential sources of PCBs or transformer oil were observed on the exterior of the Phase I Property at the time of the site inspection.

#### Interior Assessment

A general description of the residential dwelling at 1184 Cummings Avenue is as follows:

Floors consist of poured concrete, ceramic tile, carpet, and laminate;

	Walls consist of concrete blocks or drywall; Ceilings consist of drywall or exposed wood joists; Lighting is provided by fluorescent and incandescent fixtures.
the ba buildi or sig	ng throughout the building is provided by a natural gas-fired boiler located in asement. No drains, pits or sumps were observed on the interior of the subjecting at the time of the site inspection. No aboveground storage tanks (ASTs) as of underground storage tanks (USTs) were observed on the interior of the rty at the time of the site visit.
A ger follow	neral description of the residential dwelling at 1188 Cummings Avenue is as s:
3 3 3	Floors consist of concrete, hardwood, vinyl tiles, laminate and ceramic tiles; Walls consist of drywall and wood panelling; Ceilings are finished with suspended ceiling tiles, drywall and stippled plaster;

An out-of-service natural gas fired furnace and water heater were identified in the basement of the 1188 Cummings Avenue residential dwelling. No drains, pits or sumps were observed on the interior of the subject building at the time of the site inspection. No aboveground storage tanks (ASTs) or signs of underground storage tanks (USTs) were observed on the interior of the property at the time of the site visit. Water damaged ceilings and suspected mould growth were observed in the 1188 Cummings Avenue residential dwelling.

Lighting is provided by fluorescent and incandescent fixtures.

Report: PE5990-1 Page 20



A	general	description	of the	residential	dwelling a	at 1196	Cummings	Avenue	is as
fc	llows:								

Floors consist of hardwood, vinyl tiles and linoleum;
Walls consist of concrete block and drywall;
Ceilings are finished with drywall and stippled plaster;
Lighting is provided by fluorescent and incandescent fixtures.

An out-of-service natural gas fired furnace and water heater were identified in the basement of the 1196 Cummings Avenue residential dwelling. No drains, pits or sumps were observed on the interior of the subject building at the time of the site inspection. No aboveground storage tanks (ASTs) or signs of underground storage tanks (USTs) were observed on the interior of the property at the time of the site visit.

### **Potentially Hazardous Building Products**

### ■ Asbestos-Containing Materials (ACMs)

Based on the age of the subject buildings (circa 1952), potential ACMs identified at the time of the site inspection include pebble stucco, vinyl floor tiles, linoleum flooring, drywall joint compound, stippled plaster and suspended ceiling tiles. The materials in the 1184 Cummings Avenue residential dwelling were observed to be in good condition at the time of the site inspection and do not pose an immediate concern.

#### ☐ Lead-Based Paints (LBPs)

Based on the age of the subject buildings (circa 1952), LBPs may be present within the structures on original or older painted surfaces. Painted surfaces in the 1184 Cummings Avenue residential dwelling were generally observed to be in good condition at the time of the site inspection, and do not pose an immediate concern.

# □ Polychlorinated Biphenyls (PCBs) and Transformer Oil

No concerns with respect to PCBs or transformer oil were identified within the subject buildings at the time of the site inspection.

# ☐ Urea Formaldehyde Foam Insulation (UFFI)

No signs of UFFI were noted at the time of the site visit, although wall and ceiling cavities were not inspected.

Report: PE5990-1 Page 21



#### **Other Potential Environmental Concerns**

#### ☐ Fuel and Chemical Storage

The subject buildings are heated with either natural gas-fired equipment and/or electrical baseboard heaters. No evidence of ASTs or USTs was observed on the Phase I Property at the time of the site visit.

No chemicals, with the exception of common household cleaning and maintenance chemicals, were observed within the subject buildings.

#### ☐ Wastewater Discharge

Wastewater discharged from the portion of the Phase I Property addressed 1184 Cummings Avenue includes wash water and sewage. No wastewater is currently generated at the 1188 and 1196 Cummings Avenue properties. No concerns were noted with regard to wastewater discharge at the Phase I Property.

## □ Ozone Depleting Substances (ODSs)

Potential sources of ODSs observed on-site include refrigerators, fire extinguishers, and exterior air conditioner units.

These appliances were noted to be in good condition at the time of the site inspection and should be regularly serviced by a licensed contractor on a regular basis.

## **Neighbouring Properties**

An inspection of the neighbouring properties was conducted from publicly accessible areas at the time of the site visits. Land use adjacent to the Phase I Property was as follows:

riope	ity was as lollows.
	North – Weldon Drive, followed by a community building and residential dwellings;
	South – a retail fuel outlet, followed by Ogilvie Road and vacant land; East – Cummings Avenue, followed by a commercial plaza and residential dwellings;
	West – Residential dwellings, followed by Murdock Gate.

Report: PE5990-1 Page 22

Ottawa, Ontario



Land use within the Phase I Study generally consists of residential use to the west and north and commercial use to the east and south. As previously discussed, the retail fuel outlet addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property).

Current land use and PCAs identified in the Phase I Study Area are presented on Drawing PE5990-2 – Surrounding Land Use Plan.

# 7.0 REVIEW AND EVALUATION OF INFORMATION

#### 7.1 Current and Past Uses

Based on city directories, aerial photographs and personal interviews, the Phase I Property was first developed with the existing residential dwellings circa 1952.

### Potentially Contaminating Activities (PCAs)

No historical or existing potentially contaminating activities were identified on the Phase I Property.

A total of 10 off-site PCAs (existing and historical) were identified within the Phase I Study Area but are not considered to result in APECs on the Phase I Property due to their respective separation distances and/or cross/down-gradient orientations with respect to the Phase I Property. The retail fuel outlet addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property).

All PCAs identified within the Phase I Study Area are presented on Drawing PE5990-2 – Surrounding Land Use Plan in the Figures section of the report, following the text.

#### **Areas of Potential Environmental Concern (APECs)**

No areas of potential environmental concern were identified on the Phase I Property.

Report: PE5990-1 Page 23



1184, 1188 and 1196 Cummings Avenue Ottawa, Ontario

#### **Contaminants of Potential Concern (CPCs)**

Since no APECs were identified there are no contaminants of potential concern identified on the Phase I Property.

# 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 the information from NRCAN, bedrock in the area of the site consists of shale of the Billings Formation. Based on the maps, the surficial geology consists of till with an overburden thickness ranging from 1 to 5 m.

The topographic maps indicate that the regional topography in the general area of the Phase I Property sloping gently downward to the west towards the Rideau River. Groundwater within the Phase I Study Area is generally expected to flow towards the west.

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic map depicts topography in the area of the Phase I Property sloping gently downward to the west towards the Rideau River. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

#### Fill Placement

No evidence of fill material was observed on the exterior of the Phase I Property at the time of the site inspection.

# Water Bodies and Areas of Natural Significance

No areas of natural significance or water bodies were identified on the Phase I Property or within the Phase I Study Area.

#### **Drinking Water Wells**

Records of historical potable wells were identified for properties within the Phase I Study Area. These wells are considered to have been abandoned and no longer in use; the Phase I Property and properties within the Phase I Study Area are currently provided with municipal services.

Report: PE5990-1 Page 24

Ottawa, Ontario



#### **Monitoring Wells**

A total of 40 well records were identified within he Phase I Study Area. Two monitoring well records were identified for the portion of the Phase I Property addressed 1196 Cummings Avenue. The monitoring wells were drilled in 2019 to depths ranging from 6.1 to 7.0 m below ground surface (mbgs). The soil profile was reported to consist of topsoil underlain by sand with stones. Shale bedrock was encountered at a depth of 2.4 m below ground surface in both wells. The wells were installed as a part of the 2019 Phase II ESA conducted on the Phase I Property.

Five monitoring well records were identified for monitoring wells drilled in 2014, at the property addressed 1134 Ogilvie Road, approximately 80 m southeast of the Phase I Property, where an existing retail was identified. The wells were drilled to depths ranging from 2.8 to 4.6 m below ground surface (mbgs). No other pertinent information was provided in these records.

Two monitoring well records were identified at the property addressed 1150 Ogilvie Road, approximately 105 m southeast of the Phase I Property, adjacent to the east of the aforementioned existing retail fuel outlet (at 1134 Ogilvie Road). The wells were drilled to depths ranging from 3.1 to 4.3 m below ground surface (mbgs). No other pertinent information was provided in these records.

The remaining monitoring well records pertain to monitoring wells approximately 100 m or more away from the Phase I Property and are not considered to pose an environmental concern to the Phase I Property. Based on the well records, the stratigraphy in the general area of the Phase I Property consists of silty sand or clay underlain by shale bedrock encountered at depths ranging from approximately 0.61 to 7.6m below grade. A copy of the well records has been included in Appendix 2.

#### **Existing Buildings and Structures**

The Phase I Property is currently occupied by a two-storey residential duplex (1184 Cummings Avenue), two vacant one-storey residential dwellings (1188 and 1194 Cummings Avenue) and five outbuildings of various uses.

The two-storey residential duplex addressed 1184 Cummings Avenue is finished on the exterior with brick, and vinyl siding in addition to a sloped and shingled style roof. Constructed circa 1952, the building is constructed with a concrete foundation and is currently heated and cooled via a combination of natural gas-and electric means.

Report: PE5990-1 Page 25



A storage shed is present to the west of the residential duplex on the 1184 Cummings Avenue property. The storage shed is constructed with a wood frame, plywood walls and flooring, in addition to a sloped weather-proof membrane roof. The storage shed has been outfitted to be used as a leisure space with full electricity.

A second storage shed is present on the northwest corner of the 1184 Cummings Avenue property. The second storage shed is constructed with a wood frame, plywood walls and a sloped and shingled style roof. The second storage shed was used to store various household items and yard maintenance equipment at the time of the site inspection.

The vacant one-storey (with one basement level) residential dwelling addressed 1188 Cummings Avenue is finished on the exterior with vinyl siding and concrete block in addition to a sloped and shingled style roof. Constructed circa 1952, the building is constructed with a concrete foundation and is not currently serviced. However, natural gas services were noted to be present on the exterior of the subject building and assumed to be the most recent means of heating and cooling for the building.

The vacant one-storey (with one basement level) residential dwelling addressed 1196 Cummings Avenue is finished on the exterior with vinyl siding and pebble in addition to a sloped and shingled style roof. Constructed circa 1952, the building is constructed with a concrete foundation and is not currently serviced. However, natural gas services were noted to be present on the exterior of the subject building and assumed to be the most recent means of heating and cooling for the building.

A storage shed is present to the west of the residential duplex on the 1196 Cummings Avenue property. The storage shed is constructed with a wood frame and is finished on the exterior with vinyl siding in addition to sloped and shingled style roof. The storage shed has been outfitted to be used as a leisure space with full electricity. The storage shed was used for the storage of miscellaneous items at the time of the site inspection.

Two small storage sheds are present on the southwest corner of the 1196 Cummings Avenue property. Both of which are constructed with metal siding and sloped and shingled style roofs. The two storage sheds were used for the storage of miscellaneous items at the time of the site inspection.

No other buildings or permanent structures are present on the Phase I Property.

Report: PE5990-1 Page 26



#### Subsurface Structures and Utilities

The Phase I Property is situated in a municipally serviced area. Underground utility services on the subject land include natural gas, electricity, cable, water and sewer services. Services enter the Phase I Property from Cummings Avenue.

No potable wells or private sewage systems were observed on the Phase I Property at the time of the site visit. No subsurface structures were identified at the time of the site visit.

#### **Neighbouring Land Use**

Land use within the Phase I Study generally consists of residential use to the west and north and commercial use to the east and south. As previously discussed, the retail fuel outlet addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property). Current land use and PCAs identified in the Phase I Study Area are presented on Drawing PE5990-2 – Surrounding Land Use Plan.

# Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, no historical or existing potentially contaminating activities were identified on the Phase I Property. A total of 10 off-site PCAs (existing and historical) were identified within the Phase I Study Area but are not considered to result in APECs on the Phase I Property due to their respective separation distances and/or cross/down-gradient orientations with respect to the Phase I Property. The retail fuel outlet addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property, is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA (conducted on the 1188 and 1196 portions of the Phase I Property). As previously discussed in Section 7.1, all PCAs identified within the Phase I Study Area are presented on Drawing PE5990-2 – Surrounding Land Use Plan in the Figures section of the report, following the text.

As per Section 7.1 of this report, no areas of potential environmental concern were identified on the Phase I Property.

Report: PE5990-1 Page 27



#### **Contaminants of Potential Concern**

As per Section 7.1 of this report, no contaminants of potential concern were identified on the Phase I Property.

#### 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 no PCAs that have resulted in APECs on the Phase I Property.

A variety of independent sources were consulted as part of this assessment, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

# 8.0 CONCLUSIONS

#### 8.1 Assessment

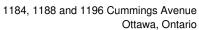
Paterson Group was retained by TCU Development Corporation to conduct a Phase I-Environmental Site Assessment (ESA) for the properties addressed 1184, 1188 and 1196 Cummings Avenue, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the Phase I Property and 250m Phase I Study Area, and to identify any environmental concerns with the potential to have impacted the Phase I Property.

According to the historical research and personal interviews, the Phase I Property was first developed with the existing residential dwellings circa 1952. No historical potentially contaminating activities (PCAs) were identified on the Phase I Property.

Based on available historical information, adjacent and surrounding properties within the Phase I Study Area were primarily used for residential and commercial purposes. Historical off-site PCAs include former retail fuel outlets, an automotive service garage and a contractors yard (with an associated underground storage tank). Based on the separation distances and/or down/cross-gradient orientation with respect to the Phase I Property, these PCAs are not considered to result in areas of potential environmental concern (APEC) on the Phase I Property.

Following the historical research, a site visit was conducted. The Phase I Property is currently occupied by a two-storey residential duplex (1184 Cummings Avenue), two vacant one-storey residential dwellings (1188 and 1194 Cummings Avenue) and five outbuildings of various uses. No concerns were identified with the current use of the Phase I Property.

Report: PE5990-1 Page 28





The current uses of the adjacent and neighbouring properties within the Phase I Study Area consists of residential use to the west and north and commercial use to the east and south. A retail fuel outlet was identified at the property addressed 1111 Ogilvie Road, adjacent to the south of the Phase I Property. The retail fuel outlet is not considered to represent an environmental concern to the Phase I Property based on the results of the 2019 Phase II ESA conducted on the 1188 and 1196 portions of the Phase I Property. Based on the separation distances and/or down/cross-gradient orientation with respect to the Phase I Property, remaining existing PCAs in the Phase I Study Area are not considered to result in areas of potential environmental concern (APEC) on the Phase I Property.

Based on the findings of the Phase I ESA, it is our opinion that a Phase II-Environmental Site Assessment is not required for the Phase I Property.

Report: PE5990-1 Page 29

M.S. D'ARCY

90377839

NOVINCE OF ONTAR

Ottawa, Ontario



#### 9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04, as amended, and meets the requirements of CSA Z768-01 (reaffirmed 2022). The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

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

This report was prepared for the sole use of the TCU Development Corporation. Permission and notification from the TCU Development Corporation and Paterson will be required to release this report to any other party.

#### Paterson Group Inc.

Jeremy Camposarcone, B.Eng.

Mark D'Arcy, P.Eng, Q.P.ESA

#### **Report Distribution:**

□ TCU Development Corporation

Paterson Group

Report: PE5990-1 Page 30



## 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 Municipal Coal Gasification Plant Site Inventory, 1991.

MECP document titled "Waste Disposal Site Inventory in Ontario".

MECP Brownfields Environmental Site Registry.

MNR Areas of Natural Significance.

MECP Water Well Record Inventory.

Chapman, L.J., and Putnam, D.F., 1984: 'The Physiography of Southern Ontario, Third Edition', Ontario Geological Survey Special Volume 2.

# **Municipal Records**

City of Ottawa Document "Old Landfill Management Strategy, Phase I - Identification of Sites.", prepared by Golder Associates, 2004. geoOttawa: City of Ottawa electronic mapping website.

City of Ottawa Historical Land Use Inventory (HLUI) Database

#### **Local Information Sources**

Personal Interviews

Previous Engineering Reports

Environmental Risk Information Services (ERIS) Report, February 27, 2023 Plan of Survey by Annis, O'Sullivan, Vollebekk Ltd., dated March 5, 2013.

#### **Public Information Sources**

Google Earth.

Google Maps/Street View.

Report: PE5990-1 Page 31

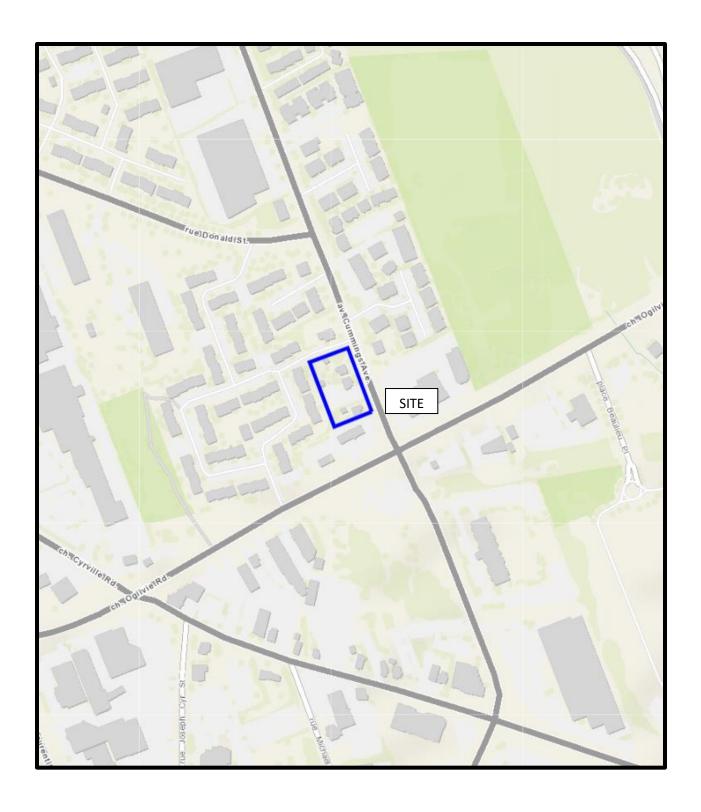
# **FIGURES**

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

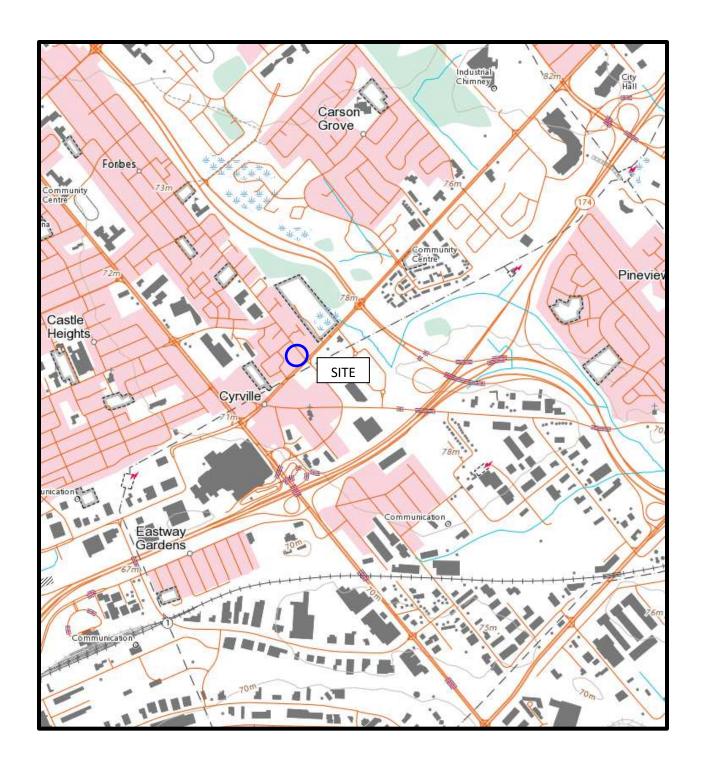
**DRAWING PE5990-1 - SITE PLAN** 

DRAWING PE5990-2 - SURROUNDING LAND USE PLAN



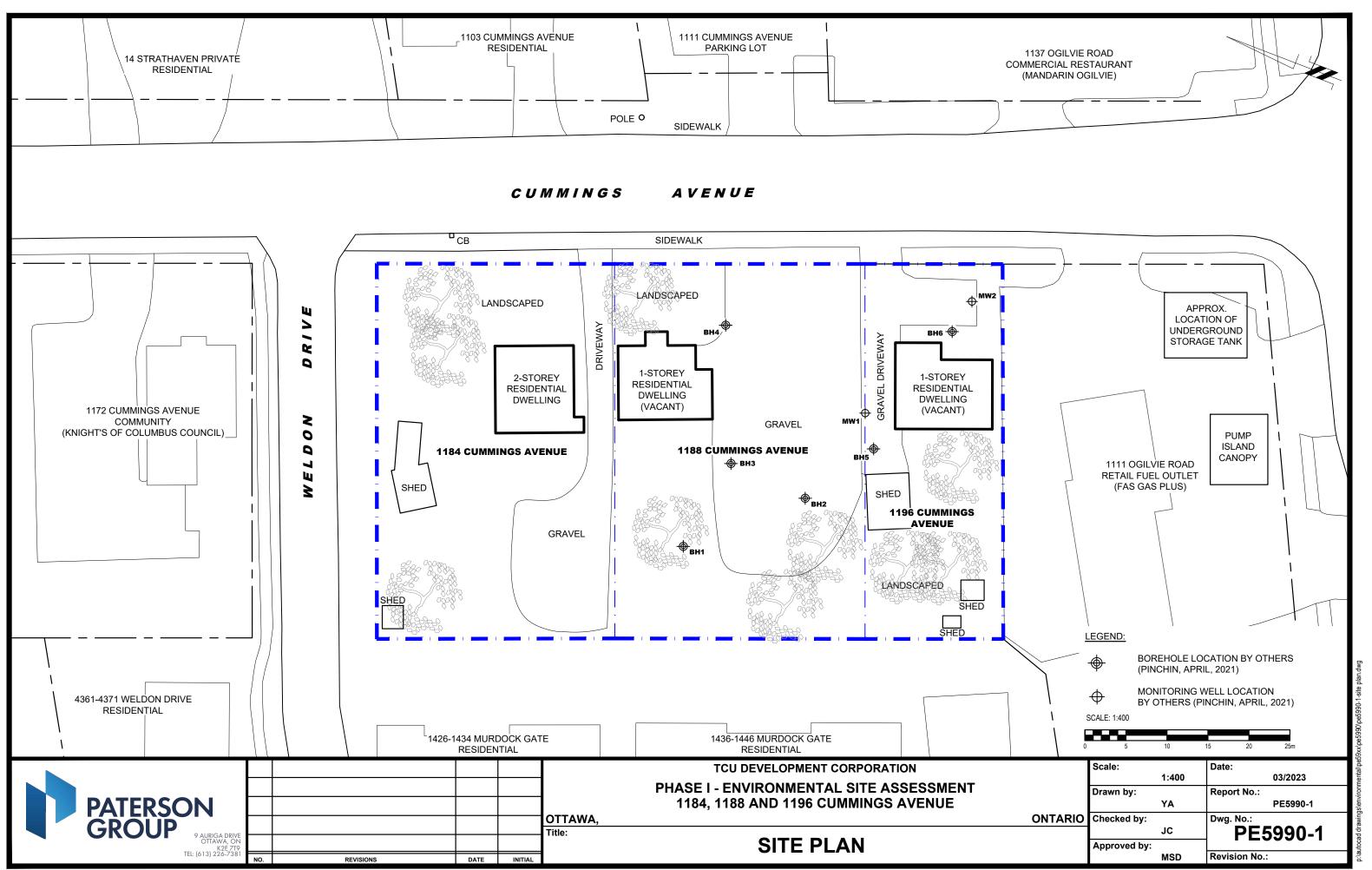
# FIGURE 1 KEY PLAN

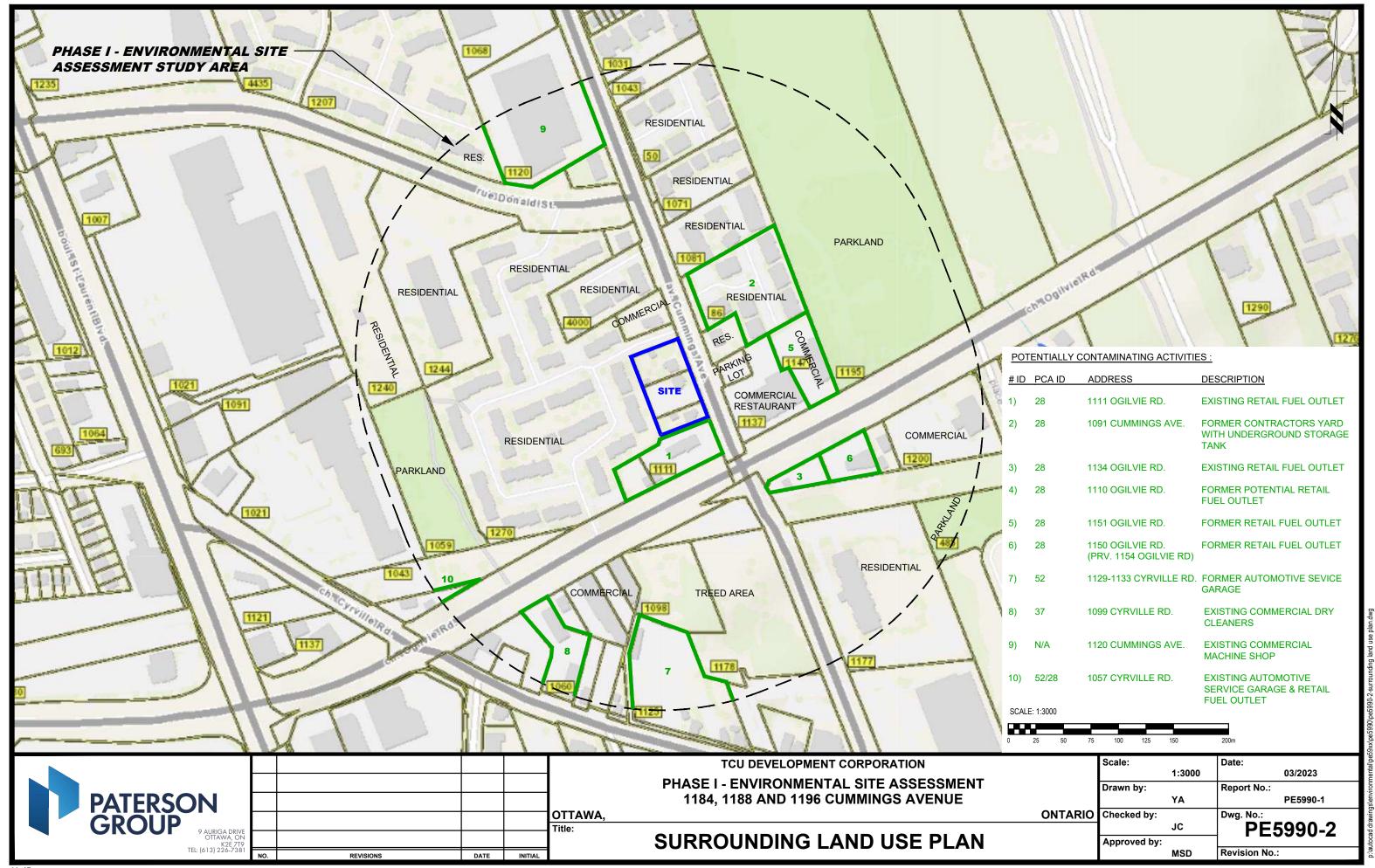




# FIGURE 2 TOPOGRAPHIC MAP







# **APPENDIX 1**

PLAN OF SURVEY

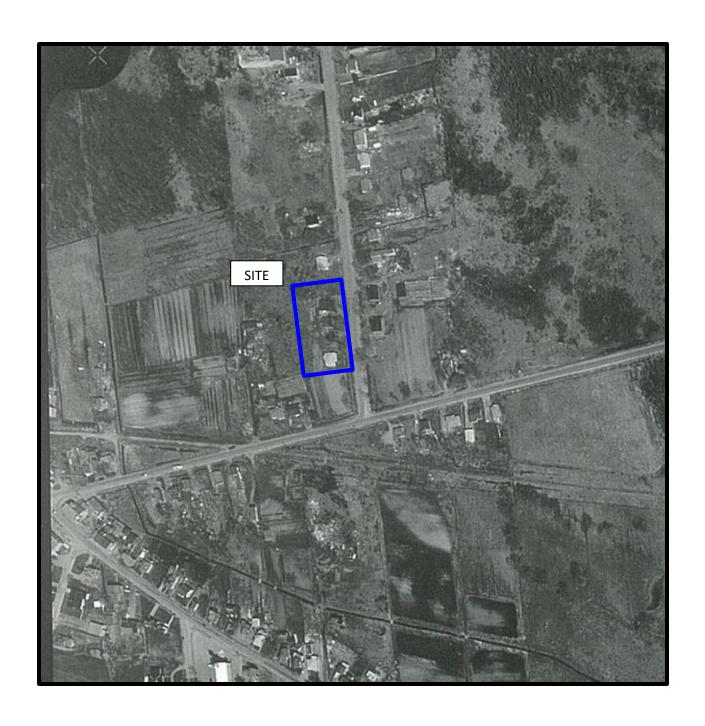
AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS



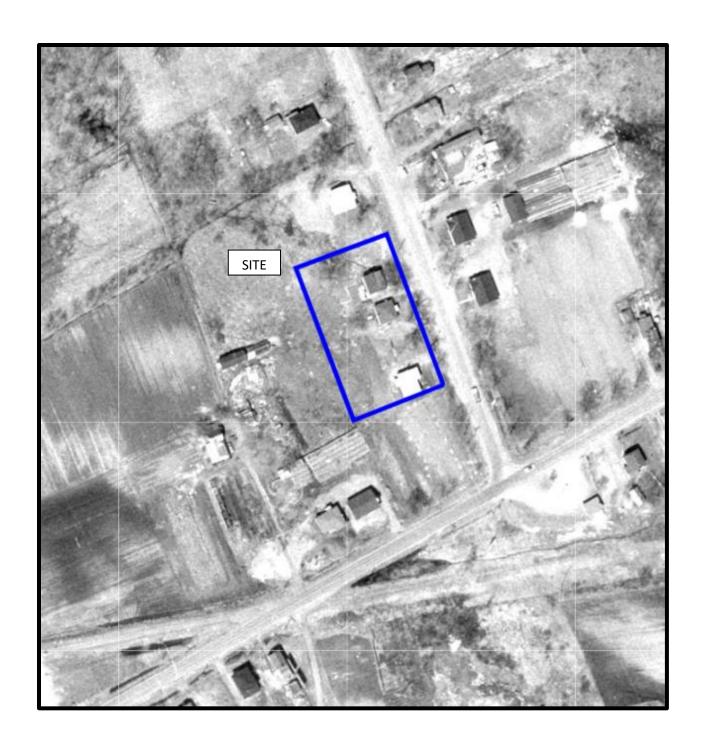
AERIAL PHOTOGRAPH 1945





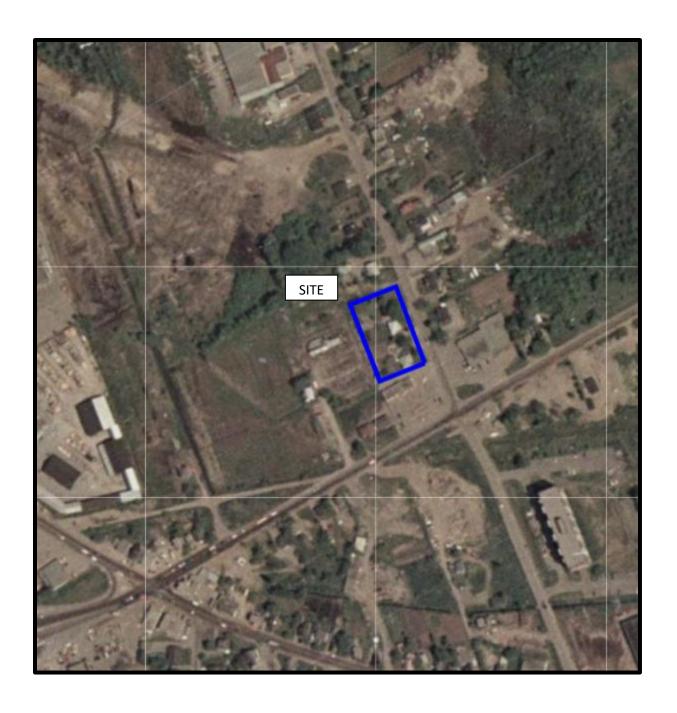
AERIAL PHOTOGRAPH 1952





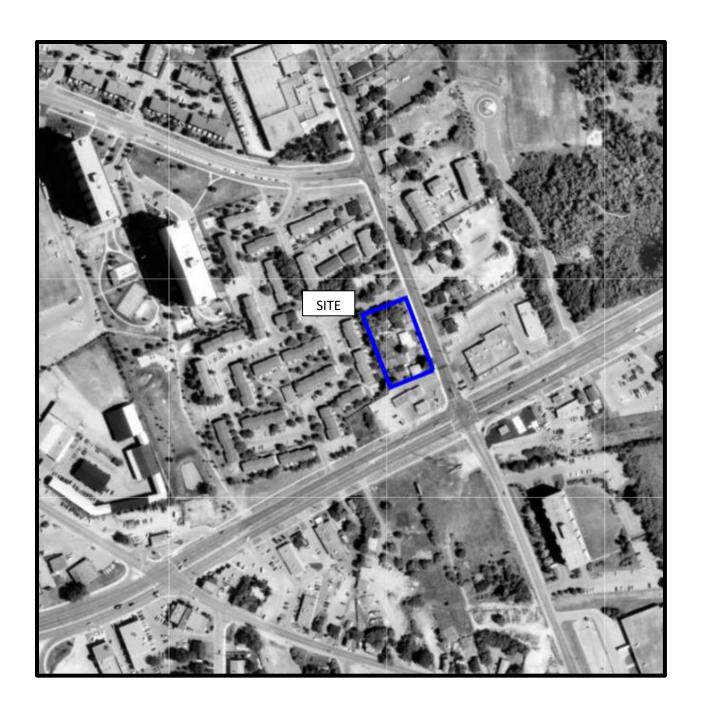
AERIAL PHOTOGRAPH 1965





AERIAL PHOTOGRAPH 1976





AERIAL PHOTOGRAPH 1991





AERIAL PHOTOGRAPH 2002





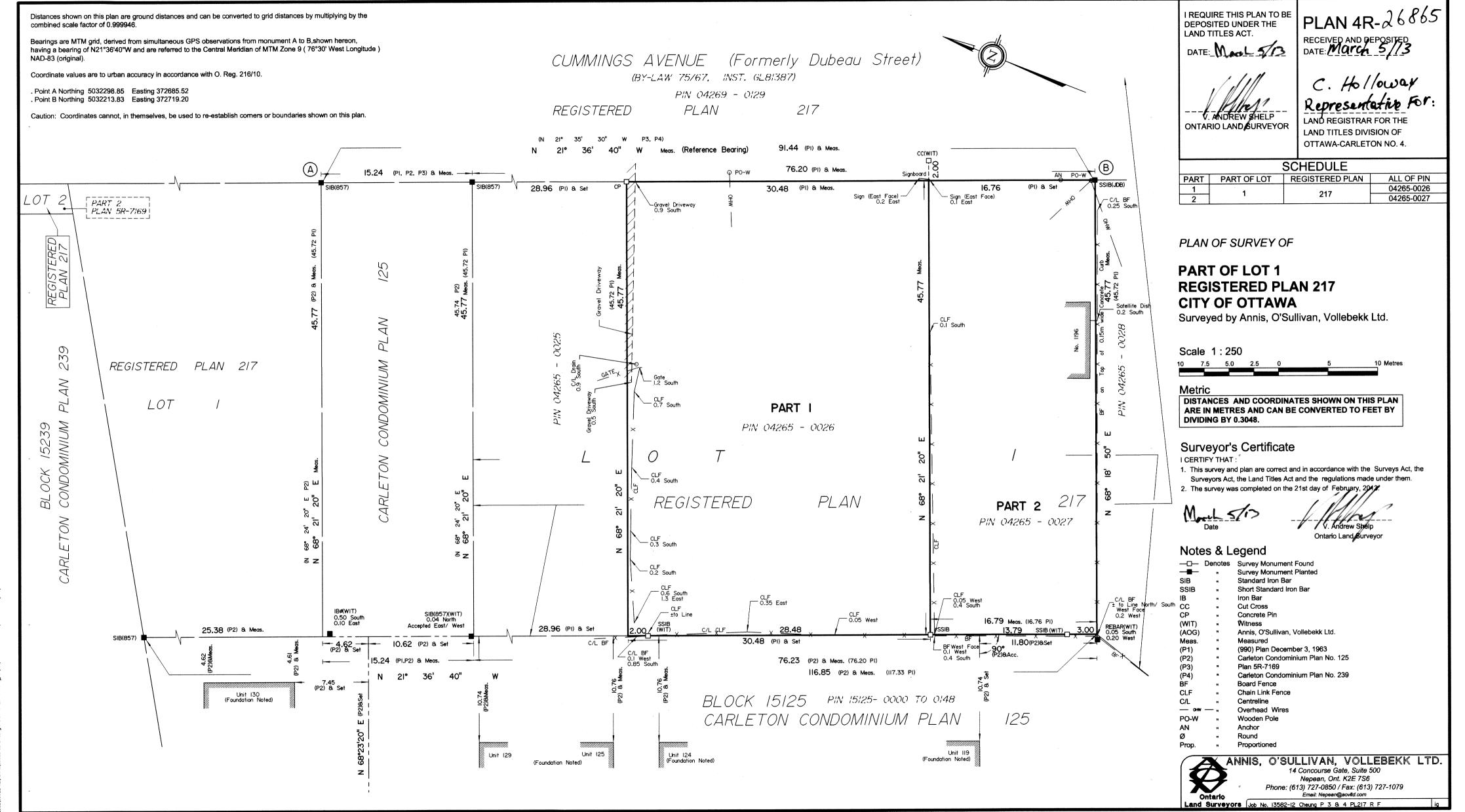
AERIAL PHOTOGRAPH 2011





AERIAL PHOTOGRAPH 2021





\2012\13582-12\FINAL\13582-12 Cheuna P 3 & 4 Pt217 R F.dwa, 05/03/2013 9:52:18 AM, KIP 7700 M



Photograph 1: View of the front of 1184 Cummings Avenue residential dwelling, facing west.



Photograph 2: View of the outbuilding on the 1184 Cummings Avenue property, facing north.





Photograph 3: View of the storage shed on the 1184 Cummings Avenue property, facing north.



Photograph 4: View of the front of 1188 Cummings Avenue residential dwelling, facing west.





Photograph 5: View of the front of 1196 Cummings Avenue residential dwelling, facing west.



Photograph 6: View of the outbuilding on the 1196 Cummings Avenue property, facing west.





Photograph 7: View of the storage sheds on the 1196 Cummings Avenue property, facing south.



Photograph 8: View of the retail fuel outlet on the 1111 Ogilvie Road property from the southeast corner of the Phase I Property, facing northwest.



	Site Photographs	
PE5990	1184, 1188 and 1196 Cummings Avenue Ottawa ON	March 7, 2023



# **APPENDIX 2**

# MECP FREEDOM OF INFORMATION SEARCH TSSA CORRESPONDANCE CITY OF OTTAWA HLUI SEARCH ERIS REPORT

# Ministry of the Environment, Conservation and Parks

Access and Privacy Office

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



March 9, 2023

Jeremy Camposarcone
Paterson Group
9 Auriga Drive
Ottawa, Ontario K2E 7T9
jcamposarcone@patersongroup.ca

Dear Jeremy Camposarcone:

RE: MECP FOI A-2023-01232, Your Reference PE5990 – Decision Letter

This letter is in response to your request made pursuant to the Freedom of Information and Protection of Privacy Act (the Act) relating to 1184, 1188 and 1196 Cummings Avenue, Ottawa.

After a thorough search through the files of the ministry's Ottawa District Office, Environmental Investigations and Enforcement Branch (EIEB), and Safe Drinking Water Branch (SDW) no records were located responsive to your request. **This file is now closed.** 

You may request a review of my decision within 30 days from the date of this letter by contacting the Information and Privacy Commissioner/Ontario at http://www.ipc.on.ca. Please note there may be a fee associated with submitting the appeal.

If you have any questions, please contact Tolani Abraham at Tolani. Abraham 2@ontario.ca.

Yours truly,

ORIGINAL SIGNED BY

Ryan Gunn Manager (A), Access and Privacy Office

# **Jeremy Camposarcone**

From: Public Information Services <publicinformationservices@tssa.org>

**Sent:** February 27, 2023 3:02 PM **To:** Jeremy Camposarcone

**Subject:** RE: Records Search Request - PE5990

Hello,

## **RECORD FOUND IN CURRENT DATABASE**

Thank you for your request for confirmation of public information. TSSA has performed a preliminary search of TSSA's current database.

We confirm that there are records in our database of any <u>fuel storage tanks</u> at the subject address(es).

Inventory Number	Address	City	Province	Postal Code	Status	Asset Type / Inventory Item
	1111 OGILVIE					FS GASOLINE STATION - FULL
10083411	RD	GLOUCESTER	ON	K1J 7P7	EXPIRED	SERVE
	1111 OGILVIE					FS GASOLINE STATION - FULL
10105915	RD	GLOUCESTER	ON	K1J 7P7	EXPIRED	SERVE
	1111 OGILVIE					FS GASOLINE STATION - FULL
10105948	RD	GLOUCESTER	ON	K1J 7P7	EXPIRED	SERVE
	1111 OGILVIE					
11287886	RD	GLOUCESTER	ON	K1J 7P7	Active	FS LIQUID FUEL TANK
	1111 OGILVIE					
11287906	RD	GLOUCESTER	ON	K1J 7P7	Active	FS LIQUID FUEL TANK
	1111 OGILVIE					
11287923	RD	GLOUCESTER	ON	K1J 7P7	Active	FS LIQUID FUEL TANK
	1111 OGILVIE					
11287944	RD	GLOUCESTER	ON	K1J 7P7	Active	FS LIQUID FUEL TANK
	1111 OGILVIE					FS GASOLINE STATION - SELF
29160194	RD	GLOUCESTER	ON	K1J 7P7	Active	SERVE
	1111 OGILVIE					
64508685	RD	GLOUCESTER	ON	K1J 7P7	Active	FS LIQUID FUEL TANK
	1111 OGILVIE					
64508686	RD	GLOUCESTER	ON	K1J 7P7	Active	FS LIQUID FUEL TANK

<u>This is not a confirmation that there are no records in the archives</u>. For a further search in our archives, please submit an application for release of public information (PI Form) through TSSA's new Service Prepayment Portal. The associated fee must be paid via credit card (Visa or MasterCard) through a secure site.

Please follow the steps below to access the new application(s) and Service Prepayment Portal:

- 1. Click Release of Public Information TSSA TSSA and click "need a copy of a document";
- 2. Select the appropriate application, download it and complete it in full; and
- 3. Proceed to page 3 of the application and click the link TSSA Service Prepayment Portal under payment options (the link will take you the secure site to pay for the release via credit card).

Accessing the Service Prepayment Portal:

- 1. Select new or existing customer (\*if you are an existing customer, you will need your account # & postal code to access your account);
- 2. Select the program area: AD (Amusement Devices), BPV (Boilers and Pressure Vessels), ED (Elevating Devices), FS (Fuels Services), OE (Operating Engineers) or SKI (Ski Lifts) and click continue;
- 3. Enter the application form number (obtained from bottom left corner of application form) and click continue;
  - a. When selecting the application form number from the drop-down menu, please make sure you select the application that begins with "PI" (i.e. PI-FS, PI-BPV etc.);
- 4. Complete the primary contact information section;
- 5. Complete the fees section;
- 6. Upload your completed application; and
- 7. Upload supporting documents (if required) and click continue.

Once all steps have been successfully completed, you will receive your receipt via email.

Questions? Please contact TSSA's Public Information Release team at <a href="mailto:publicinformationservices@tssa.org">publicinformationservices@tssa.org</a>.

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,



## Kimberly Gage | Public Information Agent

Legal 345 Carlingview Drive Toronto, Ontario M9W 6N9

Tel: +1 416-734-3348 | Fax: +1 416-734-3568 | E-Mail: kgage@tssa.org

www.tssa.org





From: Jeremy Camposarcone



#### Winner of 2022 5-Star Safety Cultures Award

<JCamposarcone@patersongroup.ca>
Sent: Monday, February 27, 2023 2:44 PM

To: Public Information Services <publicinformationservices@tssa.org>

Subject: Records Search Request - PE5990

[CAUTION]: This email originated outside the organisation.

Please do not click links or open attachments unless you recognise the source of this email and know the content is safe.

Good afternoon,

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

Cummings Avenue: 1184, 1188, 1196, 1172, 1111, 1103;

Ogilvie Road: 1101, 1111, 1137

Belgate Way: 1270

Best Regards,



## Jeremy Camposarcone, B.Eng.

Junior Environmental Engineer

TEL: (613)-226-7381 CELL: (343)-999-7255 9 AURIGA DRIVE OTTAWA ON K2E 7T9 patersongroup.ca

TEMPORARY SHORING DESIGN SERVICES ARE NOW AVAILABLE, PLEASE CONTACT US TO SEE HOW WE CAN HELP!

OUR DIRECT LINE FOR MATERIALS TESTING INSPECTION BOOKING HAS BEEN UPDATED, PLEASE CALL **613-696-9677** TO BOOK AN INSPECTION.

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

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



# **Historic Land Use Inventory**

**Application Form** 

# **Notice of Public Record**

All information and materials required in support of your application shall be made available to the public, as indicated by Section 1.0.1 of *The Planning Act*, R.S.O. 1990, C.P.13.

## **Municipal Freedom of Information and Protection Act**

Personal information on this form is collected under the authority the *Planning Act*, RSO 1990, c. P. 13 and will be used to process this application. Questions about this collection may be directed by mail to Manager, Business Support Services, Planning, Real Estate and Economic Development Department, 110 Laurier Avenue West, Ottawa, K1P 1J1, or by phone at (613) 580-2424, ext. 24075

	Background Information
*Site Address or Location:	1184, 1188 & 1196 Commings Avenue *Mandatory Field
Applicant/Agent I	nformation:
Name:	Jereny Camposorcone - Paterson Group
Mailing Address:	9 Auriga Drive
Telephone:	343-999-7255 Email Address: Camposarcure Opatesongroup.ca
Registered Prope	rty Owner Information: Same as above
Name:	TW Development Corporation
Mailing Address:	
Telephone:	Email Address:

# **Site Details** Legal Description and PIN: What is the land currently used for? Lot depth: Lot area: 0 m<sup>2</sup>Lot frontage: m Lot area: (irregular lot) OR Does the site have Full Municipal Services: **Required Fees** Please don't hesitate to visit the Historic Land Use Inventory website more information. Fees must be paid in full at the time of application submission. **Planning Fee** \$132.00

### **Submittal Requirements**

The following are required to be submitted with this application:

- 1. Consent to Disclose Information: Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner. This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.
- 2. **Disclaimer:** Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, Real Estate and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3. A site plan or key plan of the property, its location and particular features.
- 4. Any significant dates or time frames that you would like researched.

# Disclaimer For use with HLUI Database

CITY OF OTTAWA ("the City") is the owner of the Historical Land Use Inventory ("HLUI"), a database of information on the type and location of land uses within the geographic area of Ottawa, which had or have the potential to cause contamination in soil, groundwater or surface water.

The City, in providing information from the HLUI, to \_\_\_\_\_\_\_\_("the Requester") does so only under the following conditions and understanding:

- 1. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.
- 2. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information provided by the City to the Requester is provided on the assumption that it will not be relied upon by any person whatsoever. The City denies all liability to any such persons attempting to rely on any information provided from the HLUI database.
- 3. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
- 4. Copyright is reserved to the City.
- 5. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
- 6. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
- 7. All information collected under this request and all records provided in response to this request are subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56, as amended.

Signed:

Company:



Project Property: Phase I ESA

1184, 1188 & 1196 Cummings Avenue

Gloucester ON K1J 7R8

**Project No:** *P.O.56881 / PE5990* 

Report Type: Standard Report Order No: 23022400359

Requested by: Paterson Group Inc.

Date Completed: February 27, 2023

# **Table of Contents**

Table of Contents	2
Executive Summary	3
Executive Summary: Report Summary	
Executive Summary: Site Report Summary - Project Property	
Executive Summary: Site Report Summary - Surrounding Properties	7
Executive Summary: Summary By Data Source	21
Map	39
Aerial	40
Topographic Map	41
Detail Report	42
Unplottable Summary	174
Unplottable Report	
Appendix: Database Descriptions	236
Definitions	245

#### Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERIS may obtain damages for such mis-use, including damages caused to third parties, and gives ERIS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Limited Partnership ("ERIS") using various sources of information, including information provided by Federal and Provincial government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

**Trademark and Copyright:** You may not use the ERIS trademarks or attribute any work to ERIS other than as outlined above. This Service and Report (s) are protected by copyright owned by ERIS Information Limited Partnership. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERIS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERIS.

# **Executive Summary**

_			
$\nu r \cap$	nortv	Intorn	nation:
	DELLA	1111011	nauvn.

Project Property: Phase I ESA

1184, 1188 & 1196 Cummings Avenue Gloucester ON K1J 7R8

Order No: 23022400359

**Project No:** P.O.56881 / PE5990

Coordinates:

 Latitude:
 45.427021

 Longitude:
 -75.6324805

 UTM Northing:
 5,030,583.34

 UTM Easting:
 450,522.54

UTM Zone: 18T

Elevation: 242 FT

73.88 M

**Order Information:** 

Order No: 23022400359

Date Requested: February 24, 2023

Requested by: Paterson Group Inc.

Report Type: Standard Report

Historical/Products:

# Executive Summary: Report Summary

Database	Name	Searched	Project Property	Within 0.25 km	Total
AAGR	Abandoned Aggregate Inventory	Υ	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Υ	0	0	0
AST	Aboveground Storage Tanks	Υ	0	0	0
AUWR	Automobile Wrecking & Supplies	Υ	0	0	0
BORE	Borehole	Υ	0	1	1
CA	Certificates of Approval	Υ	0	2	2
CDRY	Dry Cleaning Facilities	Υ	0	0	0
CFOT	Commercial Fuel Oil Tanks	Υ	0	0	0
CHEM	Chemical Manufacturers and Distributors	Υ	0	0	0
CHM	Chemical Register	Υ	0	0	0
CNG	Compressed Natural Gas Stations	Υ	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Υ	0	0	0
CONV	Compliance and Convictions	Υ	0	0	0
CPU	Certificates of Property Use	Υ	0	0	0
DRL	Drill Hole Database	Υ	0	0	0
DTNK	Delisted Fuel Tanks	Υ	0	26	26
EASR	Environmental Activity and Sector Registry	Υ	0	1	1
EBR	Environmental Registry	Υ	0	2	2
ECA	Environmental Compliance Approval	Υ	0	5	5
EEM	Environmental Effects Monitoring	Υ	0	0	0
EHS	ERIS Historical Searches	Υ	1	11	12
EIIS	Environmental Issues Inventory System	Υ	0	0	0
EMHE	Emergency Management Historical Event	Υ	0	0	0
EPAR	Environmental Penalty Annual Report	Υ	0	0	0
EXP	List of Expired Fuels Safety Facilities	Υ	0	0	0
FCON	Federal Convictions	Υ	0	0	0
FCS	Contaminated Sites on Federal Land	Υ	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Υ	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Υ	0	0	0
FST	Fuel Storage Tank	Y	0	13	13
FSTH	Fuel Storage Tank - Historic	Y	0	5	5
GEN	Ontario Regulation 347 Waste Generators Summary	Υ	0	51	51
GHG	Greenhouse Gas Emissions from Large Facilities	Υ	0	0	0
HINC	TSSA Historic Incidents	Υ	0	1	1
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0

Database	Name	Searched	Project Property	Within 0.25 km	Total
INC	Fuel Oil Spills and Leaks	Υ	0	2	2
LIMO	Landfill Inventory Management Ontario	Υ	0	0	0
MINE	Canadian Mine Locations	Υ	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System	Υ	0	0	0
NCPL	(NATES) Non-Compliance Reports	Υ	0	0	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Υ	0	0	0
NDSP	National Defense & Canadian Forces Spills	Υ	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal	Υ	0	0	0
NEBI	Sites National Energy Board Pipeline Incidents	Υ	0	0	0
NEBP	National Energy Board Wells	Υ	0	0	0
NEES	National Environmental Emergencies System (NEES)	Υ	0	0	0
NPCB	National PCB Inventory	Υ	0	0	0
NPRI	National Pollutant Release Inventory	Υ	0	0	0
OGWE	Oil and Gas Wells	Υ	0	0	0
OOGW	Ontario Oil and Gas Wells	Υ	0	0	0
OPCB	Inventory of PCB Storage Sites	Υ	0	0	0
ORD	Orders	Υ	0	0	0
PAP	Canadian Pulp and Paper	Υ	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Υ	0	0	0
PES	Pesticide Register	Y	0	0	0
PINC	Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	8	8
PTTW	Permit to Take Water	Υ	0	1	1
REC	Ontario Regulation 347 Waste Receivers Summary	Υ	0	0	0
RSC	Record of Site Condition	Υ	0	0	0
RST	Retail Fuel Storage Tanks	Υ	0	9	9
SCT	Scott's Manufacturing Directory	Υ	0	4	4
SPL	Ontario Spills	Υ	0	5	5
SRDS	Wastewater Discharger Registration Database	Υ	0	0	0
TANK	Anderson's Storage Tanks	Υ	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Υ	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Υ	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Υ	0	0	0
WWIS	Water Well Information System	Υ	1	23	24
		Total:	2	170	172

# Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
1	EHS		1188 Cummings Ave Ottawa ON Gloucester ON K1J 7R8	SSE/29.9	0.00	<u>42</u>
<u>2</u> .	WWIS		c1196 Cummings Ave Ottawa ON	SSE/44.7	0.00	<u>42</u>

Well ID: 7346072

# Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>3</u>	WWIS		1198 Cummings Ave Ottawa ON	SSE/56.4	0.00	<u>45</u>
			<b>Well ID:</b> 7346071			
<u>4</u>	WWIS		lot 25 con 1 ON	N/58.7	0.00	<u>49</u>
			Well ID: 1501127			
<u>5</u>	WWIS		lot 25 con 1 ON	ENE/65.9	0.00	<u>52</u>
			<b>Well ID:</b> 1501129			
<u>6</u>	wwis		lot 25 con 1 ON	NE/79.2	1.00	<u>54</u>
			<b>Well ID:</b> 1501126			
7	PRT	CALEX DIVISION OF SUNOCO ATTN ROBERTA WALSH	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>57</u>
<u>7</u>	PRT	CALEX DIVISION OF SUNOCO ATTN ROBERTA WALSH	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>57</u>
<u>7</u>	PRT	LES PETROLES CALEX LTEE	1111 OGILVIE OTTAWA ON K1J7P7	S/80.4	-1.00	<u>57</u>
<u>7</u>	PRT	CALEX DIVISION OF SUNOCO ATTN MARY MISANGYI	1111 OGILVIE OTTAWA ON K1J7P7	S/80.4	-1.00	<u>57</u>
<u>7</u>	PRT	CALEX DIVISION OF SUNOCO ATTN MARY MISANGYI	1111 OGILVIE OTTAWA ON K1J7P7	S/80.4	-1.00	<u>57</u>
<u>7</u> *	RST	CALEX SERVICE STATION	1111 OGILVIE RD GLOUCESTER ON K1J7P7	S/80.4	-1.00	<u>58</u>
<u>7</u> '	GEN	OLCO Petrolleum	1111 Ogilvie Ottawa ON K1J 7P7	S/80.4	-1.00	<u>58</u>
<u>7</u> '	FSTH	1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER OTTAWA ON K1J 7P7	S/80.4	-1.00	<u>58</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>7</u>	FSTH	1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>59</u>
<u>7</u>	CA	1633981 Ontario Inc.	1111 Ogilvie Rd Ottawa ON	S/80.4	-1.00	<u>59</u>
<u>7</u>	DTNK	MOT MARWAN ENTERPRISES LTD	1111 OGILVIE RD OTTAWA ON	S/80.4	-1.00	<u>59</u>
<u>7</u>	DTNK	LES PETROLES CALEX LTEE	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>60</u>
<u>7</u>	DTNK	SMS PETROLEUMS DIVISION OF SUNOCO NANCY NG	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>61</u>
<u>7</u>	DTNK	MO & MARWAN ENTERPRISES LTD	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>61</u>
<u>7</u> '	DTNK	1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON	S/80.4	-1.00	<u>62</u>
<u>7</u> '	DTNK	1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON	S/80.4	-1.00	<u>62</u>
<u>7</u> '	DTNK	1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON	S/80.4	-1.00	<u>63</u>
<u>7</u> '	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S/80.4	-1.00	<u>64</u>
<u>7</u> '	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S/80.4	-1.00	<u>64</u>
<u>z</u> *	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S/80.4	-1.00	<u>65</u>
7	FST	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>65</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>7</u>	FST	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>65</u>
7	FST	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>66</u>
<u>7</u>	FST	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>66</u>
7	FST	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>67</u>
<u>7</u>	FST	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>67</u>
<u>7</u> *	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S/80.4	-1.00	<u>68</u>
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S/80.4	-1.00	<u>68</u>
7	RST	FAS GAS PLUS	1111 OGILVIE RD UNIT 1 GLOUCESTER ON K1J7P7	S/80.4	-1.00	6 <u>9</u>
7	SPL		1111 Ogilvie Rd Ottawa ON	S/80.4	-1.00	<u>69</u>
7	ECA	1633981 Ontario Inc.	1111 Ogilvie Rd Ottawa ON K1J 7P7	S/80.4	-1.00	<u>69</u>
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>70</u>
<u>7</u>	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>70</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>71</u>
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>71</u>
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>72</u>
<u>7</u>	RST	ECONO GAS	1111 OGILVIE RD APT 1 GLOUCESTER ON K1J7P7	S/80.4	-1.00	<u>72</u>
7	DTNK	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>72</u>
<u>7</u>	DTNK	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>73</u>
<u>7</u> '	DTNK	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>73</u>
<u>7</u>	DTNK	1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S/80.4	-1.00	<u>74</u>
7	DTNK		1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S/80.4	-1.00	<u>75</u>
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>75</u>
7	GEN	1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S/80.4	-1.00	<u>76</u>
<u>8</u>	СА	MANDARIN-OGILVIE RESTAURANT	1137 OGILVIE ROAD GLOUCESTER CITY ON K1J 7P6	E/81.9	0.00	<u>76</u>
<u>8</u>	GEN	FRESH AIR EXPERIENCE INC.	1137 AGILVIE ROAD GLOUCESTER ON K1J 7P6	E/81.9	0.00	<u>76</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>8</u>	GEN	FRESH AIR EXPERIENCE INC. 15-313	1137 AGILVIE ROAD GLOUCESTER ON K1J 7P6	E/81.9	0.00	<u>77</u>
<u>8</u>	EHS		1137 Ogilvie Road and 1111 Cummings Avenue Gloucester ON K1J 7P6	E/81.9	0.00	<u>77</u>
<u>8</u>	EHS		1137 Ogilvie Road and 1111 Cummings Avenue Gloucester ON K1J 7P6	E/81.9	0.00	<u>77</u>
9	PRT	ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE W	1091 CUMMINGS AV GLOUCESTER ON K1J 7S2	ENE/86.9	1.00	<u>77</u>
<u>9</u> .	FSTH	ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER ON K1J 7S2	ENE/86.9	1.00	<u>78</u>
9	DTNK	ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER ON	ENE/86.9	1.00	<u>78</u>
<u>9</u> .	DTNK	ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA ON	ENE/86.9	1.00	<u>79</u>
9	FST	ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA ON	ENE/86.9	1.00	<u>79</u>
<u>10</u>	WWIS		lot 25 con 1 ON <i>Well ID:</i> 1501115	SE/92.0	0.00	<u>80</u>
<u>11</u>	WWIS		lot 25 con 1 ON <i>Well ID:</i> 1501124	NE/92.2	1.00	83
<u>12</u>	WWIS		lot 25 con 1 ON <i>Well ID</i> : 1510842	SW/113.8	-1.00	<u>86</u>
<u>13</u>	SPL	UNKNOWN	CUMMINGS AVE JUST SOUTH OF OLGILVIE GLOUCESTER CITY ON	SE/114.3	0.00	<u>89</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>13</u>	SPL	Labrador Spring Water <unofficial></unofficial>	OGILVIE STREET / CUMMING STREET <unofficial> Ottawa ON</unofficial>	SE/114.3	0.00	90
<u>14</u>	HINC		1085 CUMMINGS AVENUE OTTAWA ON	NNE/121.3	1.00	<u>90</u>
<u>15</u>	wwis		lot 25 con 1 ON <i>Well ID:</i> 1501128	NE/128.3	1.00	<u>91</u>
<u>16</u>	WWIS		1134 OGILVIE RD. Ottawa ON <i>Well ID:</i> 7224359	ESE/146.8	-1.03	93
<u>17</u>	wwis		1134 ON <i>Well ID</i> : 7224188	ESE/154.8	-1.03	<u>97</u>
<u>18</u>	wwis		1134 OGILVIE RD ON <i>Well ID:</i> 7224189	SE/155.6	-1.06	100
<u>19</u>	PRT	C CORP (ONTARIO) INC ATTN ACCOUNTS PAYABLE	1134 OGILVIE RD OTTAWA ON K1J8V1	ESE/160.7	-1.03	103
<u>19</u>	SPL	PIONEER PETROLEUMS LTD.	1134 OGILVIE RD GLOUCESTER SERVICE STATION OTTAWA CITY ON K1J 8V1	ESE/160.7	-1.03	103
<u>19</u>	RST	PIONEER PETROLEUMS	1134 OGILVIE RD OTTAWA ON K1J 8V1	ESE/160.7	-1.03	104
<u>19</u>	FSTH	PIONEER PETROLEUMS MANAGEMENT INC**	1134 OGILVIE RD OTTAWA ON K1J 8V1	ESE/160.7	-1.03	104
<u>19</u>	RST	PIONEER PETROLEUMS	1134 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE/160.7	-1.03	104
<u>19</u>	FSTH	PIONEER PETROLEUMS MANAGEMENT INC**	1134 OGILVIE RD OTTAWA ON	ESE/160.7	-1.03	104
<u>19</u>	DTNK	PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON K1J 8V1	ESE/160.7	-1.03	<u>105</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>19</u>	DTNK	PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON	ESE/160.7	-1.03	<u>106</u>
<u>19</u>	DTNK	PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON	ESE/160.7	-1.03	106
<u>19</u>	DTNK	PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON	ESE/160.7	-1.03	<u>107</u>
<u>19</u>	FST	PARKLAND CORPORATION	1134 OGILVIE RD OTTAWA K1J 8V1 ON CA ON	ESE/160.7	-1.03	<u>107</u>
<u>19</u>	FST	PARKLAND CORPORATION	1134 OGILVIE RD OTTAWA K1J 8V1 ON CA ON	ESE/160.7	-1.03	108
<u>19</u>	FST	PARKLAND CORPORATION	1134 OGILVIE RD OTTAWA K1J 8V1 ON CA ON	ESE/160.7	-1.03	108
<u>19</u>	RST	PIONEER PETROLEUMS	1134 OGILVIE RD GLOUCESTER ON K1J8V1	ESE/160.7	-1.03	109
<u>19</u>	SPL	Triangle Pump Service Limited	1134 Ogilvie Road Ottawa ON K1J 8V1	ESE/160.7	-1.03	109
<u>19</u>	GEN	Pioneer Energy LP	1134 Ogilvie Road Gloucester ON K1J 8V1	ESE/160.7	-1.03	<u>110</u>
<u>19</u>	RST	PIONEER PETROLEUMS	1134 OGILVIE RD GLOUCESTER ON K1J8V1	ESE/160.7	-1.03	<u>110</u>
<u>19</u>	INC	PARKLAND CORPORATION	1134 OGILVIE RD,,OTTAWA,ON,K1J 8V1, CA ON	ESE/160.7	-1.03	<u>110</u>
<u>19</u>	DTNK		1134 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE/160.7	-1.03	111
<u>20</u>	WWIS		1134 OGILVIE RD. Ottawa ON	ESE/166.8	-1.00	111

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
			<b>Well ID:</b> 7224358			
<u>21</u>	wwis		1134 ON <i>Well ID:</i> 7224187	ESE/168.4	-1.00	<u>115</u>
<u>22</u>	BORE		ON	ESE/168.9	-1.00	118
<u>23</u>	WWIS		lot 26 con 2 ON <i>Well ID</i> : 1501363	ESE/169.0	-1.00	<u>119</u>
<u>24</u>	wwis		lot 26 con 2 ON <i>Well ID:</i> 1501355	ESE/177.9	0.08	121
<u>25</u>	PRT	1085091 ONTARIO LTD	1154 OGLIVIE RD GLOUCESTER ON K1J 8V1	ESE/178.7	0.08	124
<u>25</u>	RST	TROPIC SQUARE	1154 OGILVIE RD GLOUCESTER ON K1J8V1	ESE/178.7	0.08	124
<u>25</u>	RST	FENELON'S GAZ	1154 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE/178.7	0.08	124
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE/178.7	0.08	125
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON	ESE/178.7	0.08	125
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON	ESE/178.7	0.08	126
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON	ESE/178.7	0.08	126
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE/178.7	0.08	127
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE/178.7	0.08	128

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>25</u>	DTNK	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE/178.7	0.08	128
<u>25</u>	FST	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE/178.7	0.08	129
<u>25</u>	FST	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE/178.7	0.08	129
<u>25</u>	FST	TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE/178.7	0.08	130
<u>26</u>	wwis		lot 25 con 1 ON <i>Well ID</i> : 1501123	E/183.2	1.00	130
<u>27</u>	GEN	6037682 CANADA INC.	1150 OGILVIE ROAD OTTAWA ON K1J 8V1	ESE/185.3	0.08	133
<u>27</u>	GEN	6037682 CANADA INC.	1150 OGILVIE RD OTTAWA ON K1J 8V1	ESE/185.3	0.08	133
<u>27</u>	EHS		1150 Chemin Ogilvie Ottawa ON K1J 8V1	ESE/185.3	0.08	134
<u>27</u>	GEN	6037682 Canada Inc.	1150 OGILVIE ROAD OTTAWA ON K1J 8V1	ESE/185.3	0.08	<u>134</u>
28	WWIS		1182 OGILIVE ROAD Ottawa ON <i>Well ID:</i> 7157668	ESE/193.7	-0.06	<u>134</u>
<u>29</u>	WWIS		ON <i>Well ID:</i> 7388761	S/194.7	-1.00	<u>137</u>
<u>30</u>	SCT	AFSC Future Security Controls	1088 Ogilvie Rd Gloucester ON K1J 7P8	SSW/201.2	-1.86	<u>138</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>31</u>	EHS		1098 Ogilvie Road Gloucester ON K1J 7P8	S/203.1	-0.97	<u>139</u>
<u>32</u>	INC		4297 WELDON DR, OTTAWA ON	WSW/204.5	-1.25	139
<u>33</u>	PTTW	9456-5082 Quebec Inc., as general partner for and on behalf of Lux Place L.P.	1098 Ogilvie Road and 1178 Cummings Avenue Ottawa, ON Canada ON	S/204.6	-0.97	139
<u>34</u>	EHS		1162 Ogilvie Road Gloucester ON K1J 8V1	ESE/205.6	0.00	<u>140</u>
<u>35</u>	EHS		1162 Ogilvie Road Ottawa ON	ESE/207.7	0.31	<u>140</u>
<u>36</u>	wwis		lot 25 con 1 ON <i>Well ID:</i> 1501130	ENE/211.7	2.00	<u>140</u>
<u>37</u>	wwis		1162 OGILIVE ROAD Ottawa ON Well ID: 7157667	ESE/218.4	0.00	143
38	EHS		1055 Cummings Ave Gloucester (Ottawa) ON K1J 7S2	N/218.5	1.00	<u>146</u>
<u>39</u>	GEN	FAIRVIEW FUNERAL &CREMATION SERVICES INC	1092 OGILVIE ROAD GLOUCESTER ON K1J 7P8	SSW/226.3	-1.86	147
<u>39</u>	GEN	FAIRVIEW FUNERAL AND CREMATION	1092 OGILVIE ROAD GLOUCESTER ON K1J 7P8	SSW/226.3	-1.86	<u>147</u>
<u>40</u>	GEN	EDIFICE BEAUFORT BUILDING INC.	1178 CUMMINGS OTTAWA ON K1J 7R8	SSE/231.6	-1.31	<u>147</u>
41	wwis		1043 CUMMINGS AVE OTTAWA ON Well ID: 7163232	N/235.9	1.00	148
<u>42</u>	SCT	Ambico Limited	1120 Cummings Ave Gloucester ON K1J 7R8	NW/241.5	0.00	<u>150</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
42	SCT	AMBICO LIMITED	1120 Cummings Ave Ottawa ON K1J 7R8	NW/241.5	0.00	<u>150</u>
<u>42</u>	GEN	MANIS METAL MANUFACTURING LTD.	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW/241.5	0.00	<u>150</u>
<u>42</u>	GEN	MANIS METAL MANUFACTURING LTD.	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW/241.5	0.00	<u>151</u>
<u>42</u>	GEN	AMBICO LIMITED 25-161	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW/241.5	0.00	<u>152</u>
<u>42</u>	GEN	MANIS METAL MANUFACTURING LTD. 25-161	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW/241.5	0.00	<u>152</u>
<u>42</u>	SCT	Ambico Limited	1120 Cummings Ave Gloucester ON K1J 7R8	NW/241.5	0.00	<u>153</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON	NW/241.5	0.00	<u>153</u>
<u>42</u>	EBR	Ambico Limited	1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA ON	NW/241.5	0.00	<u>154</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON	NW/241.5	0.00	154
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON	NW/241.5	0.00	<u>154</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON	NW/241.5	0.00	<u>155</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON	NW/241.5	0.00	<u>155</u>
<u>42</u>	ECA	Ambico Limited	1120 Cummings Ave Ottawa ON K1J 7R8	NW/241.5	0.00	<u>156</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON	NW/241.5	0.00	<u>156</u>
<u>42</u>	EBR	Ambico Limited	1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA ON	NW/241.5	0.00	<u>157</u>
<u>42</u>	ECA	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	157
<u>42</u>	ECA	Ambico Limited	1120 Cummings Ave Ottawa ON K1J 7R8	NW/241.5	0.00	<u>157</u>
<u>42</u>	ECA	Ambico Limited	1120 Cummings Ave Ottawa ON K1J 7R8	NW/241.5	0.00	<u>158</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>158</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>159</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>159</u>
42	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>160</u>
42	EASR	AMBICO LIMITED	1120 CUMMINGS AVE GLOUCESTER ON K1J 7R8	NW/241.5	0.00	<u>161</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>161</u>
<u>42</u>	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>162</u>
42	GEN	Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW/241.5	0.00	<u>162</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>43</u>	EHS		1059 Ogilvie Road Gloucester ON K1J 7S6	WSW/242.3	-2.00	<u>163</u>
43	EHS		1059 Ogilvie Road Gloucester ON K1J 7S6	WSW/242.3	-2.00	<u>163</u>
44	EHS		1098 Ogilvie Road and 1178 Cummings Avenue Gloucester ON K1J 7P8	S/243.3	-1.68	<u>163</u>
<u>44</u>	EHS		1098 Ogilvie Road and 1178 Cummings Avenue Gloucester ON K1J 7P8	S/243.3	-1.68	164
<u>45</u>	GEN	ST. LAURENT FUNERAL HOME	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E/246.4	0.88	164
<u>45</u>	GEN	ST. LAURENT FUNERAL HOME 44-081	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E/246.4	0.88	<u>164</u>
<u>45</u>	GEN	HULSE PLAYFAIR & MCGARRY	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E/246.4	0.88	<u>164</u>
<u>45</u>	GEN	HULSE, PLAYFAIR & MCGARRY	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E/246.4	0.88	<u>165</u>
<u>45</u>	GEN	HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	E/246.4	0.88	<u>165</u>
<u>45</u>	GEN	HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	E/246.4	0.88	<u>165</u>
<u>45</u>	GEN	HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	E/246.4	0.88	<u>166</u>
<u>45</u>	GEN	HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	E/246.4	0.88	<u>166</u>
<u>45</u>	GEN	Hulse, Playfair & McGarry	1200 Ogilvie Rd. Ottawa ON K1J 8V1	E/246.4	0.88	<u>167</u>

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>45</u>	GEN	Hulse, Playfair & McGarry	1200 Ogilvie Rd. Ottawa ON K1J 8V1	E/246.4	0.88	<u>167</u>
<u>45</u>	GEN	Hulse, Playfair & McGarry	1200 Ogilvie Rd. Ottawa ON K1J 8V1	E/246.4	0.88	<u>167</u>
<u>46</u>	GEN	Gignul Non Profit Housing Corporation	1043 Cummings Avenue Ottawa ON K1J 7R8	N/248.8	1.00	<u>168</u>
<u>47</u>	wwis		1043 CUMMINGS AVE Ottawa ON	NNW/248.9	1.00	168
			<b>Well ID:</b> 7159001			
<u>47</u>	WWIS		1043 CUMMINGS AVE OTTAWA ON	NNW/248.9	1.00	<u>171</u>
			Well ID: 7163230			

# Executive Summary: Summary By Data Source

## **BORE** - Borehole

A search of the BORE database, dated 1875-Jul 2018 has found that there are 1 BORE site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	<u>Address</u>	<b>Direction</b>	Distance (m)	<u>Map Key</u>
	ON	ESE	168.90	<u>22</u>

## **CA** - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011\* has found that there are 2 CA site(s) within approximately 0.25 kilometers of the project property.

<b>Equal/Higher Elevation</b>	<u>Address</u>	<u>Direction</u>	Distance (m)	Map Key
MANDARIN-OGILVIE RESTAURANT	1137 OGILVIE ROAD GLOUCESTER CITY ON K1J 7P6	E	81.94	<u>8</u>
Lower Elevation	<u>Address</u>	<u>Direction</u>	Distance (m)	Map Key
1633981 Ontario Inc.	1111 Ogilvie Rd Ottawa ON	S	80.43	<u>7</u>

## **DTNK** - Delisted Fuel Tanks

A search of the DTNK database, dated Feb 28, 2022 has found that there are 26 DTNK site(s) within approximately 0.25 kilometers of the project property.

<b>Equal/Higher Elevation</b>	<u>Address</u>	<b>Direction</b>	Distance (m)	Map Key
ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER ON	ENE	86.94	<u>9</u>
ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA ON	ENE	86.94	9

Equal/Higher Elevation TROPIC SQUARE LTD	Address  1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	<u>Direction</u> ESE	<u>Distance (m)</u> 178.65	<u>Map Key</u> <u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER ON	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE	178.65	<u>25</u>
Lower Elevation  MOT MARWAN ENTERPRISES LTD	Address 1111 OGILVIE RD OTTAWA ON	<b>Direction</b> S	<u>Distance (m)</u> 80.43	Map Key 7
SMS PETROLEUMS DIVISION OF SUNOCO NANCY NG	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	7
MO & MARWAN ENTERPRISES LTD	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	7
1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON	S	80.43	7

1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON	S	80.43	7
1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON	S	80.43	<u>7</u>
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	<u>7</u>
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	7
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	<u>7</u>
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	7
	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	<u>7</u>
LES PETROLES CALEX LTEE	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	7
PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON K1J 8V1	ESE	160.74	<u>19</u>
PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON	ESE	160.74	<u>19</u>
PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON	ESE	160.74	<u>19</u>
PIONEER ENERGY MANAGEMENT INC.	1134 OGILVIE RD OTTAWA ON	ESE	160.74	<u>19</u>
	1134 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE	160.74	<u>19</u>

## **EASR** - Environmental Activity and Sector Registry

A search of the EASR database, dated Oct 2011- Dec 31, 2022 has found that there are 1 EASR site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	<u>Address</u>	<b>Direction</b>	Distance (m)	<u>Map Key</u>
AMBICO LIMITED	1120 CUMMINGS AVE	NW	241.51	<u>42</u>

# **EBR** - Environmental Registry

A search of the EBR database, dated 1994 - Jan 31, 2023 has found that there are 2 EBR site(s) within approximately 0.25 kilometers of the project property.

<b>Equal/Higher Elevation</b>	<u>Address</u>	<u>Direction</u>	Distance (m)	<u>Map Key</u>
Ambico Limited	1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA ON	NW	241.51	42
Ambico Limited	1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA ON	NW	241.51	<u>42</u>

## **ECA** - Environmental Compliance Approval

A search of the ECA database, dated Oct 2011- Dec 31, 2022 has found that there are 5 ECA site(s) within approximately 0.25 kilometers of the project property.

<b>Equal/Higher Elevation</b>	<u>Address</u>	<b>Direction</b>	Distance (m)	Map Key
Ambico Limited	1120 Cummings Ave Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Ave Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Ave Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>

Equal/Higher Elevation	<u>Address</u>	<u>Direction</u>	Distance (m)	Map Key
Lower Elevation	<u>Address</u>	<u>Direction</u>	Distance (m)	Map Key
1633981 Ontario Inc.	1111 Ogilvie Rd Ottawa ON K1J 7P7	S	80.43	7

# **EHS** - ERIS Historical Searches

A search of the EHS database, dated 1999-Jul 31, 2022 has found that there are 12 EHS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address 1188 Cummings Ave Ottawa ON Gloucester ON K1J 7R8	<u>Direction</u> SSE	<u>Distance (m)</u> 29.86	Map Key 1
	1137 Ogilvie Road and 1111 Cummings Avenue Gloucester ON K1J 7P6	E	81.94	<u>8</u>
	1137 Ogilvie Road and 1111 Cummings Avenue Gloucester ON K1J 7P6	E	81.94	<u>8</u>
	1150 Chemin Ogilvie Ottawa ON K1J 8V1	ESE	185.31	<u>27</u>
	1162 Ogilvie Road Gloucester ON K1J 8V1	ESE	205.64	<u>34</u>
	1162 Ogilvie Road Ottawa ON	ESE	207.72	<u>35</u>
	1055 Cummings Ave Gloucester (Ottawa) ON K1J 7S2	N	218.51	<u>38</u>
Lower Elevation	Address	<u>Direction</u>	Distance (m)	Map Key

1098 Ogilvie Road Gloucester ON K1J 7P8	S	203.10	<u>31</u>
1059 Ogilvie Road Gloucester ON K1J 7S6	WSW	242.30	<u>43</u>
1059 Ogilvie Road Gloucester ON K1J 7S6	wsw	242.30	<u>43</u>
1098 Ogilvie Road and 1178 Cummings Avenue Gloucester ON K1J 7P8	S	243.26	<u>44</u>
1098 Ogilvie Road and 1178 Cummings Avenue Gloucester ON K1J 7P8	S	243.26	<u>44</u>

# **FST** - Fuel Storage Tank

A search of the FST database, dated Feb 28, 2022 has found that there are 13 FST site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation  ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	Address  1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA ON	<u>Direction</u> ENE	<u>Distance (m)</u> 86.94	Map Key 9
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE	178.65	<u>25</u>
TROPIC SQUARE LTD	1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA ON	ESE	178.65	<u>25</u>
Lower Elevation	<u>Address</u>	<u>Direction</u>	Distance (m)	Map Key
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	<u>7</u>

1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	<u>7</u>
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	7
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	<u>7</u>
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	<u>7</u>
1633981 ONTARIO INC	1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA ON	S	80.43	7
PARKLAND CORPORATION	1134 OGILVIE RD OTTAWA K1J 8V1 ON CA ON	ESE	160.74	<u>19</u>
PARKLAND CORPORATION	1134 OGILVIE RD OTTAWA K1J 8V1 ON CA ON	ESE	160.74	<u>19</u>
PARKLAND CORPORATION	1134 OGILVIE RD OTTAWA K1J 8V1 ON CA ON	ESE	160.74	<u>19</u>

# **FSTH** - Fuel Storage Tank - Historic

A search of the FSTH database, dated Pre-Jan 2010\* has found that there are 5 FSTH site(s) within approximately 0.25 kilometers of the project property.

<b>Equal/Higher Elevation</b>	<u>Address</u>	<b>Direction</b>	Distance (m)	<u>Map Key</u>
ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD	1091 CUMMINGS AVE GLOUCESTER ON K1J 7S2	ENE	86.94	<u>9</u>

Lower Elevation	<u>Address</u>	<u>Direction</u>	Distance (m)	<u>Map Key</u>

1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER OTTAWA ON K1J 7P7	S	80.43	7
1633981 ONTARIO INC O/ A OLCO GAS BAR	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	<u>7</u>
PIONEER PETROLEUMS MANAGEMENT INC**	1134 OGILVIE RD OTTAWA ON	ESE	160.74	<u>19</u>
PIONEER PETROLEUMS MANAGEMENT INC**	1134 OGILVIE RD OTTAWA ON K1J 8V1	ESE	160.74	<u>19</u>

# **GEN** - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Oct 31, 2022 has found that there are 51 GEN site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation FRESH AIR EXPERIENCE INC.	Address  1137 AGILVIE ROAD GLOUCESTER ON K1J 7P6	<u>Direction</u> E	<u>Distance (m)</u> 81.94	<u>Map Key</u> <u>8</u>
FRESH AIR EXPERIENCE INC. 15-313	1137 AGILVIE ROAD GLOUCESTER ON K1J 7P6	Е	81.94	<u>8</u>
6037682 CANADA INC.	1150 OGILVIE ROAD OTTAWA ON K1J 8V1	ESE	185.31	<u>27</u>
6037682 CANADA INC.	1150 OGILVIE RD OTTAWA ON K1J 8V1	ESE	185.31	<u>27</u>
6037682 Canada Inc.	1150 OGILVIE ROAD OTTAWA ON K1J 8V1	ESE	185.31	<u>27</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>

<b>Equal/Higher Elevation</b>	<u>Address</u>	<b>Direction</b>	Distance (m)	<u>Map Key</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON	NW	241.51	<u>42</u>
MANIS METAL MANUFACTURING LTD.	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW	241.51	<u>42</u>
MANIS METAL MANUFACTURING LTD.	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW	241.51	<u>42</u>
AMBICO LIMITED 25-161	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW	241.51	<u>42</u>
MANIS METAL MANUFACTURING LTD. 25-161	1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON	NW	241.51	<u>42</u>

<b>Equal/Higher Elevation</b>	<u>Address</u>	<b>Direction</b>	Distance (m)	Map Key
Ambico Limited	1120 Cummings Avenue Ottawa ON	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON	NW	241.51	<u>42</u>
Ambico Limited	1120 Cummings Avenue Ottawa ON	NW	241.51	<u>42</u>
ST. LAURENT FUNERAL HOME	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E	246.38	<u>45</u>
ST. LAURENT FUNERAL HOME 44-081	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E	246.38	<u>45</u>
HULSE PLAYFAIR & MCGARRY	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	E	246.38	<u>45</u>
HULSE, PLAYFAIR & MCGARRY	1200 OGILVIE ROAD GLOUCESTER ON K1J 8V1	Е	246.38	<u>45</u>
HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	Е	246.38	<u>45</u>
HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	Е	246.38	<u>45</u>
HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	E	246.38	<u>45</u>
HULSE, PLAYFAIR & MCGARRY INC.	1200 OGILVIE ROAD OTTAWA ON K1J 8V1	Е	246.38	<u>45</u>

Equal/Higher Elevation	<u>Address</u>	<u>Direction</u>	Distance (m)	<u>Map Key</u>
Hulse, Playfair & McGarry	1200 Ogilvie Rd. Ottawa ON K1J 8V1	E	246.38	<u>45</u>
Hulse, Playfair & McGarry	1200 Ogilvie Rd. Ottawa ON K1J 8V1	E	246.38	<u>45</u>
Hulse, Playfair & McGarry	1200 Ogilvie Rd. Ottawa ON K1J 8V1	E	246.38	<u>45</u>
Gignul Non Profit Housing Corporation	1043 Cummings Avenue Ottawa ON K1J 7R8	N	248.82	<u>46</u>
Lower Elevation	Address	<u>Direction</u>	Distance (m)	Map Key
OLCO Petrolleum	1111 Ogilvie Ottawa ON K1J 7P7	S	80.43	<u>7</u>
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S	80.43	<u>7</u>
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S	80.43	7
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S	80.43	7
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S	80.43	7
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON	S	80.43	7
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	7

1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	7
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	<u>7</u>
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	<u>7</u>
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	<u>7</u>
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	<u>7</u>
1633981 Ontario Inc	1111 Ogilvie Road Ottawa ON K1J 7P7	S	80.43	<u>7</u>
Pioneer Energy LP	1134 Ogilvie Road Gloucester ON K1J 8V1	ESE	160.74	<u>19</u>
FAIRVIEW FUNERAL &CREMATION SERVICES INC	1092 OGILVIE ROAD GLOUCESTER ON K1J 7P8	SSW	226.28	<u>39</u>
FAIRVIEW FUNERAL AND CREMATION	1092 OGILVIE ROAD GLOUCESTER ON K1J 7P8	SSW	226.28	<u>39</u>
EDIFICE BEAUFORT BUILDING INC.	1178 CUMMINGS OTTAWA ON K1J 7R8	SSE	231.57	<u>40</u>

# **HINC** - TSSA Historic Incidents

A search of the HINC database, dated 2006-June 2009\* has found that there are 1 HINC site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address	<u>Direction</u>	Distance (m)	<u>Map Key</u>
	1085 CUMMINGS AVENUE OTTAWA ON	NNE	121.26	<u>14</u>

## **INC** - Fuel Oil Spills and Leaks

A search of the INC database, dated Feb 28, 2022 has found that there are 2 INC site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	<u>Address</u>	<b>Direction</b>	Distance (m)	<u>Map Key</u>
PARKLAND CORPORATION	1134 OGILVIE RD,,OTTAWA,ON,K1J 8V1,CA ON	ESE	160.74	<u>19</u>
	4297 WELDON DR, OTTAWA ON	WSW	204.51	<u>32</u>

# PRT - Private and Retail Fuel Storage Tanks

A search of the PRT database, dated 1989-1996\* has found that there are 8 PRT site(s) within approximately 0.25 kilometers of the project property.

<b>Equal/Higher Elevation</b>	<u>Address</u>	<u>Direction</u>	Distance (m)	Map Key
ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE W	1091 CUMMINGS AV GLOUCESTER ON K1J 7S2	ENE	86.94	9
1085091 ONTARIO LTD	1154 OGLIVIE RD GLOUCESTER ON K1J 8V1	ESE	178.65	<u>25</u>

Lower Elevation	Address	<u>Direction</u>	Distance (m)	Map Key
CALEX DIVISION OF SUNOCO ATTN ROBERTA WALSH	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	7
LES PETROLES CALEX LTEE	1111 OGILVIE OTTAWA ON K1J7P7	S	80.43	7
CALEX DIVISION OF SUNOCO ATTN ROBERTA WALSH	1111 OGILVIE RD GLOUCESTER ON K1J 7P7	S	80.43	<u>7</u>

CALEX DIVISION OF SUNOCO ATTN MARY MISANGYI	1111 OGILVIE OTTAWA ON K1J7P7	S	80.43	7
CALEX DIVISION OF SUNOCO ATTN MARY MISANGYI	1111 OGILVIE OTTAWA ON K1J7P7	S	80.43	<u>7</u>
C CORP (ONTARIO) INC ATTN ACCOUNTS PAYABLE	1134 OGILVIE RD OTTAWA ON K1J8V1	ESE	160.74	<u>19</u>

### PTTW - Permit to Take Water

A search of the PTTW database, dated 1994 - Jan 31, 2023 has found that there are 1 PTTW site(s) within approximately 0.25 kilometers of the project property.

Lower Elevation	<u>Address</u>	<b>Direction</b>	Distance (m)	<u>Map Key</u>
9456-5082 Quebec Inc., as general partner for and on behalf of Lux Place L.P.	1098 Ogilvie Road and 1178 Cummings Avenue Ottawa, ON Canada ON	S	204.56	<u>33</u>

# **RST** - Retail Fuel Storage Tanks

A search of the RST database, dated 1999-May 31, 2022 has found that there are 9 RST site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation TROPIC SQUARE	Address 1154 OGILVIE RD GLOUCESTER ON K1J8V1	<u>Direction</u> ESE	<u>Distance (m)</u> 178.65	<u>Map Key</u> <u>25</u>
FENELON'S GAZ	1154 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE	178.65	<u>25</u>
Lower Elevation  CALEX SERVICE STATION	Address  1111 OGILVIE RD GLOUCESTER ON K1J7P7	<b>Direction</b> S	<u>Distance (m)</u> 80.43	Map Key  7
ECONO GAS	1111 OGILVIE RD APT 1 GLOUCESTER ON K1J7P7	S	80.43	7

FAS GAS PLUS	1111 OGILVIE RD UNIT 1 GLOUCESTER ON K1J7P7	S	80.43	7
PIONEER PETROLEUMS	1134 OGILVIE RD GLOUCESTER ON K1J8V1	ESE	160.74	<u>19</u>
PIONEER PETROLEUMS	1134 OGILVIE RD GLOUCESTER ON K1J 8V1	ESE	160.74	<u>19</u>
PIONEER PETROLEUMS	1134 OGILVIE RD OTTAWA ON K1J 8V1	ESE	160.74	<u>19</u>
PIONEER PETROLEUMS	1134 OGILVIE RD GLOUCESTER ON K1J8V1	ESE	160.74	<u>19</u>

# **SCT** - Scott's Manufacturing Directory

A search of the SCT database, dated 1992-Mar 2011\* has found that there are 4 SCT site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation Ambico Limited	Address 1120 Cummings Ave Gloucester ON K1J 7R8	<u>Direction</u> NW	<u>Distance (m)</u> 241.51	<u>Map Key</u> <u>42</u>
Ambico Limited	1120 Cummings Ave Gloucester ON K1J 7R8	NW	241.51	<u>42</u>
AMBICO LIMITED	1120 Cummings Ave Ottawa ON K1J 7R8	NW	241.51	<u>42</u>
Lower Elevation  AFSC Future Security Controls	Address  1088 Ogilvie Rd Gloucester ON K1J 7P8	<u>Direction</u> SSW	<u>Distance (m)</u> 201.21	<u>Map Key</u> <u>30</u>

### SPL - Ontario Spills

A search of the SPL database, dated 1988-Sep 2020; Dec 2020-Mar 2021 has found that there are 5 SPL site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation UNKNOWN	Address CUMMINGS AVE JUST SOUTH OF OLGILVIE GLOUCESTER CITY ON	<u>Direction</u> SE	<u>Distance (m)</u> 114.30	<u>Map Key</u> <u>13</u>
Labrador Spring Water <unofficial></unofficial>	OGILVIE STREET / CUMMING STREET <unofficial> Ottawa ON</unofficial>	SE	114.30	<u>13</u>
Lower Elevation	Address 1111 Ogilvie Rd Ottawa ON	<u>Direction</u> S	<u>Distance (m)</u> 80.43	Map Key 7
Lower Elevation  Triangle Pump Service Limited	1111 Ogilvie Rd			-

# **WWIS** - Water Well Information System

A search of the WWIS database, dated Jun 30 2022 has found that there are 24 WWIS site(s) within approximately 0.25 kilometers of the project property.

Equal/Higher Elevation	Address c1196 Cummings Ave Ottawa ON Well ID: 7346072	<u>Direction</u> SSE	<u>Distance (m)</u> 44.74	Map Key 2
	1198 Cummings Ave Ottawa ON Well ID: 7346071	SSE	56.45	<u>3</u>
	lot 25 con 1 ON <i>Well ID:</i> 1501127	N	58.69	<u>4</u>

Order No: 23022400359

SERVICE STATION OTTAWA CITY ON K1J 8V1

Equal/Higher Elevation	Address lot 25 con 1 ON	<u>Direction</u> ENE	<u>Distance (m)</u> 65.86	Map Key <u>5</u>
	<b>Well ID:</b> 1501129			
	lot 25 con 1 ON	NE	79.16	<u>6</u>
	<b>Well ID:</b> 1501126			
	lot 25 con 1 ON	SE	92.04	<u>10</u>
	<b>Well ID:</b> 1501115			
	lot 25 con 1 ON	NE	92.23	<u>11</u>
	<b>Well ID:</b> 1501124			
	lot 25 con 1 ON	NE	128.27	<u>15</u>
	<b>Well ID:</b> 1501128			
	lot 26 con 2 ON	ESE	177.85	<u>24</u>
	<b>Well ID:</b> 1501355			
	lot 25 con 1 ON	E	183.17	<u>26</u>
	<b>Well ID:</b> 1501123			
	lot 25 con 1 ON	ENE	211.73	<u>36</u>
	<b>Well ID:</b> 1501130			
	1162 OGILIVE ROAD Ottawa ON	ESE	218.36	<u>37</u>
	<b>Well ID</b> : 7157667			
	1043 CUMMINGS AVE OTTAWA ON	N	235.94	<u>41</u>
	<b>Well ID:</b> 7163232			
	1043 CUMMINGS AVE Ottawa ON	NNW	248.93	<u>47</u>
	<b>Well ID:</b> 7159001			
	1043 CUMMINGS AVE OTTAWA ON	NNW	248.93	<u>47</u>

<u>Equaliting net Elevation</u>	Well ID: 7163230	<u>Direction</u>	<u>Distance (m)</u>	<u>шар кеу</u>
Lower Elevation	Address	<b>Direction</b>	Distance (m)	Map Key
	lot 25 con 1 ON	SW	113.83	<u>12</u>
	<b>Well ID:</b> 1510842			
	1134 OGILVIE RD. Ottawa ON	ESE	146.79	<u>16</u>
	<b>Well ID:</b> 7224359			
	1134 ON	ESE	154.77	<u>17</u>
	<b>Well ID:</b> 7224188			
	1134 OGILVIE RD ON	SE	155.61	<u>18</u>
	<b>Well ID:</b> 7224189			
	1134 OGILVIE RD. Ottawa ON	ESE	166.78	<u>20</u>
	<b>Well ID:</b> 7224358			
	1134 ON	ESE	168.41	<u>21</u>
	<b>Well ID:</b> 7224187			
	lot 26 con 2 ON	ESE	169.02	<u>23</u>
	<b>Well ID:</b> 1501363			
	1182 OGILIVE ROAD Ottawa ON	ESE	193.69	<u>28</u>
	<b>Well ID:</b> 7157668			
	ON	S	194.65	<u>29</u>

**Direction** 

Distance (m)

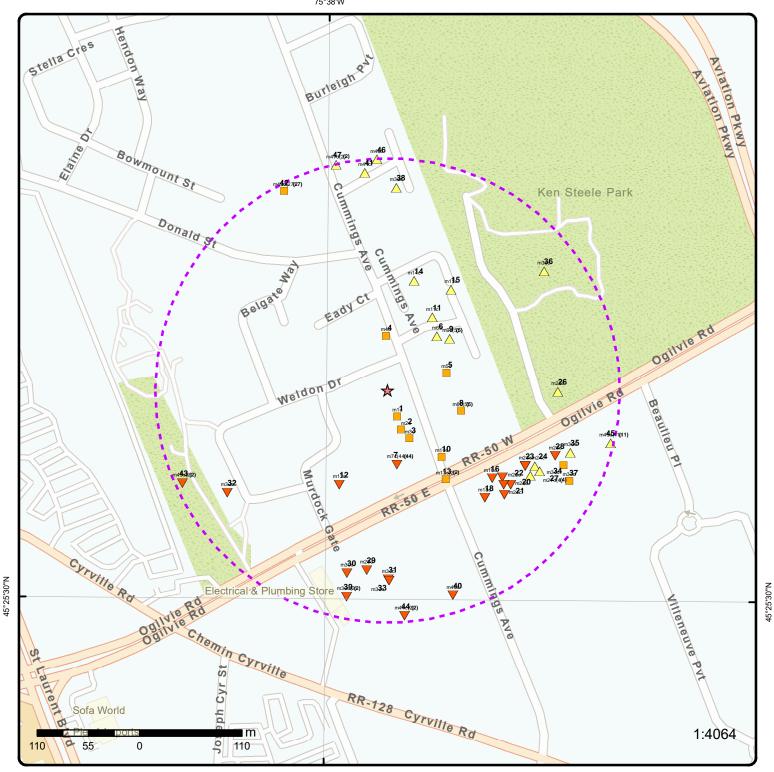
Map Key

Order No: 23022400359

Well ID: 7388761

**Equal/Higher Elevation** 

**Address** 



# Map: 0.25 Kilometer Radius

Order Number: 23022400359

Address: 1184, 1188 & 1196 Cummings Avenue, Gloucester, ON



ERIS

Aerial Year: 2022

Address: 1184, 1188 & 1196 Cummings Avenue, Gloucester, ON

Source: ESRI World Imagery

Order Number: 23022400359



# **Topographic Map**

Address: 1184, 1188 & 1196 Cummings Avenue, ON

Source: ESRI World Topographic Map

Order Number: 23022400359



# **Detail Report**

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m) 1 of 1 73.9 / 0.00 1188 Cummings Ave Ottawa ON 1 SSE/29.9 **EHS** Gloucester ON K1J 7R8 Order No: 20190809156 Nearest Intersection: Status: Municipality: Report Type: Standard Report Client Prov/State: ON Report Date: 15-AUG-19 Search Radius (km): .25 Date Received: 09-AUG-19 X: -75.632344 Y: Previous Site Name: 45.42677 Lot/Building Size: Fire Insur. Maps and/or Site Plans Additional Info Ordered:

2 1 of 1 SSE/44.7 73.9 / 0.00 c1196 Cummings Ave Ottawa ON WWIS

Flowing (Y/N):

Date Received:

Selected Flag:

Form Version:

Concession:

Easting NAD83: Northing NAD83:

UTM Reliability:

Contractor:

Owner:

County:

Lot:

Zone:

Data Entry Status:

Abandonment Rec:

Concession Name:

30-Oct-2019 00:00:00

OTTAWA-CARLETON

Order No: 23022400359

TRUE

7241

Flow Rate:

Data Src:

**Well ID:** 7346072

Construction Date:

Use 1st: Monitoring and Test Hole Use 2nd:

Final Well Status: Monitoring and Test Hole

Water Type:

Casing Material:
Audit No: Z298268
Too: A274730

Tag: A274739
Constructn Method:

Elevation (m): Elevatn Reliabilty: Depth to Bedrock: Well Depth: Overburden/Bedrock:

Pump Rate: Static Water Level: Clear/Cloudy:

Municipality: GLOUCESTER TOWNSHIP

Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

 Well Completed Date:
 2019/09/16

 Year Completed:
 2019

 Depth (m):
 6.1

**Latitude:** 45.4266409195665 **Longitude:** -75.6322914072156

Path:

**Bore Hole Information** 

 Bore Hole ID:
 1007697673
 Elevation:

 DP2BR:
 Elevrc:

Spatial Status: Zone: 18

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m)

East83:

North83:

Org CS:

UTMRC: UTMRC Desc:

Location Method:

450537.00

5030541.00

margin of error: 30 m - 100 m

Order No: 23022400359

UTM83

Code OB: Code OB Desc: Open Hole:

**Date Completed:** 16-Sep-2019 00:00:00

Remarks:

. Cluster Kind:

Loc Method Desc: on Water Well Record

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 1007890235

Layer: Color: 8 **BLACK** General Color: Mat1: 27 **OTHER** Most Common Material: Mat2: 11 Mat2 Desc: **GRAVEL** Mat3: 66 Mat3 Desc: **DENSE** 

Formation End Depth: 0.3100000023841858

0.0

Formation End Depth UOM: m

Overburden and Bedrock

Formation Top Depth:

Materials Interval

Formation ID: 1007890236

 Layer:
 2

 Color:
 6

 General Color:
 BROWN

 Mat1:
 28

 Most Common Material:
 SAND

 Mat2:
 12

 Mat2 Desc:
 STONES

 Mat3:
 77

 Mat3 Desc:
 LOOSE

 Formation Top Depth:
 0.3100000023841858

 Formation End Depth:
 2.440000057220459

Formation End Depth UOM: m

Overburden and Bedrock

Materials Interval

**Formation ID:** 1007890237

 Layer:
 3

 Color:
 8

 General Color:
 BLACK

 Mat1:
 17

 Most Common Material:
 SHALE

Mat2:

Mat2 Desc:

Mat3: 85 Mat3 Desc: SOFT

 Formation Top Depth:
 2.440000057220459

 Formation End Depth:
 6.099999904632568

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Formation End Depth UOM:

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1007891422

Layer:

 Plug From:
 0.3100000023841858

 Plug To:
 2.740000009536743

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1007891421

Layer: 1

Plug From: 0.0

**Plug To:** 0.3100000023841858

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1007891423

Layer:

 Plug From:
 2.74000009536743

 Plug To:
 6.099999904632568

Plug Depth UOM: m

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1007892585

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

**Pipe ID:** 1007888646

Casing No:

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 1007893026

Layer: 1
Material: 5

Open Hole or Material: PLASTIC

Depth From: 0.0

 Depth To:
 3.0999999046325684

 Casing Diameter:
 5.199999809265137

Casing Diameter UOM: cm
Casing Depth UOM: m

**Construction Record - Screen** 

**Screen ID:** 1007893380

Layer: 1

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m)

10 Slot:

Screen Top Depth: 3.0999999046325684 Screen End Depth: 6.099999904632568

Screen Material: 5 Screen Depth UOM: m Screen Diameter UOM: cm

Screen Diameter: 6.03000020980835

### Results of Well Yield Testing

Pumping Test Method Desc:

1007894063 Pump Test ID:

Pump Set At: Static Level:

Final Level After Pumping: Recommended Pump Depth:

Pumping Rate: Flowing Rate:

Recommended Pump Rate:

Levels UOM: Rate UOM: Water State After Test Code:

LPM

0

Water State After Test: Pumping Test Method: **Pumping Duration HR:** 

**Pumping Duration MIN:** 

Flowing:

### Hole Diameter

Hole ID: 1007892093

Diameter: 11.430000305175781

Depth From: 0.0

Depth To: 3.3499999046325684

Hole Depth UOM: m Hole Diameter UOM: cm

### **Hole Diameter**

1007892094 Hole ID: Diameter: 8.890000343322754 Depth From: 3.3499999046325684 Depth To: 6.099999904632568

Hole Depth UOM: m Hole Diameter UOM: cm

### <u>Links</u>

Bore Hole ID: 1007697673 Tag No: A274739 Contractor: Depth M: 6.1 7241

734\7346072.pdf Year Completed: 2019 Path: Well Completed Dt: 2019/09/16 Latitude: 45.4266409195665 Audit No: Z298268 Longitude: -75.6322914072156

3 1 of 1 SSE/56.4 73.9 / 0.00 1198 Cummings Ave **WWIS** Ottawa ON

Flowing (Y/N):

Data Entry Status:

Order No: 23022400359

Flow Rate:

Data Src:

Well ID: 7346071

Construction Date: Use 1st: Monitoring and Test Hole

Use 2nd:

Final Well Status: Date Received: 30-Oct-2019 00:00:00 Monitoring and Test Hole

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m)

Water Type:

Casing Material:

Z298267 Audit No: A274740 Tag:

Constructn Method: Elevation (m):

Elevatn Reliabilty: Depth to Bedrock: Well Depth:

Overburden/Bedrock: Pump Rate: Static Water Level: Clear/Cloudy:

Municipality: Site Info:

**GLOUCESTER TOWNSHIP** 

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/734\7346071.pdf

### Additional Detail(s) (Map)

2019/09/16 Well Completed Date: 2019 Year Completed: Depth (m): 7.01

Latitude: 45.426560550015 Longitude: -75.6321754619596 734\7346071.pdf Path:

#### **Bore Hole Information**

Bore Hole ID: 1007697670

DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole:

Cluster Kind:

Date Completed: 16-Sep-2019 00:00:00 Remarks:

Loc Method Desc: on Water Well Record

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

### Overburden and Bedrock

### **Materials Interval**

1007890232 Formation ID:

Layer: Color: 6 General Color: **BROWN** Mat1: 02 **TOPSOIL** Most Common Material:

Mat2:

Mat2 Desc:

Mat3: 85 **SOFT** Mat3 Desc: Formation Top Depth: 0.0

0.3100000023841858 Formation End Depth:

Formation End Depth UOM: m Selected Flag:

Abandonment Rec:

7241 Contractor: Form Version: 7

Owner:

**OTTAWA-CARLETON** County:

> 18 450546.00

5030532.00

margin of error: 30 m - 100 m

Order No: 23022400359

UTM83

TRUE

Lot: Concession:

Concession Name: Easting NAD83: Northing NAD83:

Zone:

Elevation:

Elevrc:

East83:

North83:

Org CS:

UTMRC:

UTMRC Desc:

Location Method:

Zone:

UTM Reliability:

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Overburden and Bedrock

Materials Interval

**Formation ID:** 1007890233

 Layer:
 2

 Color:
 6

 General Color:
 BROWN

 Mat1:
 28

 Most Common Material:
 SAND

 Mat2:
 12

 Mat2 Desc:
 STONES

Mat3: 77
Mat3 Desc: LOOSE

 Formation Top Depth:
 0.3100000023841858

 Formation End Depth:
 2.440000057220459

Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

**Formation ID:** 1007890234

 Layer:
 3

 Color:
 8

 General Color:
 BLACK

 Mat1:
 17

 Most Common Material:
 SHALE

Mat2: Mat2 Desc:

Mat3: 85
Mat3 Desc: SOFT

 Formation Top Depth:
 2.440000057220459

 Formation End Depth:
 7.010000228881836

Formation End Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1007891418

Layer: 1
Plug From: 0.0

**Plug To:** 0.3100000023841858

Plug Depth UOM:

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1007891419

Layer:

 Plug From:
 0.3100000023841858

 Plug To:
 3.6600000858306885

Plug Depth UOM:

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1007891420

Layer: 3

 Plug From:
 3.6600000858306885

 Plug To:
 7.010000228881836

Plug Depth UOM: m

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m)

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1007892579

Method Construction Code: 5

Method Construction: Air Percussion

**Other Method Construction:** 

Pipe Information

**Pipe ID:** 1007888645

Casing No:

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 1007893025

Layer:1Material:5Open Hole or Material:PLASTICDepth From:0.0

 Depth To:
 3.9600000381469727

 Casing Diameter:
 4.0300020980835

Casing Diameter UOM: cm
Casing Depth UOM: m

**Construction Record - Screen** 

**Screen ID:** 1007893379

**Layer**: 1 **Slot**: 10

 Screen Top Depth:
 3.9600000381469727

 Screen End Depth:
 7.010000228881836

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 4.820000171661377

Results of Well Yield Testing

Pumping Test Method Desc:

**Pump Test ID:** 1007894062

Pump Set At: Static Level:

Final Level After Pumping: Recommended Pump Depth:

Pumping Rate: Flowing Rate:

Recommended Pump Rate:

Levels UOM: m Rate UOM: LPM

Water State After Test Code: Water State After Test:

Pumping Test Method: 0

Pumping Duration HR: Pumping Duration MIN:

Flowing:

Hole Diameter

Hole ID: 1007892092

Number of Direction/ Elev/Diff Site DΒ Map Key

Diameter: 7.619999885559082 Depth From: 3.0999999046325684 Depth To: 7.010000228881836

Hole Depth UOM: m Hole Diameter UOM: cm

Records

**Hole Diameter** 

Hole ID: 1007892091

Diameter: 11.430000305175781

Depth From: 0.0

Depth To: 3.0999999046325684

Hole Depth UOM: m Hole Diameter UOM: cm

**Links** 

Bore Hole ID: 1007697670 A274740 Tag No: Depth M: 7.01 Contractor: 7241

Year Completed: 2019 Path: 734\7346071.pdf Well Completed Dt: 2019/09/16 Latitude: 45.426560550015 -75.6321754619596 Audit No: Z298267 Longitude:

4 1 of 1 N/58.7 73.9 / 0.00 lot 25 con 1 **WWIS** ON

Flowing (Y/N):

Order No: 23022400359

Well ID: 1501127

Construction Date: Flow Rate: Use 1st: **Domestic** Data Entry Status:

Distance (m)

Use 2nd: Data Src: Final Well Status: Water Supply Date Received:

22-Jun-1959 00:00:00 Selected Flag: TRUE Water Type:

Casing Material: Abandonment Rec: Audit No: Contractor:

2311 Tag: Form Version: Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty: Lot: 025 Depth to Bedrock: Concession: 01 Well Depth: Concession Name: OF Overburden/Bedrock:

Easting NAD83: Pump Rate: Northing NAD83: Static Water Level: Zone:

Clear/Cloudy: UTM Reliability:

**GLOUCESTER TOWNSHIP** Municipality: Site Info:

https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501127.pdf PDF URL (Map):

Additional Detail(s) (Map)

1959/06/12 Well Completed Date: Year Completed: 1959 24.384 Depth (m):

Latitude: 45.4275488368718 -75.6325099122333 Longitude: 150\1501127.pdf Path:

**Bore Hole Information** 

Bore Hole ID: 10023170 Elevation: DP2BR: Elevrc:

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m)

Zone: Spatial Status: 18

Code OB: East83: 450520.70 Code OB Desc: North83: 5030642.00

Open Hole: Org CS: Cluster Kind: UTMRC:

12-Jun-1959 00:00:00 margin of error: 100 m - 300 m **UTMRC Desc:** Date Completed:

Remarks: Location Method: p5 Loc Method Desc: Original Pre1985 UTM Rel Code 5: margin of error : 100 m - 300 m

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

# Overburden and Bedrock

**Materials Interval** 

Formation ID: 930991043

Layer: Color:

General Color:

17 Mat1: SHALE Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 4.0 Formation End Depth: 80.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

930991042 Formation ID:

Layer:

Color:

General Color:

Mat1: 11 **GRAVEL** Most Common Material: Mat2: 05 Mat2 Desc: CLAY

Mat3:

Mat3 Desc:

0.0 Formation Top Depth: Formation End Depth: 4.0 Formation End Depth UOM:

# Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961501127

**Method Construction Code:** 

Method Construction: Cable Tool

Other Method Construction:

### Pipe Information

Pipe ID: 10571740

Casing No:

Comment:

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m)

Alt Name:

### **Construction Record - Casing**

Casing ID: 930039247 Layer: 2

Material:

OPEN HOLE Open Hole or Material:

Depth From: Depth To: 0.08 Casing Diameter: 4.0 Casing Diameter UOM: inch Casing Depth UOM: ft

### **Construction Record - Casing**

930039246 Casing ID:

Layer: Material: Open Hole or Material: **STEEL** 

Depth From:

10.0 Depth To: Casing Diameter: 4.0 Casing Diameter UOM: inch Casing Depth UOM: ft

### Results of Well Yield Testing

**PUMP** Pumping Test Method Desc: Pump Test ID: 991501127

Pump Set At:

8.0 Static Level: Final Level After Pumping: 24.0 Recommended Pump Depth: 22.0 Pumping Rate: 4.0 Flowing Rate: 4.0 Recommended Pump Rate: Levels UOM: Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: Pumping Duration HR: 1 **Pumping Duration MIN:** 0 No Flowing:

### Water Details

Water ID: 933453814

Layer: 1 Kind Code: **FRESH** Kind: Water Found Depth: 76.0 Water Found Depth UOM: ft

### **Links**

Bore Hole ID: 10023170 Tag No: 24.384 2311 Depth M: Contractor:

1959

Year Completed: Path: 150\1501127.pdf Well Completed Dt: 1959/06/12 Latitude: 45.4275488368718 -75.6325099122333 Audit No: Longitude:

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m)

1 of 1 ENE/65.9 73.9 / 0.00 lot 25 con 1 5 **WWIS** ON

1501129 Well ID: Flowing (Y/N): Construction Date: Flow Rate:

Use 1st: Domestic Data Entry Status: Use 2nd: Data Src:

Final Well Status: Water Supply Date Received: 07-Dec-1962 00:00:00

Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec:

Audit No: Contractor: 1504 Form Version: Tag: 1 Constructn Method: Owner:

OTTAWA-CARLETON Elevation (m): County:

Elevatn Reliabilty: 025 Lot: Depth to Bedrock: Concession: 01 OF Well Depth: Concession Name: Overburden/Bedrock: Easting NAD83:

Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

**GLOUCESTER TOWNSHIP** Municipality:

Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501129.pdf

Additional Detail(s) (Map)

Well Completed Date: 1962/10/15 Year Completed: 1962 Depth (m): 28.0416

Latitude: 45.4271934067589 Longitude: -75.6316750312776 Path: 150\1501129.pdf

**Bore Hole Information** 

Bore Hole ID: 10023172 Elevation: DP2BR: Elevrc:

Spatial Status: 18 Zone: Code OB:

East83: 450585.70 Code OB Desc: North83: 5030602.00

Org CS: Open Hole:

Cluster Kind: UTMRC:

Date Completed: 15-Oct-1962 00:00:00 UTMRC Desc: margin of error: 100 m - 300 m

Order No: 23022400359

Remarks: Location Method: Original Pre1985 UTM Rel Code 5: margin of error: 100 m - 300 m Loc Method Desc:

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock **Materials Interval** 

Formation ID: 930991047

Layer: Color: 6 **BROWN** General Color:

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Mat1: 19
Most Common Material: SLATE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 8.0
Formation End Depth: 92.0
Formation End Depth UOM: ft

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 930991046

Layer:

Color:

General Color:

Mat1: 17
Most Common Material: SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 8.0 Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961501129

Method Construction Code: 1

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

**Pipe ID:** 10571742

Casing No:

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 930039251

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 92.0
Casing Diameter: 5.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Construction Record - Casing

**Casing ID:** 930039250

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

**Depth To:** 16.0

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

5.0 Casing Diameter: Casing Diameter UOM: inch Casing Depth UOM: ft

### Results of Well Yield Testing

**PUMP** Pumping Test Method Desc: 991501129 Pump Test ID:

Pump Set At: Static Level: 12.0 30.0 Final Level After Pumping: 30.0 Recommended Pump Depth: Pumping Rate: 12.0

Flowing Rate:

Recommended Pump Rate: 12.0 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: **Pumping Duration HR:** 3

### Water Details

Flowing:

Pumping Duration MIN:

Water ID: 933453816

0

No

Layer: Kind Code: **FRESH** Kind: Water Found Depth: 92.0 Water Found Depth UOM: ft

### **Links**

Bore Hole ID: 10023172 Tag No: Contractor: Depth M: 28.0416 1504

Year Completed: 1962 Path: 150\1501129.pdf 1962/10/15 45.4271934067589 Well Completed Dt: Latitude: -75.6316750312776 Longitude:

Audit No:

Use 1st:

NE/79.2 6 1 of 1 74.9 / 1.00 lot 25 con 1 **WWIS** ON

Order No: 23022400359

Well ID: 1501126 Flowing (Y/N):

Construction Date: Flow Rate: Domestic

Data Entry Status: Use 2nd: Data Src: Final Well Status: Water Supply Date Received: 18-Apr-1957 00:00:00

Water Type: Selected Flag: TRUE Casing Material: Abandonment Rec:

Audit No: Contractor: 2311 Tag: Form Version:

Constructn Method: Owner: Elevation (m): County: **OTTAWA-CARLETON** 

Elevatn Reliabilty: Lot: 025 Depth to Bedrock: Concession: 01 Well Depth: Concession Name: OF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability: Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m)

Municipality:

**GLOUCESTER TOWNSHIP** 

Site Info:

 $https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501126.pdf$ PDF URL (Map):

### Additional Detail(s) (Map)

1957/03/16 Well Completed Date: Year Completed: 1957 Depth (m): 38.1

45.4275527278765 Latitude: -75.631806872455 Longitude: Path: 150\1501126.pdf

### **Bore Hole Information**

10023169 Bore Hole ID: Elevation: DP2BR: Elevrc:

Spatial Status: 18 Zone: Code OB: East83: 450575.70 Code OB Desc: North83: 5030642.00

Open Hole: Org CS:

Cluster Kind: UTMRC: 16-Mar-1957 00:00:00

Date Completed: unknown UTM **UTMRC Desc:** Remarks: **Location Method:** p9

Loc Method Desc: Original Pre1985 UTM Rel Code 9: unknown UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

#### Overburden and Bedrock

**Materials Interval** 

Formation ID: 930991041

Layer: Color:

General Color:

Mat1: 17 Most Common Material: SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 125.0 Formation End Depth UOM: ft

### Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961501126 **Method Construction Code:** 

**Method Construction:** Cable Tool

Other Method Construction:

#### Pipe Information

Pipe ID: 10571739 Casing No:

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Comment: Alt Name:

### Construction Record - Casing

**Casing ID:** 930039244

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From:

Depth To: 12.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Construction Record - Casing

**Casing ID:** 930039245

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 125.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991501126

Pump Set At:

Static Level: 8.0 Final Level After Pumping: 100.0

Recommended Pump Depth:

Pumping Rate: 1.0

Flowing Rate:

Recommended Pump Rate:
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 2
Pumping Duration MIN: 0

Water Details

Flowing:

*Water ID*: 933453813

No

ft

 Layer:
 1

 Kind Code:
 1

 Kind:
 FRESH

 Water Found Depth:
 90.0

Water Found Depth UOM:

<u>Links</u>

**Bore Hole ID:** 10023169 **Tag No:** 

 Depth M:
 38.1
 Contractor:
 2311

 Year Completed:
 1957
 Path:
 150\1501126.pdf

 Well Completed Dt:
 1957/03/16
 Latitude:
 45.4275527278765

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Audit No:				<b>Longitude:</b> -75.631806872455	
7	1 of 44	S/80.4	72.9/-1.00	CALEX DIVISION OF SUNOCO ATTN ROBERTA WALSH 1111 OGILVIE RD GLOUCESTER ON K1J 7P7	PRT
Location ID: Type: Expiry Date: Capacity (L): Licence #:		19079 retail 1992-12-31 136380 0076343748			
7_	2 of 44	S/80.4	72.9 / -1.00	CALEX DIVISION OF SUNOCO ATTN ROBERTA WALSH 1111 OGILVIE RD GLOUCESTER ON K1J 7P7	PRT
Location ID: Type: Expiry Date: Capacity (L): Licence #:		19079 retail 1994-12-31 136380 0076389428			
7	3 of 44	S/80.4	72.9 / -1.00	LES PETROLES CALEX LTEE 1111 OGILVIE OTTAWA ON K1J7P7	PRT
Location ID: Type: Expiry Date: Capacity (L): Licence #:		28325 retail 1995-08-31 136313 0076421999			
7_	4 of 44	S/80.4	72.9 / -1.00	CALEX DIVISION OF SUNOCO ATTN MARY MISANGYI 1111 OGILVIE OTTAWA ON K1J7P7	PRT
Location ID: Type: Expiry Date: Capacity (L): Licence #:		28325 retail 1992-12-31 136380 0076343748			
7_	5 of 44	S/80.4	72.9 / -1.00	CALEX DIVISION OF SUNOCO ATTN MARY MISANGYI 1111 OGILVIE OTTAWA ON K1J7P7	PRT
Location ID: Type: Expiry Date: Capacity (L): Licence #:		28325 retail 1994-12-31 136380 0076389428			

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m) **CALEX SERVICE STATION** 7 6 of 44 S/80.4 72.9 / -1.00 **RST** 1111 OGILVIE RD **GLOUCESTER ON K1J7P7** Headcode: 1186800 Headcode Desc: Service Stations-Gasoline, Oil & Natural Gas 6137420528 Phone: List Name: Description: 7 7 of 44 S/80.4 72.9 / -1.00 **OLCO Petrolleum GEN** 1111 Ogilvie Ottawa ON K1J 7P7 Generator No: ON7373036 SIC Code: SIC Description: Approval Years: 03,04 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: 7 8 of 44 S/80.4 72.9 / -1.00 1633981 ONTARIO INC O/ A OLCO GAS BAR **FSTH** 1111 OGILVIE RD GLOUCESTER OTTAWA ON K1J 7P7 7/25/2005 License Issue Date: Tank Status: Licensed Tank Status As Of: August 2007 Operation Type: Retail Fuel Outlet Gasoline Station - Self Serve Facility Type: --Details--Status: Active Year of Installation: 1989 **Corrosion Protection:** Capacity: 27274 Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline Status: Active Year of Installation: 1977 **Corrosion Protection:** 36365 Capacity: Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline Active Status: Year of Installation: 1989 **Corrosion Protection:** 27274 Capacity: Tank Fuel Type: Liquid Fuel Single Wall UST - Diesel Active Status: Year of Installation: 1989 **Corrosion Protection:** 

Liquid Fuel Single Wall UST - Gasoline

Order No: 23022400359

45400

Capacity:

Tank Fuel Type:

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m) 9 of 44 S/80.4 72.9 / -1.00 1633981 ONTARIO INC O/ A OLCO GAS BAR 7 **FSTH** 1111 OGILVIE RD **GLOUCESTER ON K1J 7P7** 7/25/2005 3:04:00 PM License Issue Date: Tank Status: Licensed Tank Status As Of: December 2008 Operation Type: Retail Fuel Outlet Gasoline Station - Self Serve Facility Type: --Details--Active Status: Year of Installation: 1989 **Corrosion Protection:** 27274 Capacity: Tank Fuel Type: Liquid Fuel Single Wall UST - Diesel Status: Active Year of Installation: 1989 **Corrosion Protection:** Capacity: 27274 Liquid Fuel Single Wall UST - Gasoline Tank Fuel Type: Active Status: Year of Installation: 1977 **Corrosion Protection:** Capacity: 36365 Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline Active Status: Year of Installation: 1989 **Corrosion Protection:** 45400 Capacity: Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline 7 10 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc. CA 1111 Ogilvie Rd Ottawa ON 9556-7BLQAG Certificate #: 2008 Application Year: Issue Date: 2/8/2008 Industrial Sewage Works Approval Type: Approved Status: Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: **Emission Control:** 7 11 of 44 S/80.4 72.9 / -1.00 **MOT MARWAN ENTERPRISES LTD DTNK** 1111 OGILVIE RD OTTAWA ON

Order No: 23022400359

<u>Delisted Expired Fuel Safety</u> <u>Facilities</u> Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

 Instance No:
 26279500

 Status:
 EXPIRED

 Instance ID:
 282503

 Instance Type:
 FS Facility

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area:

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:

Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

Source

TSSA Program Area 2:
Description: FS Cylinder Exchange

Original Source: EXP

Record Date: Up to Mar 2012

7 12 of 44 S/80.4 72.9 / -1.00

LES PETROLES CALEX LTEE

1111 OGILVIE RD GLOUCESTER ON K1J 7P7 DTNK

Order No: 23022400359

Delisted Expired Fuel Safety

**Facilities** 

Instance No: 10083411 Status: EXPIRED

Instance ID:

Instance Type: FS Facility

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives:

TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area: **Expired Date:** 5/20/2009

Max Hazard Rank: Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related: Panam Venue Nm: External Identifier:

Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:

Source:

Map Key Number of Direction/ Elev/Diff Site DB

TSSA Program Area 2:

Description:
Original Source: EXP

Records

Record Date: Up to May 2013

7 13 of 44 S/80.4 72.9 / -1.00 SMS PETROLEUMS DIVISION OF SUNOCO

72.9 / -1.00

(m)

Distance (m)

NANCY NG 1111 OGILVIE RD

GLOUCESTER ON K1J 7P7

**Delisted Expired Fuel Safety** 

**Facilities** 

Instance No: 10105915 Status: EXPIRED

Instance ID:

Instance Type: FS Facility

Instance Type:
Instance Creation Dt:
Instance Install Dt:
Item Description:
Manufacturer:
Model:
Serial No:
ULC Standard:
Quantity:

ULC Standard:
Quantity:
Unit of Measure:
Overfill Prot Type:
Creation Date:
Next Periodic Str DT:
TSSA Base Sched Cycle 2:

TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives:

TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva:

TSSA Recd Tolerance: TSSA Program Area:

TSSA Program Area 2: Description:

Original Source: EXP

14 of 44

**Record Date:** Up to May 2013

12/20/1991

**DTNK** 

**DTNK** 

Order No: 23022400359

Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:

Expired Date:

Item: Piping Steel:

Piping Steel.
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:

Source:

Delisted Expired Fuel Safety

**Facilities** 

7

Instance No: 10105948
Status: EXPIRED

Status: EXPIRED Instance ID: Instance Type: FS Facility

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: GLOUCESTER ON K1J 7P7

**MO & MARWAN ENTERPRISES LTD** 

**Expired Date:** 12/7/2009 9:28

Max Hazard Rank: Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related: Panam Venue Nm: External Identifier:

1111 OGILVIE RD

Item: Piping Steel:

S/80.4

**ULC Standard:** 

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) Quantity: Piping Galvanized: Unit of Measure: Tank Single Wall St: Overfill Prot Type: Piping Underground: Tank Underground: Creation Date: Next Periodic Str DT: Source: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area: TSSA Program Area 2: Description: Original Source: **EXP** Record Date: Up to May 2013

7 15 of 44 S/80.4 72.9 / -1.00 1633981 ONTARIO INC O/ A OLCO GAS BAR **DTNK** 1111 OGILVIE RD **GLOUCESTER ON** 

### **Delisted Expired Fuel Safety Facilities**

63282847 Instance No: **EXPIRED** Status: Instance ID: 348109 FS Piping Instance Type: Instance Creation Dt:

Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva:

TSSA Recd Tolerance: TSSA Program Area: TSSA Program Area 2:

Original Source: **EXP** 

Record Date: Up to Mar 2012 Expired Date: Max Hazard Rank: Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related: Panam Venue Nm: External Identifier: Item: Piping Steel:

Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground: Source:

FS Piping Description:

1633981 ONTARIO INC O/ A OLCO GAS BAR 1111 OGILVIE RD **GLOUCESTER ON** 

**DTNK** 

Order No: 23022400359

**Delisted Expired Fuel Safety** 

16 of 44

S/80.4

72.9 / -1.00

7

**Facilities** 

Instance No: 11572668
Status: EXPIRED
Instance ID: 91197
Instance Type: FS Piping
Instance Creation Dt:

Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance:

TSSA Program Area 2:
Description: FS Piping
Original Source: EXP

Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:

Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:
Source:

7 17 of 44

TSSA Program Area:

S/80.4 72.9 / -1.00

1633981 ONTARIO INC O/ A OLCO GAS BAR 1111 OGILVIE RD GLOUCESTER ON

DTNK

Order No: 23022400359

#### <u>Delisted Expired Fuel Safety</u> <u>Facilities</u>

 Instance No:
 11572649

 Status:
 EXPIRED

 Instance ID:
 91528

 Instance Type:
 FS Piping

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva:

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:
Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall Si

Tank Single Wall St: Piping Underground: Tank Underground:

Source:

TSSA Recd Tolerance:

TSSA Program Area: TSSA Program Area 2:

Description: FS Piping
Original Source: EXP

Record Date: Up to Mar 2012

7 18 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc 1111 Ogilvie Road GEN

Ottawa ON

 Generator No:
 ON7051938

 SIC Code:
 447110, 811192

SIC Description: Gasoline Stations with Convenience Stores, Car Washes

Approval Years: 200

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 213

Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 221

Waste Class Name: LIGHT FUELS

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

7 19 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc

1111 Ogilvie Road Ottawa ON

Order No: 23022400359

Ottawa

**Generator No:** ON7051938 **SIC Code:** 447110, 811192

SIC Description: Gasoline Stations with Convenience Stores, Car Washes

Approval Years: 2010

PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility:

Detail(s)

MHSW Facility:

Waste Class: 25

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 213

Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 221

Waste Class Name: LIGHT FUELS

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m) 1633981 Ontario Inc 7 20 of 44 S/80.4 72.9 / -1.00 **GEN** 1111 Ogilvie Road

Ottawa ON

Generator No: ON7051938 SIC Code: 447110, 811192

SIC Description: Gasoline Stations with Convenience Stores, Car Washes

Approval Years:

PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class:

LIGHT FUELS Waste Class Name:

Waste Class:

Waste Class Name: PETROLEUM DISTILLATES

21 of 44 S/80.4 **1633981 ONTARIO INC** 7 72.9 / -1.00

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

Gasoline

NULL

NULL

ON

Quantity: Unit of Measure:

Fuel Type:

Fuel Type2:

Fuel Type3:

Piping Steel: Piping Galvanized:

Tanks Single Wall St:

Piping Underground:

No Underground:

Panam Related:

Panam Venue:

Manufacturer: Serial No:

Ulc Standard:

Instance No: 11287923

Status: Cont Name:

FS Liquid Fuel Tank

Instance Type:

Item:

Item Description: FS Liquid Fuel Tank Tank Type: Single Wall UST 7/24/2009 10:42:38 AM Install Date:

1986

Install Year:

Years in Service:

Model: **NULL** 

Description:

36365 Capacity:

Fiberglass (FRP) Tank Material: Corrosion Protect: Fiberglass

Overfill Protect:

FS Liquid Fuel Tank Facility Type:

FS GASOLINE STATION - SELF SERVE Parent Facility Type:

Facility Location:

Device Installed Location: 1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

**Liquid Fuel Tank Details** 

**Overfill Protection:** 

1633981 ONTARIO INC **Owner Account Name:** FS LIQUID FUEL TANK Item:

S/80.4 **1633981 ONTARIO INC** 7 22 of 44 72.9 / -1.00

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

ON

Order No: 23022400359

**FST** 

**FST** 

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

11287886 Manufacturer:

Status: Serial No: Cont Name: Ulc Standard:

FS Liquid Fuel Tank Instance Type: Quantity: Item:

Unit of Measure:

FS Liquid Fuel Tank Gasoline Fuel Type: Item Description: Tank Type: Single Wall UST Fuel Type2: NULL Install Date: 7/24/2009 10:41:37 AM Fuel Type3: **NULL** 

Install Year: 1976 Piping Steel: Years in Service: Piping Galvanized:

NULL Tanks Single Wall St: Model: Description: Piping Underground: 45400 No Underground: Capacity: Tank Material: Fiberglass (FRP) Panam Related:

**Corrosion Protect:** Overfill Protect:

Instance No:

FS Liquid Fuel Tank Facility Type:

Fiberglass

Parent Facility Type: FS GASOLINE STATION - SELF SERVE

Facility Location:

Device Installed Location: 1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

Liquid Fuel Tank Details

Overfill Protection:

**Owner Account Name: 1633981 ONTARIO INC** FS LIQUID FUEL TANK Item:

S/80.4 72.9 / -1.00 **1633981 ONTARIO INC** 7 23 of 44

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

**FST** 

**FST** 

Order No: 23022400359

ON

Panam Venue:

11287944 Manufacturer: Instance No:

Serial No: Status: Ulc Standard: Cont Name: Instance Type: FS Liquid Fuel Tank Quantity:

Unit of Measure: Item:

FS Liquid Fuel Tank Fuel Type: Diesel Item Description: Tank Type: Single Wall UST Fuel Type2: NULL Install Date: Fuel Type3: 7/24/2009 10:42:16 AM **NULL** Install Year: 1986 Piping Steel:

Piping Galvanized: Years in Service:

Model: NULL Tanks Single Wall St: Piping Underground: Description:

No Underground: Capacity: 27274 Tank Material: Fiberglass (FRP) Panam Related: **Corrosion Protect: Fiberglass** Panam Venue:

**Overfill Protect:** 

FS Liquid Fuel Tank Facility Type:

Parent Facility Type: FS GASOLINE STATION - SELF SERVE

Facility Location:

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA Device Installed Location:

**Liquid Fuel Tank Details** 

**Overfill Protection:** 

**1633981 ONTARIO INC Owner Account Name:** Item: **FS LIQUID FUEL TANK** 

7 24 of 44 S/80.4 72.9 / -1.00 **1633981 ONTARIO INC** 

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

ON

Instance No: 64508685 Manufacturer:

Number of Direction/ Elev/Diff Site DΒ Map Key

Records Distance (m) (m)

Serial No: Status: Cont Name: Ulc Standard: Instance Type: FS Liquid Fuel Tank Quantity:

Unit of Measure: Item Description: FS Liquid Fuel Tank Fuel Type: Gasoline Double Wall UST Fuel Type2: NULL Tank Type: Install Date: 6/24/2011 11:17:43 AM Fuel Type3: NULL

Install Year: 2011 Piping Steel:

Years in Service: Piping Galvanized: Model: DWT6 Tanks Single Wall St: Piping Underground: Description: Capacity: 50000 No Underground: Fiberglass (FRP) Panam Related: Tank Material:

Corrosion Protect: Fiberglass Panam Venue:

Overfill Protect: Facility Type: FS Liquid Fuel Tank

Parent Facility Type: FS Gasoline Station - Self Serve

Facility Location:

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA Device Installed Location:

**Liquid Fuel Tank Details** 

Item:

**Overfill Protection:** 1633981 ONTARIO INC **Owner Account Name:** 

Item: FS LIQUID FUEL TANK

S/80.4 72.9 / -1.00 **1633981 ONTARIO INC** 7 25 of 44 **FST** 1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

ON

Instance No: 64508686 Manufacturer:

Serial No: Status: Ulc Standard: Cont Name: Instance Type: FS Liquid Fuel Tank Quantity:

Item: Unit of Measure: Item Description: FS Liquid Fuel Tank Gasoline Fuel Type:

Double Wall UST Fuel Type2: Diesel Tank Type: Install Date: 6/24/2011 11:24:14 AM Fuel Type3: NULL

Install Year: 2011 Piping Steel:

Years in Service: Piping Galvanized: **DWT6 DWB2** Tanks Single Wall St: Model: Description: Piping Underground:

50000 No Underground: Capacity: Tank Material: Fiberglass (FRP) Panam Related: **Corrosion Protect:** Fiberglass Panam Venue:

Overfill Protect:

FS Liquid Fuel Tank Facility Type:

FS Gasoline Station - Self Serve Parent Facility Type:

Facility Location:

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA Device Installed Location:

**Liquid Fuel Tank Details** 

Overfill Protection:

67

**Owner Account Name: 1633981 ONTARIO INC FS LIQUID FUEL TANK** Item:

7 26 of 44 S/80.4 72.9 / -1.00 **1633981 ONTARIO INC** 

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

**FST** 

ON

Instance No: 11287906 Manufacturer: Status: Serial No:

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

Fuel Type:

Fuel Type2:

Fuel Type3:

Piping Steel: Piping Galvanized:

Tanks Single Wall St:

Piping Underground:

No Underground:

Panam Related:

Panam Venue:

Cont Name: Ulc Standard: Instance Type: FS Liquid Fuel Tank Quantity: Unit of Measure:

Item:

Item Description: FS Liquid Fuel Tank Tank Type: Single Wall UST Install Date: 7/24/2009 10:43:05 AM

Install Year:

Years in Service: Model:

NULL Description: 27274 Capacity: Tank Material: Fiberglass (FRP)

Corrosion Protect: **Fiberglass** 

Overfill Protect:

Facility Type: FS Liquid Fuel Tank

FS GASOLINE STATION - SELF SERVE Parent Facility Type:

Facility Location:

Device Installed Location: 1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

**Liquid Fuel Tank Details** 

Overfill Protection:

**1633981 ONTARIO INC Owner Account Name: FS LIQUID FUEL TANK** Item:

7 27 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc

1111 Ogilvie Road Ottawa ON

Gasoline

**GEN** 

Order No: 23022400359

NULL

**NULL** 

Generator No: ON7051938 SIC Code: 447110. 811192

SIC Description: Gasoline Stations with Convenience Stores, Car Washes

Approval Years:

PO Box No: Country: Status: Co Admin:

Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 221

Waste Class Name: LIGHT FUELS

Waste Class:

PETROLEUM DISTILLATES Waste Class Name:

7 28 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc **GEN** 

1111 Ogilvie Road

Ottawa ON

Generator No: ON7051938 447110, 811192 SIC Code: SIC Description: **CAR WASHES** 

Approval Years: PO Box No: Country:

2013

erisinfo.com | Environmental Risk Information Services

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

Status: Co Admin:

Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class:

WASTE OILS & LUBRICANTS Waste Class Name:

Waste Class: 221

Waste Class Name: LIGHT FUELS

Waste Class: 213

Waste Class Name: PETROLEUM DISTILLATES

7 29 of 44 S/80.4 72.9 / -1.00 **FAS GAS PLUS** 

1111 OGILVIE RD UNIT 1 **GLOUCESTER ON K1J7P7** 

Unknown / N/A

1111 Ogilvie Rd

Primary Assessment of Spills

Ottawa

01186800 Headcode:

SERVICE STATIONS GASOLINE OIL & NATURAL GAS Headcode Desc:

Phone: 6137420528

List Name: Info-direct(TM) BUSINESS FILE

Description:

30 of 44 S/80.4 72.9 / -1.00 1111 Ogilvie Rd 7 SPL Ottawa ON

Sector Type:

Site Address:

Site Region: Site Municipality:

Site Lot:

Site Conc:

Northing:

Easting:

Agency Involved:

Site District Office:

Site Geo Ref Accu:

SAC Action Class:

Site Map Datum:

Source Type:

Site Postal Code:

Nearest Watercourse:

Ref No: 2234-ACHT7Y Discharger Report: Site No: NA Material Group: Incident Dt: 2016/08/04 Health/Env Conseq: Client Type:

Year:

Incident Cause: Incident Event: Unknown / N/A

Contaminant Code:

COOLANT N.O.S. Contaminant Name:

Contaminant Limit 1: Contam Limit Freq 1: Contaminant UN No 1: **Environment Impact:** Nature of Impact:

Receiving Medium: Receiving Env: Land No

MOE Response: Dt MOE Arvl on Scn:

2016/08/04 MOE Reported Dt: **Dt Document Closed:** 

Incident Reason: Unknown / N/A

catch basin<UNOFFICIAL>

Site Name: Site County/District:

Municipality No: Site Geo Ref Meth:

Incident Summary: Ottawa - 0.5L coolant to CB, cleaning

Contaminant Qty: 0.5 L

31 of 44

1633981 Ontario Inc. 1111 Ogilvie Rd

Order No: 23022400359

**ECA** 

**RST** 

72.9 / -1.00

S/80.4

7

Map Key Number of Direction/ Elev/Diff Site DB

Records Distance (m) (m)

Ottawa ON K1J 7P7

45.426285

**GEN** 

Order No: 23022400359

 Approval No:
 9556-7BLQAG
 MOE District:
 Ottawa

 Approval Date:
 2008-02-08
 City:
 -75.63237

 Status:
 Approved
 Longitude:
 -75.63237

 Status:
 Approved
 Longitude:

 Record Type:
 ECA
 Latitude:

 Link Source:
 IDS
 Geometry X:

 SWP Area Name:
 Rideau Valley
 Geometry Y:

Approval Type: ECA-INDUSTRIAL SEWAGE WORKS
Project Type: INDUSTRIAL SEWAGE WORKS

Business Name: 1633981 Ontario Inc. Address: 1111 Ogilvie Rd

Address: 1111 Ogilvie Rd Full Address:

Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/3406-7B4RGZ-14.pdf

PDF Site Location:

7 32 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc 1111 Ogilvie Road

Ottawa ON K1J 7P7

 Generator No:
 ON7051938

 SIC Code:
 447110, 811192

 SIC Description:
 447110, CAR WASHES

Approval Years: 2016
PO Box No:
Country: Canada

Status:
Co Admin:

Choice of Contact: CO\_OFFICIAL

Phone No Admin:

**Contaminated Facility:** No **MHSW Facility:** No

Detail(s)

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 213

Waste Class Name: PETROLEUM DISTILLATES

Waste Class: 221

Waste Class Name: LIGHT FUELS

7 33 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc 1111 Ogilvie Road

Ottawa ON K1J 7P7

 Generator No:
 ON7051938

 SIC Code:
 447110, 811192

 SIC Description:
 447110, CAR WASHES

Approval Years: 2015
PO Box No:
Country: Canada

Status: Co Admin:

Choice of Contact: CO\_OFFICIAL

Phone No Admin:

Contaminated Facility: No MHSW Facility: No

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m) Detail(s) Waste Class: 221 Waste Class Name: LIGHT FUELS Waste Class: 213 Waste Class Name: PETROLEUM DISTILLATES Waste Class: Waste Class Name: WASTE OILS & LUBRICANTS 7 34 of 44 S/80.4 72.9 / -1.00 1633981 Ontario Inc **GEN** 1111 Ogilvie Road Ottawa ON K1J 7P7 ON7051938 Generator No: SIC Code: 447110, 811192 447110, CAR WASHES SIC Description: Approval Years: PO Box No: Country: Canada Status: Co Admin: Choice of Contact: CO\_OFFICIAL Phone No Admin: Contaminated Facility: No MHSW Facility: No Detail(s) Waste Class: 221 Waste Class Name: LIGHT FUELS Waste Class: 252 WASTE OILS & LUBRICANTS Waste Class Name: Waste Class: Waste Class Name: PETROLEUM DISTILLATES 35 of 44 72.9 / -1.00 1633981 Ontario Inc 7 S/80.4 **GEN** 1111 Ogilvie Road Ottawa ON K1J 7P7 Generator No: ON7051938 SIC Code: SIC Description: Approval Years: As of Dec 2018 PO Box No: Country: Canada Status: Registered Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Order No: 23022400359

Detail(s)

Waste Class: 221 I
Waste Class Name: Light fuels

Waste Class: 252 L

Waste Class Name: Waste crankcase oils and lubricants

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) 72.9 / -1.00 1633981 Ontario Inc 7 36 of 44 S/80.4 **GEN** 1111 Ogilvie Road Ottawa ON K1J 7P7 ON7051938 Generator No: SIC Code: SIC Description: Approval Years: As of Jul 2020 PO Box No: Country: Canada Status: Registered Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 252 I Waste Class Name: Waste crankcase oils and lubricants 221 I Waste Class: Waste Class Name: Light fuels 7 37 of 44 S/80.4 72.9 / -1.00 **ECONO GAS** RST 1111 OGILVIE RD APT 1 **GLOUCESTER ON K1J7P7** Headcode: 01186800 SERVICE STATIONS GASOLINE OIL & NATURAL GAS Headcode Desc: Phone: 6137420528 List Name: INFO-DIRECT(TM) BUSINESS FILE

Description:

7

S/80.4 **1633981 ONTARIO INC** 38 of 44 72.9 / -1.00

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

**NULL** 

**DTNK** 

Order No: 23022400359

**Delisted Expired Fuel Safety** 

**Facilities** 

Instance No: 11287923 Expired Date: Inactive Max Hazard Rank: Status:

Instance ID: Facility Location: 1111 OGILVIE RD GLOUCESTER K1J 7P7

ON CA

Instance Type: Facility Type: **FS LIQUID FUEL TANK** 

Instance Creation Dt: 7/19/2000 8:15:15 PM Fuel Type 2: NULL 7/24/2009 10:42:38 AM Fuel Type 3: NULL FS Liquid Fuel Tank Panam Related: NULL

Instance Install Dt: Item Description: NULL Panam Venue Nm: NULL Manufacturer: Model: NULL External Identifier: NULL Serial No: **NULL** Item:

**NULL** Piping Steel: **ULC Standard:** Quantity: Piping Galvanized: Unit of Measure: EΑ Tank Single Wall St: Overfill Prot Type: **NULL** Piping Underground: Creation Date: 7/5/2009 1:24:38 AM Tank Underground:

Next Periodic Str DT: FS Liquid Fuel Tank NULL Source:

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) TSSA Base Sched Cycle 2: NULL

TSSAMax Hazard Rank 1: **NULL** TSSA Risk Based Periodic Yn: NULL TSSA Volume of Directives: **NULL** TSSA Periodic Exempt: **NULL** TSSA Statutory Interval: **NULL** TSSA Recd Insp Interva: **NULL** TSSA Recd Tolerance: NULL TSSA Program Area: **NULL** TSSA Program Area 2: **NULL** 

2009VBS Super gasoline Description:

S/80.4

Original Source: **EXP** 31-JUL-2020 Record Date:

72.9 / -1.00

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

**DTNK** 

**DTNK** 

Order No: 23022400359

ON

**Delisted Expired Fuel Safety** 

**Facilities** 

7

11287906 Instance No: Inactive Status:

39 of 44

Instance ID:

Instance Type:

7/19/2000 8:15:15 PM Instance Creation Dt: Instance Install Dt: 7/24/2009 10:43:05 AM Item Description: FS Liquid Fuel Tank

Manufacturer: NULL Model: NULL Serial No: NULL **ULC Standard: NULL** Quantity: Unit of Measure: EΑ Overfill Prot Type: NULL

7/5/2009 1:24:38 AM Creation Date:

Next Periodic Str DT: NULL

**NULL** TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: **NULL** TSSA Risk Based Periodic Yn: NULL NULL TSSA Volume of Directives: TSSA Periodic Exempt: **NULL** TSSA Statutory Interval: NULL TSSA Recd Insp Interva: **NULL** TSSA Recd Tolerance: **NULL** TSSA Program Area: NULL TSSA Program Area 2: NULL

2009VBS Regular gasoline Description:

EXP Original Source:

Record Date: 31-JUL-2020 Expired Date:

Max Hazard Rank: **NULL** 

**1633981 ONTARIO INC** 

1111 OGILVIE RD GLOUCESTER K1J 7P7 Facility Location:

ON CA

Facility Type: FS LIQUID FUEL TANK

Fuel Type 2: NULL Fuel Type 3: NULL Panam Related: NULL Panam Venue Nm: NULL External Identifier: **NULL** 

Item:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

FS Liquid Fuel Tank Source:

7 40 of 44 S/80.4

72.9 / -1.00

**1633981 ONTARIO INC** 

1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

ON

**Delisted Expired Fuel Safety** 

**Facilities** 

Instance No: 11287944

Status: Inactive **Expired Date:** 

**NULL** Max Hazard Rank:

Map Key Number of Direction/ Elev/Diff Site DB

Records Distance (m) (m)

Instance ID: Facility Location: 1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

Instance Type: FS LIQUID FUEL TANK

 Instance Creation Dt:
 7/19/2000 8:15:15 PM
 Fuel Type 2:
 NULL

 Instance Install Dt:
 7/24/2009 10:42:16 AM
 Fuel Type 3:
 NULL

 Item Description:
 FS Liquid Fuel Tank
 Panam Related:
 NULL

 Manufacturer:
 NULL
 Panam Venue Nm:
 NULL

 Model:
 NULL
 External Identifier:
 NULL

 Sorial No:
 NULL
 Item:

 Serial No:
 NULL
 Item:

 ULC Standard:
 NULL
 Piping Steel:

 Quantity:
 1
 Piping Galvanized:

 Unit of Measure:
 EA
 Tank Single Wall St:

 Overfill Prot Type:
 NULL
 Piping Underground:

Creation Date: 7/5/2009 1:24:35 AM Tank Underground:

Next Periodic Str DT: NULL Source: FS Liquid Fuel Tank
TSSA Base Sched Cvcle 2: NULL

TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: **NULL** TSSA Risk Based Periodic Yn: NULL TSSA Volume of Directives: **NULL** TSSA Periodic Exempt: NULL TSSA Statutory Interval: **NULL** TSSA Recd Insp Interva: **NULL** NULL TSSA Recd Tolerance: TSSA Program Area: **NULL** TSSA Program Area 2: **NULL** Description: 2009VBS

Original Source: EXP Record Date: 31-JUL-2020

7 41 of 44 S/80.4 72.9 / -1.00 1633981 ONTARIO INC 1111 OGILVIE RD GLOUCESTER K1J 7P7 ON CA

ON

<u>Delisted Expired Fuel Safety</u> <u>Facilities</u>

Instance No: 11287886

Instance ID:

Status:

Instance Type:

Instance Creation Dt: 7/19/2000 8:15:15 PM
Instance Install Dt: 7/24/2009 10:41:37 AM
Item Description: FS Liquid Fuel Tank

Inactive

Manufacturer: NULL
Model: NULL
Serial No: NULL
ULC Standard: NULL
Quantity: 1
Unit of Measure: EA
Overfill Prot Type: NULL

**Creation Date:** 7/5/2009 1:24:32 AM

Next Periodic Str DT: NULL

TSSA Base Sched Cycle 2: **NULL NULL** TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: NULL TSSA Volume of Directives: NULL TSSA Periodic Exempt: **NULL** TSSA Statutory Interval: **NULL** TSSA Recd Insp Interva: **NULL** TSSA Recd Tolerance: NULL TSSA Program Area: NULL TSSA Program Area 2: **NULL**  Expired Date:

Max Hazard Rank: NULL

Facility Location: 1111 OGILVIE RD GLOUCESTER K1J 7P7

Order No: 23022400359

ON CA

Facility Type: FS LIQUID FUEL TANK

Fuel Type 2: NULL
Fuel Type 3: NULL
Panam Related: NULL
Panam Venue Nm: NULL
External Identifier: NULL

Item:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

Source: FS Liquid Fuel Tank

**Description:** 2009VBS Regular gasoline

Original Source: EXP

Record Date: 31-JUL-2020

7 42 of 44 S/80.4 72.9 / -1.00 1111 OGIL VIE RD GLOUCESTER ON K1J 7P7

**Delisted Fuel Storage Tank** 

Instance No: 29160194
Status: Active

Instance Type:
Fuel Type:
Cont Name:
Capacity:
Tank Material:
Corrosion Prot:
Tank Type:
Install Year:
Facility Type:
Device Installed Loc:

Fuel Type 2: Fuel Type 3:

Item: FS GASOLINE STATION - SELF SERVE

Item Description:
Model:
Description:

Instance Creation Dt: Instance Install Dt: Manufacturer: Serial No: ULC Standard: Quantity: Unit of Measure: Parent Fac Type:

TSSA Base Sched Cycle 1: TSSA Base Sched Cycle 2:

Original Source: FST

43 of 44

Record Date: 31-MAY-2021

Creation Date: Overfill Prot Type: Facility Location:

Piping SW Steel: 0 Piping SW Galvan: 0 Tanks SW Steel: 0 Piping Underground: 3 No Underground: 6 Max Hazard Rank: Max Hazard Rank 1: Nxt Period Start Dt: Program Area 1: Program Area 2: Nxt Period Strt Dt 2: Risk Based Periodic: Vol of Directives: Years in Service: Created Date:

Periodic Exempt: Statutory Interval: Rcomnd Insp Interval: Recommended Toler: Panam Venue Name: External Identifier:

1633981 Ontario Inc

Federal Device:

72.9 / -1.00

Generator No: SIC Code:

7

SIC Description:

Approval Years: As of Nov 2021

PO Box No:

Country: Canada Status: Registered

Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 252 L

Waste Class Name: Waste crankcase oils and lubricants

S/80.4

ON7051938

1111 Ogilvie Road Ottawa ON K1J 7P7

GEN

Order No: 23022400359

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Waste Class: Waste Class Name:		221 I Light fuels			
<u>7</u>	44 of 44	S/80.4	72.9 / -1.00	1633981 Ontario Inc 1111 Ogilvie Road Ottawa ON K1J 7P7	GEN
Generator No: SIC Code:		ON7051938			
SIC Description: Approval Years: PO Box No:		As of Oct 2022			
Country: Status: Co Admin: Choice of Co	ontact:	Canada Registered			
Phone No Ad Contaminate MHSW Facili	ed Facility:				
<u>Detail(s)</u>					
Waste Class: Waste Class Name:		221 I LIGHT FUELS			
Waste Class: Waste Class Name:		252 L WASTE OILS & LU	BRICANTS		
<u>8</u>	1 of 5	E/81.9	73.9 / 0.00	MANDARIN-OGILVIE RESTAURANT 1137 OGILVIE ROAD GLOUCESTER CITY ON K1J 7P6	CA
Certificate #		8-4099-93- 93			
Issue Date:		9/29/1993			
Approval Ty Status: Application Client Name Client Addre Client City:	Type: :	Industrial air Approved			
Client Postal Code: Project Description: Contaminants: Emission Control:		RESTAURANT KIT Odour/Fumes Panel Filter	CHEN EXHAUST	FAN	
8	2 of 5	E/81.9	73.9 / 0.00	FRESH AIR EXPERIENCE INC. 1137 AGILVIE ROAD GLOUCESTER ON K1J 7P6	GEN
Generator No: SIC Code: SIC Description: Approval Years: PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:		ON0960500 0000 *** NOT DEFINED *** 86,87,88,89,90,92,93,97,98			

Order No: 23022400359

Detail(s)

Waste Class: 213

Waste Class Name: PETROLEUM DISTILLATES

8 3 of 5 E/81.9 73.9 / 0.00 FRESH AIR EXPERIENCE INC. 15-313
1137 AGILVIE ROAD
GLOUCESTER ON K1J 7P6

Generator No: ON0960500

**SIC Code:** 6541

SIC Description: SPORTING GOODS STORE

94,95,96

Approval Years:
PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:

Country: Status: So Admin:

Detail(s)

MHSW Facility:

Waste Class: 213

Waste Class Name: PETROLEUM DISTILLATES

<u>8</u> 4 of 5 E/81.9 73.9 / 0.00 1137 Ogilvie Road and 1111 Cummings Avenue Gloucester ON K1J 7P6

 Order No:
 21031000028

 Status:
 C

Report Type: Standard Report Report Date: 15-MAR-21

Date Received: 10-MAR-21

Date Received: 1
Previous Site Name:
Lot/Building Size:
Additional Info Ordered:

Municipality:
d Report Client Prov/State: ON
-21 Search Radius (km): .25

**X**: -75.6314686 **Y**: 45.4268306

Nearest Intersection:

8 5 of 5 E/81.9 73.9 / 0.00

1137 Ogilvie Road and 1111 Cummings Avenue Gloucester ON K1J 7P6

**EHS** 

PRT

Order No: 23022400359

*Order No:* 21031000028

Status: C

Report Type: Standard Report Report Date: 15-MAR-21
Date Received: 10-MAR-21

Previous Site Name: Lot/Building Size: Additional Info Ordered: Nearest Intersection:
Municipality:
Client Prov/State:

Client Prov/State: ON Search Radius (km): .25

X:-75.6314686Y:45.4268306

1 of 5 ENE/86.9 74.9 / 1.00 ATLAS WELDING & EQUIPMENT RENTALS DIV

OF LALONDE W 1091 CUMMINGS AV GLOUCESTER ON K1J 7S2

Location ID: 5278 Type: private

9

 Map Key
 Number of Direction/
 Elev/Diff
 Site
 DB

 Records
 Distance (m) (m)

 Expiry Date:

 Capacity (L):
 2273.00

 Licence #:
 0001019493

9 2 of 5 ENE/86.9 74.9 / 1.00 ATLAS WELDING & EQUIPMENT RENTALS DIV

OF LALONDE WELDING LTD 1091 CUMMINGS AVE GLOUCESTER ON K1J 7S2 **FSTH** 

Order No: 23022400359

License Issue Date:6/4/1990Tank Status:LicensedTank Status As Of:August 2007Operation Type:Private Fuel Outlet

Facility Type: Gasoline Station - Self Serve

--Details--

Status:RemovedYear of Installation:1985

Corrosion Protection:

Capacity: 2273

Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline

9 3 of 5 ENE/86.9 74.9 / 1.00 ATLAS WELDING & EQUIPMENT RENTALS DIV

OF LALONDE WELDING LTD 1091 CUMMINGS AVE GLOUCESTER ON

<u>Delisted Expired Fuel Safety</u> <u>Facilities</u>

 Instance No:
 10762206

 Status:
 EXPIRED

 Instance ID:
 38518

 Instance Type:
 FS Piping

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance:

**Description:** FS Piping **Original Source:** EXP

Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:
External Identifier:

Item:
Piping Steel:
Piping Galvanized:
Tank Single Wall St:
Piping Underground:
Tank Underground:

Source:

TSSA Program Area: TSSA Program Area 2:

OF LALONDE WELDING LTD 1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA ON

**DTNK** 

**Delisted Expired Fuel Safety** 

**Facilities** 

Instance No: 10762197 **EXPIRED** Status:

Instance ID:

Instance Type:

1/17/1990 Instance Creation Dt: Instance Install Dt: 1/17/1990

Item Description: FS Liquid Fuel Tank

Manufacturer: NULL NULL Model: Serial No: NULL **ULC Standard:** NULL Quantity: FΑ Unit of Measure: Overfill Prot Type: NULL

7/5/2009 1:20:40 AM Creation Date:

Next Periodic Str DT: NULL

TSSA Base Sched Cycle 2: **NULL** TSSAMax Hazard Rank 1: **NULL** TSSA Risk Based Periodic Yn: NULL TSSA Volume of Directives: NULL TSSA Periodic Exempt: **NULL** TSSA Statutory Interval: **NULL** TSSA Recd Insp Interva: NULL TSSA Recd Tolerance: **NULL** TSSA Program Area: **NULL NULL** TSSA Program Area 2:

Description: UNDERGROUND TANK

AS PER E063297

Original Source: **EXP** Record Date: 31-JUL-2020 Expired Date:

Max Hazard Rank: **NULL** 

Facility Location: 1091 CUMMINGS AVE GLOUCESTER K1J

7S2 ON CA

FS LIQUID FUEL TANK Facility Type:

Fuel Type 2: **NULL** Fuel Type 3: NULL Panam Related: NULL Panam Venue Nm: **NULL** External Identifier: NULL

Item:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

FS Liquid Fuel Tank Source:

9 5 of 5 ENE/86.9 74.9 / 1.00 ATLAS WELDING & EQUIPMENT RENTALS DIV

Instance No: 10762197

Status: Cont Name: Instance Type: Item:

FS Liquid Fuel Tank Item Description: Tank Type: Liquid Fuel Single Wall UST

Install Date: 1/17/1990 Install Year: 1985

Years in Service:

**NULL** Model: Description:

2273 Capacity: Tank Material: Steel

Impressed Current **Corrosion Protect:** 

OF LALONDE WELDING LTD

1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA

ON

Manufacturer: Serial No: Ulc Standard: Quantity: Unit of Measure:

Fuel Type: Gasoline Fuel Type2: NULL Fuel Type3: NULL

Piping Steel: Piping Galvanized: Tanks Single Wall St: Piping Underground: No Underground: Panam Related: Panam Venue:

**FST** 

Number of Elev/Diff Site DΒ Map Key Direction/ (m)

Records Distance (m)

Overfill Protect: Facility Type: FS Liquid Fuel Tank

Parent Facility Type: Facility Location:

Device Installed Location: 1091 CUMMINGS AVE GLOUCESTER K1J 7S2 ON CA

**Liquid Fuel Tank Details** 

Overfill Protection:

Owner Account Name: ATLAS WELDING & EQUIPMENT RENTALS DIV OF LALONDE WELDING LTD

**FS LIQUID FUEL TANK** Item:

1 of 1 SE/92.0 10 73.9 / 0.00 lot 25 con 1 **WWIS** ON

Well ID: 1501115 Flowing (Y/N):

**Construction Date:** Flow Rate: Use 1st: Domestic Data Entry Status:

Use 2nd: Data Src: Water Supply 23-Jun-1948 00:00:00 Final Well Status: Date Received:

TRUE Water Type: Selected Flag:

Casing Material: Abandonment Rec: 2311 Audit No: Contractor:

Tag: Form Version: 1 Constructn Method: Owner:

Elevation (m): County: **OTTAWA-CARLETON** 

Elevatn Reliabilty: Lot: 025 Depth to Bedrock: Concession: 01 Well Depth: Concession Name: OF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: UTM Reliability: Clear/Cloudy:

**GLOUCESTER TOWNSHIP** Municipality:

Site Info:

https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501115.pdf PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 1948/04/30 Year Completed: 1948 Depth (m): 42.672

45.4263829899684 Latitude: Longitude: -75.6317299075181 150\1501115.pdf Path:

**Bore Hole Information** 

Bore Hole ID: 10023158 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18

Code OB: East83: 450580.70 Code OB Desc: 5030512.00 North83: Open Hole: Org CS:

Cluster Kind: **UTMRC:** 

30-Apr-1948 00:00:00 Date Completed: **UTMRC Desc:** unknown UTM

Order No: 23022400359

Remarks: Location Method:

Loc Method Desc: Original Pre1985 UTM Rel Code 9: unknown UTM

Elevrc Desc: Location Source Date: Improvement Location Source:

Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

930991012 Formation ID:

Layer: 2 Color:

General Color:

Mat1:

SHALE Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 22.0 Formation End Depth: 140.0 Formation End Depth UOM:

Overburden and Bedrock

**Materials Interval** 

Formation ID: 930991011

Layer: 6

Color:

**BROWN** General Color: Mat1: 05 Most Common Material: CLAY 09 Mat2:

MEDIUM SAND Mat2 Desc:

Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 22.0 Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961501115

**Method Construction Code:** 

Cable Tool **Method Construction:** 

Other Method Construction:

Pipe Information

Pipe ID: 10571728

Casing No:

Comment: Alt Name:

**Construction Record - Casing** 

Casing ID: 930039223

Layer: 3 Material:

**OPEN HOLE** Open Hole or Material:

Depth From:

Depth To: 140.0 Casing Diameter: 4.0

Order No: 23022400359

Casing Diameter UOM: inch Casing Depth UOM: ft

### **Construction Record - Casing**

**Casing ID:** 930039222

Layer: 2

Material:

Open Hole or Material:

Depth From:

Depth To: 22.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Construction Record - Casing

**Casing ID:** 930039221

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To:20.0Casing Diameter:4.0Casing Diameter UOM:inchCasing Depth UOM:ft

### Results of Well Yield Testing

Pumping Test Method Desc: PUMP

**Pump Test ID:** 991501115

Pump Set At: Static Level:

Final Level After Pumping: 45.0

Recommended Pump Depth:

Pumping Rate: 2.0

Flowing Rate: Recommended Pump Rate:

Levels UOM: ft

Rate UOM: GPM

Water State After Test Code:

Water State After Test: Pumping Test Method:

Pumping Duration HR: Pumping Duration MIN:

Flowing: No

# Water Details

*Water ID*: 933453797

1

Layer: 1
Kind Code: 1

Kind: FRESH
Water Found Depth: 120.0
Water Found Depth UOM: ft

### Water Details

*Water ID:* 933453798

 Layer:
 2

 Kind Code:
 1

 Kind:
 FRESH

Order No: 23022400359

Water Found Depth: 135.0
Water Found Depth UOM: ft

**Links** 

**Bore Hole ID:** 10023158 **Tag No:** 

**Depth M:** 42.672 **Contractor:** 2311

 Year Completed:
 1948
 Path:
 150\1501115.pdf

 Well Completed Dt:
 1948/04/30
 Latitude:
 45.4263829899684

 Audit No:
 Longitude:
 -75.6317299075181

11 1 of 1 NE/92.2 74.9 / 1.00 lot 25 con 1 WWIS

Well ID: 1501124 Flowing (Y/N):
Construction Date: Flow Rate:

 Use 1st:
 Domestic
 Data Entry Status:

 Use 2nd:
 0
 Data Src:

Final Well Status: Water Supply Date Received: 25-Oct-1956 00:00:00

Water Type: Selected Flag: TRUE

Casing Material:Abandonment Rec:Audit No:Contractor:23

Audit No:Contractor:2311Tag:Form Version:1Constructn Method:Owner:

Elevation (m): County: OTTAWA-CARLETON

 Elevatn Reliabilty:
 Lot:
 025

 Depth to Bedrock:
 Concession:
 01

 Well Depth:
 Concession Name:
 OF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone:

Clear/Cloudy: UTM Reliability:

Municipality: GLOUCESTER TOWNSHIP

Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501124.pdf

Additional Detail(s) (Map)

 Well Completed Date:
 1956/10/06

 Year Completed:
 1956

 Depth (m):
 19.812

 Latitude:
 45.4277323883663

 Longitude:
 -75.6318727936797

 Path:
 150\1501124.pdf

**Bore Hole Information** 

Bore Hole ID: 10023167 Elevation: DP2BR: Elevrc:

 DP2BR.
 Elevic.

 Spatial Status:
 Zone:
 18

 Code OB:
 East83:
 450570.70

 Code OB Desc:
 North83:
 5030662.00

Open Hole: Org CS:

Cluster Kind: UTMRC:

**Date Completed:** 06-Oct-1956 00:00:00 **UTMRC Desc:** margin of error : 100 m - 300 m

Order No: 23022400359

Remarks: Location Method: p5
Loc Method Desc: Original Pre1985 UTM Rel Code 5: margin of error : 100 m - 300 m

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method:

Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 930991038

2

Layer:

Color:

General Color:

Mat1: 17
Most Common Material: SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 5.0
Formation End Depth: 65.0
Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

**Formation ID:** 930991037

Layer: 1

Color: 6
General Color: BROWN

Mat1: 02
Most Common Material: TOPSOIL

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 5.0 Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961501124

Method Construction Code: 1

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

**Pipe ID:** 10571737

Casing No:

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 930039240

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To: 12.0 Casing Diameter: 4.0

Casing Diameter UOM: inch

Order No: 23022400359

Casing Depth UOM:

Construction Record - Casing

 Casing ID:
 930039241

 Layer:
 2

ft

Material: 4

Open Hole or Material: OPEN HOLE

Depth From:
Depth To: 65.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991501124

Pump Set At:

Static Level: 5.0 Final Level After Pumping: 15.0

Recommended Pump Depth:

Pumping Rate: 2.0

Flowing Rate:

Recommended Pump Rate:

Recommended Fump Nate:

Levels UOM:

Rate UOM:

Water State After Test Code:

Water State After Test:

CLEAR

Pumping Test Method:

Pumping Duration HR:

Pumping Duration MIN:

O

Flowing:

No

Water Details

*Water ID:* 933453810

 Layer:
 1

 Kind Code:
 1

 Kind:
 FRESH

 Water Found Depth:
 35.0

 Water Found Depth UOM:
 ft

Water Details

 Water ID:
 933453811

 Layer:
 2

 Kind Code:
 1

 Kind:
 FRESH

Water Found Depth: 58.0
Water Found Depth UOM: ft

<u>Links</u>

**Bore Hole ID:** 10023167 **Depth M:** 19.812

**Depth M:** 19.812 **Contractor:** 2311

 Year Completed:
 1956
 Path:
 150\1501124.pdf

 Well Completed Dt:
 1956/10/06
 Latitude:
 45.4277323883663

 Audit No:
 Longitude:
 -75.6318727936797

Tag No:

12 1 of 1 SW/113.8 72.9/-1.00 lot 25 con 1 ON WWIS

Well ID: 1510842 Flowing (Y/N):
Construction Date: Flow Rate:

Use 1st: Commerical Data Entry Status:

Use 2nd: 0 Data Src:

Final Well Status:Water SupplyDate Received:28-Sep-1970 00:00:00Water Type:Selected Flag:TRUE

Water Type: Selected Flag:
Casing Material: Abandonment Rec:

Audit No: Contractor: 1558
Tag: Form Version: 1

Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

 Elevatn Reliabilty:
 Lot:
 025

 Depth to Bedrock:
 Concession:
 01

 Well Depth:
 Concession Name:
 OF

Well Depth: Concession Name: OF
Overburden/Bedrock: Easting NAD83:
Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

Municipality: GLOUCESTER TOWNSHIP

Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/151\1510842.pdf

### Additional Detail(s) (Map)

 Well Completed Date:
 1970/07/22

 Year Completed:
 1970

 Depth (m):
 60.96

 Latitude:
 45.4261051836758

 Longitude:
 -75.6331329392714

 Path:
 151\1510842.pdf

### **Bore Hole Information**

Bore Hole ID: 10032845 Elevation:

DP2BR: Elevrc: Spatial Status: Zone:

 Spatial Status:
 Zone:
 18

 Code OB:
 East83:
 450470.70

 Code OB Desc:
 North83:
 5030482.00

Open Hole: Org CS: Cluster Kind: UTMRC:

 Date Completed:
 22-Jul-1970 00:00:00
 UTMRC Desc:
 margin of error : 30 m - 100 m

Order No: 23022400359

Remarks: Location Method: p4

Loc Method Desc: Original Pre1985 UTM Rel Code 4: margin of error : 30 m - 100 m

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

# Overburden and Bedrock

Materials Interval

**Formation ID:** 931015951

 Layer:
 3

 Color:
 6

 General Color:
 BROWN

 Mat1:
 17

 Most Common Material:
 SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 30.0
Formation End Depth: 55.0
Formation End Depth UOM: ft

Overburden and Bedrock Materials Interval

**Formation ID:** 931015950

 Layer:
 2

 Color:
 8

 General Color:
 BLACK

 Mat1:
 17

 Most Common Material:
 SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 4.0
Formation End Depth: 30.0
Formation End Depth UOM: ft

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931015952

 Layer:
 4

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 55.0 Formation End Depth: 200.0 Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

**Formation ID:** 931015949

Layer: 1 Color: 6

**General Color:** BROWN **Mat1:** 09

Most Common Material: MEDIUM SAND

 Mat2:
 12

 Mat2 Desc:
 STONES

 Mat3:
 01

 Mat3 Desc:
 FILL

 Formation Top Depth:
 0.0

 Formation End Depth:
 4.0

 Formation End Depth UOM:
 ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961510842

Method Construction Code:

Method Construction: Cable Tool

**Other Method Construction:** 

### Pipe Information

**Pipe ID:** 10581415

Casing No:

Comment: Alt Name:

### Construction Record - Casing

**Casing ID:** 930058243

Layer: 1
Material: 1
Open Hole or Material: STEEL

Open Hole or Material: Depth From:

Depth To: 10.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Construction Record - Casing

**Casing ID:** 930058244

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 200.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

# Results of Well Yield Testing

Pumping Test Method Desc: BAILER
Pump Test ID: 991510842

Pump Set At:

Static Level: 4.0 Final Level After Pumping: 125.0 150.0 Recommended Pump Depth: Pumping Rate: 1.0 Flowing Rate: Recommended Pump Rate: 1.0 Levels UOM: ft **GPM** Rate UOM: Water State After Test Code: 2 CLOUDY Water State After Test: Pumping Test Method: 2 **Pumping Duration HR:** 30 **Pumping Duration MIN:** Flowing: No

### **Draw Down & Recovery**

 Pump Test Detail ID:
 934380135

 Test Type:
 Draw Down

 Test Duration:
 30

 Test Level:
 125.0

Test Level UOM:

**Draw Down & Recovery** 

Pump Test Detail ID: 934899053 Draw Down Test Type: Test Duration: 125.0 Test Level: Test Level UOM: ft

ft

**Draw Down & Recovery** 

Pump Test Detail ID: 934097400 Test Type: Draw Down Test Duration: 15 Test Level: 125.0 Test Level UOM: ft

**Draw Down & Recovery** 

Pump Test Detail ID: 934641711 Draw Down Test Type: Test Duration: 45 125.0 Test Level: Test Level UOM: ft

Water Details

Water ID: 933465871

Layer: Kind Code: 3

SULPHUR Kind: Water Found Depth: 130.0 ft Water Found Depth UOM:

**Links** 

Bore Hole ID: 10032845 Tag No: Depth M: 60.96 Contractor:

1558 151\1510842.pdf Year Completed: 1970 Path: Well Completed Dt: 1970/07/22 Latitude: 45.4261051836758 Longitude: -75.6331329392714

Audit No:

13 1 of 2 SE/114.3 73.9 / 0.00 UNKNOWN

**CUMMINGS AVE JUST SOUTH OF OLGILVIE** 

**SPL** 

Order No: 23022400359

**GLOUCESTER CITY ON** 

71782 Ref No: Discharger Report: Site No: Material Group:

Incident Dt: Health/Env Conseq: Client Type: Year: Sector Type: **UNKNOWN** Incident Cause:

CITY OF GLOUCESTOR Incident Event: Agency Involved:

Nearest Watercourse: Contaminant Code: Contaminant Name: Site Address: Site District Office: Contaminant Limit 1: Contam Limit Freq 1: Site Postal Code: Contaminant UN No 1: Site Region:

CONFIRMED **GLOUCESTER CITY** Environment Impact: Site Municipality:

Nature of Impact: Soil contamination Site Lot: LAND Receiving Medium: Site Conc:

Receiving Env: Northing:

MOE Response:

Dt MOE Arvl on Scn:

MOE Reported Dt:

6/9/1992

Site Map Datum:

Dt Document Closed:
Incident Reason: UNKNOWN

Site Name:

Site County/District:

Municipality No: 20105

Site Geo Ref Meth:
Incident Summary: 100 L HYDRAULIC OIL TO GROUND FROM UNK SOURCE.

Contaminant Qty:

13 2 of 2 SE/114.3 73.9 / 0.00 Labrador Spring Water<UNOFFICIAL>

OGILVIE STREET / CUMMING

Oil

SPL

Order No: 23022400359

STREET<UNOFFICIAL>

Ottawa ON

Discharger Report:

SAC Action Class:

Source Type:

**Ref No:** 1776-5W9PV4

Site No: Material Group:

Incident Dt: 2/17/2004 Health/Env Conseq:
Year: Client Type:

 Incident Cause:
 Other Transport Accident
 Sector Type:

 Incident Event:
 Agency Involved:

 Conteminant Code:
 13

Contaminant Code:13Nearest Watercourse:Contaminant Name:DIESEL FUELSite Address:

Contaminant Limit 1: Site District Office: Ottawa
Contam Limit Freq 1: Site Postal Code:

Contain Limit Freq 1: Site Postal Code:

Contain Limit Freq 1: Site Postal Code:

Site Region: Eastern

Cottoms

Environment Impact: Not Anticipated Site Municipality: Ottawa
Nature of Impact: Soil Contamination Site Lot:

Receiving Medium:LandSite Conc:Receiving Env:Northing:MOE Response:Easting:Dt MOE Arvl on Scn:Site Geo R

Dt MOE Arvl on Scn:Site Geo Ref Accu:MOE Reported Dt:2/17/2004Site Map Datum:Dt Document Closed:SAC Action Class:

 Dt Document Closed:
 SAC Action Class:
 Spill to Land

 Incident Reason:
 Error- Operator error
 Source Type:

Incident Reason: Error- Operator error Source Type:
Site Name: OGILVIE STREET / CUMMING STREET <UNOFFICIAL>

Site County/District: Municipality No: Site Geo Ref Meth:

Incident Summary: MVA, 40 gal diesel to gnd

Contaminant Qty: 182 L

1 of 1 NNE/121.3 74.9 / 1.00 1085 CUMMINGS AVENUE OTTAWA ON HINC

External File Num: FS INC 0711-06584
Fuel Occurrence Type: Pipeline Strike
Date of Occurrence: 11/2/2007
Fuel Type Involved: Natural Gas

 Status Desc:
 Completed - Causal Analysis(End)

 Job Type Desc:
 Incident/Near-Miss Occurrence (FS)

 Oper. Type Involved:
 Construction Site (pipeline strike)

Service Interruptions: Yes Property Damage: Yes

Fuel Life Cycle Stage: Transmission, Distribution and Transportation

Root Cause: Equipment/Material/Component:No Procedures:Yes Maintenance:No Design:No Training:No

Management:Yes Human Factors:Yes

Reported Details:

Fuel Category: Gaseous Fuel

Number of Direction/ Elev/Diff Site DΒ Map Key (m)

Records Distance (m)

Incident

Occurrence Type: Affiliation: Industry Stakeholder (Licensee/Registration/Certificate Holder, Facility Owner, etc.)

County Name: Ottawa

Approx. Quant. Rel: Nearby body of water: Enter Drainage Syst.: Approx. Quant. Unit: **Environmental Impact:** 

> 15 1 of 1 NE/128.3 74.9 / 1.00 lot 25 con 1 **WWIS** ON

Well ID: 1501128 Flowing (Y/N): Construction Date: Flow Rate:

Use 1st: **Domestic** Data Entry Status:

Use 2nd: Data Src:

18-Aug-1959 00:00:00 Final Well Status: Water Supply Date Received:

TRUE Water Type: Selected Flag:

Casing Material: Abandonment Rec: Audit No: 2311 Contractor:

Tag: Form Version: Constructn Method: Owner:

Elevation (m): County: **OTTAWA-CARLETON** 

Elevatn Reliabilty: Lot: 025 Depth to Bedrock: 01 Concession:

Well Depth: Concession Name: OF Overburden/Bedrock: Easting NAD83:

Pump Rate: Northing NAD83: Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501128.pdf

### Additional Detail(s) (Map)

Well Completed Date: 1959/07/15 Year Completed: 1959 Depth (m): 44.196

Latitude: 45.4280038234168 -75.6316201535922 Longitude: Path: 150\1501128.pdf

# **Bore Hole Information**

10023171 Bore Hole ID: Elevation:

DP2BR: Elevrc: Spatial Status: Zone:

18 Code OB: East83: 450590.70 Code OB Desc: 5030692.00 North83:

Open Hole: Org CS:

Cluster Kind: **UTMRC:** 

Date Completed: 15-Jul-1959 00:00:00 **UTMRC Desc:** margin of error: 100 m - 300 m

Order No: 23022400359

Location Method: Remarks: Loc Method Desc: Original Pre1985 UTM Rel Code 5: margin of error: 100 m - 300 m

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 930991044

Layer:

Color:

General Color:

**Mat1:** 09

Most Common Material: MEDIUM SAND

Mat2: 11
Mat2 Desc: GRAVEL

Mat3: Mat3 Desc:

Formation Top Depth: 0.0
Formation End Depth: 28.0
Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

**Formation ID:** 930991045

Layer: 2

Color:

General Color:

**Mat1:** 17

Most Common Material: SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 28.0 Formation End Depth: 145.0 Formation End Depth UOM: ft

omaton Ena Depar Com.

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961501128

Method Construction Code: 1

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

**Pipe ID:** 10571741

Casing No:

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 930039249

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 145.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Order No: 23022400359

### Construction Record - Casing

Casing ID: 930039248

Layer: Material:

Open Hole or Material: STEEL Depth From:

30.0 Depth To: Casing Diameter: 4.0 Casing Diameter UOM: inch ft Casing Depth UOM:

#### Results of Well Yield Testing

Pumping Test Method Desc: **PUMP** Pump Test ID: 991501128

Pump Set At: 16.0 Static Level: Final Level After Pumping: 145.0

Recommended Pump Depth: Pumping Rate: 0.0

Flowing Rate:

Recommended Pump Rate:

ft Levels UOM: Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: **Pumping Duration HR:** 4 Pumping Duration MIN: 0

### Water Details

Flowing:

933453815 Water ID:

Layer: Kind Code:

Kind: **FRESH** Water Found Depth: 80.0 Water Found Depth UOM: ft

### <u>Links</u>

Bore Hole ID: 10023171

Contractor: Depth M: 44.196 2311

Year Completed: 1959 Path: 150\1501128.pdf Well Completed Dt: 1959/07/15 Latitude: 45.4280038234168 Audit No: Longitude: -75.6316201535922

1 of 1 ESE/146.8 72.8 / -1.03 1134 OGILVIE RD. 16 **WWIS** Ottawa ON

Tag No:

21-Jul-2014 00:00:00

Order No: 23022400359

Well ID: 7224359 Flowing (Y/N): Flow Rate:

**Construction Date:** 

No

Use 1st: Monitoring and Test Hole Data Entry Status: Use 2nd: Data Src:

Final Well Status: Monitoring and Test Hole Date Received: Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec:

Audit No: Z189005 Contractor: 7241 Form Version: Tag: A164777 7

Constructn Method: Owner:

Concession:

Order No: 23022400359

levation (m): County: OTTAWA-CARLETON

 Elevation (m):
 Cou

 Elevatn Reliabilty:
 Lot:

 Depth to Bedrock:
 Con

 Well Depth:
 Con

 Overburden/Bedrock:
 East

Well Depth: Concession Name:
Overburden/Bedrock: Easting NAD83:
Pump Rate: Northing NAD83:
Static Water Level: Zone:
Clear/Cloudy: UTM Reliability:

Municipality: GLOUCESTER TOWNSHIP

Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

 Well Completed Date:
 2014/06/10

 Year Completed:
 2014

 Depth (m):
 3.1

Latitude: 45.4261798104351 Longitude: -75.6310335230838

Path:

**Bore Hole Information** 

 Bore Hole ID:
 1004957479
 Elevation:

 DP2BR:
 Elevrc:

 Spatial Status:
 Zone:
 18

 Code OB:
 East83:
 450635.00

 Code OB Desc:
 North83:
 5030489.00

 Open Hole:
 Org CS:
 UTM83

 Cluster Kind:
 UTMRC:
 4

**Date Completed:** 10-Jun-2014 00:00:00 **UTMRC Desc:** margin of error : 30 m - 100 m

Remarks: Location Method: w
Loc Method Desc: on Water Well Record

Location Source Date:

Elevrc Desc:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 1005233183

 Layer:
 1

 Color:
 6

 General Color:
 BROWN

 Mat1:
 02

 Most Common Material:
 TOPSOIL

 Mat2:
 28

 Mat2 Desc:
 SAND

 Mat3:
 77

Mat3 Desc: LOOSE
Formation Top Depth: 0.0

Formation End Depth: 0.6100000143051147

Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

**Formation ID:** 1005233185

3 Layer: Color: **GREY** General Color: 06 Mat1: Most Common Material: SILT 28 Mat2: Mat2 Desc: SAND Mat3: 66 Mat3 Desc: **DENSE** Formation Top Depth:

Formation End Depth: 3.0999999046325684

2

Formation End Depth UOM:

## Overburden and Bedrock

**Materials Interval** 

Formation ID: 1005233184

Layer: Color: 6 General Color: **BROWN** Mat1: 06 Most Common Material: SILT Mat2: 05

Mat2 Desc: CLAY Mat3: 66 **DENSE** Mat3 Desc:

Formation Top Depth: 0.6100000143051147

Formation End Depth: 1.5 Formation End Depth UOM: m

# Annular Space/Abandonment

Sealing Record

1005233194 Plug ID:

Layer:

0.30000001192092896 Plug From: 1.2200000286102295 Plug To:

Plug Depth UOM:

# Annular Space/Abandonment

Sealing Record

Plug ID: 1005233195

Layer: 3

1.2200000286102295 Plug From: Plug To: 3.0999999046325684

Plug Depth UOM:

## Annular Space/Abandonment

Sealing Record

Plug ID: 1005233193

Layer: 1 0.0 Plug From:

Plug To: 0.30000001192092896

Plug Depth UOM:

### Method of Construction & Well

**Method Construction ID:** 1005233192

**Method Construction Code:** 

**Method Construction:** 

Auger

Other Method Construction:

Pipe Information

**Pipe ID:** 1005233182

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1005233188

Layer: 1 Material: 5

Open Hole or Material:PLASTICDepth From:0.0Depth To:1.5

**Casing Diameter:** 5.199999809265137

Casing Diameter UOM: cm Casing Depth UOM: m

Construction Record - Screen

**Screen ID:** 1005233189

 Layer:
 1

 Slot:
 10

 Screen Top Depth:
 1.5

**Screen End Depth:** 3.0999999046325684

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 6.03000020980835

Water Details

*Water ID:* 1005233187

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: m

**Hole Diameter** 

**Hole ID:** 1005233186

**Diameter:** 15.239999771118164

Depth From: 0.0

**Depth To:** 3.0999999046325684

Hole Depth UOM: m
Hole Diameter UOM: cm

<u>Links</u>

 Bore Hole ID:
 1004957479
 Tag No:
 A164777

 Depth M:
 3.1
 Contractor:
 7241

 Year Completed:
 2014
 Path:
 722\7224359.pdf

 Well Completed Dt:
 2014/06/10
 Latitude:
 45.4261798104351

 Audit No:
 Z189005
 Longitude:
 -75.6310335230838

Order No: 23022400359

17 1 of 1 ESE/154.8 72.8 / -1.03 1134 ON WWIS

*Well ID:* 7224188

Construction Date:

Use 1st: Monitoring Use 2nd: Test Hole

Final Well Status: Monitoring and Test Hole

Water Type:

Casing Material:

Audit No: Z189003
Tag: A164780
Constructn Method:

Elevation (m): Elevatn Reliabilty: Depth to Bedrock: Well Depth:

Overburden/Bedrock: Pump Rate: Static Water Level:

Clear/Cloudy:
Municipality: GLOUCESTER TOWNSHIP

Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

 Well Completed Date:
 2014/06/10

 Year Completed:
 2014

 Depth (m):
 2.79

 Latitude:
 45.4261895878527

 Longitude:
 -75.6308930187634

Path:

**Bore Hole Information** 

**Bore Hole ID:** 1004950461

DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole: Cluster Kind:

**Date Completed:** 10-Jun-2014 00:00:00

Remarks:

Loc Method Desc: on Water Well Record

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 1006697676

Layer: 2
Color: 6
General Color: BROWN

Mat1: 06
Most Common Material: SILT

Flowing (Y/N): Flow Rate:

Data Entry Status:

Data Src:

**Date Received:** 21-Jul-2014 00:00:00

Selected Flag: TRUE

Abandonment Rec: Contractor: 7241

Form Version:

Owner:

Lot:

County: OTTAWA-CARLETON

Concession: Concession Name: Easting NAD83: Northing NAD83: Zone:

UTM Reliability:

Elevation: Elevrc:

**Zone:** 18 **East83:** 450646.00 **North83:** 5030490.00

Org CS: UTM83 UTMRC: 4

UTMRC Desc: margin of error : 30 m - 100 m

Order No: 23022400359

Location Method: wv

 Mat2:
 05

 Mat2 Desc:
 CLAY

 Mat3:
 66

 Mat3 Desc:
 DENSE

 Formation Top Depth:
 0.6100000143051147

 Formation End Depth:
 1.2200000286102295

Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

**Formation ID:** 1006697677

Layer: 3 Color: 2 General Color: **GREY** 06 Mat1: Most Common Material: SILT Mat2: 05 Mat2 Desc: CLAY Mat3: 66 **DENSE** Mat3 Desc:

 Formation Top Depth:
 1.2200000286102295

 Formation End Depth:
 2.7899999618530273

Formation End Depth UOM: m

Overburden and Bedrock

Materials Interval

**Formation ID:** 1006697675

Layer: 6 Color: **BROWN** General Color: Mat1: 01 Most Common Material: FILL Mat2: 11 **GRAVEL** Mat2 Desc: Mat3: 77 Mat3 Desc: LOOSE

Formation Top Depth: 0.0

Formation End Depth: 0.6100000143051147

Formation End Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697680

Layer: 1

Plug From: 0.0

**Plug To:** 0.30000001192092896

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697681

Layer:

 Plug From:
 0.30000001192092896

 Plug To:
 0.9100000262260437

Plug Depth UOM:

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697682

Layer: 3

 Plug From:
 0.9100000262260437

 Plug To:
 2.7899999618530273

Plug Depth UOM:

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1005235020
Method Construction Code: E

Method Construction: Auger

Other Method Construction:

Pipe Information

**Pipe ID:** 1005235014

Casing No: 0

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 1005235018

Layer: 1 Material: 5

Open Hole or Material: PLASTIC

Depth From: 0.0

 Depth To:
 1.2200000286102295

 Casing Diameter:
 5.199999809265137

Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

**Screen ID:** 1005235019

**Layer:** 1 **Slot:** 10

 Screen Top Depth:
 1.2200000286102295

 Screen End Depth:
 2.700000047683716

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 6.03000020980835

Water Details

*Water ID:* 1005235017

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: m

Hole Diameter

 Hole ID:
 1005235016

 Diameter:
 20.31999969482422

**Depth From:** 0.0

**Depth To:** 2.7899999618530273

Hole Depth UOM: m Hole Diameter UOM: cm

**Links** 

Bore Hole ID: 1004950461 A164780 Tag No: 2.79 Contractor: Depth M: 7241

Path: 722\7224188.pdf Year Completed: 2014 Well Completed Dt: 2014/06/10 Latitude: 45.4261895878527 Audit No: Z189003 Longitude: -75.6308930187634

1 of 1 SE/155.6 72.8 / -1.06 1134 OGILVIE RD 18 **WWIS** 

Flowing (Y/N):

Date Received:

Selected Flag:

Form Version:

Concession:

Contractor:

Owner:

County:

Lot:

Zone:

Data Entry Status:

Abandonment Rec:

Concession Name:

Easting NAD83:

Northing NAD83:

UTM Reliability:

21-Jul-2014 00:00:00

**OTTAWA-CARLETON** 

Order No: 23022400359

TRUE

7241

Flow Rate:

Data Src:

7224189 Well ID: Construction Date:

Use 1st: Monitoring Use 2nd: Test Hole

Final Well Status: Monitoring and Test Hole

Water Type: Casing Material:

Audit No: Z189002 A164781

Tag: Constructn Method: Elevation (m):

Elevatn Reliabilty: Depth to Bedrock: Well Depth: Overburden/Bedrock: Pump Rate:

Static Water Level: Clear/Cloudy:

**GLOUCESTER TOWNSHIP** Municipality:

Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 2014/06/10 Year Completed: 2014 Depth (m): 4.57

45.425990230626 Latitude: -75.6311336745975 Longitude:

Path:

**Bore Hole Information** 

Bore Hole ID: 1004950464 Elevation:

DP2BR: Elevrc: Spatial Status: 18 Zone: 450627.00 Code OB: East83: Code OB Desc: North83: 5030468.00 Open Hole: UTM83 Org CS: Cluster Kind: UTMRC:

Date Completed: 10-Jun-2014 00:00:00 **UTMRC Desc:** 

margin of error: 30 m - 100 m Remarks: Location Method: wwr

Loc Method Desc: on Water Well Record

Location Source Date: Improvement Location Source:

Improvement Location Method:

Elevrc Desc:

Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 1006697684

 Layer:
 2

 Color:
 6

 General Color:
 BROWN

 Mat1:
 06

 Most Common Material:
 SILT

 Mat2:
 05

 Mat2 Desc:
 CLAY

 Mat3:
 66

Formation Top Depth: 0.6100000143051147

**DENSE** 

Formation End Depth: 1.5
Formation End Depth UOM: m

Overburden and Bedrock

**Materials Interval** 

Mat3 Desc:

**Formation ID:** 1006697685

Layer: Color: 2 General Color: **GREY** Mat1: 06 Most Common Material: SILT Mat2: 05 CLAY Mat2 Desc: Mat3: 66 **DENSE** Mat3 Desc: Formation Top Depth: 1.5

Formation End Depth: 4.570000171661377

Formation End Depth UOM:

Overburden and Bedrock

Materials Interval

**Formation ID:** 1006697683

Layer: Color: 6 **BROWN** General Color: Mat1: 01 Most Common Material: **FILL** Mat2: 11 **GRAVEL** Mat2 Desc: Mat3: 77 LOOSE Mat3 Desc:

 Formation Top Depth:
 0.0

 Formation End Depth:
 0.6100000143051147

Formation End Depth. o...

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697688

Layer: 1
Plug From: 0.0

**Plug To:** 0.30000001192092896

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697689

Layer: 2

 Plug From:
 0.30000001192092896

 Plug To:
 1.2200000286102295

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697690

Layer: 3

 Plug From:
 1.2200000286102295

 Plug To:
 4.570000171661377

Plug Depth UOM: m

Method of Construction & Well

<u>Use</u>

Method Construction ID:1005235027Method Construction Code:EMethod Construction:Auger

Other Method Construction:

Pipe Information

**Pipe ID:** 1005235021

Casing No: 0

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1005235025

Layer: 1 Material: 5

Open Hole or Material:PLASTICDepth From:0.0

**Depth To:** 1.5

**Casing Diameter:** 5.199999809265137

Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

**Screen ID:** 1005235026

**Layer:** 1 **Slot:** 10

Screen Top Depth: 1.5

**Screen End Depth:** 4.570000171661377

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 6.03000020980835

Water Details

Order No: 23022400359

Мар Кеу	Number Record			Site		DB
Water ID: Layer: Kind Code: Kind: Water Found	Depth:	1005235024				
Water Found		<i>M:</i> m				
Hole Diamete	<u>er</u>					
Hole ID: Diameter: Depth From: Depth To: Hole Depth U Hole Diamete	ЮМ:	1005235023 15.23999977 0.0 4.570000171 m cm				
<u>Links</u>						
Bore Hole ID: Depth M: Year Complet Well Complet Audit No:	ted:	1004950464 4.57 2014 2014/06/10 Z189002		Tag No: Contractor: Path: Latitude: Longitude:	A164781 7241 722\7224189.pdf 45.425990230626 -75.6311336745975	
<u>19</u>	1 of 19	ESE/160.7	72.8/-1.03	C CORP (ONTARIO) INC ATTN ACCOUNTS PAYABLE 1134 OGILVIE RD OTTAWA ON K1J8V1		PRT
Location ID: Type: Expiry Date: Capacity (L): Licence #:		11027 retail 1996-02-28 81700 0056442001				
<u>19</u>	2 of 19	ESE/160.7	72.8/-1.03	PIONEER PETRO 1134 OGILVIE RD STATION OTTAWA CITY OI	GLOUCESTER SERVICE	SPL
Ref No: Site No: Incident Dt: Year:		197240 3/28/2001		Discharger Report: Material Group: Health/Env Conseq Client Type:		
Incident Caus Incident Ever Contaminant Contaminant Contaminant Contam Limit Contaminant	nt: Code: Name: Limit 1: t Freq 1:	PIPE/HOSE LEAK		Sector Type: Agency Involved: Nearest Watercours Site Address: Site District Office: Site Postal Code: Site Region:		
Environment Nature of Imp Receiving Me Receiving En MOE Respon Dt MOE Arvi	: Impact: pact: edium: nv: nse:	Possible Soil contamination Land		Site Region. Site Nunicipality: Site Lot: Site Conc: Northing: Easting: Site Geo Ref Accu:	OTTAWA CITY	
MOE Reported Dt: 3/2 Dt Document Closed:		3/28/2001 FRROR		Site Map Datum: SAC Action Class:		

Source Type:

Order No: 23022400359

ERROR

Site Name:

Incident Reason:

Site County/District:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB		
Municipality	No:	20107					
Site Geo Rei Incident Sun Contaminan	nmary:	PIONEER SERVIC	E STN: 50 LGASO	LINE TO GRND, ERROR, FD CONTAINED, WILL CLEAN.			
<u>19</u>	3 of 19	ESE/160.7	72.8 / -1.03	PIONEER PETROLEUMS 1134 OGILVIE RD OTTAWA ON K1J 8V1	RST		
Headcode: Headcode D Phone: List Name: Description:		1186800 Service Stations-Gasoline, Oil & Natural Gas 6137418911					
<u>19</u>	4 of 19	ESE/160.7	72.8/-1.03	PIONEER PETROLEUMS MANAGEMENT INC** 1134 OGILVIE RD OTTAWA ON K1J 8V1	FSTH		
License Issu		9/27/2002					
Tank Status. Tank Status	=	Licensed August 2007					
Operation Ty		Retail Fuel Outlet					
Facility Type	<b>9</b> :	Gasoline Station - S	Self Serve				
Details							
Status:		Active					
Year of Insta		1991					
Corrosion Pacage Capacity:	rotection:	45400					
Tank Fuel Ty	/pe:	Liquid Fuel Single	Wall UST - Gasoline	е			
Status:		Active					
Year of Insta		1991					
Corrosion Page Capacity:	rotection:	22700					
Tank Fuel Ty	/pe:	Liquid Fuel Single	Wall UST - Gasoline	e			
Status:		Active					
Year of Insta		1991					
Corrosion P	rotection:	13600					
Capacity: Tank Fuel Type:		13600 Liquid Fuel Single Wall UST - Diesel					
<u>19</u>	5 of 19	ESE/160.7	72.8 / -1.03	PIONEER PETROLEUMS 1134 OGILVIE RD GLOUCESTER ON K1J 8V1	RST		
Headcode: Headcode Desc: Phone: List Name: Description:		01186800 SERVICE STATIONS-GASOLINE, OIL & NATURAL GAS					
<u>19</u>	6 of 19	ESE/160.7	72.8 / -1.03	PIONEER PETROLEUMS MANAGEMENT INC** 1134 OGILVIE RD OTTAWA ON	FSTH		

Order No: 23022400359

License Issue Date: 9/27/2002 Tank Status: Licensed December 2008 Tank Status As Of: Retail Fuel Outlet Operation Type:

Facility Type: Gasoline Station - Self Serve

--Details--

Active Status: Year of Installation: 1991 **Corrosion Protection:** 

45400 Capacity:

Liquid Fuel Single Wall UST - Gasoline Tank Fuel Type:

Status: Active Year of Installation: 1991

**Corrosion Protection:** 

22700 Capacity:

Liquid Fuel Single Wall UST - Gasoline Tank Fuel Type:

Status: Active 1991 Year of Installation:

**Corrosion Protection:** 

Capacity: 13600

Liquid Fuel Single Wall UST - Diesel Tank Fuel Type:

7 of 19 ESE/160.7 72.8 / -1.03 PIONEER ENERGY MANAGEMENT INC. 19 DTNK 1134 OGILVIE RD **OTTAWA ON K1J 8V1** 

# **Delisted Expired Fuel Safety**

**Facilities** 

Instance No: 9836528 **EXPIRED** Status:

Instance ID: Instance Type: FS Facility

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn:

TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area: TSSA Program Area 2: Description:

Original Source:

Record Date: Up to May 2013 Expired Date: 9/1/1995

Max Hazard Rank: Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related: Panam Venue Nm: External Identifier:

Item:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

Source:

72.8 / -1.03

72.8 / -1.03

ESE/160.7

Delisted Expired Fuel Safety

**Facilities** 

19

Instance No: 10905133
Status: EXPIRED
Instance ID: 50628
Instance Type: FS Piping

8 of 19

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area:

TSSA Program Area 2:
Description: FS Piping
Original Source: EXP

Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:

Panam Venue Nm:

External Identifier:

1134 OGILVIE RD OTTAWA ON

PIONEER ENERGY MANAGEMENT INC.

**DTNK** 

**DTNK** 

Order No: 23022400359

Item:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

Source:

Delisted Expired Fuel Safety

**Facilities** 

19

Instance No: 10905155
Status: EXPIRED
Instance ID: 51355
Instance Type: FS Piping
Instance Creation Dt:

9 of 19

Instance Install Dt: Item Description: Manufacturer: Model: Serial No: ULC Standard: Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: PIONEER ENERGY MANAGEMENT INC. 1134 OGILVIE RD OTTAWA ON

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:

External Identifier: Item: Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

Source:

ESE/160.7

TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area: TSSA Program Area 2:

Description: FS Piping
Original Source: EXP

Record Date: Up to Mar 2012

19 10 of 19 ESE/160.7 72.8 / -1.03 PIONEER ENERGY MANAGEMENT INC.
1134 OGILVIE RD

# Delisted Expired Fuel Safety

**Facilities** 

Instance No: 10905118
Status: EXPIRED
Instance ID: 52544
Instance Type: FS Piping
Instance Creation Dt:

Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area: TSSA Program Area 2:

**Description:** FS Piping **Original Source:** EXP

Record Date: Up to Mar 2012

Expired Date:
Max Hazard Rank:
Facility Location:
Facility Type:
Fuel Type 2:
Fuel Type 3:
Panam Related:
Panam Venue Nm:

OTTAWA ON

External Identifier: Item: Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground: Source:

19 11 of 19 ESE/160.7 72.8 / -1.03 PARKLAND CORPORATION

1134 OGILVIE RD OTTAWA K1J 8V1 ON CA

**FST** 

Order No: 23022400359

ON

Instance No: 10905127 Manufacturer: Status: Serial No:

Cont Name:

Instance Type:

FS Liquid Fuel Tank

Uic Standard:
Quantity:
Unit of Measure:

Item Description:FS Liquid Fuel TankFuel Type:GasolineTank Type:Single Wall USTFuel Type2:NULL

Piping Steel:

Piping Galvanized: Tanks Single Wall St:

Panam Related: Panam Venue:

Piping Underground: No Underground:

5/14/2009 NULL Install Date: Fuel Type3:

Install Year: 1991

Years in Service: Model: NULL

Description: 22730 Capacity: Tank Material: Fiberglass (FRP)

**Corrosion Protect:** Fiberglass

Overfill Protect:

Facility Type: FS Liquid Fuel Tank

FS Gasoline Station - Self Serve Parent Facility Type:

Facility Location:

1134 OGILVIE RD OTTAWA K1J 8V1 ON CA Device Installed Location:

Liquid Fuel Tank Details

**Overfill Protection:** 

PARKLAND CORPORATION **Owner Account Name: FS LIQUID FUEL TANK** Item:

19 12 of 19 ESE/160.7 72.8 / -1.03 PARKLAND CORPORATION

1134 OGILVIE RD OTTAWA K1J 8V1 ON CA

Diesel

NULL

NULL

ON

Serial No:

Quantity: Unit of Measure:

Fuel Type:

Fuel Type2:

Fuel Type3:

Piping Steel: Piping Galvanized:

Tanks Single Wall St: Piping Underground:

No Underground:

Panam Related: Panam Venue:

Manufacturer:

Ulc Standard:

Instance No: 10905142

Status:

Cont Name:

Instance Type: FS Liquid Fuel Tank

Item:

Item Description: FS Liquid Fuel Tank Tank Type: Single Wall UST Install Date: 5/14/2009 Install Year: 1991

Years in Service:

Model: NULL

Description:

Capacity: 13630

Fiberglass (FRP) Tank Material: **Corrosion Protect:** Fiberglass

Overfill Protect:

FS Liquid Fuel Tank Facility Type:

Parent Facility Type: FS Gasoline Station - Self Serve

Facility Location:

Device Installed Location: 1134 OGILVIE RD OTTAWA K1J 8V1 ON CA

**Liquid Fuel Tank Details** 

Overfill Protection:

PARKLAND CORPORATION **Owner Account Name: FS LIQUID FUEL TANK** Item:

13 of 19 ESE/160.7 72.8 / -1.03 PARKLAND CORPORATION 19

1134 OGILVIE RD OTTAWA K1J 8V1 ON CA

ON

10905109 Instance No:

Status: Cont Name:

Instance Type: FS Liquid Fuel Tank

Item:

Item Description: FS Liquid Fuel Tank

Tank Type: Single Wall UST Install Date: 5/14/2009

Manufacturer: Serial No: Ulc Standard:

> Quantity: Unit of Measure:

Gasoline Fuel Type: Fuel Type2: NULL NULL Fuel Type3:

erisinfo.com | Environmental Risk Information Services

108

Order No: 23022400359

**FST** 

**FST** 

Number of Direction/ Elev/Diff Site DΒ Map Key

Piping Steel:

Piping Galvanized:

No Underground:

Panam Related:

Panam Venue:

Tanks Single Wall St:

Piping Underground:

1991 Install Year:

Years in Service:

**NULL** Model:

Description:

Capacity: 45460

Fiberglass (FRP) Tank Material: **Corrosion Protect:** Fiberglass

Records

Overfill Protect:

Facility Type:

FS Liquid Fuel Tank

FS Gasoline Station - Self Serve

Distance (m)

(m)

Parent Facility Type: Facility Location:

Device Installed Location: 1134 OGILVIE RD OTTAWA K1J 8V1 ON CA

**Liquid Fuel Tank Details** 

**Overfill Protection:** 

PARKLAND CORPORATION **Owner Account Name: FS LIQUID FUEL TANK** Item:

14 of 19

ESE/160.7

PIONEER PETROLEUMS 1134 OGILVIE RD **GLOUCESTER ON K1J8V1** 

**RST** 

SPL

Order No: 23022400359

Headcode: 01186800

SERVICE STATIONS GASOLINE OIL & NATURAL Headcode Desc:

Phone: 6137418911

List Name: Description:

19

19 15 of 19 ESE/160.7 72.8 / -1.03 Triangle Pump Service Limited

72.8 / -1.03

1134 Ogilvie Road

7201-9KX2M7 Ref No: Site No: NA 2014/06/09

Incident Dt: Year:

Incident Cause:

Operator/Human error

Incident Event:

Contaminant Code: 13

**DIESEL FUEL** Contaminant Name:

Contaminant Limit 1: Contam Limit Freq 1:

Contaminant UN No 1:

Environment Impact:

Possible Nature of Impact: Soil Contamination

Receiving Medium: Receiving Env:

MOE Response: Dt MOE Arvl on Scn:

No Field Response

MOE Reported Dt: 2014/06/09 Dt Document Closed: 2014/10/22

Incident Reason: Operator/Human Error

Site Name:

Site County/District:

Municipality No: Site Geo Ref Meth:

Incident Summary: Pioneer Gas Stn 40L Diesel Cln

Contaminant Qty: 40 L

Ottawa ON K1J 8V1

Discharger Report: Material Group: Health/Env Conseq:

Client Type:

Sector Type: Service Station

Agency Involved: Nearest Watercourse:

Site Address: 1134 Ogilvie Road Site District Office:

Site Postal Code:

K1J 8V1 Site Region:

Site Municipality:

Ottawa Site Lot: Site Conc:

Northing: Easting:

Site Geo Ref Accu: Site Map Datum:

Land Spills SAC Action Class:

Source Type:

Pioneer Gas STn < UNOFFICIAL>

Map Key	Numbe Record		Elev/Diff (m)	Site	DB
<u>19</u>	16 of 19	ESE/160.7	72.8 / -1.03	Pioneer Energy LP 1134 Ogilvie Road Gloucester ON K1J 8V1	GEN
Generator N	lo:	ON5440275			
SIC Code:	-	447110			
SIC Descrip	tion:	447110			
Approval Ye		2014			
PO Box No:					
Country: Status:		Canada			
Co Admin:		Alyssa Santiago			
Choice of Co		CO_ADMIN			
Phone No A		905-567-4444 Ext.	.1494		
Contaminate	•	No			
MHSW Facil	ity:	No			
Detail(s)					
Waste Class	<b>:</b> :	251			
Waste Class	Name:	OIL SKIMMINGS 8	& SLUDGES		
Waste Class		221			
Waste Class	Name:	LIGHT FUELS			
<u>19</u>	17 of 19	ESE/160.7	72.8 / -1.03	PIONEER PETROLEUMS 1134 OGILVIE RD GLOUCESTER ON K1J8V1	RST
Headcode:	1000	01186800 SERVICE STATIO	INIS CASOLINE O	L & NATURAL GAS	
Headcode D Phone:	esc:	6137418911	INS GASOLINE OI	L & NATURAL GAS	
List Name: Description:	:	INFO-DIRECT(TM	) BUSINESS FILE		
<u>19</u>	18 of 19	ESE/160.7	72.8 / -1.03	PARKLAND CORPORATION 1134 OGILVIE RD,,OTTAWA,ON,K1J 8V1,CA ON	INC
Incident No:		1413186		Any Hoolth Imports	
Incident ID:		1413100		Any Health Impact: Any Enviro Impact:	
Instance No.				Service Interrupted:	
Status Code				Was Prop Damaged:	
Attribute Ca		FS-Incident		Reside App. Type: Commer App. Type:	
		6/10/2014		Indus App. Type:	
Time of Occurrence:				Institut App. Type:	
Incident Created On:				Venting Type:	
Instance Cre	eation Dt:			Vent Conn Mater:	
Instance Install Dt: Occur Insp Start Date: Approx Quant Rel: Tank Capacity:				Vent Chimney Mater:	
				Pipeline Type:	
				Pipeline Involved:	
				Pipe Material:	
Fuels Occur				Depth Ground Cover:	
Fuel Type In				Regulator Location:	
Enforcemen Prc Escalati	•			Regulator Type: Operation Pressure:	
Tank Materia	•			Ciperation Pressure. Liquid Prop Make:	
Tank Storag				Liquid Prop Model:	
Tank Location				Liquid Prop Serial No:	
Pump Flow				Liquid Prop Notes:	
Task No:	-			Equipment Type:	
Notes:				Equipment Model:	

Order No: 23022400359

Direction/ Elev/Diff Site DΒ Map Key Number of

Records Distance (m) (m)

Serial No: Drainage System: Sub Surface Contam.: Cylinder Capacity: Aff Prop Use Water: Cylinder Cap Units: Contam. Migrated: Cylinder Mat Type: Contact Natural Env: Near Body of Water:

Incident Location: 1134 OGILVIE RD,,OTTAWA,ON,K1J 8V1,CA

Occurence Narrative: Operation Type Involved:

FS GASOLINE STATION - SELF SERVE Item:

Item Description:

19

Device Installed Location:

19 of 19 ESE/160.7 1134 OGILVIE RD 72.8 / -1.03

**GLOUCESTER ON K1J 8V1** 

**Delisted Fuel Storage Tank** 

10340301 Instance No: Active Status:

Instance Type: Fuel Type: Cont Name: Capacity: Tank Material: **Corrosion Prot:** Tank Type: Install Year: Facility Type: Device Installed Loc: Fuel Type 2:

FS GASOLINE STATION - SELF SERVE Item:

Item Description:

Model: Description:

Fuel Type 3:

Instance Creation Dt: Instance Install Dt: Manufacturer: Serial No: **ULC Standard:** Quantity: Unit of Measure: Parent Fac Type:

TSSA Base Sched Cycle 1: TSSA Base Sched Cycle 2:

**FST** Original Source:

Record Date: 31-MAY-2021

Facility Location: Piping SW Steel: 0 Piping SW Galvan: 0 Tanks SW Steel: Piping Underground:

Creation Date:

Overfill Prot Type:

**DTNK** 

Order No: 23022400359

0 3 No Underground: 3 Max Hazard Rank: Max Hazard Rank 1: Nxt Period Start Dt: Program Area 1:

Program Area 2: Nxt Period Strt Dt 2: Risk Based Periodic: Vol of Directives: Years in Service: Created Date: Federal Device: Periodic Exempt: Statutory Interval: Rcomnd Insp Interval: Recommended Toler:

Panam Venue Name:

External Identifier:

20 1 of 1 ESE/166.8 72.9 / -1.00 1134 OGILVIE RD. **WWIS** Ottawa ON

Well ID: 7224358

Construction Date:

Use 1st: Monitoring and Test Hole

Use 2nd:

Monitoring and Test Hole Final Well Status:

Water Type:

Casing Material:

Z189004 Audit No: A164778 Tag:

Constructn Method:

Flowing (Y/N): Flow Rate: Data Entry Status: Data Src:

21-Jul-2014 00:00:00 Date Received:

Selected Flag: TRUE

Abandonment Rec:

7241 Contractor: Form Version: 7

Owner:

Map Key Number of Direction/ Elev/Diff Site DB

Records Distance (m) (m)

Levation (m): County: OTTAWA-CARLETON

Elevation (m): County:
Elevatn Reliabilty: Lot:
Depth to Bedrock: Concession:
Well Depth: Concession Name:
Overburden/Bedrock: Easting NAD83:

Overburden/Bedrock:Easting NAD83:Pump Rate:Northing NAD83:Static Water Level:Zone:

Clear/Cloudy: UTM Reliability: Municipality: OTTAWA CITY

Site Info:

Additional Detail(s) (Map)

PDF URL (Map):

Well Completed Date: 2014/06/10

 Year Completed:
 2014

 Depth (m):
 3.1

**Latitude:** 45.4261182175659 **Longitude:** -75.6307771766537

Path:

**Bore Hole Information** 

Bore Hole ID: 1004957476 Elevation:
DP2BR: Flevrc:

 DP2BR:
 Elevrc:

 Spatial Status:
 Zone:

 Code OB:
 East83:

 Code OP Processing
 North 02:

 Code OB:
 East83:
 450655.00

 Code OB Desc:
 North83:
 5030482.00

 Open Hole:
 Org CS:
 UTM83

 Cluster Kind:
 UTMRC:
 4

 Date Completed:
 10-Jun-2014 00:00:00
 UTMRC Desc:
 margin of error : 30 m - 100 m

 Remarks:
 Location Method:
 wwr

18

Order No: 23022400359

Loc Method Desc: on Water Well Record

Location Source Date: Improvement Location Source:

Improvement Location Source.
Improvement Location Method:
Source Revision Comment:

Supplier Comment:

Elevrc Desc:

Overburden and Bedrock Materials Interval

**Formation ID:** 1005233156

 Layer:
 2

 Color:
 6

 General Color:
 BROWN

 Mat1:
 06

 Most Common Material:
 SILT

 Most Common Material:
 SIL1

 Mat2:
 05

 Mat2 Desc:
 CLAY

 Mat3:
 66

 Mat3 Desc:
 DENSE

**Formation Top Depth:** 0.6100000143051147

**Formation End Depth:** 1.5 **Formation End Depth UOM:** m

Overburden and Bedrock Materials Interval

**Formation ID:** 1005233155

Layer: Color: 6 **BROWN** General Color: Mat1: 01 Most Common Material: **FILL** Mat2: 11 Mat2 Desc: **GRAVEL** Mat3: 77 Mat3 Desc: LOOSE

Formation Top Depth: 0.0

Formation End Depth: 0.6100000143051147

Formation End Depth UOM:

## Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 1005233157

Layer: 3 Color: 2 General Color: **GREY** Mat1: 06 Most Common Material: SILT Mat2: 05 Mat2 Desc: CLAY Mat3: 66 DENSE Mat3 Desc: Formation Top Depth: 1.5

Formation End Depth: 3.0999999046325684

Formation End Depth UOM: m

# Annular Space/Abandonment

Sealing Record

**Plug ID:** 1005233166

Layer:

 Plug From:
 0.30000001192092896

 Plug To:
 1.2200000286102295

Plug Depth UOM:

# Annular Space/Abandonment

Sealing Record

**Plug ID:** 1005233165

Layer: 1 0.0

**Plug To:** 0.30000001192092896

Plug Depth UOM:

## Annular Space/Abandonment

Sealing Record

**Plug ID:** 1005233167

Layer: 3

 Plug From:
 1.2200000286102295

 Plug To:
 3.0999999046325684

Plug Depth UOM: m

#### Method of Construction & Well

Use

Method Construction ID: 1005233164

Method Construction Code:

**Method Construction:** 

Auger

Other Method Construction:

Pipe Information

**Pipe ID:** 1005233154

Casing No:

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1005233160

Layer: 1 Material: 5

Open Hole or Material:PLASTICDepth From:0.0Depth To:1.5

**Casing Diameter:** 5.199999809265137

Casing Diameter UOM: cm Casing Depth UOM: m

Construction Record - Screen

**Screen ID:** 1005233161

 Layer:
 1

 Slot:
 10

 Screen Top Depth:
 1.5

**Screen End Depth:** 3.0999999046325684

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 6.03000020980835

Water Details

*Water ID:* 1005233159

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: m

**Hole Diameter** 

**Hole ID:** 1005233158

**Diameter:** 15.239999771118164

Depth From: 0.0

**Depth To:** 3.0999999046325684

Hole Depth UOM: m
Hole Diameter UOM: cm

<u>Links</u>

 Bore Hole ID:
 1004957476
 Tag No:
 A164778

 Depth M:
 3.1
 Contractor:
 7241

 Year Completed:
 2014
 Path:
 722\7224358.pdf

 Well Completed Dt:
 2014/06/10
 Latitude:
 45.4261182175659

 Audit No:
 Z189004
 Longitude:
 -75.6307771766537

Order No: 23022400359

21 1 of 1 ESE/168.4 72.9/-1.00 1134 ON WWIS

*Well ID:* 7224187

Construction Date: Use 1st:

Monitoring Test Hole

Use 2nd: Test Hole
Final Well Status: Monitoring and Test Hole

Water Type:

Casing Material:

**Audit No:** Z189001 **Tag:** A164779

Constructn Method: Elevation (m): Elevatn Reliabilty: Depth to Bedrock:

Well Depth: Overburden/Bedrock: Pump Rate: Static Water Level:

Clear/Cloudy:

Municipality: GLOUCESTER TOWNSHIP Site Info:

PDF URL (Map):

Additional Detail(s) (Map)

 Well Completed Date:
 2014/06/10

 Year Completed:
 2014

 Depth (m):
 3.1

 Latitude:
 45.4260187156382

 Longitude:
 -75.6308655493403

Path:

**Bore Hole Information** 

**Bore Hole ID:** 1004950458

DP2BR: Spatial Status: Code OB: Code OB Desc: Open Hole: Cluster Kind:

**Date Completed:** 10-Jun-2014 00:00:00

Remarks:

Loc Method Desc: on Water Well Record

Elevrc Desc:

Location Source Date: Improvement Location Source:

Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 1006697630

 Layer:
 3

 Color:
 2

 General Color:
 GREY

 Mat1:
 06

 Most Common Material:
 SILT

Flowing (Y/N): Flow Rate:

Data Entry Status:

Data Src:

**Date Received:** 21-Jul-2014 00:00:00

Selected Flag: TRUE

Abandonment Rec:

Contractor: 7241 Form Version: 7

Owner:

County: OTTAWA-CARLETON Lot:

Concession: Concession Name: Easting NAD83: Northing NAD83:

Zone: UTM Reliability:

Elevation: Elevrc:

**Zone:** 18 **East83:** 450

 East83:
 450648.00

 North83:
 5030471.00

 Org CS:
 UTM83

 UTMRC:
 4

UTMRC Desc: margin of error : 30 m - 100 m

Order No: 23022400359

Location Method: ww

 Mat2:
 05

 Mat2 Desc:
 CLAY

 Mat3:
 66

 Mat3 Desc:
 DENSE

 Formation Top Depth:
 1.5

Formation End Depth: 3.0999999046325684

Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

**Formation ID:** 1006697628

Layer: Color: 6 **BROWN** General Color: 01 Mat1: Most Common Material: **FILL** Mat2: 11 GRAVEL Mat2 Desc: Mat3: 77 LOOSE Mat3 Desc:

**Formation End Depth:** 0.6100000143051147

0.0

Formation End Depth UOM: m

Overburden and Bedrock

Formation Top Depth:

**Materials Interval** 

**Formation ID:** 1006697629

Layer: 6 Color: **BROWN** General Color: Mat1: 06 Most Common Material: SILT Mat2: 05 Mat2 Desc: CLAY Mat3: 66 Mat3 Desc: **DENSE** 

Formation Top Depth: 0.6100000143051147

Formation End Depth: 1.5
Formation End Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697635

Layer: 3

 Plug From:
 1.2200000286102295

 Plug To:
 3.0999999046325684

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697633

Layer: 1

Plug From: 0.0

**Plug To:** 0.30000001192092896

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1006697634

Layer: 2

 Plug From:
 0.30000001192092896

 Plug To:
 1.2200000286102295

Auger

Plug Depth UOM: m

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1005235010
Method Construction Code: E

Method Construction:
Other Method Construction:

Pipe Information

**Pipe ID:** 1005235004

Casing No: 0

Comment: Alt Name:

Construction Record - Casing

Casing ID: 1005235008

Layer: 1
Material: 5
Open Hole or Material: PLASTIC

 Open Hole or Material:
 PLAS

 Depth From:
 0.0

 Depth To:
 1.5

**Casing Diameter:** 5.199999809265137

Casing Diameter UOM: cm
Casing Depth UOM: m

Construction Record - Screen

**Screen ID:** 1005235009

 Layer:
 1

 Slot:
 10

 Screen Top Depth:
 1.5

**Screen End Depth:** 3.0999999046325684

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 6.03000020980835

Water Details

*Water ID:* 1005235007

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: m

Hole Diameter

**Hole ID:** 1005235006

**Diameter:** 15.239999771118164

Depth From: 0.0

**Depth To:** 3.0999999046325684

Order No: 23022400359

Hole Depth UOM: m
Hole Diameter UOM: cm

**Links** 

 Bore Hole ID:
 1004950458
 Tag No:
 A164779

 Depth M:
 3.1
 Contractor:
 7241

 Year Completed:
 2014
 Path:
 722\7224187.pdf

 Well Completed Dt:
 2014/06/10
 Latitude:
 45.4260187156382

 Audit No:
 Z189001
 Longitude:
 -75.6308655493403

22 1 of 1 ESE/168.9 72.9 / -1.00 ON BORE

45.426301

Order No: 23022400359

 Borehole ID:
 615076
 Inclin FLG:
 No

 OGF ID:
 215516018
 SP Status:
 Initial Entry

 Status:
 Surv Elev:
 No

 Type:
 Borehole
 Piezometer:
 No

Use: Primary Name:
Completion Date: AUG-1960 Municipality:

Completion Date:AUG-1960Municipality:Static Water Level:Lot:Primary Water Use:Township:

Sec. Water Use: Latitude DD:

Total Depth m:24.4Longitude DD:-75.630579Depth Ref:Ground SurfaceUTM Zone:18

 Depth Elev:
 Easting:
 450671

 Drill Method:
 Northing:
 5030502

 Orig Ground Elev m:
 70.1
 Location Accuracy:

Orig Ground Elev m: 70.1 Location Accuracy: Elev Reliabil Note: Accuracy:

Elev Reliabil Note:Accuracy:Not ApplicableDEM Ground Elev m:72.6

Concession: Location D: Survey D: Comments:

#### **Borehole Geology Stratum**

Geology Stratum ID: 218400344 Mat Consistency: Top Depth: 1.5 Material Moisture: **Bottom Depth:** 24.4 Material Texture: Material Color: Red Non Geo Mat Type: Material 1: Shale Geologic Formation: Material 2: Geologic Group: Material 3: Geologic Period:

Material 4: Gsc Material Description:

**Stratum Description:** SHALE. 00046. BEDROCK. 00035 010 WEATHERED. 000100140008910030RED. 000050040 \*\*Note: Many

records provided by the department have a truncated [Stratum Description] field.

Depositional Gen:

Geology Stratum ID: 218400343 Mat Consistency: Top Depth: Material Moisture: 0 **Bottom Depth:** 1.5 Material Texture: Material Color: Brown Non Geo Mat Type: Material 1: Soil Geologic Formation: Material 2: Geologic Group: Material 3: Geologic Period: Material 4: Depositional Gen:

Gsc Material Description:

Stratum Description: SOIL. BROWN.

**Source** 

Spatial/Tabular Source Type: **Data Survey** Source Appl:

Source Orig: Geological Survey of Canada Source Iden: Varies Source Date: 1956-1972 Scale or Res: NAD27 Confidence: Horizontal:

Observatio: Verticalda: Mean Average Sea Level

Source Name: Urban Geology Automated Information System (UGAIS) Source Details: File: OTTAWA2.txt RecordID: 07584 NTS\_Sheet:

Confiden 1:

Source List

NAD27 Source Identifier: Horizontal Datum:

Data Survey Mean Average Sea Level Source Type: Vertical Datum: Source Date: 1956-1972 Projection Name: Universal Transverse Mercator

Scale or Resolution: Varies Source Name: Urban Geology Automated Information System (UGAIS)

Source Originators: Geological Survey of Canada

23 1 of 1 ESE/169.0 72.9 / -1.00 lot 26 con 2 **WWIS** ON

**OTTAWA-CARLETON** 

Order No: 23022400359

Well ID: 1501363 Flowing (Y/N): Construction Date: Flow Rate:

Use 1st: Domestic Data Entry Status:

Use 2nd: Data Src:

07-Sep-1960 00:00:00 Final Well Status: Water Supply Date Received:

Water Type: Selected Flag: TRUE Casing Material: Abandonment Rec: Audit No: Contractor: 2311

Tag: Form Version: 1 Constructn Method: Owner:

Elevation (m): County:

Elevatn Reliabilty: 026 Lot: Depth to Bedrock: Concession: 02

Well Depth: Concession Name: OF Overburden/Bedrock: Easting NAD83:

Pump Rate: Northing NAD83: Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501363.pdf PDF URL (Map):

# Additional Detail(s) (Map)

1960/08/22 Well Completed Date: 1960 Year Completed: Depth (m): 24.384

Latitude: 45.4262993397699 Longitude: -75.6305785000678 150\1501363.pdf Path:

#### **Bore Hole Information**

Bore Hole ID: 10023406 Elevation:

DP2BR: Elevrc: Spatial Status: Zone:

18 Code OB: East83: 450670.70 Code OB Desc: North83: 5030502.00

Open Hole: Org CS: Cluster Kind: UTMRC: 5

**Date Completed:** 22-Aug-1960 00:00:00 **UTMRC Desc:** margin of error : 100 m - 300 m

Remarks: Location Method:
Loc Method Desc: Original Pre1985 UTM Rel Code 5: margin of error : 100 m - 300 m

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 930991645

Layer:

Color:

General Color:

Mat1: 17
Most Common Material: SHALE

Mat2: Mat2 Desc: Mat3:

Mat3 Desc:

Formation Top Depth: 5.0
Formation End Depth: 80.0
Formation End Depth UOM: ft

## Overburden and Bedrock

Materials Interval

**Formation ID:** 930991644

 Layer:
 1

 Color:
 6

 General Color:
 BROWN

 Mat1:
 02

 Most Common Material:
 TOPSOIL

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 5.0 Formation End Depth UOM: ft

## Method of Construction & Well

<u>Use</u>

Method Construction ID: 961501363

Method Construction Code:

Method Construction: Cable Tool

Other Method Construction:

## Pipe Information

**Pipe ID:** 10571976

Casing No: Comment:

Construction Record - Casing

**Casing ID:** 930039695

Alt Name:

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From:

Depth To: 12.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

## Construction Record - Casing

**Casing ID:** 930039696

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 80.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

# Results of Well Yield Testing

Pumping Test Method Desc: PUMP Pump Test ID: 991501363

Pump Set At:

Static Level:10.0Final Level After Pumping:65.0Recommended Pump Depth:65.0Pumping Rate:1.0

Flowing Rate:

Recommended Pump Rate: 1.0
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1

Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: No

# Water Details

 Water ID:
 933454062

 Layer:
 1

 Kind Code:
 1

 Kind:
 FRESH

 Water Found Depth:
 46.0

 Water Found Depth UOM:
 ft

## <u>Links</u>

 Bore Hole ID:
 10023406
 Tag No:

 Depth M:
 24.384
 Contractor:

 Depth M:
 24.384
 Contractor:
 2311

 Year Completed:
 1960
 Path:
 150\1501363.pdf

 Well Completed Dt:
 1960/08/22
 Latitude:
 45.4262993397699

 Audit No:
 Longitude:
 -75.6305785000678

24 1 of 1 ESE/177.9 74.0 / 0.08 lot 26 con 2 WWIS

Well ID: 1501355 Flowing (Y/N):

Construction Date: Flow Rate: Use 1st: **Domestic** Data Entry Status:

Use 2nd: 0 Data Src:

Final Well Status: 16-May-1956 00:00:00 Water Supply Date Received: Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec:

Audit No: Contractor: 2311 Tag: Form Version: Constructn Method: Owner:

Elevation (m): County: **OTTAWA-CARLETON** 

Elevatn Reliabilty: 026 Lot: Depth to Bedrock: Concession: 02 OF Well Depth: Concession Name:

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone:

UTM Reliability: Clear/Cloudv: **GLOUCESTER TOWNSHIP** 

Municipality: Site Info:

https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501355.pdf PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 1956/05/08 Year Completed: 1956 Depth (m): 22.86

45.4263000453708 Latitude: Longitude: -75.6304506774367 Path: 150\1501355.pdf

**Bore Hole Information** 

Bore Hole ID: 10023398 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18

East83: 450680.70 Code OB: Code OB Desc: North83: 5030502.00 Open Hole: Org CS:

Cluster Kind: **UTMRC**:

08-May-1956 00:00:00 Date Completed: **UTMRC Desc:** unknown UTM

Location Method: Remarks: p9

Loc Method Desc: Original Pre1985 UTM Rel Code 9: unknown UTM

Elevrc Desc: Location Source Date: Improvement Location Source: Improvement Location Method:

Source Revision Comment: Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 930991628

Layer:

Color: General Color:

Mat1:

**TOPSOIL** Most Common Material: Mat2: 12 Mat2 Desc: **STONES** 

Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 12.0 Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

 Formation ID:
 930991629

 Laver:
 2

Layer: Color:

General Color:

*Mat1:* 26

Most Common Material: ROCK

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 12.0 Formation End Depth: 75.0 Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID:961501355Method Construction Code:1Method Construction:Cable Tool

Other Method Construction:

Pipe Information

 Pipe ID:
 10571968

 Casing No:
 1

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 930039680

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 75.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

**Construction Record - Casing** 

**Casing ID:** 930039679

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:
Depth To: 16.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site		DB
Pump Test II Pump Set At Static Level: Final Level A Recommend Pumping Rate Flowing Rate Recommend Levels UOM: Rate UOM:	st Method Desc: D: Ster Pumping: led Pump Depth: te: led Pump Rate: Ster Test Code: After Test: st Method: ration HR:	PUMP 991501355  7.0 15.0  7.0  ft GPM 1 CLEAR 1 1 0 No	(***)			
Water Detail: Water ID: Layer: Kind Code: Kind: Water Found		933454054 1 3 SULPHUR 70.0 ft				
Links  Bore Hole ID Depth M: Year Comple Well Comple Audit No:	22.86 <b>22.86</b> 1956			Tag No: Contractor: Path: Latitude: Longitude:	2311 150\1501355.pdf 45.4263000453708 -75.6304506774367	
Location ID: Type: Expiry Date: Capacity (L): Licence #:		ESE/178.7  5309 retail 1995-08-31 23097 0076428457	74.0 / 0.08	1085091 ONTARI 1154 OGLIVIE RE GLOUCESTER O		PRT
Headcode: Headcode De Phone: List Name: Description:		ESE/178.7 1186800 Service Stations-Ga 6137425552	<b>74.0 / 0.08</b> asoline, Oil & Nat	TROPIC SQUARE 1154 OGILVIE RE GLOUCESTER O ural Gas		RST
<u>25</u>	3 of 13	ESE/178.7	74.0 / 0.08	FENELON'S GAZ 1154 OGILVIE RE GLOUCESTER O		RST

Order No: 23022400359

1186800 Headcode:

Headcode Desc: Service Stations-Gasoline, Oil & Natural Gas

Phone:

List Name: Description:

6138429864

25 4 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD 1154 OGILVIE RD

**GLOUCESTER ON K1J 8V1** 

**DTNK** 

**Delisted Expired Fuel Safety** 

**Facilities** 

Instance No: 9841329 Status: **EXPIRED** 

Instance ID:

FS Facility Instance Type:

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT:

TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt:

TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area:

TSSA Program Area 2: Description:

EXP Original Source:

Record Date: Up to May 2013 Expired Date: 3/23/2010 9:23

Max Hazard Rank: Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related: Panam Venue Nm: External Identifier: Item:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground:

Source:

25

5 of 13

ESE/178.7

74.0 / 0.08

TROPIC SQUARE LTD 1154 OGILVIE RD **GLOUCESTER ON** 

**DTNK** 

Order No: 23022400359

**Delisted Expired Fuel Safety** 

**Facilities** 

11422193 Instance No: Status: **EXPIRED** 83287 Instance ID: Instance Type: FS Piping

Instance Creation Dt: Instance Install Dt: Item Description: Manufacturer: Model: Serial No:

Expired Date: Max Hazard Rank: Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related:

Panam Venue Nm: External Identifier:

Item:

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) Piping Steel: **ULC Standard:** Quantity: Piping Galvanized: Unit of Measure: Tank Single Wall St: Overfill Prot Type: Piping Underground: Creation Date: Tank Underground: Next Periodic Str DT: Source: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area: TSSA Program Area 2: FS Piping Description: Original Source: **EXP** Record Date: Up to Mar 2012 25 6 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD **DTNK** 1154 OGILVIE RD **GLOUCESTER ON Delisted Expired Fuel Safety Facilities** 11422176 Instance No: Expired Date: Status: **EXPIRED** Max Hazard Rank: Instance ID: 84055 Facility Location: FS Piping Facility Type: Instance Type: Instance Creation Dt: Fuel Type 2: Fuel Type 3: Instance Install Dt: Item Description: Panam Related: Manufacturer: Panam Venue Nm: Model: External Identifier: Serial No: Item: **ULC Standard:** Piping Steel: Quantity: Piping Galvanized: Tank Single Wall St: Unit of Measure: Overfill Prot Type: Piping Underground: Tank Underground: Creation Date: Next Periodic Str DT: Source: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area:

**Description:** FS Piping **Original Source:** EXP

7 of 13

TSSA Program Area 2:

**Record Date:** Up to Mar 2012

ESE/178.7 74.0 / 0.08

TROPIC SQUARE LTD 1154 OGILVIE RD GLOUCESTER ON

DTNK

Order No: 23022400359

25

**Delisted Expired Fuel Safety** 

**Facilities** 

11422150 Instance No: Status: **EXPIRED** 84057 Instance ID: FS Piping Instance Type: Instance Creation Dt:

Instance Install Dt: Item Description: Manufacturer: Model: Serial No: **ULC Standard:** Quantity: Unit of Measure: Overfill Prot Type: Creation Date: Next Periodic Str DT: TSSA Base Sched Cycle 2: TSSAMax Hazard Rank 1: TSSA Risk Based Periodic Yn: TSSA Volume of Directives: TSSA Periodic Exempt: TSSA Statutory Interval: TSSA Recd Insp Interva: TSSA Recd Tolerance: TSSA Program Area:

TSSA Program Area 2: Description: FS Piping Original Source: **EXP** 

Record Date:

Facility Location: Facility Type: Fuel Type 2: Fuel Type 3: Panam Related: Panam Venue Nm: External Identifier: Item:

Expired Date:

Max Hazard Rank:

Piping Steel: Piping Galvanized: Tank Single Wall St: Piping Underground: Tank Underground: Source:

Up to Mar 2012

8 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

**Delisted Expired Fuel Safety** 

**Facilities** 

25

Instance No: 10762955 **EXPIRED** Status:

Instance ID:

Instance Type:

Instance Creation Dt: 7/19/2000 8:15:15 PM

Instance Install Dt: 5/19/2009

Item Description: FS Liquid Fuel Tank

NULL Manufacturer: NULL Model: Serial No: NULL NULL **ULC Standard:** Quantity: Unit of Measure: EΑ Overfill Prot Type: **NULL** 

Creation Date: 7/5/2009 1:20:44 AM

Next Periodic Str DT: **NULL** 

TSSA Base Sched Cycle 2: **NULL** TSSAMax Hazard Rank 1: NULL TSSA Risk Based Periodic Yn: NULL TSSA Volume of Directives: **NULL** TSSA Periodic Exempt: NULL TSSA Statutory Interval: **NULL**  Expired Date:

Max Hazard Rank: NULL

Facility Location: 1154 OGILVIE RD GLOUCESTER K1J 8V1

**DTNK** 

Order No: 23022400359

ON CA

Facility Type: **FS LIQUID FUEL TANK** 

Fuel Type 2: **NULL** Fuel Type 3: NULL NULL Panam Related: Panam Venue Nm: NULL **NULL** External Identifier:

Item: Piping Steel: Piping Galvanized: Tank Single Wall St:

Piping Underground: Tank Underground:

FS Liquid Fuel Tank Source:

TSSA Recd Insp Interva:
TSSA Recd Tolerance:
NULL
TSSA Program Area:
NULL
TSSA Program Area 2:
NULL

**Description:** 2009VBSRegular Gasoline

Original Source: EXP

Record Date: 31-JUL-2020

25 9 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

**NULL** 

ON CA

NULL

NULL

NULL

NULL

**NULL** 

FS LIQUID FUEL TANK

FS Liquid Fuel Tank

1154 OGILVIE RD GLOUCESTER K1J 8V1

**DTNK** 

**DTNK** 

Order No: 23022400359

ON

**Expired Date:** 

Facility Type:

Fuel Type 2:

Fuel Type 3:

Piping Steel:

Source:

Item:

Panam Related:

Panam Venue Nm:

External Identifier:

Piping Galvanized: Tank Single Wall St:

Piping Underground:

Tank Underground:

Max Hazard Rank:

Facility Location:

**Delisted Expired Fuel Safety** 

**Facilities** 

Instance No: 11292765 Status: EXPIRED

Instance ID:

Instance Type:

Instance Creation Dt: 7/19/2000 8:15:15 PM

Instance Install Dt: 5/19/2009

Item Description: FS Liquid Fuel Tank

Manufacturer: NULL
Model: NULL
Serial No: NULL
ULC Standard: NULL
Quantity: 1
Unit of Measure: EA
Overfill Prot Type: NULL

**Creation Date:** 7/5/2009 1:24:34 AM

Next Periodic Str DT: NULL

TSSA Base Sched Cycle 2: **NULL** TSSAMax Hazard Rank 1: NULL TSSA Risk Based Periodic Yn: NULL TSSA Volume of Directives: NULL TSSA Periodic Exempt: **NULL** TSSA Statutory Interval: **NULL** TSSA Recd Insp Interva: **NULL** TSSA Recd Tolerance: **NULL** TSSA Program Area: **NULL** TSSA Program Area 2: NULL

Description: NOLL 2009VBSETHANOL

Original Source: EXP

Record Date: 31-JUL-2020

25 10 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

ON

Expired Date:

Delisted Expired Fuel Safety

**Facilities** 

Instance No: 11292792

Status: EXPIRED Max Hazard Rank:

Instance ID: Facility Location: 1154 OGILVIE RD GLOUCESTER K1J 8V1

ON CA

Instance Type: FS LIQUID FUEL TANK

Instance Creation Dt:7/19/2000 8:15:15 PMFuel Type 2:NULLInstance Install Dt:5/19/2009Fuel Type 3:NULLItem Description:FS Liquid Fuel TankPanam Related:NULL

Item:

Source:

Piping Steel:

Piping Galvanized: Tank Single Wall St:

Piping Underground:

Tank Underground:

NULL Panam Venue Nm: NULL Manufacturer: Model: External Identifier: NULL NULL

Serial No: NULL NULL **ULC Standard:** Quantity: Unit of Measure: FΑ Overfill Prot Type: **NULL** 

7/5/2009 1:24:40 AM Creation Date:

Next Periodic Str DT: **NULL** 

TSSA Program Area:

TSSA Program Area 2:

TSSA Base Sched Cycle 2: **NULL** TSSAMax Hazard Rank 1: NULL TSSA Risk Based Periodic Yn: **NULL** TSSA Volume of Directives: NULL TSSA Periodic Exempt: NULL TSSA Statutory Interval: **NULL** TSSA Recd Insp Interva: **NULL** TSSA Recd Tolerance: **NULL** 

Description: 2009VBSPreviously a diesel tank, now filled with super gasoline

**NULL** NULL

Original Source: **EXP** 

Record Date: 31-JUL-2020

25 11 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

FS Liquid Fuel Tank

**FST** 

**FST** 

Order No: 23022400359

ON

Piping Galvanized:

Instance No: 10762955 Manufacturer: Status:

Serial No: Cont Name: Ulc Standard: Instance Type: Quantity: Item: Unit of Measure:

FS Liquid Fuel Tank Fuel Type: Gasoline Item Description: Single Wall UST NULL Tank Type: Fuel Type2: Install Date: 5/19/2009 Fuel Type3: **NULL** Piping Steel:

Install Year: 1990 Years in Service:

**NULL** Tanks Single Wall St: Model: Description: Piping Underground: Capacity: 35000 No Underground: Tank Material: Panam Related: Steel **Corrosion Protect:** Sacrificial anode Panam Venue:

Overfill Protect:

Facility Type: FS Liquid Fuel Tank

Parent Facility Type: Facility Location:

Device Installed Location: 1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

**Liquid Fuel Tank Details** 

**Overfill Protection:** 

**Owner Account Name:** TROPIC SQUARE LTD Item: FS LIQUID FUEL TANK

ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD 25 12 of 13

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

ON

Instance No: 11292765 Manufacturer:

Status: Serial No: Cont Name: Ulc Standard: Instance Type: Quantity: Unit of Measure: Item:

Piping Steel:

Piping Galvanized:

No Underground:

Panam Related:

Panam Venue:

Tanks Single Wall St:

Piping Underground:

FS Liquid Fuel Tank Item Description: Fuel Type: Tank Type: Single Wall UST Fuel Type2: Install Date: 5/19/2009 Fuel Type3:

Install Year: 1990 Years in Service:

**NULL** Model:

Description:

35000 Capacity: Tank Material: Steel

Corrosion Protect: Sacrificial anode

Overfill Protect: Facility Type:

FS Liquid Fuel Tank

Parent Facility Type: Facility Location:

Device Installed Location: 1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

**Liquid Fuel Tank Details** 

Overfill Protection:

Owner Account Name: TROPIC SQUARE LTD FS LIQUID FUEL TANK Item:

25 13 of 13 ESE/178.7 74.0 / 0.08 TROPIC SQUARE LTD

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA

Gasoline

NULL

**NULL** 

**FST** 

Order No: 23022400359

Gasoline

NULL

**NULL** 

ON

Instance No: 11292792

Status: Cont Name: Instance Type:

Item:

Manufacturer: Serial No: Ulc Standard: Quantity:

Unit of Measure: Fuel Type:

Tanks Single Wall St:

Piping Underground:

No Underground:

Panam Related:

Panam Venue:

Fuel Type2:

Fuel Type3:

Piping Steel: Piping Galvanized:

FS Liquid Fuel Tank Item Description: Single Wall UST Tank Type: Install Date: 5/19/2009 Install Year: 1990

Years in Service:

Model: **NULL** Description:

Capacity: 25000 Tank Material: Steel

Sacrificial anode **Corrosion Protect:** 

Overfill Protect:

FS Liquid Fuel Tank Facility Type:

Parent Facility Type: Facility Location:

1154 OGILVIE RD GLOUCESTER K1J 8V1 ON CA Device Installed Location:

**Liquid Fuel Tank Details** 

**Overfill Protection:** 

**Owner Account Name:** TROPIC SQUARE LTD **FS LIQUID FUEL TANK** Item:

26 1 of 1 E/183.2 74.9 / 1.00 lot 25 con 1 **WWIS** ON

Well ID: 1501123

Construction Date:

Use 1st: Domestic Use 2nd:

Final Well Status: Water Supply Water Type:

Data Entry Status: Data Src: Date Received:

16-May-1956 00:00:00 Selected Flag: TRUE

Abandonment Rec:

Flowing (Y/N):

Flow Rate:

Casing Material:

Contractor: 2311

Audit No: Form Version: Tag: Constructn Method: Owner:

**OTTAWA-CARLETON** Elevation (m): County:

Elevatn Reliabilty: Lot: 025 01 Depth to Bedrock: Concession: Well Depth: Concession Name: OF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

Municipality: **GLOUCESTER TOWNSHIP** Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501123.pdf

## Additional Detail(s) (Map)

Well Completed Date: 1956/04/30 Year Completed: 1956 Depth (m): 27.432

Latitude: 45.4270218652671 Longitude: -75.630139132531 150\1501123.pdf Path:

#### **Bore Hole Information**

Bore Hole ID: 10023166 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18 450705.70 Code OB: East83: Code OB Desc: North83: 5030582.00

Open Hole: Org CS:

Cluster Kind: **UTMRC:** Date Completed: 30-Apr-1956 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method: p9

Loc Method Desc: Original Pre1985 UTM Rel Code 9: unknown UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: **Source Revision Comment:** 

Supplier Comment:

## Overburden and Bedrock

### **Materials Interval**

Formation ID: 930991036

Layer: 2 Color:

General Color:

26 Mat1: Most Common Material: **ROCK** 

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 10.0 Formation End Depth: 90.0 Formation End Depth UOM: ft

# Overburden and Bedrock

Order No: 23022400359

Materials Interval

**Formation ID:** 930991035

Layer:

Color:

General Color:

**Mat1:** 02

Most Common Material:TOPSOILMat2:19Mat2 Desc:SLATE

Mat3:

Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 10.0 Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 961501123

Method Construction Code:

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

**Pipe ID:** 10571736

Casing No:

Comment: Alt Name:

**Construction Record - Casing** 

**Casing ID:** 930039238

Layer: 1
Material: 1

Open Hole or Material: STEEL
Depth From:
Depth To: 14.0
Casing Diameter: 4.0
Casing Diameter UOM: inch

Casing Depth UOM:

**Construction Record - Casing** 

**Casing ID:** 930039239

ft

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 90.0
Casing Diameter: 4.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991501123

Pump Set At:

Static Level: 5.0 Final Level After Pumping: 10.0

Мар Кеу	Number Records		Direction/ Distance (m)	Elev/Diff (m)	Site		DB
Recommender Pumping Rate Flowing Rate Recommender Levels UOM: Rate UOM: Water State A Pumping Test Pumping Dur Flowing:	e: : ed Pump R After Test C After Test: it Method: ration HR:	ate:	ft GPM 1 CLEAR 1 1 0 No				
Water Details  Water ID: Layer: Kind Code: Kind: Water Found Water Found	Depth:	<b>и</b> :	933453808 1 1 FRESH 76.0 ft				
Water Details Water ID: Layer: Kind Code: Kind: Water Found Water Found	Depth:	<b>и</b> :	933453809 2 1 FRESH 83.0 ft				
Links  Bore Hole ID: Depth M: Year Complet Well Complet Audit No:	ted:	1002316 27.432 1956 1956/04/			Tag No: Contractor: Path: Latitude: Longitude:	2311 150\1501123.pdf 45.4270218652671 -75.630139132531	
27	1 of 4		ESE/185.3	74.0 / 0.08	6037682 CANADA INC 1150 OGILVIE ROAD OTTAWA ON K1J 8V1		GEN
Generator No SIC Code: SIC Descripti Approval Yea PO Box No: Country: Status: Co Admin: Choice of Co. Phone No Ad Contaminate MHSW Facilit	ion: ars: ntact: lmin: d Facility:		ON2090726 03,04				
27	2 of 4		ESE/185.3	74.0 / 0.08	6037682 CANADA INC 1150 OGILVIE RD OTTAWA ON K1J 8V1		GEN

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

SIC Description:

Other Gasoline Stations

Approval Years: PO Box No: Country: Status: Co Admin:

**27** 

Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

ESE/185.3 74.0 / 0.08

1150 Chemin Ogilvie Ottawa ON K1J 8V1

Nearest Intersection:

Municipality:

**EHS** 

20051229028 Order No:

3 of 4

Status: С

Report Type: Complete Report Report Date: 1/2/2006 Date Received: 12/29/2005 Previous Site Name:

Client Prov/State: ON Search Radius (km): 0.25 -75.630738 X: Y: 45.426276

Lot/Building Size:

Additional Info Ordered: Fire Insur. Maps and/or Site Plans, City Directory Search

27 4 of 4 ESE/185.3 74.0 / 0.08

6037682 Canada Inc. 1150 OGILVIE ROAD **OTTAWA ON K1J 8V1** 

**GEN** 

**WWIS** 

Order No: 23022400359

Generator No: ON8677710 447190 SIC Code:

SIC Description:

Approval Years:

PO Box No: Country: Status: Co Admin:

Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Other Gasoline Stations

Detail(s)

28

Waste Class:

WASTE OILS & LUBRICANTS Waste Class Name:

Monitoring and Test Hole

Well ID: 7157668

Construction Date:

1 of 1

Monitoring and Test Hole Use 1st: Use 2nd:

Final Well Status:

Water Type: Casing Material:

Audit No: Z120905 A097240

Constructn Method:

Tag:

Elevation (m): Elevatn Reliabilty:

Depth to Bedrock:

ESE/193.7 73.8 / -0.06 1182 OGILIVE ROAD Ottawa ON

Flowing (Y/N):

Flow Rate: Data Entry Status:

Data Src:

Date Received: 14-Jan-2011 00:00:00 Selected Flag: TRUE

Abandonment Rec:

Contractor: 7241 Form Version: 7

Owner:

**OTTAWA-CARLETON** County: Lot:

Concession: Concession Name:

Well Depth:

Map Key Number of Direction/ Elev/Diff Site DB

Records Distance (m) (m)

Overburden/Bedrock:Easting NAD83:Pump Rate:Northing NAD83:

Static Water Level: Zone:
Clear/Cloudy: UTM Reliability:

Municipality: GLOUCESTER TOWNSHIP

Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/715\7157668.pdf

Additional Detail(s) (Map)

 Well Completed Date:
 2010/12/08

 Year Completed:
 2010

 Depth (m):
 3.1

 Latitude:
 45.4264006261219

 Longitude:
 -75.6301667346025

 Path:
 715√7157668.pdf

**Bore Hole Information** 

 Bore Hole ID:
 1003455874
 Elevation:

 DP2BR:
 Elevrc:

 Spatial Status:
 Zone:
 18

 Code OB:
 East83:
 450703.00

 Code OB Desc:
 North83:
 5030513.00

 Open Hole:
 Org CS:
 UTM83

Open Hole: Org CS: Cluster Kind: UTMRC:

 Date Completed:
 08-Dec-2010 00:00:00
 UTMRC Desc:
 margin of error: 10 - 30 m

 Remarks:
 Location Method:
 wwr

Remarks: Location Method: w
Loc Method Desc: on Water Well Record

Elevre Desc:

Location Source Date: Improvement Location Source: Improvement Location Method:

Source Revision Comment: Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 1003772804

Layer: 3

Color: General Color:

Mat1:

Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 3.0999999046325684

Formation End Depth:

Formation End Depth UOM: m

Overburden and Bedrock

Materials Interval

**Formation ID:** 1003772802

 Layer:
 1

 Color:
 6

 General Color:
 BROWN

 Mat1:
 28

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

 Most Common Material:
 SAND

 Mat2:
 11

 Mat2 Desc:
 GRAVEL

 Mat3:
 05

 Mat3 Desc:
 CLAY

 Formation Top Depth:
 0.0

Formation End Depth: 2.440000057220459

Formation End Depth UOM: m

Overburden and Bedrock Materials Interval

**Formation ID:** 1003772803

 Layer:
 2

 Color:
 6

General Color: BROWN
Mat1: 28
Most Common Material: SAND
Mat2: 85

 Mat2:
 85

 Mat2 Desc:
 SOFT

 Mat3:
 91

 Mat3 Desc:
 WATE

 Mat3 Desc:
 WATER-BEARING

 Formation Top Depth:
 2.440000057220459

 Formation End Depth:
 3.0999999046325684

Formation End Depth UOM: m

<u>Annular Space/Abandonment</u> <u>Sealing Record</u>

**Plug ID:** 1003772813

Layer: 1 0.0

**Plug To:** 0.3100000023841858

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003772815

Layer: 3

 Plug From:
 1.2200000286102295

 Plug To:
 3.0999999046325684

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003772814

Layer:

 Plug From:
 0.3100000023841858

 Plug To:
 1.2200000286102295

Plug Depth UOM: m

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1003772811

Method Construction Code: B

Method Construction: Other Method Other Method Construction: DIRECT PUSH

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

**Pipe Information** 

**Pipe ID:** 1003772801

Casing No: Comment:

Alt Name:

**Construction Record - Casing** 

**Casing ID:** 1003772807

 Layer:
 1

 Material:
 5

 Open Hole or Material:
 PLASTIC

 Depth From:
 0.0

 Depth To:
 1.5

**Casing Diameter:** 4.03000020980835

Casing Diameter UOM: cm
Casing Depth UOM: m

**Construction Record - Screen** 

**Screen ID:** 1003772808

 Layer:
 1

 Slot:
 10

 Screen Top Depth:
 1.5

**Screen End Depth:** 3.0999999046325684

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 4.820000171661377

Water Details

*Water ID:* 1003772806

Layer: Kind Code: Kind:

Water Found Depth:
Water Found Depth UOM:

**Hole Diameter** 

 Hole ID:
 1003772805

 Diameter:
 8.25

 Depth From:
 0.0

**Depth To:** 3.0999999046325684

Hole Depth UOM: m
Hole Diameter UOM: cm

<u>Links</u>

 Bore Hole ID:
 1003455874
 Tag No:
 A097240

 Depth M:
 3.1
 Contractor:
 7241

 Year Completed:
 2010
 Path:
 715/7157668.pdf

 Well Completed Dt:
 2010/12/08
 Latitude:
 45.4264006261219

 Audit No:
 2120905
 Longitude:
 -75.6301667346025

29 1 of 1 S/194.7 72.9 / -1.00 WWIS

Order No: 23022400359

*Well ID:* 7388761 *Flowing (Y/N):* 

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

Construction Date:

Use 1st: Use 2nd: Final Well Status: Water Type:

Casing Material:

Audit No: C32281 Tag: A202124

Constructn Method: Elevation (m): Elevatn Reliabilty: Depth to Bedrock: Well Depth:

Overburden/Bedrock: Pump Rate: Static Water Level: Clear/Cloudv:

Site Info:

Municipality: **GLOUCESTER TOWNSHIP** 

1008667703

**Bore Hole Information** 

Bore Hole ID: DP2BR:

Spatial Status: Code OB: Code OB Desc: Open Hole: Cluster Kind:

Date Completed:

25-Sep-2019 00:00:00

Remarks:

Loc Method Desc: on Water Well Record

Elevrc Desc:

Location Source Date: Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

**Links** 

Bore Hole ID: 1008667703

Depth M:

**30** 

2019 Year Completed:

Audit No: C32281

1 of 1

Flow Rate:

Data Entry Status: Yes

Data Src:

03-Jun-2021 00:00:00 Date Received:

Selected Flag: TRUE

Abandonment Rec:

Contractor: 1844 Form Version: 8

Owner: County:

**OTTAWA-CARLETON** 

Lot: Concession: Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Elevation: Elevrc:

Zone: 18 450500.00 East83: North83: 5030390.00

Org CS: UTM83 UTMRC: 4

**UTMRC Desc:** margin of error: 30 m - 100 m

Location Method: wwr

Well Completed Dt: 2019/09/25 Tag No: Contractor: Path:

1844

A202124

SCT

Order No: 23022400359

1088 Ogilvie Rd Gloucester ON K1J 7P8

Latitude: 45.4252791943293 -75.632749168996 Longitude:

**AFSC Future Security Controls** 

01-SEP-82 8000

SSW/201.2

Established: Plant Size (ft2): Employment:

--Details--

Electronic Components, Navigational and Communications Equipment and Supplies Wholesaler-Distributors Description:

72.0 / -1.86

SIC/NAICS Code:

Description: Security Systems Services (except Locksmiths)

SIC/NAICS Code: 561621

Elev/Diff Site DΒ Map Key Number of Direction/

Description: Industrial Design Services

SIC/NAICS Code: 541420

Records

Description: Electrical Wiring and Construction Supplies Wholesaler-Distributors

Distance (m)

SIC/NAICS Code: 416110

31 1 of 1 S/203.1 72.9 / -0.97 1098 Ogilvie Road **EHS** 

Order No: 20190813196

Status:

Standard Report Report Type: Report Date: 20-AUG-19 13-AUG-19 Date Received:

Previous Site Name: Lot/Building Size: Additional Info Ordered: Nearest Intersection:

Municipality:

Client Prov/State: ON Search Radius (km): .25

Gloucester ON K1J 7P8

-75.63245 X: Y: 45.425193

32 1 of 1 WSW/204.5 72.6 / -1.25 4297 WELDON DR, OTTAWA INC

Incident No: 1576702 Any Health Impact: Incident ID: Any Enviro Impact: Nο

Instance No: Service Interrupted: Status Code: Was Prop Damaged: No

Attribute Category: FS-Perform L1 Incident Insp Reside App. Type: Context:

2015/02/16 00:00:00 Date of Occurrence:

Time of Occurrence: 18:21:00

Incident Created On: Instance Creation Dt-Instance Install Dt:

Occur Insp Start Date: 2015/02/18 00:00:00

Approx Quant Rel:

Tank Capacity:

CO Release Fuels Occur Type: Fuel Type Involved: Natural Gas **NULL** Enforcement Policy:

Prc Escalation Reg: NULL Tank Material Type: Tank Storage Type: Tank Location Type: Pump Flow Rate Cap:

5367418 Task No:

Notes:

Drainage System: Sub Surface Contam.: Aff Prop Use Water: Contam. Migrated:

Contact Natural Env: Incident Location:

Occurence Narrative:

Operation Type Involved: Item:

Item Description:

Device Installed Location:

No

Yes

Commer App. Type: Indus App. Type: Institut App. Type: Venting Type:

Vent Conn Mater: Vent Chimney Mater: Pipeline Type: Pipeline Involved:

Pipe Material: Depth Ground Cover: Regulator Location: Regulator Type: Operation Pressure: Liquid Prop Make: Liquid Prop Model: Liquid Prop Serial No: Liquid Prop Notes:

Equipment Type: **Equipment Model:** Serial No: Cylinder Capacity: Cylinder Cap Units: Cylinder Mat Type:

Near Body of Water: 4297 WELDON DR, OTTAWA - CO RELEASE

CO Release coming from NG fired furnace Multi-unit Residential

33 1 of 1 S/204.6 72.9 / -0.97

9456-5082 Quebec Inc., as general partner for and on behalf of Lux Place L.P.

1098 Ogilvie Road and 1178 Cummings Avenue

**PTTW** 

Map Key Number of Direction/ Elev/Diff Site DB

Records Distance (m) (m)

Ottawa, ON Canada

EBR Registry No: 019-5394 Decision Posted: August 15, 2022

Ministry Ref No:0432-CDMNAAException Posted:Notice Type:InstrumentSection:

Notice Type:InstrumentSection:Section 34Notice Stage:DecisionAct 1:Ontario Water Resources Act, R.S.O. 1990

Notice Date: Act 2: Ontario Water Resources Act

 Proposal Date:
 April 29, 2022
 Site Location Map:
 45.424992, -75.631751

**Year:** 2022

Instrument Type: Permit to take water

Off Instrument Name: Permit to Take Water (OWRA s. 34)

Posted By: Ministry of the Environment, Conservation and Parks

Company Name:

Site Address: 1098 Ogilvie Road and 1178 Cummings Avenue

Ottawa, ON Canada

Location Other:

Proponent Name:9456-5082 Quebec Inc., as general partner for and on behalf of Lux Place L.P.Proponent Address:9456-5082 Quebec Inc., as general partner for and on behalf of Lux Place L.P.

155 Wellington Street West

Unit 40 Toronto, ON M5V 3J7 Canada

**Comment Period:** April 29, 2022 - May 29, 2022 (30 days) Closed

URL: https://ero.ontario.ca/notice/019-5394

Site Location Details:

34 1 of 1 ESE/205.6 73.9 / 0.00 1162 Ogilvie Road Gloucester ON K1J 8V1

*Order No:* 20190628212

Status: C

Report Type: Standard Report Report Date: 08-JUL-19
Date Received: 28-JUN-19

Previous Site Name: Lot/Building Size:

Additional Info Ordered: City Directory

12 Nearest Intersection: Municipality:

Client Prov/State: ON Search Radius (km): .25

**X:** -75.630053 **Y:** 45.426311

45.426433

Order No: 23022400359

35 1 of 1 ESE/207.7 74.2 / 0.31 1162 Ogilvie Road Ottawa ON

 Order No:
 20101102009
 Nearest Intersection:

 Status:
 C
 Municipality:

 Report Type:
 Standard Report
 Client Prov/State:
 ON

 Report Date:
 11/8/2010
 Search Radius (km):
 0.25

 Date Received:
 11/2/2010 11:09:01 AM
 X:
 -75.62996

Previous Site Name: Lot/Building Size:

Additional Info Ordered: Fire Insur. Maps and/or Site Plans; City Directory

36 1 of 1 ENE/211.7 75.9 / 2.00 lot 25 con 1 WWIS

Y:

**Well ID:** 1501130 **Flowing (Y/N):** 

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

**Construction Date:** Flow Rate: Use 1st: **Domestic** Data Entry Status:

Use 2nd: 0 Data Src: Final Well Status: Water Supply Date Received:

27-Aug-1963 00:00:00 Water Type: Selected Flag: TRUE Casing Material: Abandonment Rec:

Audit No: Contractor: 1802 Tag: Form Version: Constructn Method: Owner:

Elevation (m): County: **OTTAWA-CARLETON** 

Elevatn Reliabilty: 025 Lot: Depth to Bedrock: Concession: 01 OF Well Depth: Concession Name:

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone:

UTM Reliability: Clear/Cloudv:

Municipality: **GLOUCESTER TOWNSHIP** Site Info:

https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/150\1501130.pdf PDF URL (Map):

Additional Detail(s) (Map)

Well Completed Date: 1963/06/04 Year Completed: 1963 Depth (m): 79.248

45.4281908989274 Latitude: Longitude: -75.6303438925385 Path: 150\1501130.pdf

**Bore Hole Information** 

Bore Hole ID: 10023173 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18

East83: 450690.70 Code OB: Code OB Desc: North83: 5030712.00 Open Hole: Org CS:

Cluster Kind: **UTMRC**:

04-Jun-1963 00:00:00 UTMRC Desc: margin of error: 100 m - 300 m Date Completed:

Order No: 23022400359

Location Method: Remarks: Loc Method Desc: Original Pre1985 UTM Rel Code 5: margin of error: 100 m - 300 m

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock Materials Interval

Formation ID: 930991048

Layer:

Color:

General Color:

Mat1: 05 Most Common Material: CLAY Mat2: 13

**BOULDERS** Mat2 Desc:

Mat3: Mat3 Desc: Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Formation Top Depth: 0.0
Formation End Depth: 15.0
Formation End Depth UOM: ft

Overburden and Bedrock

**Materials Interval** 

 Formation ID:
 930991050

 Layer:
 3

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 165.0 Formation End Depth: 260.0 Formation End Depth UOM: ft

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 930991049

 Layer:
 2

 Color:
 8

 General Color:
 BLACK

 Mat1:
 17

 Most Common Material:
 SHALE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 15.0
Formation End Depth: 165.0
Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID:961501130Method Construction Code:1

Method Construction: Cable Tool

Other Method Construction:

Pipe Information

**Pipe ID:** 10571743

Casing No: 1
Comment:

Alt Name:

Construction Record - Casing

**Casing ID:** 930039252

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To: 18.0 Casing Diameter: 6.0

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m)

Casing Diameter UOM: inch Casing Depth UOM: ft

# Construction Record - Casing

930039253 Casing ID:

Layer: 2 Material:

Open Hole or Material:

**OPEN HOLE** 

Depth From:

260.0 Depth To: Casing Diameter: 6.0 Casing Diameter UOM: inch Casing Depth UOM: ft

### Results of Well Yield Testing

**PUMP** Pumping Test Method Desc:

Pump Test ID: 991501130

Pump Set At:

Static Level: 30.0 260.0 Final Level After Pumping: Recommended Pump Depth: 200.0 2.0 Pumping Rate:

Flowing Rate:

Recommended Pump Rate: 2.0 Levels UOM: ft

**GPM** Rate UOM: Water State After Test Code: 2 Water State After Test: **CLOUDY** 

Pumping Test Method: 1 **Pumping Duration HR:** 1 **Pumping Duration MIN:** 0 Flowing: No

### Water Details

Water ID: 933453817

Layer: Kind Code:

Kind: **FRESH** Water Found Depth: 255.0 Water Found Depth UOM:

# Links

Bore Hole ID: 10023173

Depth M: 79.248 Contractor: 1802

Year Completed: 1963 Path: 150\1501130.pdf 1963/06/04 45.4281908989274 Well Completed Dt: Latitude: Longitude: -75.6303438925385

Tag No:

Flowing (Y/N):

**WWIS** 

Order No: 23022400359

Audit No:

Well ID:

1162 OGILIVE ROAD 1 of 1 ESE/218.4 73.9 / 0.00 **37** 

Ottawa ON 7157667

Flow Rate: **Construction Date:** 

Use 1st: Monitoring and Test Hole Data Entry Status: 0 Use 2nd: Data Src:

Final Well Status: Monitoring and Test Hole Date Received: 14-Jan-2011 00:00:00

TRUE Water Type: Selected Flag: Casing Material:

Abandonment Rec:

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m)

Z120906 Contractor: 7241

Audit No: A097242 Form Version: Tag: Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty: Lot: Concession: Depth to Bedrock: Well Depth: Concession Name: Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83: Static Water Level: Zone:

UTM Reliability: Clear/Cloudy:

Municipality: **GLOUCESTER TOWNSHIP** Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/715\7157667.pdf

## Additional Detail(s) (Map)

Well Completed Date: 2010/12/08 Year Completed: 2010 Depth (m): 4.27

Latitude: 45.4261586646808 Longitude: -75.6299722970786 715\7157667.pdf Path:

### **Bore Hole Information**

Bore Hole ID: 1003455872 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18 450718.00 Code OB: East83: 5030486.00 Code OB Desc: North83: Open Hole: Org CS: UTM83 Cluster Kind: **UTMRC:** 

margin of error: 10 - 30 m Date Completed: 08-Dec-2010 00:00:00 UTMRC Desc:

Order No: 23022400359

Remarks: Location Method: wwr Loc Method Desc: on Water Well Record

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: **Source Revision Comment:** 

Supplier Comment:

## Overburden and Bedrock

### **Materials Interval**

Formation ID: 1003768436

2 Layer: Color: 6 General Color: **BROWN** Mat1: 09

Most Common Material: MEDIUM SAND

Mat2: 85 Mat2 Desc: SOFT Mat3: 91

Mat3 Desc: WATER-BEARING Formation Top Depth: 2.440000057220459 Formation End Depth: 4.269999980926514

Formation End Depth UOM: m

## Overburden and Bedrock

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m)

Materials Interval

**Formation ID:** 1003768435

 Layer:
 1

 Color:
 6

 General Color:
 BROWN

 Mat1:
 11

 Most Common Material:
 GRAVEL

 Mat2:
 28

 Mat2 Desc:
 SAND

 Mat3:
 05

 Mat3 Desc:
 CLAY

 Formation Top Depth:
 0.0

Formation End Depth: 2.440000057220459

Formation End Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003768445

**Layer:** 1 0.0

**Plug To:** 0.3100000023841858

Plug Depth UOM: m

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003768447

Layer:

 Plug From:
 0.9100000262260437

 Plug To:
 4.26999980926514

Plug Depth UOM:

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003768446

Layer:

 Plug From:
 0.3100000023841858

 Plug To:
 0.9100000262260437

Plug Depth UOM: m

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1003768443

Method Construction Code: B

Method Construction:Other MethodOther Method Construction:DIRECT PUSH

Pipe Information

**Pipe ID:** 1003768434

Casing No:

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 1003768439

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Layer:1Material:5Open Hole or Material:PLASTIC

 Depth From:
 0.0

 Depth To:
 1.2200000286102295

Casing Diameter: 4.03000020980835
Casing Diameter UOM: cm

Casing Depth UOM:

**Construction Record - Screen** 

**Screen ID:** 1003768440

**Layer**: 1 **Slot**: 10

 Screen Top Depth:
 1.2200000286102295

 Screen End Depth:
 4.269999980926514

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 4.820000171661377

Water Details

Water ID: 1003768438

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: m

Hole Diameter

 Hole ID:
 1003768437

 Diameter:
 8.25

Depth From: 0.0

**Depth To:** 4.269999980926514

Hole Depth UOM: m
Hole Diameter UOM: cm

**Links** 

 Bore Hole ID:
 1003455872
 Tag No:
 A097242

 Depth M:
 4.27
 Contractor:
 7241

 Year Completed:
 2010
 Path:
 715\7157667.pdf

 Well Completed Dt:
 2010/12/08
 Latitude:
 45.4261586646808

 Audit No:
 Z120906
 Longitude:
 -75.6299722970786

38 1 of 1 N/218.5 74.9 / 1.00 1055 Cummings Ave Gloucester (Ottawa) ON K1J 7S2

 Order No:
 20040407012

 Status:
 C

 Report Type:
 Complete Report

 Report Date:
 4/13/04

 Date Received:
 4/7/04

Previous Site Name: Lot/Building Size: Additional Info Ordered: Nearest Intersection: Donald
Nunicipality: Prov/State: Donald
Regional Municipality of Ottawa-Carleton
ON

Order No: 23022400359

 Client Prov/State:
 ON

 Search Radius (km):
 0.25

 X:
 -75.633036

 Y:
 45.429095

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>39</u>	1 of 2	SSW/226.3	72.0 / -1.86	FAIRVIEW FUNERAL &CREMATION SERVICES INC 1092 OGILVIE ROAD GLOUCESTER ON K1J 7P8	GEN
Generator No SIC Code: SIC Descript Approval Ye PO Box No: Country: Status: Co Admin: Choice of Co Phone No AC Contaminate MHSW Facili	ion: ars: ontact: dmin: ed Facility:	ONF055900 9731 FUNERAL HOMES 95,96,97,98,99			
<u>Detail(s)</u>					
Waste Class: Waste Class Name:		312 PATHOLOGICAL WASTES			
<u>39</u>	2 of 2	SSW/226.3	72.0 / -1.86	FAIRVIEW FUNERAL AND CREMATION 1092 OGILVIE ROAD GLOUCESTER ON K1J 7P8	GEN
Generator No SIC Code: SIC Descript Approval Ye PO Box No: Country: Status: Co Admin: Choice of Co Phone No Ad Contaminate MHSW Facili	ion: ars: ontact: dmin: ed Facility:	ONF055900 9731 FUNERAL HOMES 00,01			
<u>Detail(s)</u>					
Waste Class: Waste Class Name:		312 PATHOLOGICAL WASTES			
<u>40</u>	1 of 1	SSE/231.6	72.6 / -1.31	EDIFICE BEAUFORT BUILDING INC. 1178 CUMMINGS OTTAWA ON K1J 7R8	GEN
Generator No SIC Code: SIC Descript Approval Ye PO Box No: Country: Status: Co Admin: Choice of Co Phone No Ad Contaminate MHSW Facili	ion: ars: ontact: dmin: ed Facility:	ON7246315 03,04			

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

**WWIS** 

Order No: 23022400359

18-May-2011 00:00:00

1 of 1 N/235.9 74.9 / 1.00 1043 CUMMINGS AVE OTTAWA ON

Well ID: 7163232 Flowing (Y/N): Construction Date: Flow Rate:

Use 1st: Data Entry Status:

Use 2nd:

Pata Src:
Final Well Status:

Abandoned-Other

Data Received:

Water Type:Selected Flag:TRUECasing Material:Abandonment Rec:Yes

Audit No: Z119783 Contractor: 1119
Tag: Form Version: 7

Constructn Method: Owner:
Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty:

Depth to Bedrock:

Well Depth:

Overburden/Bedrock:

Lot:

Concession:

Concession Name:

Easting NAD83:

Pump Rate:
Static Water Level:
Clear/Cloudy:
Northing NAD83:
Zone:
UTM Reliability:

lear/Cloudy: UTM Reli

Municipality: GLOUCESTER TOWNSHIP Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/716\7163232.pdf

Additional Detail(s) (Map)

41

Well Completed Date: 2011/04/06 Year Completed: 2011

Depth (m):

 Latitude:
 45.4291313527472

 Longitude:
 -75.6328177774273

 Path:
 716\7163232.pdf

**Bore Hole Information** 

Bore Hole ID: 1003510536 Elevation:

 DP2BR:
 Elevrc:

 Spatial Status:
 Zone:
 18

 Code OB:
 East83:
 450498.00

 Code OB Desc:
 North83:
 5030818.00

 Open Hole:
 Org CS:
 UTM83

 Date Completed:
 06-Apr-2011 00:00:00
 UTMRC Desc:
 margin of error : 10 - 30 m

UTMRC:

Remarks: Location Method: wwr

Loc Method Desc: on Water Well Record

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Annular Space/Abandonment

Sealing Record

Cluster Kind:

**Plug ID:** 1003900155

 Layer:
 2

 Plug From:
 4.0

 Plug To:
 12.0

 Plug Depth UOM:
 ft

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m)

Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003900154

 Layer:
 1

 Plug From:
 0.0

 Plug To:
 4.0

 Plug Depth UOM:
 ft

Method of Construction & Well

<u>Use</u>

Method Construction ID: 1003900153

Method Construction Code: Method Construction: Other Method Construction:

Pipe Information

**Pipe ID:** 1003900147

Casing No: 0

Comment: Alt Name:

**Construction Record - Casing** 

Casing ID: 1003900151

Layer: Material:

Open Hole or Material:

Depth From: Depth To: Casing Diameter:

Casing Diameter UOM: inch Casing Depth UOM: ft

Construction Record - Screen

**Screen ID:** 1003900152

Layer: Slot:

Screen Top Depth: Screen End Depth: Screen Material:

Screen Depth UOM: ft
Screen Diameter UOM: inch

Screen Diameter:

Water Details

Water ID: 1003900150

Layer: Kind Code: Kind:

Water Found Depth:
Water Found Depth UOM: ft

Hole Diameter

**Hole ID:** 1003900149

Diameter:

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m)

Depth From: Depth To:

Hole Depth UOM: ft Hole Diameter UOM: inch

<u>Links</u>

1003510536 Bore Hole ID:

Depth M:

Year Completed: 2011 2011/04/06 Well Completed Dt: Z119783 Audit No:

Tag No:

Contractor: 1119

Path: 716\7163232.pdf Latitude: 45.4291313527472 -75.6328177774273 Longitude:

42

1 of 27

NW/241.5

73.9 / 0.00

Ambico Limited 1120 Cummings Ave Gloucester ON K1J 7R8

SCT

Established:

Plant Size (ft2): Employment:

7/1/1961

--Details--

Description:

Metal Window and Door Manufacturing

SIC/NAICS Code: 332321

Description:

Other Ornamental and Architectural Metal Product Manufacturing

SIC/NAICS Code: 332329

**42** 

2 of 27

NW/241.5

73.9 / 0.00

AMBICO LIMITED 1120 Cummings Ave Ottawa ON K1J 7R8

SCT

Established: 1961 Plant Size (ft2): 16100 Employment: 40

--Details--

Description: SIC/NAICS Code: Wood Window and Door Manufacturing

321911

Metal Window and Door Manufacturing Description:

SIC/NAICS Code: 332321

42

3 of 27

NW/241.5

73.9 / 0.00

MANIS METAL MANUFACTURING LTD. 1120 CUMMINGS AVENUE **OTTAWA ON K1J 7R8** 

GEN

Order No: 23022400359

ON0526500 Generator No: SIC Code:

SIC Description: **METAL DOOR & WINDOW** 

Approval Years:

PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin:

3031

86,87

Contaminated Facility:

MHSW Facility:

Map Key Number of Direction/ Elev/Diff Site DB

Detail(s)

Waste Class: 212

Records

Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 233

Waste Class Name: OTHER POLYMERIC WASTES

Distance (m)

(m)

Waste Class: 241

Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 123

Waste Class Name: ALKALINE PHOSPHATES

Waste Class: 211

Waste Class Name: AROMATIC SOLVENTS

42 4 of 27 NW/241.5 73.9 / 0.00 MANIS METAL MANUFACTURING LTD.
1120 CUMMINGS AVENUE GEN

**OTTAWA ON K1J 7R8** 

Order No: 23022400359

Generator No: ON0526500

SIC Code: 3031

SIC Description: METAL DOOR & WINDOW

Approval Years: 88,89

PO Box No:
Country:
Status:
Co Admin:
Choice of Contact:
Phone No Admin:
Contaminated Facility:
MHSW Facility:

Detail(s)

Waste Class: 123

Waste Class Name: ALKALINE PHOSPHATES

Waste Class: 145

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 211

Waste Class Name: AROMATIC SOLVENTS

Waste Class: 212

Waste Class Name: ALIPHATIC SOLVENTS

Waste Class: 232

Waste Class Name: POLYMERIC RESINS

Waste Class: 233

Waste Class Name: OTHER POLYMERIC WASTES

Waste Class: 241

Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m) (m)

MANIS METAL MANUFACTURING LTD. 25-161

1120 CUMMINGS AVENUE OTTAWA ON K1J 7R8

**GEN** 

**GEN** 

Order No: 23022400359

NW/241.5 73.9 / 0.00 **AMBICO LIMITED 25-161** 42 5 of 27 1120 CUMMINGS AVENUE **OTTAWA ON K1J 7R8** 

ON0526500 Generator No: SIC Code: 3031

**METAL DOOR & WINDOW** SIC Description:

Approval Years: 92,93,96,97,98

PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 123

Waste Class Name: ALKALINE PHOSPHATES

Waste Class:

PAINT/PIGMENT/COATING RESIDUES Waste Class Name:

Waste Class:

AROMATIC SOLVENTS Waste Class Name:

Waste Class: 241

Waste Class Name: HALOGENATED SOLVENTS

Waste Class: 212

Waste Class Name: ALIPHATIC SOLVENTS

Waste Class:

Waste Class Name: POLYMERIC RESINS

Waste Class: 233

OTHER POLYMERIC WASTES Waste Class Name:

Waste Class:

6 of 27

WASTE OILS & LUBRICANTS Waste Class Name:

NW/241.5

73.9 / 0.00

Generator No: ON0526500

SIC Code: 3031

METAL DOOR & WINDOW SIC Description:

Approval Years: 94,95

PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin:

Contaminated Facility:

MHSW Facility:

Detail(s)

42

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) 123 Waste Class: Waste Class Name: ALKALINE PHOSPHATES Waste Class: Waste Class Name: PAINT/PIGMENT/COATING RESIDUES Waste Class: AROMATIC SOLVENTS Waste Class Name: Waste Class: 212 ALIPHATIC SOLVENTS Waste Class Name: Waste Class: 232 Waste Class Name: POLYMERIC RESINS Waste Class: 233 Waste Class Name: OTHER POLYMERIC WASTES Waste Class: 241 Waste Class Name: HALOGENATED SOLVENTS Waste Class: Waste Class Name: WASTE OILS & LUBRICANTS 42 7 of 27 NW/241.5 73.9 / 0.00 Ambico Limited SCT 1120 Cummings Ave Gloucester ON K1J 7R8 Established: 01-AUG-55 Plant Size (ft2): Employment: --Details--Description: Metal Window and Door Manufacturing SIC/NAICS Code: 332321 Description: Other Ornamental and Architectural Metal Product Manufacturing SIC/NAICS Code: 332329 42 8 of 27 NW/241.5 73.9 / 0.00 Ambico Limited **GEN** 1120 Cummings Avenue Ottawa ON ON5821952 Generator No: SIC Code: 321911 SIC Description: Wood Window and Door Manufacturing Approval Years: PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility:

Order No: 23022400359

Detail(s)

MHSW Facility:

Waste Class: 211

Waste Class Name: AROMATIC SOLVENTS

Waste Class: 252

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

WASTE OILS & LUBRICANTS Waste Class Name:

42 9 of 27 NW/241.5 73.9 / 0.00 Ambico Limited **EBR** 

1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA

ON

011-5449 EBR Registry No: Decision Posted: Ministry Ref No: 5049-8PDMPE Exception Posted:

Notice Type: Instrument Decision Section: Notice Stage: Act 1: Notice Date: September 09, 2014 Act 2:

December 23, 2011 Proposal Date: Site Location Map:

2011 Year:

(EPA Part II.1-air) - Environmental Compliance Approval (project type: air) Instrument Type:

Off Instrument Name:

Posted By:

Ambico Limited Company Name:

Site Address: Location Other: Proponent Name:

Proponent Address: 1120 Cummings avenue, Ottawa Ontario, Canada K1J 7R8

Comment Period:

**URL**:

Site Location Details:

1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA

10 of 27 NW/241.5 73.9 / 0.00 Ambico Limited 42 **GEN** 

1120 Cummings Avenue

Ottawa ON

Generator No: ON5821952 SIC Code: 321911

SIC Description: Wood Window and Door Manufacturing

Approval Years: 2009

Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

PO Box No:

Waste Class:

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class:

Waste Class Name: AROMATIC SOLVENTS

Waste Class:

11 of 27

Waste Class Name: WASTE OILS & LUBRICANTS

NW/241.5 73.9 / 0.00 Ambico Limited

1120 Cummings Avenue

**GEN** 

Order No: 23022400359

Ottawa ON

42

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m)

ON5821952 Generator No: SIC Code: 321911

SIC Description: Wood Window and Door Manufacturing

Approval Years: 2010

Country: Status: Co Admin: Choice of Contact: Phone No Admin:

Contaminated Facility: MHSW Facility:

Detail(s)

PO Box No:

Waste Class: 145

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class:

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class:

AROMATIC SOLVENTS Waste Class Name:

**42** 12 of 27 NW/241.5 73.9 / 0.00 Ambico Limited **GEN** 

1120 Cummings Avenue

Ottawa ON

ON5821952 Generator No: SIC Code: 321911

SIC Description: Wood Window and Door Manufacturing

Approval Years:

PO Box No: Country: Status: Co Admin:

Choice of Contact: Phone No Admin: Contaminated Facility:

MHSW Facility:

Detail(s)

Waste Class: 252

WASTE OILS & LUBRICANTS Waste Class Name:

Waste Class:

PAINT/PIGMENT/COATING RESIDUES Waste Class Name:

Waste Class:

Waste Class Name: AROMATIC SOLVENTS

73.9 / 0.00 Ambico Limited 42 13 of 27 NW/241.5 **GEN** 

1120 Cummings Avenue

Order No: 23022400359

Ottawa ON

Generator No: ON5821952 SIC Code: 321911

Wood Window and Door Manufacturing SIC Description:

Approval Years: 2012

PO Box No: Country: Status:

Number of Direction/ Elev/Diff Site DΒ Map Key

Co Admin:

**Choice of Contact:** Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 145

Records

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class:

AROMATIC SOLVENTS Waste Class Name:

Waste Class:

Waste Class Name: WASTE OILS & LUBRICANTS

**42** 14 of 27 NW/241.5 73.9 / 0.00 Ambico Limited **ECA** 1120 Cummings Ave

Ottawa ON K1J 7R8

Approval No: 3400-94XLJ4 **MOE District:** 

Distance (m)

(m)

8/22/14 Approval Date: City: Ottawa

Approved -75.6358333333333376913287793286144733 Status: Longitude:

428955078125

**GEN** 

Order No: 23022400359

45.431388888888888970996049465611577033 Record Type: Latitude:

Geometry Y:

Ambico Limited

Ottawa ON

1120 Cummings Avenue

99658203125 Geometry X:

Link Source: SWP Area Name:

Approval Type:

Project Type: Air/Noise Ambico Limited

42

**Business Name:** Address: Full Address:

Full PDF Link: PDF Site Location:

Ambico Ltd. 1120 Cummings A ve Ottawa City K1J 7R8

73.9 / 0.00

Generator No: ON5821952

SIC Code: 321911 SIC Description: WOOD WINDOW AND DOOR MANUFACTURING

NW/241.5

Approval Years: 2013

15 of 27

PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin:

Contaminated Facility:

MHSW Facility:

Detail(s)

Waste Class:

AROMATIC SOLVENTS Waste Class Name:

Waste Class:

**INORGANIC LABORATORY CHEMICALS** Waste Class Name:

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

Waste Class: 145

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 232

Waste Class Name: POLYMERIC RESINS

Waste Class: 263

Waste Class Name: ORGANIC LABORATORY CHEMICALS

42 16 of 27 NW/241.5 73.9 / 0.00 Ambico Limited

1120 Cummings Avenue Ottawa K1J 7R8 CITY

OF OTTAWA

ON

Act 1:

EBR Registry No:012-2917Decision Posted:Ministry Ref No:5484-9P3QL3Exception Posted:Notice Type:Instrument DecisionSection:

Notice Type: Instrument Decision
Notice Stage:

Notice Date: January 13, 2015 Act 2:

Proposal Date: October 28, 2014 Site Location Map:

**Year:** 2014

Instrument Type: (EPA Part II.1-air) - Environmental Compliance Approval (project type: air)

Off Instrument Name:

Posted By:

Company Name: Ambico Limited

Site Address:
Location Other:
Proponent Name:

Proponent Address: 1120 Cummings avenue, Ottawa Ontario, Canada K1J 7R8

Comment Period:

URL:

Site Location Details:

1120 Cummings Avenue Ottawa K1J 7R8 CITY OF OTTAWA

42 17 of 27 NW/241.5 73.9 / 0.00 Ambico Limited

1120 Cummings Avenue Ottawa ON K1J 7R8

Approval No: 5887-9SHN85 MOE District:

Approval Date: 1/8/15 City: Ottawa

 Status:
 Approved
 Longitude:
 -75.635833333333376913287793286144733

428955078125

**Record Type: Latitude:**45.4313888888888970996049465611577033
99658203125

eometrv X:

Link Source: Geometry X: SWP Area Name: Geometry Y:

Approval Type:

Project Type: Air/Noise
Business Name: Ambico Limited

Address:

Full Address: Ambico Limited 1120 Cummings A venue Ottawa, Ontario K1J 7R8

Full PDF Link: PDF Site Location:

42 18 of 27 NW/241.5 73.9 / 0.00 Ambico Limited

ECA

Order No: 23022400359

**EBR** 

Number of Direction/ Elev/Diff Site DΒ Map Key

Records Distance (m) (m)

> 1120 Cummings Ave Ottawa ON K1J 7R8

Approval No: 5887-9SHN85 **MOE District:** Ottawa

Approval Date: 2015-01-08 City: Status: Approved Longitude: -75.6358 Record Type: ECA Latitude: 45.43152 **IDS** Link Source: Geometry X: Geometry Y:

Rideau Valley SWP Area Name: ECA-AIR Approval Type: Project Type: AIR

Ambico Limited **Business Name:** 1120 Cummings Ave

Address: Full Address:

Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/5484-9P3QL3-14.pdf

PDF Site Location:

19 of 27 NW/241.5 73.9 / 0.00 Ambico Limited 42 **ECA** 

Geometry X:

Geometry Y:

1120 Cummings Ave Ottawa ON K1J 7R8

Approval No: 3400-94XLJ4 **MOE District:** Ottawa 2014-08-22 Approval Date:

City: Longitude: -75.6358 Status: Revoked and/or Replaced Record Type: **ECA** Latitude: 45.43152

Link Source: **IDS** SWP Area Name: Rideau Valley ECA-AIR Approval Type: Project Type: AIR

**Business Name:** Ambico Limited

Address: 1120 Cummings Ave Full Address:

Full PDF Link: https://www.accessenvironment.ene.gov.on.ca/instruments/5049-8PDMPE-14.pdf

PDF Site Location:

NW/241.5 73.9 / 0.00 Ambico Limited 42 20 of 27

1120 Cummings Avenue Ottawa ON K1J 7R8

**GEN** 

Order No: 23022400359

Generator No: ON5821952 SIC Code: 321911

SIC Description: WOOD WINDOW AND DOOR MANUFACTURING

Approval Years: 2016

PO Box No:

Country: Canada

Status:

Co Admin:

Choice of Contact: CO\_OFFICIAL Phone No Admin:

Contaminated Facility: No

MHSW Facility: No

Detail(s)

Waste Class: 263

Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class:

POLYMERIC RESINS Waste Class Name:

Waste Class:

Waste Class Name: INORGANIC LABORATORY CHEMICALS

Number of Direction/ Elev/Diff Site DΒ Map Key

Records Distance (m) (m)

Waste Class: 252 WASTE OILS & LUBRICANTS Waste Class Name:

Waste Class:

AROMATIC SOLVENTS Waste Class Name:

Waste Class: 145

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

42 21 of 27 NW/241.5 73.9 / 0.00 Ambico Limited **GEN** 

1120 Cummings Avenue Ottawa ON K1J 7R8

ON5821952 Generator No: SIC Code: 321911

SIC Description: WOOD WINDOW AND DOOR MANUFACTURING

Approval Years: 2015 PO Box No:

Country: Canada

Status: Co Admin:

CO\_OFFICIAL Choice of Contact:

Phone No Admin:

Contaminated Facility: No MHSW Facility: No

Detail(s)

Waste Class: 145

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 252

WASTE OILS & LUBRICANTS Waste Class Name:

Waste Class:

Waste Class Name: **INORGANIC LABORATORY CHEMICALS** 

Waste Class:

AROMATIC SOLVENTS Waste Class Name:

Waste Class:

ORGANIC LABORATORY CHEMICALS Waste Class Name:

Waste Class:

Waste Class Name: POLYMERIC RESINS

22 of 27 NW/241.5 73.9 / 0.00 Ambico Limited 42 **GEN** 1120 Cummings Avenue

Ottawa ON K1J 7R8

Order No: 23022400359

Generator No: ON5821952 SIC Code: 321911

SIC Description: WOOD WINDOW AND DOOR MANUFACTURING

Approval Years: 2014

PO Box No:

Country: Canada

Status:

Co Admin:

CO\_OFFICIAL Choice of Contact:

Phone No Admin:

Contaminated Facility: No MHSW Facility: No Map Key Number of Direction/ Elev/Diff Site DB

Detail(s)

Waste Class: 263

Records

Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 148

Waste Class Name: INORGANIC LABORATORY CHEMICALS

Distance (m)

(m)

Waste Class: 145

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 232

Waste Class Name: POLYMERIC RESINS

Waste Class: 211

Waste Class Name: AROMATIC SOLVENTS

Waste Class: 252

Waste Class Name: WASTE OILS & LUBRICANTS

42 23 of 27 NW/241.5 73.9 / 0.00 Ambico Limited 1120 Cummings Avenue GEN

Order No: 23022400359

Ottawa ON K1J 7R8

Generator No: ON5821952

SIC Code:

SIC Description:

Approval Years: As of Dec 2018

PO Box No:

Country: Canada Status: Registered

Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility:

MHSW Facility:

Detail(s)

Waste Class: 145 H

Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 145 l

Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 148 L

Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 211 E

Waste Class Name: Aromatic solvents and residues

Waste Class: 232 C

Waste Class Name: Polymeric resins

Waste Class: 232 L

Waste Class Name: Polymeric resins

Waste Class: 252 L

Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 263 l

Waste Class Name: Misc. waste organic chemicals

Map Key Number of Direction/ Elev/Diff Site DB

Records Distance (m) (m)

NW/241.5

AMBICO LIMITED 1120 CUMMINGS AVE GLOUCESTER ON K1J 7R8

**EASR** 

**GEN** 

Order No: 23022400359

Approval No: R-010-1110351691 MOE District: Ottawa

 Status:
 REGISTERED
 Municipality:
 GLOUCESTER

 Date:
 2018-01-31
 Latitude:
 45.42916667

 Record Type:
 EASR
 Longitude:
 -75.63416667

 Link Source:
 MOFA
 Geometry X:

73.9 / 0.00

Project Type: Air Emissions
Full Address:
Approval Type: EASR-Air Emissions

SWP Area Name: Rideau V

25 of 27

24 of 27

PDF Site Location:

42

Rideau Valley

NW/241.5

73.9 / 0.00 Ambico Limited 1120 Cummings Avenue Ottawa ON K1J 7R8

Geometry Y:

Generator No: ON5821952

SIC Code:

42

SIC Description:

Approval Years: As of Jul 2020
PO Box No:
Country: Canada
Status: Registered

Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 211 B

Waste Class Name: Aromatic solvents and residues

Waste Class: 263 L

Waste Class Name: Misc. waste organic chemicals

Waste Class: 232 L

Waste Class Name: Polymeric resins

Waste Class: 145 H

Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 148 L

Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 232 C

Waste Class Name: Polymeric resins

Waste Class: 263 l

Waste Class Name: Misc. waste organic chemicals

Waste Class: 145 I

Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 252 L

Waste Class Name: Waste crankcase oils and lubricants

Map Key Number of Direction/ Elev/Diff Site DΒ Records Distance (m)

26 of 27 NW/241.5 73.9 / 0.00 Ambico Limited 42 1120 Cummings Avenue

Ottawa ON K1J 7R8

**GEN** 

Order No: 23022400359

ON5821952 Generator No:

SIC Code: SIC Description:

Approval Years: As of Nov 2021

PO Box No: Country: Canada Registered Status:

Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 145 H

Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class:

Misc. waste organic chemicals Waste Class Name:

Waste Class: 232 L

Waste Class Name: Polymeric resins

Waste Class:

Waste Class Name: Wastes from the use of pigments, coatings and paints

Waste Class: 148 L

Waste Class Name: Misc. wastes and inorganic chemicals

Waste Class: 263 L

Waste Class Name: Misc. waste organic chemicals

Waste Class:

Waste Class Name: Waste crankcase oils and lubricants

Waste Class: 232 C

Waste Class Name: Polymeric resins

Waste Class:

Waste Class Name: Aromatic solvents and residues

42 27 of 27 NW/241.5 73.9 / 0.00 Ambico Limited **GEN** 1120 Cummings Avenue

Ottawa ON K1J 7R8

Generator No: ON5821952

SIC Code: SIC Description:

As of Oct 2022 Approval Years:

PO Box No:

Country: Canada Status: Registered

Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility:

Number of Direction/ Elev/Diff Site DΒ Map Key

Records

Distance (m)

(m)

Detail(s)

Waste Class: 232 C

Waste Class Name: POLYMERIC RESINS

Waste Class:

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 211 B

Waste Class Name: AROMATIC SOLVENTS

Waste Class:

INORGANIC LABORATORY CHEMICALS Waste Class Name:

Waste Class:

Waste Class Name: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 232 I

Waste Class Name: POLYMERIC RESINS

Waste Class: 252 I

Waste Class Name: WASTE OILS & LUBRICANTS

Waste Class: 263 I

Waste Class Name: ORGANIC LABORATORY CHEMICALS

Waste Class: 263 I

Waste Class Name: ORGANIC LABORATORY CHEMICALS

43 1 of 2 WSW/242.3 71.9 / -2.00 1059 Ogilvie Road **EHS** Gloucester ON K1J 7S6

Order No: 21062900038

Status:

Report Type: RSC Report (Urban)

05-JUL-21 Report Date: Date Received: 29-JUN-21

Previous Site Name: Lot/Building Size: Additional Info Ordered: Nearest Intersection: Municipality:

> Client Prov/State: ON Search Radius (km): .3

-75.63529262 X:

Y: 45.42610701

2 of 2 WSW/242.3 71.9 / -2.00 1059 Ogilvie Road 43 **EHS** Gloucester ON K1J 7S6

Order No: 21062900038

Status:

RSC Report (Urban) Report Type: 05-JUL-21 Report Date:

Date Received: 29-JUN-21 Previous Site Name: Lot/Building Size: Additional Info Ordered:

Nearest Intersection: Municipality: Client Prov/State: ON

Search Radius (km): .3

X: -75.63529262 Y: 45.42610701

44 1 of 2 S/243.3 72.2 / -1.68 1098 Ogilvie Road and 1178 Cummings Avenue **EHS** Gloucester ON K1J 7P8

Order No: 21071700001

C Status:

Standard Report Report Type: Report Date: 21-JUL-21 Date Received: 17-JUL-21

Nearest Intersection: Municipality:

Client Prov/State: ON Search Radius (km): .25

X: -75.6322221

Number of Direction/ Elev/Diff Site DΒ Map Key Records Distance (m) (m) Previous Site Name: **Y**: 45.424839 Lot/Building Size: Additional Info Ordered: **Aerial Photos** S/243.3 72.2 / -1.68 1098 Ogilvie Road and 1178 Cummings Avenue 44 2 of 2 **EHS** Gloucester ON K1J 7P8 Order No: 21071700001 Nearest Intersection: Status: Municipality: Report Type: Standard Report Client Prov/State: ON 21-JUL-21 Report Date: Search Radius (km): .25 Date Received: 17-JUL-21 X: -75.6322221 Previous Site Name: Y: 45.424839 Lot/Building Size: Additional Info Ordered: **Aerial Photos** 1 of 11 E/246.4 74.8 / 0.88 ST. LAURENT FUNERAL HOME 45 **GEN** 1200 OGILVIE ROAD **GLOUCESTER ON K1J 8V1** ONF008100 Generator No: SIC Code: 8000 **EXEMPT** SIC Description: Approval Years: 88,89,90 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: 45 2 of 11 E/246.4 74.8 / 0.88 ST. LAURENT FUNERAL HOME 44-081 **GEN** 1200 OGILVIE ROAD **GLOUCESTER ON K1J 8V1** Generator No: ONF008100 SIC Code: 8000 **EXEMPT** SIC Description: Approval Years: 92,93,94 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: 45 3 of 11 E/246.4 74.8 / 0.88 **HULSE PLAYFAIR & MCGARRY GEN** 1200 OGILVIE ROAD **GLOUCESTER ON K1J 8V1** Generator No: ONF022701 SIC Code: 9731 **FUNERAL HOMES** SIC Description: 95,96,97,98,99 Approval Years: PO Box No:

Order No: 23022400359

erisinfo.com | Environmental Risk Information Services

Country: Status:

DΒ Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m) Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 312 Waste Class Name: PATHOLOGICAL WASTES 45 4 of 11 74.8 / 0.88 HULSE, PLAYFAIR & MCGARRY E/246.4 **GEN** 1200 OGILVIE ROAD **GLOUCESTER ON K1J 8V1** Generator No: ONF022701 SIC Code: 9731 SIC Description: **FUNERAL HOMES** Approval Years: 00,01 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 312 Waste Class Name: PATHOLOGICAL WASTES HULSE, PLAYFAIR & MCGARRY INC. 45 5 of 11 E/246.4 74.8 / 0.88 **GEN** 1200 OGILVIE ROAD **OTTAWA ON K1J 8V1** Generator No: ONF022701 SIC Code: SIC Description: Approval Years: 02,03,04,05,06,07,08 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 312 Waste Class Name: PATHOLOGICAL WASTES 45 6 of 11 E/246.4 74.8 / 0.88 HULSE, PLAYFAIR & MCGARRY INC. **GEN** 1200 OGILVIE ROAD **OTTAWA ON K1J 8V1** ONF022701 Generator No: SIC Code: 812210

DΒ Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m) Funeral Homes SIC Description: Approval Years: 2010 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 312 PATHOLOGICAL WASTES Waste Class Name: 45 7 of 11 E/246.4 74.8 / 0.88 HULSE, PLAYFAIR & MCGARRY INC. **GEN** 1200 OGILVIE ROAD **OTTAWA ON K1J 8V1** ONF022701 Generator No: SIC Code: 812210 **Funeral Homes** SIC Description: Approval Years: 2011 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 312 Waste Class Name: PATHOLOGICAL WASTES 8 of 11 HULSE, PLAYFAIR & MCGARRY INC. 45 E/246.4 74.8 / 0.88 **GEN** 1200 OGILVIE ROAD **OTTAWA ON K1J 8V1** ONF022701 Generator No: SIC Code: 812210 SIC Description: **Funeral Homes** Approval Years: 2012 PO Box No: Country: Status: Co Admin: Choice of Contact: Phone No Admin: Contaminated Facility: MHSW Facility: Detail(s) Waste Class: 312 Waste Class Name: PATHOLOGICAL WASTES

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<u>45</u>	9 of 11	E/246.4	74.8 / 0.88	Hulse, Playfair & McGarry 1200 Ogilvie Rd. Ottawa ON K1J 8V1	GEN
Generator N	o:	ON7369472			
SIC Code:	•	812210			
SIC Descript	tion:	812210			
Approval Ye		2016			
PO Box No:					
Country:		Canada			
Status:					
Co Admin:					
Choice of Co		CO_OFFICIAL			
Phone No A					
Contaminate	•	No			
MHSW Facil	ity:	No			
<u>Detail(s)</u>					
Waste Class	:	312			
Waste Class	Name:	PATHOLOGICAL V	VASTES		
Waste Class		252			
Waste Class	Name:	WASTE OILS & LU	BRICANTS		
<u>45</u>	10 of 11	E/246.4	74.8 / 0.88	Hulse, Playfair & McGarry 1200 Ogilvie Rd. Ottawa ON K1J 8V1	GEN
Generator N	o:	ON7369472			
SIC Code:					
SIC Descript		Ac of Dog 2019			
Approval Ye PO Box No:	ars:	As of Dec 2018			
		Canada			
Country: Status:		Registered			
Co Admin:		Registered			
Choice of Co	ontact:				
Phone No A					
Contaminate					
MHSW Facil					
<u>Detail(s)</u>					
Waste Class		252 H			
Waste Class		Waste crankcase o	ils and lubricants		
Wests Class		312 P			
Waste Class: Waste Class Name:		Pathological wastes	3		
<u>45</u>	11 of 11	E/246.4	74.8 / 0.88	Hulse, Playfair & McGarry 1200 Ogilvie Rd. Ottawa ON K1J 8V1	GEN
Generator N	· .	ON7369472		Guawa ON NIJ OV I	
SIC Code:	u.	ON1308412			
SIC Code.	tion:				
Approval Ye		As of Oct 2022			
PO Box No:	<del></del>				
Country:		Canada			
Status:		Registered			
Co Admin:					
Choice of Co	ontact:				

Map Key Number of Direction/ Elev/Diff Site DB

Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 312 P

Records

Waste Class Name: PATHOLOGICAL WASTES

Waste Class: 252 H

Waste Class Name: WASTE OILS & LUBRICANTS

Distance (m)

46 1 of 1 N/248.8 74.9 / 1.00 Gignul Non Profit Housing Corporation

(m)

1043 Cummings Avenue Ottawa ON K1J 7R8 **GEN** 

**WWIS** 

Order No: 23022400359

 Generator No:
 ON8012313

 SIC Code:
 531112

 SIC Description:
 531112

 Approval Years:
 2016

PO Box No:

Country: Canada

Status:

Co Admin: jim Smith
Choice of Contact: CO\_ADMIN
Phone No Admin: 6137452444 Ext.241

Contaminated Facility: No MHSW Facility: No

Detail(s)

Waste Class: 251

Waste Class Name: OIL SKIMMINGS & SLUDGES

47 1 of 2 NNW/248.9 74.9 / 1.00 1043 CUMMINGS AVE
Ottawa ON

Flowing (Y/N):

Date Received:

Selected Flag:

Form Version:

Concession:

Contractor:

Owner:

County:

Lot:

Zone:

Data Entry Status:

Abandonment Rec:

Concession Name:

Easting NAD83:

Northing NAD83:

UTM Reliability:

10-Feb-2011 00:00:00

OTTAWA-CARLETON

TRUE

6964

7

Flow Rate:

Data Src:

*Well ID:* 7159001

Construction Date:

Use 1st: Test Hole Use 2nd:

Final Well Status: Test Hole

Water Type: Casing Material:

**Audit No:** Z127791 **Tag:** A108203

Constructn Method:
Elevation (m):

Elevatn Reliabilty: Depth to Bedrock: Well Depth:

Overburden/Bedrock: Pump Rate: Static Water Level:

Clear/Cloudy: Municipality:

Municipality: OTTAWA CITY

Site Info:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/715\7159001.pdf

Additional Detail(s) (Map)

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m)

18

450467.00

5030826.00

Order No: 23022400359

UTM83

 Well Completed Date:
 2011/01/06

 Year Completed:
 2011

 Depth (m):
 4.77

 Latitude:
 45.4292011621791

 Longitude:
 -75.6332148523521

 Path:
 715√7159001.pdf

#### **Bore Hole Information**

 Bore Hole ID:
 1003472030
 Elevation:

 DP2BR:
 Elevrc:

 Spatial Status:
 Zone:

 Code OB:
 East83:

 Code OB Desc:
 North83:

 Open Hole:
 Org CS:

 Cluster Kind:
 UTMRC:

 Date Completed:
 06-Jan-2011 00:00:00
 UTMRC Desc:
 margin of error : 10 - 30 m

Remarks: Location Method: w
Loc Method Desc: on Water Well Record

Elevrc Desc: Location Source Date: Improvement Location Source:

Improvement Location Method: Source Revision Comment: Supplier Comment:

## Overburden and Bedrock

<u>Materials Interval</u>

**Formation ID:** 1003768748

Layer: 1

Color: General Color:

*Mat1:* 02

Most Common Material: TOPSOIL

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0

Formation End Depth: 0.07999999821186066

Formation End Depth UOM: m

#### Overburden and Bedrock

Materials Interval

**Formation ID:** 1003768749

 Layer:
 2

 Color:
 6

 General Color:
 BROWN

 Mat1:
 28

 Most Common Material:
 SAND

 Mat2:
 84

 Mat2 Desc:
 SILTY

Mat3: Mat3 Desc:

 Formation Top Depth:
 0.07999999821186066

 Formation End Depth:
 1.4700000286102295

Formation End Depth UOM: m

## Overburden and Bedrock

Materials Interval

Map Key Number of Direction/ Elev/Diff Site DB Records Distance (m) (m)

**Formation ID:** 1003768750

 Layer:
 3

 Color:
 8

 General Color:
 BLACK

 Mat1:
 17

 Most Common Material:
 SHALE

 Mat2:
 26

 Mat2 Desc:
 ROCK

Mat3: Mat3 Desc:

 Formation Top Depth:
 1.470000286102295

 Formation End Depth:
 4.769999980926514

Formation End Depth UOM: m

#### Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003768759

Layer: 1 0.0

**Plug To:** 2.1600000858306885

Plug Depth UOM:

## Annular Space/Abandonment

Sealing Record

**Plug ID:** 1003768760

Layer:

 Plug From:
 2.1600000858306885

 Plug To:
 4.769999980926514

Plug Depth UOM: m

#### Method of Construction & Well

<u>Use</u>

Method Construction ID: 1003768757

Method Construction Code: 7

Method Construction: Diamond

Other Method Construction:

#### Pipe Information

**Pipe ID:** 1003768747

Casing No: 0

Comment: Alt Name:

#### **Construction Record - Casing**

Casing ID: 1003768754

Layer: 1
Material: 5
Open Hole or Material: PLASTIC

Depth From: 0.0

**Depth To:** 2.450000047683716

Casing Diameter: 3.5
Casing Diameter UOM: cm
Casing Depth UOM: m

## Construction Record - Screen

Map Key Number of Direction/ Elev/Diff Site DB
Records Distance (m) (m)

**Screen ID:** 1003768755

**Layer:** 1 **Slot:** 10

 Screen Top Depth:
 2.450000047683716

 Screen End Depth:
 4.769999980926514

Screen Material: 5
Screen Depth UOM: m
Screen Diameter UOM: cm

**Screen Diameter:** 4.099999904632568

Water Details

Water ID: 1003768753

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: m

**Hole Diameter** 

Hole ID: 1003768751

 Diameter:
 7.5

 Depth From:
 0.0

 Depth To:
 1.5

 Hole Depth UOM:
 m

 Hole Diameter UOM:
 cm

Hole Diameter

 Hole ID:
 1003768752

 Diameter:
 5.69999809265137

Depth From: 1.5

**Depth To:** 4.769999980926514

Hole Depth UOM: m
Hole Diameter UOM: cm

**Links** 

 Bore Hole ID:
 1003472030
 Tag No:
 A108203

 Depth M:
 4.77
 Contractor:
 6964

 Vear Completed:
 2011
 Path:
 715\7159001.pdf

 Well Completed Dt:
 2011/01/06
 Latitude:
 45.4292011621791

 Audit No:
 Z127791
 Longitude:
 -75.6332148523521

47 2 of 2 NNW/248.9 74.9 / 1.00 1043 CUMMINGS AVE OTTAWA ON WWIS

Well ID: 7163230 Flowing (Y/N):
Construction Date: Flow Rate:

e: Flow Rate: Data Entry Status:

Use 1st:
Use 2nd:
Data Entru
Use 2nd:
Data Src:

Final Well Status: Abandoned-Other Date Received: 18-May-2011 00:00:00
Water Type: Selected Flag: TRUE

Casing Material:
Abandonment Rec:
Yes
Audit No:
Z119818
Contractor:
1119

Tag: Form Version: 7
Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty: Lot:
Depth to Bedrock: Concession:

DB Map Key Number of Direction/ Elev/Diff Site Records Distance (m) (m)

Northing NAD83:

Order No: 23022400359

Well Depth: Concession Name: Overburden/Bedrock: Easting NAD83:

Static Water Level: Zone: UTM Reliability:

Clear/Cloudy: **GLOUCESTER TOWNSHIP** Municipality:

Site Info:

Pump Rate:

PDF URL (Map): https://d2khazk8e83rdv.cloudfront.net/moe\_mapping/downloads/2Water/Wells\_pdfs/716\7163230.pdf

Additional Detail(s) (Map)

2011/04/06 Well Completed Date: Year Completed: 2011

Depth (m):

Latitude: 45.4292011621791 -75.6332148523521 Longitude: Path: 716\7163230.pdf

**Bore Hole Information** 

Bore Hole ID: 1003510532 Elevation: DP2BR: Elevrc:

Spatial Status: 18 Zone:

Code OB: East83: 450467.00 Code OB Desc: North83: 5030826.00 Open Hole: Org CS: UTM83 Cluster Kind: **UTMRC:** 

Date Completed: 06-Apr-2011 00:00:00 UTMRC Desc: margin of error: 10 - 30 m

Remarks: Location Method: wwr on Water Well Record

Loc Method Desc:

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method:

Source Revision Comment: Supplier Comment:

Annular Space/Abandonment

Sealing Record

1003900062 Plug ID:

Layer: 0.0 Plug From: 4.0 Plug To: Plug Depth UOM: ft

Annular Space/Abandonment

Sealing Record

1003900063 Plug ID:

2 Layer: Plug From: 4.0 15.0 Plug To: Plug Depth UOM: ft

Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 1003900061

**Method Construction Code: Method Construction:** 

Site DB Map Key Number of Direction/ Elev/Diff Records Distance (m) (m)

Other Method Construction:

Pipe Information

Pipe ID: 1003900055

Casing No: Comment:

Alt Name:

Construction Record - Casing

Casing ID: 1003900059

Layer:

Material:

Open Hole or Material:

Depth From: Depth To: Casing Diameter:

Casing Diameter UOM: inch Casing Depth UOM:

**Construction Record - Screen** 

1003900060 Screen ID:

Layer: Slot:

Screen Top Depth: Screen End Depth: Screen Material: Screen Depth UOM:

ft Screen Diameter UOM: inch

Screen Diameter:

Water Details

Water ID: 1003900058

Layer: Kind Code: Kind:

Water Found Depth:

Water Found Depth UOM: ft

**Hole Diameter** 

Hole ID: 1003900057

Diameter: Depth From: Depth To:

Hole Depth UOM: ft Hole Diameter UOM: inch

<u>Links</u>

Bore Hole ID: 1003510532 Tag No:

Depth M: Contractor: 1119

Year Completed: 2011 Path: 716\7163230.pdf 2011/04/06 45.4292011621791 Well Completed Dt: Latitude: Audit No: Z119818 Longitude: -75.6332148523521

# Unplottable Summary

Total: 42 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	CARL W. MADIGAN	CUMMINGS AVE.	GLOUCESTER CITY ON	
CA	CARL W. MADIGAN	CUMMINGS AVE.	GLOUCESTER CITY ON	
CA	EASTERN ONTARIO LAND TRUST INC.	OGILVIE RD.	GLOUCESTER CITY ON	
CA	CITY	CUMMINGS AVE.	GLOUCESTER CITY ON	
CA		Ogilvie Rd., Part of Rd. Allowance	Gloucester ON	
CA		Lot 25 & 26, Concession 1	Ottawa ON	
CA		Lot 25 & 26, Concession 1	Ottawa ON	
CA	GLOUCESTER CITY	CUMMINGS AVE	GLOUCESTER CITY ON	
CA	CARL W. MADIGAN	CUMMINGS AVE.	GLOUCESTER CITY ON	
CA	670669 ONTARIO LTD.	CUMMINGS AVE. NON PROFIT HOUS	GLOUCESTER CITY ON	
CA	BEAUFORT BUILDING INC.	E. S. OF CUMMINGS AVE.	GLOUCESTER CITY ON	
CA	EASTERN ONTARIO LAND TRUST INC.	OGILVIE RD.	GLOUCESTER CITY ON	
CA	CARL W. MADIGAN	CUMMINGS AVE.	GLOUCESTER CITY ON	
CA	Triangle Pump Service Limited	Mobile Unit	Ottawa ON	
CA	670669 ONTARIO LTD.	CUMMINGS AVE. NON PROFIT HOUSI	GLOUCESTER CITY ON	
CA	St. Joseph Print Shop	Part of Lots 25 and 26, Concession 2	Ottawa ON	
EBR	Triangle Pump Service Limited	Mobile Unit Ottawa CITY OF OTTAWA	ON	
ECA	Triangle Pump Service Limited	Mobile Unit	Ottawa ON	K1T 3V6

GEN	NATIONAL CAPITAL COMMISSION	LOT 25,26,27	OTTAWA ON	K1P 1C7
SPL	Eric Olmsted <unofficial></unofficial>	At Cummings Ave	Ottawa ON	
SPL	TEXACO	OTTAWA RIVER, OUTFALL AT END OF OGILVIE RD. BULK STATION	GLOUCESTER CITY ON	
SPL	Triangle Pump Service Limited		Ottawa ON	
SPL	BUS	OGILVIE RD. & OTHERS MOTOR VEHICLE (OPERATING FLUID)	GLOUCESTER CITY ON	
SPL	UNKNOWN	NORTH END OF OGILVIE RD. AT THE OTTAWA RIVER OUTFALL.	GLOUCESTER CITY ON	
WWIS		lot 27	ON	
wwis		con 1	ON	
WWIS		lot 27	ON	
WWIS		lot 25	ON	
WWIS		lot 25	ON	
wwis		lot 27	ON	
WWIS		con 1	ON	
wwis		lot 27	ON	
wwis		lot 25	ON	
wwis		lot 25	ON	
wwis		con 1	ON	
wwis		lot 26	ON	
wwis		lot 26	ON	
wwis		lot 26	ON	
wwis		lot 27	ON	
wwis		lot 27	ON	
wwis		lot 26	ON	

WWIS con 1 ON

## Unplottable Report

Site: CARL W. MADIGAN

**CUMMINGS AVE. GLOUCESTER CITY ON** 

Database:

Certificate #: 7-0081-88Application Year: 88
Issue Date: 2/9/1988
Approval Type: Municipal water
Status: Approved
Application Type:

Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:

Site: CARL W. MADIGAN

CUMMINGS AVE. GLOUCESTER CITY ON

Database:

Certificate #:7-0958-88-Application Year:88Issue Date:7/5/1988Approval Type:Municipal waterStatus:Approved

Status:
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:

**Emission Control:** 

<u>Site:</u> EASTERN ONTARIO LAND TRUST INC. OGILVIE RD. GLOUCESTER CITY ON

Database:

Certificate #: 7-1485-88Application Year: 88
Issue Date: 9/13/1988
Approval Type: Municipal water
Status: Approved

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:

Site: CITY

**CUMMINGS AVE. GLOUCESTER CITY ON** 

Database:

Order No: 23022400359

**Certificate #:** 3-0371-85-006

Application Year: 85

**Issue Date:** 5/2/85

Approval Type: Municipal sewage Status: Approved

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:

<u>Site:</u>
Ogilvie Rd., Part of Rd. Allowance Gloucester ON

Database:

Certificate #: 7032-4H8TJA

Application Year:00Issue Date:3/11/00

Approval Type: Municipal & Private sewage

Status: Approved

Application Type: New Certificate of Approval
Client Name: New Certificate of Approval
Anglican Church Of The Epiphany

Client Address: 24 Steel St.
Client City: Gloucester

Client Postal Code:

Project Description: Contaminants: Emission Control: Construction of sanitary sewers along Ogilvie Rd..

Site: Lot 25 & 26, Concession 1 Ottawa ON Database:

Certificate #: 6524-4QHTM6

 Application Year:
 00

 Issue Date:
 10/30/00

Approval Type: Municipal & Private sewage

Status: Approved

Application Type:New Certificate of ApprovalClient Name:1270449 Ontario Inc.Client Address:1187 Bank Street

Client City: Ottawa
Client Postal Code: K1S 3X7

Project Description: storm sewers construction on Saundres Ave; sanitary sewers construction on Pooler Ave, Orvigale Road, Porter

St.

Contaminants: Emission Control:

Site: Lot 25 & 26, Concession 1 Ottawa ON Database:

Order No: 23022400359

Certificate #: 3510-4QHTRG

Application Year:00Issue Date:10/30/00

Approval Type: Municipal & Private water

Status: Approved

Application Type:New Certificate of ApprovalClient Name:1270449 Ontario Inc.Client Address:1187 Bank Street

Client City: Ottawa
Client Postal Code: K1S 3X7

Project Description: watermain construction on pooler ave, orvigale road, porter st.

Contaminants: Emission Control: Site: GLOUCESTER CITY

**CUMMINGS AVE GLOUCESTER CITY ON** 

**Certificate #:** 3-1611-86-

Application Year:86Issue Date:10/23/1986Approval Type:Municipal sewageStatus:Approved

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description:

Contaminants: Emission Control:

Site: CARL W. MADIGAN

**CUMMINGS AVE. GLOUCESTER CITY ON** 

 Certificate #:
 3-1114-88 

 Application Year:
 88

 Issue Date:
 7/5/1988

Approval Type: Municipal sewage Status: Approved

Status: Application Type: Client Name: Client Address: Client City: Client Postal Code:

Client Postal Code: Project Description: Contaminants: Emission Control:

Site: 670669 ONTARIO LTD.

**CUMMINGS AVE. NON PROFIT HOUS GLOUCESTER CITY ON** 

Certificate #: 7-1300-87Application Year: 87
Issue Date: 9/4/1987
Approval Type: Municipal water
Status: Approved

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants:

**Emission Control:** 

Site: BEAUFORT BUILDING INC.

E. S. OF CUMMINGS AVE. GLOUCESTER CITY ON

 Certificate #:
 3-1989-88 

 Application Year:
 88

 Issue Date:
 4/6/1989

Approval Type: Municipal sewage Status: Approved in 1989

Application Type: Client Name: Client Address: Client City: Client Postal Code: Database: CA

Database:

Database:

Database:

Project Description: Contaminants: **Emission Control:** 

EASTERN ONTARIO LAND TRUST INC. Site: OGILVIE RD. GLOUCESTER CITY ON

3-1727-88-Certificate #: Application Year: 88 Issue Date: 9/13/1988 Municipal sewage Approval Type:

Status: Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: **Emission Control:** 

Site: CARL W. MADIGAN

**CUMMINGS AVE. GLOUCESTER CITY ON** 

Approved

Certificate #: 3-0090-88-Application Year: 88 Issue Date: 2/9/1988 Approval Type: Municipal sewage Status: Approved

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: **Emission Control:** 

Site: Triangle Pump Service Limited Mobile Unit Ottawa ON

7640-7H4H53 Certificate #: Application Year: 2008 9/26/2008 Issue Date:

Industrial Sewage Works Approval Type:

Status: Approved

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: **Emission Control:** 

Site: 670669 ONTARIO LTD.

CUMMINGS AVE. NON PROFIT HOUSI GLOUCESTER CITY ON

3-1553-87-Certificate #: Application Year: 87 Issue Date: 9/4/1987 Approval Type: Municipal sewage Status: Approved

Database:

Database: CA

Database: CA

Database:

CA

Application Type: Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants:

**Emission Control:** 

Site: St. Joseph Print Shop

Part of Lots 25 and 26, Concession 2 Ottawa ON CA

Certificate #: 4747-52XKCD

Application Year: 01
Issue Date: 10/22/01

Approval Type: Industrial sewage

Status: Approved

Application Type:New Certificate of ApprovalClient Name:St. Joseph Print Group Inc.Client Address:50 Macintosh Boulevard

Client City: Concord Client Postal Code: L4K 4P3

Project Description: On-site stormwater storage provided by ponding on the roof, in parking and loading areas and in super-pipes below

the parking area. An orifice control will be used to control the release of stormwater from the whole site prior to entering the City's existing storm sewer system in Kenaston Road. Stormwater quality control will be provided through a Stormceptor STC9000 for the whole site area prior to release into the City's existing storm sewer system in Kenaston Road. The site will be serviced using existing watermain and sanitary sewer systems in Kenaston

Database:

Database: EBR

Database:

Road. Where possible grass swales will be used to provide erosion and sediment control.

Contaminants: Emission Control:

EBR Registry No:

<u>Site:</u> Triangle Pump Service Limited

Mobile Unit Ottawa CITY OF OTTAWA ON cistry No: 010-3624

Decision Posted:
T Exception Posted:

Ministry Ref No:0746-7EFKGTExceptionNotice Type:Instrument DecisionSection:

Notice Stage: Act 1:
Notice Date: October 20, 2008 Act 2:

Proposal Date: May 21, 2008 Site Location Map:

Year: 2008

Instrument Type: (OWRA s. 53(1)) - Approval for sewage works

Off Instrument Name:

Posted By:

Company Name: Triangle Pump Service Limited

Site Address: Location Other: Proponent Name:

Proponent Address: 2565 Delzotto Avenue, Gloucester Ontario, Canada K1T 3V6

Comment Period:

**URL**:

Site Location Details:

Mobile Unit Ottawa CITY OF OTTAWA

Site: Triangle Pump Service Limited

Mobile Unit Ottawa ON K1T 3V6

MOE District: City:

Longitude:

Latitude:

 Approval No:
 7640-7H4H53

 Approval Date:
 2008-09-26

 Status:
 Approved

 Record Type:
 ECA

 Link Source:
 IDS

Geometry X:

Order No: 23022400359

SWP Area Name: Geometry Y:

**ECA-INDUSTRIAL SEWAGE WORKS** Approval Type: INDUSTRIAL SEWAGE WORKS Project Type: Triangle Pump Service Limited **Business Name:** 

Address: Mobile Unit

Full Address: Full PDF Link:

https://www.accessenvironment.ene.gov.on.ca/instruments/0746-7EFKGT-14.pdf

PDF Site Location:

NATIONAL CAPITAL COMMISSION Site: Database: LOT 25,26,27 OTTAWA ON K1P 1C7 GEN

Generator No: ON9920165 SIC Code: 712190

Other Heritage Institutions SIC Description:

Approval Years: 2010 PO Box No:

Country: Status: Co Admin: Choice of Contact:

Phone No Admin: Contaminated Facility: MHSW Facility:

Detail(s)

Waste Class: 221

LIGHT FUELS Waste Class Name:

Eric Olmsted<UNOFFICIAL> Site: Database: SPL At Cummings Ave Ottawa ON

Discharger Report:

Ref No: 3407-65HSEE

Site No: Material Group: Oil

Incident Dt: 10/6/2004 Health/Env Conseq: Year: Client Type:

Incident Cause: Sector Type: Other

Incident Event: Agency Involved: Contaminant Code: Nearest Watercourse:

**ENGINE OIL** Contaminant Name: Site Address:

Contaminant Limit 1: Site District Office: Ottawa

Contam Limit Freq 1: Site Postal Code: Contaminant UN No 1: Site Region:

Eastern **Environment Impact:** Not Anticipated Site Municipality: Ottawa Nature of Impact: Site Lot:

Receiving Medium: Land Site Conc: Receiving Env: Northing: MOE Response: Easting:

Dt MOE Arvl on Scn: Site Geo Ref Accu: 10/6/2004 MOE Reported Dt: Site Map Datum:

Dt Document Closed: SAC Action Class: Spill to Land

Incident Reason: Source Type:

1152-1160 OGILVIE RD<UNOFFICIAL> Site Name:

Site County/District: Municipality No: Site Geo Ref Meth:

Incident Summary: Unknown Source: Dumping to Vacant Plaza

Contaminant Qty: 75 L

Database: Site: OTTAWA RIVER, OUTFALL AT END OF OGILVIE RD. BULK STATION GLOUCESTER CITY ON

Order No: 23022400359

Ref No: 21520 Discharger Report: Site No: Material Group:

Incident Dt: 7/4/1989 Health/Env Conseq: Year: Client Type: Sector Type:

Incident Cause: WASTEWATER DISCHARGE TO

WATER

WATERCOURSE

Agency Involved: F.D., PUC, EPS, MCCR

Incident Event: Contaminant Code: Nearest Watercourse: Contaminant Name: Site Address: Contaminant Limit 1: Site District Office: Contam Limit Freg 1: Site Postal Code: Contaminant UN No 1:

Site Region:

Site Municipality: **GLOUCESTER CITY Environment Impact:** Nature of Impact:

Site Lot: Site Conc: Northina:

> Sector Type: Agency Involved:

Site Address:

Site Region:

Site Lot:

Site Conc:

Northina:

Easting:

Nearest Watercourse:

Site District Office: Site Postal Code:

Site Municipality:

Site Geo Ref Accu:

SAC Action Class:

Site Map Datum:

Source Type:

Ottawa

Land Spills

Easting: Site Geo Ref Accu:

7/4/1989 Site Map Datum: **Dt Document Closed:** SAC Action Class: **UNKNOWN** Source Type:

Incident Reason:

Site Name:

Receiving Medium:

Dt MOE Arvl on Scn: MOE Reported Dt:

Receiving Env:

MOE Response:

Site County/District:

Municipality No: 20105

Site Geo Ref Meth:

Incident Summary: TEXACO - UNKNOWN AMOUNT OF GASOLINE TO OTTAWA RIVER FROM OUTFALL.

Contaminant Qty:

Site: Triangle Pump Service Limited Database: Ottawa ON SPL

0255-9VJS4B Ref No: Discharger Report: Site No: NA Material Group: Incident Dt: 4/13/2015 Health/Env Conseq: Client Type:

Year:

Incident Cause: Leak/Break Incident Event:

Contaminant Code: 13

**DIESEL FUEL** Contaminant Name: Contaminant Limit 1: Contam Limit Freq 1: Contaminant UN No 1:

**Environment Impact:** Nature of Impact: Land

Receiving Medium: Receiving Env: MOE Response: Ν

Dt MOE Arvl on Scn:

MOE Reported Dt: Dt Document Closed:

5/25/2015 Incident Reason: Unknown / N/A

Site Name: Site County/District:

Municipality No: Site Geo Ref Meth:

4/13/2015

Contaminant Qty: 0 other - see incident description

DUPLICATE REPORT - SEE 0738-9VJPN6 Incident Summary:

Site: OGILVIE RD. & OTHERS MOTOR VEHICLE (OPERATING FLUID) GLOUCESTER CITY ON

114 Preston Street<UNOFFICIAL>

Ref No: 75056 Site No:

Incident Dt: 8/20/1992 Year:

Incident Cause: Incident Event:

**UNKNOWN** 

Contaminant Code: Contaminant Name: Health/Env Conseq: Client Type: Sector Type:

**WORKS** Agency Involved:

Nearest Watercourse:

Discharger Report:

Material Group:

Site Address:

erisinfo.com | Environmental Risk Information Services

183

Order No: 23022400359

Database:

Site District Office: Contaminant Limit 1: Contam Limit Freg 1: Site Postal Code:

Contaminant UN No 1: Site Region:

**NOT ANTICIPATED** Site Municipality: **GLOUCESTER CITY** Environment Impact:

Nature of Impact: Site Lot: Receiving Medium: Site Conc: LAND Receiving Env: Northina: MOE Response:

Easting: Site Geo Ref Accu:

MOE Reported Dt: 8/21/1992 Site Map Datum: **Dt Document Closed:** SAC Action Class: Incident Reason: **UNKNOWN** Source Type:

Site Name:

Site County/District:

Dt MOE Arvl on Scn:

Municipality No: 20105

Site Geo Ref Meth:

Incident Summary: OTTAWA/CARLETON TRANSPORTATION - DIESEL FUEL TO ROADS FROM BUS.

Contaminant Qty:

UNKNOWN Site: Database: NORTH END OF OGILVIE RD. AT THE OTTAWA RIVER OUTFALL. GLOUCESTER CITY ON SPL

Ref No: 44105 Discharger Report:

Site No: Material Group: Incident Dt: 11/30/1990 Health/Env Conseq: Client Type: Year:

Incident Cause: **UNKNOWN** Sector Type:

CITY OF GLOUCESTER Incident Event: Agency Involved:

Contaminant Code: Nearest Watercourse: Contaminant Name: Site Address: Site District Office: Contaminant Limit 1: Contam Limit Freq 1: Site Postal Code: Contaminant UN No 1: Site Region:

**POSSIBLE GLOUCESTER CITY** Environment Impact: Site Municipality:

Nature of Impact: Water course or lake Site Lot: Receiving Medium: WATER Site Conc: Receiving Env: Northing:

MOE Response: Easting: Dt MOE Arvl on Scn:

Site Geo Ref Accu: MOE Reported Dt: 11/30/1990 Site Map Datum: Dt Document Closed: SAC Action Class: Incident Reason: **UNKNOWN** Source Type:

Site Name:

Site County/District:

Municipality No: 20105

Site Geo Ref Meth:

Incident Summary: OTTAWA RIVER OUTFALL - FUEL OIL SPILLING INTO RIVER. SOURCE UNKNOWN.

Contaminant Qty:

Site: Database: lot 27 ON

Order No: 23022400359

Well ID: 1520415 Flowing (Y/N):

Construction Date: Flow Rate: Domestic Data Entry Status: Use 1st:

Use 2nd: Data Src:

09-Jan-1986 00:00:00 Final Well Status: Water Supply Date Received:

Water Type: Selected Flag: TRUE Casing Material: Abandonment Rec:

3323 Audit No: Contractor: Tag: Form Version: 1

Constructn Method: Owner:

County: OTTAWA-CARLETON Elevation (m):

Elevatn Reliabilty: Lot: 027 Depth to Bedrock: Concession:

Well Depth: Concession Name: Overburden/Bedrock: Easting NAD83:

Pump Rate:

Northing NAD83: Static Water Level: Zone: UTM Reliability: Clear/Cloudy:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

**Bore Hole Information** 

Bore Hole ID: 10042258 Elevation:

DP2BR: Elevrc: Spatial Status: 18 Zone:

Code OB: East83: Code OB Desc: North83: Open Hole: Org CS:

Cluster Kind: UTMRC:

Date Completed: 04-Oct-1984 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method: na Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: **Source Revision Comment:** Supplier Comment:

## Overburden and Bedrock

Materials Interval

931044690 Formation ID: Layer:

Color: 2 **GREY** General Color: Mat1: 18

SANDSTONE Most Common Material:

73 Mat2: Mat2 Desc: HARD

Mat3: Mat3 Desc:

Formation Top Depth: 18.0 68.0 Formation End Depth: Formation End Depth UOM:

## Overburden and Bedrock

Materials Interval

Formation ID: 931044689

Layer: Color: 6 **BROWN** General Color: Mat1: 28 Most Common Material: SAND Mat2: 77 Mat2 Desc: LOOSE

Mat3: Mat3 Desc:

Formation Top Depth: 0.0 18.0 Formation End Depth: Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961520415

**Method Construction Code:** 

**Method Construction:** Air Percussion

Other Method Construction:

#### Pipe Information

**Pipe ID:** 10590828

Casing No:
Comment:
Alt Name:

#### **Construction Record - Casing**

**Casing ID:** 930073767

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From:

Depth To:21.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

#### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991520415

Pump Set At:

Static Level:27.0Final Level After Pumping:60.0Recommended Pump Depth:50.0Pumping Rate:25.0

Flowing Rate:
Recommended Pump Rate: 10.0
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1
Water State After Test: CLEAR
Pumping Test Method: 1

Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: No

### **Draw Down & Recovery**

 Pump Test Detail ID:
 934111908

 Test Type:
 Recovery

 Test Duration:
 15

 Test Level:
 27.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934648930

 Test Type:
 Recovery

 Test Duration:
 45

 Test Level:
 27.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934386772

 Test Type:
 Recovery

 Test Duration:
 30

 Test Level:
 27.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

934905590 Pump Test Detail ID: Test Type: Recovery Test Duration: 60 27.0 Test Level: Test Level UOM: ft

Water Details

933477657 Water ID:

Layer: 1 Kind Code: **FRESH** Kind: Water Found Depth: 60.0 Water Found Depth UOM: ft

Site: Database: con 1 ON **WWIS** 

1519865 Well ID: Flowing (Y/N):

**Construction Date:** Flow Rate:

Use 1st: Domestic Data Entry Status:

Use 2nd: Data Src: Final Well Status: Water Supply Date Received:

16-Sep-1985 00:00:00 Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec: Audit No: Contractor: 1558 Form Version: Tag: 1

Constructn Method: Owner: **OTTAWA-CARLETON** Elevation (m): County:

Elevatn Reliabilty: Lot:

Depth to Bedrock: Concession: Concession Name: RF

Well Depth: Easting NAD83: Overburden/Bedrock: Pump Rate: Northing NAD83:

Static Water Level: Zone:

Clear/Cloudy: UTM Reliability: **GLOUCESTER TOWNSHIP** 

Municipality: Site Info:

**Bore Hole Information** 

Bore Hole ID: 10041718 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18

Code OB: East83: Code OB Desc: North83: Open Hole: Org CS: Cluster Kind: UTMRC:

Date Completed: 01-Aug-1985 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method: na

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date: Improvement Location Source:

Improvement Location Method: **Source Revision Comment:** Supplier Comment:

Overburden and Bedrock Materials Interval

187

Formation ID: 931042996

Layer: Color: **BROWN** General Color:

9

Mat1: 05
Most Common Material: CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 5.0 Formation End Depth UOM: ft

## Overburden and Bedrock

Materials Interval

 Formation ID:
 931042998

 Layer:
 3

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 60.0 Formation End Depth: 75.0 Formation End Depth UOM: ft

#### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931042997

Layer: 2 Color: General Color: **GREY** 05 Mat1: Most Common Material: CLAY Mat2: 81 Mat2 Desc: SANDY Mat3: 11 **GRAVEL** Mat3 Desc: Formation Top Depth: 5.0 60.0 Formation End Depth: Formation End Depth UOM: ft

Method of Construction & Well

<u>Use</u>

Method Construction ID:961519865Method Construction Code:5

Method Construction: Air Percussion

Other Method Construction:

Pipe Information

 Pipe ID:
 10590288

 Casing No:
 1

Comment: Alt Name:

Construction Record - Casing

**Casing ID:** 930072830

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To:62.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

#### **Construction Record - Casing**

**Casing ID:** 930072831

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:
Depth To: 75.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991519865

Pump Set At:

Static Level:25.0Final Level After Pumping:30.0Recommended Pump Depth:50.0Pumping Rate:10.0

Flowing Rate:

Flowing:

Recommended Pump Rate: 5.0

Levels UOM: ft
Rate UOM: GPM

Water State After Test Code: 1

Water State After Test: CLEAR

Pumping Test Method: 1

Pumping Duration HR: 1

Pumping Duration MIN: 0

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934895214

 Test Type:
 Draw Down

 Test Duration:
 60

 Test Level:
 30.0

 Test Level UOM:
 ft

No

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934109742

 Test Type:
 Draw Down

 Test Duration:
 15

 Test Level:
 30.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934384474

 Test Type:
 Draw Down

 Test Duration:
 30

 Test Level:
 30.0

 Test Level UOM:
 ft

## **Draw Down & Recovery**

Pump Test Detail ID:934655014Test Type:Draw Down

45 Test Duration: 30.0 Test Level: Test Level UOM: ft

Water Details

933476954 Water ID:

Layer:

Kind Code:

Kind: **FRESH** Water Found Depth: 70.0 Water Found Depth UOM: ft

Site: Database: lot 27 ON

Well ID: 1518033 Flowing (Y/N):

Construction Date: Flow Rate:

Cooling And A/C Use 1st: Data Entry Status: Use 2nd: Data Src:

Final Well Status: Water Supply 13-Dec-1982 00:00:00 Date Received: Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec:

Audit No: Contractor: 1558 Tag: Form Version: 1 Constructn Method: Owner:

County: Elevation (m): OTTAWA-CARLETON

Elevatn Reliabilty: Lot: 027 Depth to Bedrock: Concession:

Concession Name: Well Depth: Overburden/Bedrock: Easting NAD83: Northing NAD83: Pump Rate:

Static Water Level: Zone:

Clear/Cloudy: UTM Reliability:

Municipality: **OTTAWA CITY** Site Info:

**Bore Hole Information** 

10039904 Bore Hole ID: Elevation:

DP2BR: Elevrc: Spatial Status: Zone: 18

Code OB: East83: Code OB Desc: North83: Org CS: Open Hole:

Cluster Kind: UTMRC: UTMRC Desc: 29-Jan-1982 00:00:00 Date Completed:

unknown UTM Remarks: Location Method: na

Order No: 23022400359

Not Applicable i.e. no UTM Loc Method Desc:

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock **Materials Interval** 

931037131 Formation ID:

Layer: Color: 2 General Color: **GREY** Mat1:

LIMESTONE Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 27.0 Formation End Depth: 100.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931037130

 Layer:
 3

 Color:
 8

 General Color:
 BLACK

 Mat1:
 17

 Most Common Material:
 SHALE

 Mat2:
 85

 Mat2 Desc:
 SOFT

Mat3: Mat3 Desc:

Formation Top Depth: 15.0 Formation End Depth: 27.0 Formation End Depth UOM: ft

## Overburden and Bedrock

Materials Interval

**Formation ID:** 931037128

Layer: 1 Color: 6

General Color: BROWN
Mat1: 05
Most Common Material: CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0
Formation End Depth: 10.0
Formation End Depth UOM: ft

## Overburden and Bedrock

Materials Interval

**Formation ID:** 931037129

 Layer:
 2

 Color:
 2

 General Color:
 GREY

 Mat1:
 05

 Most Common Material:
 CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 10.0 Formation End Depth: 15.0 Formation End Depth UOM: ft

## Method of Construction & Well

<u>Use</u>

Method Construction ID: 961518033

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

#### Pipe Information

 Pipe ID:
 10588474

 Casing No:
 1

Comment: Alt Name:

#### **Construction Record - Casing**

**Casing ID:** 930069713

Layer: 2 Material: 4

Open Hole or Material:

OPEN HOLE

Depth From:

Depth To: 100.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### Construction Record - Casing

**Casing ID:** 930069712

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To:23.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

#### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991518033

Pump Set At:

Static Level: 15.0 Final Level After Pumping: 50.0 Recommended Pump Depth: 60.0 Pumping Rate: 10.0 Flowing Rate: Recommended Pump Rate: 5.0 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: CLEAR Pumping Test Method: Pumping Duration HR: 1 Pumping Duration MIN: 0

## **Draw Down & Recovery**

Flowing:

 Pump Test Detail ID:
 934377689

 Test Type:
 Draw Down

 Test Duration:
 30

 Test Level:
 50.0

 Test Level UOM:
 ft

No

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934896797

 Test Type:
 Draw Down

 Test Duration:
 60

 Test Level:
 50.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

934103360 Pump Test Detail ID: Draw Down Test Type: Test Duration: 15 Test Level: 50.0 Test Level UOM:

#### **Draw Down & Recovery**

Water Found Depth UOM:

Pump Test Detail ID: 934647523 Test Type: Draw Down Test Duration: 45 50.0 Test Level: Test Level UOM: ft

#### Water Details

Water ID: 933474659 Layer: Kind Code: **FRESH** Kind: Water Found Depth: 97.0

Site: Database: lot 25 ON

18

Order No: 23022400359

Well ID: 1522184 Flowing (Y/N):

ft

**Construction Date:** Flow Rate: Use 1st: Domestic Data Entry Status:

Use 2nd: Data Src:

Final Well Status: Water Supply Date Received: 01-Feb-1988 00:00:00 Selected Flag: TRUE Water Type:

Casing Material: Abandonment Rec:

Audit No: 25073 Contractor: 1558 Form Version: Tag: 1

Constructn Method: Owner:

**OTTAWA-CARLETON** Elevation (m): County:

Elevatn Reliabilty: Lot: 025

Depth to Bedrock: Concession: Well Depth: Concession Name: Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

**GLOUCESTER TOWNSHIP** 

Municipality: Site Info:

#### **Bore Hole Information**

Bore Hole ID: 10043997 Elevation:

DP2BR: Elevrc: Spatial Status: Zone:

Code OB: East83: Code OB Desc: North83: Open Hole: Org CS:

Cluster Kind: UTMRC: 9

08-Dec-1987 00:00:00 Date Completed: **UTMRC Desc:** unknown UTM

Remarks: Location Method: na

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

## Supplier Comment:

#### Overburden and Bedrock

Materials Interval

**Formation ID:** 931050500

 Layer:
 2

 Color:
 2

 General Color:
 GREY

 Mat1:
 05

 Most Common Material:
 CLAY

 Mat2:
 13

Mat2 Desc: BOULDERS

Mat3: Mat3 Desc:

Formation Top Depth: 14.0 Formation End Depth: 23.0 Formation End Depth UOM: ft

## Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931050501

 Layer:
 3

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

*Mat2:* 78

Mat2 Desc: MEDIUM-GRAINED

Mat3:

Mat3 Desc:

Formation Top Depth: 23.0 Formation End Depth: 60.0 Formation End Depth UOM: ft

#### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931050499

 Layer:
 1

 Color:
 6

 General Color:
 BROWN

 Mat1:
 05

 Most Common Material:
 CLAY

 Mat2:
 79

 Mat2 Desc:
 PACKED

Mat3:

Mat3 Desc:

Formation Top Depth: 0.0
Formation End Depth: 14.0
Formation End Depth UOM: ft

#### Method of Construction & Well

<u>Use</u>

Method Construction ID: 961522184

Method Construction Code: 5

Method Construction: Air Percussion

**Other Method Construction:** 

#### Pipe Information

 Pipe ID:
 10592567

 Casing No:
 1

Comment:

#### Alt Name:

#### Construction Record - Casing

**Casing ID:** 930076928

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To:60.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

#### **Construction Record - Casing**

**Casing ID:** 930076927

 Layer:
 1

 Material:
 1

 Open Hole or Material:
 STEEL

 Depth From:
 30.0

 Casing Diameter:
 6.0

 Casing Diameter UOM:
 inch

## Results of Well Yield Testing

Casing Depth UOM:

Pumping Test Method Desc: PUMP Pump Test ID: 991522184

Pump Set At:

Static Level:15.0Final Level After Pumping:30.0Recommended Pump Depth:40.0Pumping Rate:20.0

Flowing Rate:

Recommended Pump Rate: 5.0 Levels UOM: **GPM** Rate UOM: Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: 1 **Pumping Duration HR:** 1 **Pumping Duration MIN:** 0 Flowing: No

#### **Draw Down & Recovery**

 Pump Test Detail ID:
 934654534

 Test Type:
 Draw Down

 Test Duration:
 45

 Test Level:
 30.0

 Test Level UOM:
 ft

## **Draw Down & Recovery**

 Pump Test Detail ID:
 934109298

 Test Type:
 Draw Down

 Test Duration:
 15

 Test Level:
 30.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

Pump Test Detail ID: 934392983

Draw Down Test Type: Test Duration: 30.0 Test Level: Test Level UOM: ft

**Draw Down & Recovery** 

Pump Test Detail ID: 934903366 Test Type: Draw Down Test Duration: 60 30.0 Test Level: Test Level UOM: ft

Water Details

933479978 Water ID:

Layer: Kind Code:

**FRESH** Kind: Water Found Depth: 55.0 Water Found Depth UOM: ft

Database: Site: **WWIS** lot 25 ON

TRUE

Order No: 23022400359

Well ID: 1523747 Flowing (Y/N): **Construction Date:** Flow Rate:

Use 1st: Industrial Data Entry Status: Use 2nd: Data Src:

04-Aug-1989 00:00:00 Final Well Status: Water Supply Date Received:

Water Type: Selected Flag:

Casing Material: Abandonment Rec: Audit No: 49862 Contractor:

3644 Tag: Form Version:

Constructn Method: Owner: OTTAWA-CARLETON Elevation (m): County:

Elevatn Reliabilty: Lot: 025 Depth to Bedrock: Concession:

Concession Name: Well Depth: Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy:

UTM Reliability:

Municipality: **OTTAWA CITY** Site Info:

**Bore Hole Information** 

Bore Hole ID: 10045521 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: 18 Code OB: East83:

Code OB Desc: North83: Open Hole: Org CS: Cluster Kind: UTMRC:

Date Completed: 12-Jun-1989 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method: Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date: Improvement Location Source:

Improvement Location Method: Source Revision Comment: Supplier Comment:

Overburden and Bedrock

#### **Materials Interval**

**Formation ID:** 931055593

 Layer:
 2

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

Mat2: 82 Mat2 Desc: SHALY

Mat3:

Mat3 Desc:

Formation Top Depth: 32.0
Formation End Depth: 250.0
Formation End Depth UOM: ft

#### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931055592

 Layer:
 1

 Color:
 2

 General Color:
 GREY

 Mat1:
 05

 Most Common Material:
 CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 32.0 Formation End Depth UOM: ft

#### Method of Construction & Well

<u>Use</u>

Method Construction ID: 961523747

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

## Pipe Information

**Pipe ID:** 10594091

Casing No:

Comment: Alt Name:

#### Construction Record - Casing

**Casing ID:** 930079667

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To: 36.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### **Construction Record - Casing**

 Casing ID:
 930079668

 Layer:
 2

Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 250.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991523747

Pump Set At:
Static Level: 19.0
Final Level After Pumping: 100.0
Recommended Pump Depth: 100.0
Pumping Rate: 14.0
Flowing Rate:

Recommended Pump Rate: 14.0
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2

Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: No

#### **Draw Down & Recovery**

Pump Test Detail ID: 934908516

Test Type:

 Test Duration:
 60

 Test Level:
 100.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

Pump Test Detail ID: 934106105

Test Type:

 Test Duration:
 15

 Test Level:
 100.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

Pump Test Detail ID: 934651310

Test Type:

 Test Duration:
 45

 Test Level:
 100.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

Pump Test Detail ID: 934390332

Test Type:

 Test Duration:
 30

 Test Level:
 100.0

 Test Level UOM:
 ft

#### Water Details

 Water ID:
 933482122

 Layer:
 1

 Kind Code:
 1

Kind: FRESH Water Found Depth: 60.0

Water Found Depth UOM: ft

Water Details

Water ID: 933482123

Layer: 2 Kind Code:

Kind: **FRESH** Water Found Depth: 225.0 Water Found Depth UOM:

Database: Site: lot 27 ON

Well ID: 1524742 Flowing (Y/N): **Construction Date:** Flow Rate:

Use 1st: **Domestic** Data Entry Status: Use 2nd: Data Src:

Final Well Status: Date Received: 17-Sep-1990 00:00:00 Water Supply

TRUE Water Type: Selected Flag:

Casing Material: Abandonment Rec: Audit No: 80312 Contractor: 1558

Form Version: Tag: Constructn Method: Owner:

County: OTTAWA-CARLETON Elevation (m): Elevatn Reliabilty: Lot: 027

Depth to Bedrock: Concession:

Well Depth: Concession Name: BF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone:

UTM Reliability: Clear/Cloudy:

Municipality: **GLOUCESTER TOWNSHIP** Site Info:

**Bore Hole Information** 

10046490 Elevation: Bore Hole ID:

DP2BR: Elevrc: Spatial Status: Zone: 18 Code OB: East83:

Code OB Desc: North83: Open Hole: Org CS: Cluster Kind: **UTMRC:** 

9 Date Completed: 19-Jul-1990 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method:

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

931058934 Formation ID:

Layer: Color: 2 General Color: **GREY** Mat1: 11 **GRAVEL** Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

199

Formation Top Depth: 29.0 Formation End Depth: 31.0 Formation End Depth UOM: ft

## Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931058935

 Layer:
 5

 Color:
 2

 General Color:
 GREY

 Mat1:
 18

Most Common Material: SANDSTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 31.0
Formation End Depth: 75.0
Formation End Depth UOM: ft

## Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931058932

**Layer:** 2 **Color:** 6

General Color: BROWN Mat1: 05
Most Common Material: CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 1.0
Formation End Depth: 11.0
Formation End Depth UOM: ft

#### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931058933

 Layer:
 3

 Color:
 2

 General Color:
 GREY

 Mat1:
 05

 Most Common Material:
 CLAY

 Mat2:
 13

Mat2 Desc: BOULDERS

Mat3:

Mat3 Desc:

Formation Top Depth: 11.0
Formation End Depth: 29.0
Formation End Depth UOM: ft

#### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931058931

**Layer:** 1 **Color:** 6

General Color: BROWN Mat1: 28
Most Common Material: SAND

Mat2: Mat2 Desc:

Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 1.0 Formation End Depth UOM: ft

## Method of Construction & Well

<u>Use</u>

Method Construction ID: 961524742

Method Construction Code:

Method Construction: Air Percussion

**Other Method Construction:** 

#### Pipe Information

 Pipe ID:
 10595060

 Casing No:
 1

Comment: Alt Name:

#### Construction Record - Casing

**Casing ID:** 930081384

Layer: 1
Material: 1
Open Hole or Material: STEEL
Depth From:

Depth To:32.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

#### **Construction Record - Casing**

**Casing ID:** 930081385

Layer: 2

Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To:75.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

#### Results of Well Yield Testing

Pumping Test Method Desc: PUMP

**Pump Test ID:** 991524742

Pump Set At:

Static Level:10.0Final Level After Pumping:20.0Recommended Pump Depth:30.0Pumping Rate:50.0

Flowing Rate:

Recommended Pump Rate: 5.0
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 1

Water State After Test: CLEAR
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: No

#### **Draw Down & Recovery**

934109929 Pump Test Detail ID: Draw Down Test Type: Test Duration: 15

20.0 Test Level: Test Level UOM: ft

#### **Draw Down & Recovery**

934654699 Pump Test Detail ID: Test Type: Draw Down

Test Duration: 45 20.0 Test Level: Test Level UOM:

## **Draw Down & Recovery**

934385338 Pump Test Detail ID: Test Type: Draw Down Test Duration: 30 Test Level: 20.0 Test Level UOM: ft

#### **Draw Down & Recovery**

934903074 Pump Test Detail ID: Test Type: Draw Down Test Duration: 60 Test Level: 20.0 Test Level UOM: ft

#### Water Details

933483473 Water ID:

Layer: 2 Kind Code: 5

Not stated Kind:

Water Found Depth: 70.0 Water Found Depth UOM: ft

## Water Details

Water ID: 933483472 1

Layer:

Kind Code: 5

Kind: Not stated Water Found Depth: 45.0 Water Found Depth UOM: ft

Database: Site: con 1 ON

Order No: 23022400359

Well ID: 1525673 Flowing (Y/N): **Construction Date:** Flow Rate:

Use 1st: Domestic Data Entry Status:

Use 2nd: Data Src:

Date Received: 21-Oct-1991 00:00:00 Final Well Status: Water Supply

Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec:

Audit No: 68558 3644 Contractor: Tag: Form Version: 1

Constructn Method: Owner: Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty: Lot: Depth to Bedrock: Well Depth:

Overburden/Bedrock:

Pump Rate: Static Water Level:

Clear/Cloudy:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

Bore Hole ID: 10047408

DP2BR: Spatial Status: Code OB: Code OB Desc:

**Bore Hole Information** 

Open Hole: Cluster Kind:

27-Feb-1991 00:00:00 Date Completed: Remarks:

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

931061986 Formation ID:

Layer: Color: 2 General Color: **GREY** Mat1: 15

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

45.0 Formation Top Depth: Formation End Depth: 103.0 Formation End Depth UOM: ft

Overburden and Bedrock

**Materials Interval** 

Formation ID: 931061985

Layer: 2 Color: **GREY** General Color: Mat1: 14 **HARDPAN** Most Common Material:

Mat2: Mat2 Desc: Mat3:

Mat3 Desc:

Formation Top Depth: 32.0 Formation End Depth: 45.0 Formation End Depth UOM:

Overburden and Bedrock

Materials Interval

Formation ID: 931061984 Concession: 01 Concession Name: RF

Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Elevation:

Elevrc: 18 Zone:

East83: North83: Org CS:

**UTMRC:** 

UTMRC Desc: unknown UTM

Location Method: na

12

**STONES** 

 Layer:
 1

 Color:
 2

 General Color:
 GREY

 Mat1:
 05

 Most Common Material:
 CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 32.0 Formation End Depth UOM: ft

#### Method of Construction & Well

<u>Use</u>

Method Construction ID: 961525673

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

#### Pipe Information

 Pipe ID:
 10595978

 Casing No:
 1

Comment: Alt Name:

#### Construction Record - Casing

**Casing ID:** 930082984

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 103.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### Construction Record - Casing

**Casing ID:** 930082983

Layer: 1
Material: 1
Open Hole or Material: STEEL

Donth From:

Depth From:

Depth To: 49.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### Results of Well Yield Testing

Pumping Test Method Desc: PUMP

**Pump Test ID:** 991525673

Pump Set At:

Static Level: 35.0
Final Level After Pumping: 55.0
Recommended Pump Depth: 55.0
Pumping Rate: 10.0
Flowing Rate:

Recommended Pump Rate:

Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2

Order No: 23022400359

8.0

Water State After Test: CLOUDY
Pumping Test Method: 1

Pumping Trest Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0
Flowing: No

## Draw Down & Recovery

Pump Test Detail ID: 934388707

Test Type:

 Test Duration:
 30

 Test Level:
 55.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

Pump Test Detail ID: 934906425

Test Type:

 Test Duration:
 60

 Test Level:
 55.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934649245

Test Type:

 Test Duration:
 45

 Test Level:
 55.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934105048

Test Type:

 Test Duration:
 15

 Test Level:
 55.0

 Test Level UOM:
 ft

#### Water Details

*Water ID:* 933484725

**Layer:** 2 **Kind Code:** 1

Kind: FRESH
Water Found Depth: 98.0
Water Found Depth UOM: ft

# Water Details

*Water ID*: 933484724

 Layer:
 1

 Kind Code:
 1

 Kind:
 FRESH

Water Found Depth: 70.0
Water Found Depth UOM: ft

Site:

| lot 27 | ON | Database: WWIS

Order No: 23022400359

 Well ID:
 1525793
 Flowing (Y/N):

 Construction Date:
 Flow Rate:

 Use 1st:
 Domestic
 Data Entry Status:

Use 2nd: Data Src.

Final Well Status: Water Supply Date Received: 22-Nov-1991 00:00:00

Water Type: Casing Material:

Audit No: 100112

Tag:

Constructn Method: Elevation (m):

Elevation (iii).
Elevatin Reliability:
Depth to Bedrock:
Well Depth:

Overburden/Bedrock: Pump Rate: Static Water Level: Clear/Cloudy:

Municipality: GLOUCESTER TOWNSHIP

Site Info:

**Bore Hole Information** 

**Bore Hole ID:** 10047528

DP2BR: Spatial Status: Code OB: Code OB Desc:

Open Hole: Cluster Kind:

**Date Completed:** 20-Aug-1991 00:00:00

Remarks:

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931062302

 Layer:
 2

 Color:
 2

 General Color:
 GREY

 Mat1:
 05

 Most Common Material:
 CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 12.0 Formation End Depth: 40.0 Formation End Depth UOM: ft

Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931062301

Layer: 1 Color: 6

General Color: BROWN Mat1: 05
Most Common Material: CLAY

Most Common Material: Mat2: Mat2 Desc:

Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 12.0 Selected Flag: TRUE

Abandonment Rec:
Contractor: 1558
Form Version: 1

Owner:

County: OTTAWA-CARLETON

Lot: 027

Concession:

Concession Name: BF

Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Elevation:

Elevrc: Zone: 18

East83: North83: Org CS:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 23022400359

Location Method: na

#### Formation End Depth UOM:

# Overburden and Bedrock

Materials Interval

**Formation ID:** 931062304

ft

Layer: Color: 2 General Color: **GREY** Mat1: 28 Most Common Material: SAND Mat2: 11 Mat2 Desc: **GRAVEL** Mat3: 79 Mat3 Desc: **PACKED** Formation Top Depth: 73.0 77.0 Formation End Depth: Formation End Depth UOM:

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931062303

 Layer:
 3

 Color:
 2

 General Color:
 GREY

 Mat1:
 28

 Most Common Material:
 SAND

 Mat2:
 12

 Mat2 Desc:
 STONES

Mat3: Mat3 Desc:

Formation Top Depth: 40.0 Formation End Depth: 73.0 Formation End Depth UOM: ft

### Method of Construction & Well

<u>Use</u>

Method Construction ID: 961525793

Method Construction Code: 5

Method Construction: Air Percussion

Other Method Construction:

### Pipe Information

*Pipe ID:* 10596098

Casing No:

Comment: Alt Name:

# Construction Record - Casing

**Casing ID:** 930083198

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:
Depth To: 77.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### **Construction Record - Casing**

**Casing ID:** 930083197

Layer: 1
Material: 1

Open Hole or Material: STEEL

Depth From:

Depth To: 75.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991525793

Pump Set At:

Static Level:6.0Final Level After Pumping:10.0Recommended Pump Depth:20.0Pumping Rate:50.0

Flowing Rate:

Recommended Pump Rate: 5.0 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: 1 Water State After Test: **CLEAR** Pumping Test Method: Pumping Duration HR: 1 **Pumping Duration MIN:** 0 No Flowing:

### **Draw Down & Recovery**

 Pump Test Detail ID:
 934906944

 Test Type:
 Draw Down

 Test Duration:
 60

 Test Level:
 10.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

 Pump Test Detail ID:
 934649766

 Test Type:
 Draw Down

 Test Duration:
 45

 Test Level:
 10.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

 Pump Test Detail ID:
 934105160

 Test Type:
 Draw Down

 Test Duration:
 15

 Test Level:
 10.0

 Test Level UOM:
 ft

# **Draw Down & Recovery**

 Pump Test Detail ID:
 934389236

 Test Type:
 Draw Down

 Test Duration:
 30

 Test Level:
 10.0

 Test Level UOM:
 ft

### Water Details

*Water ID*: 933484901

Layer: Kind Code: 5

Not stated Kind: Water Found Depth: 76.0 Water Found Depth UOM:

Site: Database: lot 25 ON

Flowing (Y/N):

TRUE

Order No: 23022400359

Well ID: 1528229

**Construction Date:** Flow Rate: Use 1st: **Domestic** 

Data Entry Status: Use 2nd: Data Src:

21-Oct-1994 00:00:00 Final Well Status: Water Supply Date Received:

Water Type: Selected Flag:

Casing Material: Abandonment Rec: Audit No: 144848 1414 Contractor:

Form Version: Tag: Constructn Method: Owner:

Elevation (m): OTTAWA-CARLETON County: Elevatn Reliabilty: Lot: 025

Depth to Bedrock: Concession: Well Depth: Concession Name:

Overburden/Bedrock: Easting NAD83: Northing NAD83: Pump Rate:

Static Water Level: Zone: UTM Reliability: Clear/Cloudy:

Municipality: **GLOUCESTER TOWNSHIP** Site Info:

**Bore Hole Information** 

Bore Hole ID: 10049768 Elevation:

DP2BR: Elevrc: Spatial Status: Zone: 18 Code OB: East83:

Code OB Desc: North83: Open Hole: Org CS: Cluster Kind: **UTMRC:** 

Date Completed: 22-Sep-1994 00:00:00 **UTMRC Desc:** unknown UTM

Remarks: Location Method:

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

931069009 Formation ID:

Layer: 2 Color: 2 General Color: **GREY** Mat1: 15

LIMESTONE Most Common Material:

Mat2: 17 Mat2 Desc: SHALE Mat3: 74 LAYERED Mat3 Desc: Formation Top Depth: 13.0 Formation End Depth: 100.0 Formation End Depth UOM: ft

Overburden and Bedrock

### Materials Interval

Formation ID: 931069008

Layer: Color: 6 General Color: **BROWN** Mat1: 14

**HARDPAN** Most Common Material:

Mat2: 13

**BOULDERS** Mat2 Desc: Mat3: 73 Mat3 Desc: HARD Formation Top Depth: 0.0 Formation End Depth: 13.0 Formation End Depth UOM:

### Annular Space/Abandonment

Sealing Record

Plug ID: 933113096

Layer: 0.0 Plug From: Plug To: 20.0 Plug Depth UOM: ft

### Method of Construction & Well

<u>Use</u>

961528229 **Method Construction ID: Method Construction Code: Method Construction:** Rotary (Air)

Other Method Construction:

### Pipe Information

10598338 Pipe ID: Casing No:

Comment: Alt Name:

### **Construction Record - Casing**

Casing ID: 930086988

Layer: Material:

STEEL Open Hole or Material:

Depth From:

Depth To: 20.0 Casing Diameter: 6.0 Casing Diameter UOM: inch Casing Depth UOM:

## Construction Record - Casing

930086989 Casing ID:

Layer:

Material:

Open Hole or Material:

Depth From:

100.0 Depth To: Casing Diameter: 6.0 Casing Diameter UOM: inch Casing Depth UOM: ft

# Results of Well Yield Testing

**BAILER** Pumping Test Method Desc: Pump Test ID: 991528229

Pump Set At:

Static Level: 14.0 Final Level After Pumping: 100.0 Recommended Pump Depth: 90.0 Pumping Rate: 6.0

Flowing Rate:

Recommended Pump Rate: 4.0 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: 2 Water State After Test: CLOUDY Pumping Test Method:

**Pumping Duration HR:** 

**Pumping Duration MIN:** Flowing: No

# **Draw Down & Recovery**

934387694 Pump Test Detail ID: Test Type: Draw Down Test Duration: 30 Test Level: 40.0 Test Level UOM: ft

## **Draw Down & Recovery**

Pump Test Detail ID: 934905393 Test Type: Draw Down Test Duration: 60 Test Level: 14.0 Test Level UOM: ft

### **Draw Down & Recovery**

934104069 Pump Test Detail ID: Test Type: Draw Down Test Duration: 15 Test Level: 50.0 Test Level UOM: ft

### **Draw Down & Recovery**

934648209 Pump Test Detail ID: Draw Down Test Type: Test Duration: 45

20.0 Test Level: Test Level UOM: ft

### Water Details

Water ID: 933487838 Layer: 1 Kind Code:

Kind: **FRESH** Water Found Depth: 30.0 Water Found Depth UOM: ft

Site:

Database: lot 25 ON

Well ID: 1528230 Flowing (Y/N): Construction Date: Flow Rate:

Use 1st: Industrial

Use 2nd: Final Well Status: Water Supply

Water Type:

Casing Material:

Audit No: 149882

Tag:

Constructn Method: Elevation (m):

Elevatn Reliabilty: Depth to Bedrock:

Well Depth:

Overburden/Bedrock:

Pump Rate: Static Water Level:

Clear/Cloudy:

Municipality:

Site Info:

**GLOUCESTER TOWNSHIP** 

**Bore Hole Information** 

Bore Hole ID: 10049769

DP2BR: Spatial Status: Code OB: Code OB Desc:

Open Hole: Cluster Kind:

13-Sep-1994 00:00:00 Date Completed:

Remarks:

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

931069011 Formation ID:

Layer: 2 Color: 2 General Color: **GREY** Mat1: 14 Most Common Material: **HARDPAN** 

Mat2: 13

**BOULDERS** Mat2 Desc: Mat3: 79 Mat3 Desc: **PACKED** Formation Top Depth: 2.0

Formation End Depth: 8.0 Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

931069012 Formation ID:

3 Layer: Color: **GREY** General Color: Mat1: 17 Most Common Material: SHALE Mat2: 74 Mat2 Desc: **LAYERED**  Data Entry Status:

Data Src:

21-Oct-1994 00:00:00 Date Received:

Selected Flag: TRUE

Abandonment Rec:

Contractor: 1414 Form Version: 1

Owner:

County: **OTTAWA-CARLETON** 

Lot:

Concession: Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

Elevation: Elevrc:

Zone: 18

East83: North83: Org CS:

UTMRC: 9

UTMRC Desc: unknown UTM

Order No: 23022400359

Location Method: na

80

Mat3:

Mat3 Desc: **POROUS** Formation Top Depth: 8.0 Formation End Depth: 11.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

Formation ID: 931069013

Layer: 2 Color: General Color: **GREY** Mat1: 17 Most Common Material: SHALE Mat2: 85 Mat2 Desc: SOFT

Mat3: Mat3 Desc:

Formation Top Depth: 11.0 Formation End Depth: 103.0 Formation End Depth UOM: ft

### Overburden and Bedrock

Materials Interval

931069010 Formation ID: Layer: Color: General Color: **GREY** Mat1: 12 **STONES** Most Common Material: Mat2: 79 Mat2 Desc: **PACKED** 73 Mat3: HARD Mat3 Desc: Formation Top Depth: 0.0 2.0 Formation End Depth:

ft

### Annular Space/Abandonment

Formation End Depth UOM:

Sealing Record

933113097 Plug ID: Layer: Plug From: 0.0 Plug To: 20.0 Plug Depth UOM:

### Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961528230

**Method Construction Code:** 

Rotary (Air) **Method Construction:** 

Other Method Construction:

### Pipe Information

Pipe ID: 10598339

Casing No:

Comment: Alt Name:

## Construction Record - Casing

**Casing ID:** 930086991

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 103.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Construction Record - Casing

**Casing ID:** 930086990

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To:20.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991528230

Pump Set At:

Static Level: 14.0 Final Level After Pumping: 103.0 Recommended Pump Depth: 95.0 Pumping Rate: 5.0 Flowing Rate: Recommended Pump Rate: 4.0 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: Water State After Test: **CLEAR** Pumping Test Method: **Pumping Duration HR:** 1 Pumping Duration MIN:

Flowing: No

# **Draw Down & Recovery**

 Pump Test Detail ID:
 934648210

 Test Type:
 Recovery

 Test Duration:
 45

 Test Level:
 20.0

 Test Level UOM:
 ft

# **Draw Down & Recovery**

 Pump Test Detail ID:
 934104070

 Test Type:
 Recovery

 Test Duration:
 15

 Test Level:
 60.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

 Pump Test Detail ID:
 934387695

 Test Type:
 Recovery

 Test Duration:
 30

 Test Level:
 40.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934905394 Recovery Test Type: Test Duration: 60 Test Level: 14.0 Test Level UOM:

### Water Details

Water ID: 933487839 Layer: Kind Code: **FRESH** Kind:

Water Found Depth: 25.0 Water Found Depth UOM:

Site: Database: con 1 ON **WWIS** 

Flowing (Y/N):

Well ID: 1529330

Construction Date: Flow Rate:

Use 1st: Commerical Data Entry Status:

Use 2nd: Data Src: Abandoned-Other 14-Feb-1997 00:00:00 Final Well Status: Date Received:

Water Type: Selected Flag: TRUE Casing Material: Abandonment Rec:

Audit No: 169507 Contractor: 6844

Tag: Form Version: 1

Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON Elevatn Reliabilty: Lot:

Depth to Bedrock: Concession:

Well Depth: Concession Name: OF Overburden/Bedrock: Easting NAD83:

Pump Rate: Northing NAD83: Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

### **Bore Hole Information**

Bore Hole ID: 10050866 Elevation:

DP2BR: Elevrc: Spatial Status: Zone: 18 East83: Code OB:

Code OB Desc: North83: Open Hole: Org CS: Cluster Kind: UTMRC:

9

Date Completed: 06-Dec-1996 00:00:00 **UTMRC Desc:** unknown UTM

Remarks: Location Method: na

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

# Overburden and Bedrock

**Materials Interval** 

Formation ID: 931072413

Layer:

Color:

General Color:

**Mat1:** 23

Most Common Material: PREVIOUSLY DUG

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 17.0 Formation End Depth UOM: ft

# Annular Space/Abandonment

Sealing Record

**Plug ID:** 933114303

 Layer:
 2

 Plug From:
 2.0

 Plug To:
 17.0

 Plug Depth UOM:
 ft

### Annular Space/Abandonment

Sealing Record

 Plug ID:
 933114302

 Layer:
 1

 Plug From:
 0.0

 Plug To:
 2.0

 Plug Depth UOM:
 ft

## Method of Construction & Well

<u>Use</u>

Method Construction ID:961529330Method Construction Code:AMethod Construction:Digging

Other Method Construction:

### Pipe Information

**Pipe ID:** 10599436

Casing No:

Comment: Alt Name:

# Construction Record - Casing

**Casing ID:** 930088795

 Layer:
 1

 Material:
 5

Open Hole or Material: PLASTIC

Depth From:

Depth To:17.0Casing Diameter:36.0Casing Diameter UOM:inchCasing Depth UOM:ft

### **Construction Record - Screen**

**Screen ID:** 933326678

Layer:

Slot:

Screen Top Depth: Screen End Depth: Screen Material:

Screen Depth UOM: ft

Screen Diameter UOM: inch 36.0 Screen Diameter:

Water Details

Water ID: 933489269

Layer: Kind Code: 5

Not stated Kind: Water Found Depth: 6.0 Water Found Depth UOM: ft

Database: Site: lot 26 ON **WWIS** 

18

Order No: 23022400359

1529709 Flowing (Y/N): Well ID: Construction Date: Flow Rate: Use 1st: Domestic Data Entry Status:

Use 2nd: Data Src:

Final Well Status: Water Supply Date Received: 22-Dec-1997 00:00:00

TRUE Water Type: Selected Flag: Abandonment Rec:

Casing Material: Audit No: 182706 Contractor: 1558

Form Version: Tag: Constructn Method: Owner:

OTTAWA-CARLETON Elevation (m): County:

Elevatn Reliabilty: Lot: 026 Depth to Bedrock: Concession:

Well Depth: Concession Name: LI Overburden/Bedrock: Easting NAD83:

Pump Rate: Northing NAD83: Static Water Level: Zone:

Clear/Cloudy: UTM Reliability:

**GLOUCESTER TOWNSHIP** Municipality:

Site Info:

**Bore Hole Information** 

Bore Hole ID: 10051244 Elevation: DP2BR: Elevrc:

Spatial Status: Zone: Code OB: East83: Code OB Desc: North83: Open Hole: Org CS:

Cluster Kind: UTMRC:

Date Completed: 11-Nov-1997 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method: na Loc Method Desc:

Not Applicable i.e. no UTM

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

**Materials Interval** 

Overburden and Bedrock

931073580 Formation ID:

Layer: 3 Color: General Color: **GREY** Mat1: 14 Most Common Material: **HARDPAN** Mat2: 11 Mat2 Desc: **GRAVEL** Mat3: 79

Mat3 Desc:PACKEDFormation Top Depth:13.0Formation End Depth:16.0Formation End Depth UOM:ft

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931073582

**Layer:** 5 **Color:** 1

General Color: WHITE Mat1: 18

Most Common Material: SANDSTONE

Mat2: 73 Mat2 Desc: HARD

Mat3:

Mat3 Desc:

Formation Top Depth: 35.0 Formation End Depth: 75.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931073581

 Layer:
 4

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

Mat2: 73 Mat2 Desc: HARD

Mat3: Mat3 Desc:

Formation Top Depth: 16.0 Formation End Depth: 35.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931073578

 Layer:
 1

 Color:
 6

 General Color:
 BROWN

 Mat1:
 05

 Most Common Material:
 CLAY

 Mat2:
 79

 Mat2 Desc:
 PACKED

Mat3:

Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 4.0 Formation End Depth UOM: ft

### Overburden and Bedrock

Materials Interval

**Formation ID:** 931073579

 Layer:
 2

 Color:
 6

 General Color:
 BROWN

 Mat1:
 14

 Most Common Material:
 HARDPAN

**Mat2:** 13

Mat2 Desc:BOULDERSMat3:79Mat3 Desc:PACKEDFormation Top Depth:4.0Formation End Depth:13.0Formation End Depth UOM:ft

### Annular Space/Abandonment

Sealing Record

 Plug ID:
 933114772

 Layer:
 1

 Plug From:
 22.0

 Plug To:
 0.0

 Plug Depth UOM:
 ft

## Method of Construction & Well

<u>Use</u>

Method Construction ID:961529709Method Construction Code:5

Method Construction: Air Percussion

Other Method Construction:

### Pipe Information

 Pipe ID:
 10599814

 Casing No:
 1

Comment: Alt Name:

### **Construction Record - Casing**

 Casing ID:
 930089441

 Laver:
 2

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:
Depth To: 75.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

## Construction Record - Casing

**Casing ID:** 930089440

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To:27.0Casing Diameter:6.0Casing Diameter UOM:inchCasing Depth UOM:ft

### Results of Well Yield Testing

Pumping Test Method Desc: PUMP Pump Test ID: 991529709

Pump Set At:

Static Level:12.0Final Level After Pumping:35.0Recommended Pump Depth:35.0Pumping Rate:30.0

Flowing Rate:

Recommended Pump Rate: 5.0
Levels UOM: ft
Rate UOM: GPM

Water State After Test Code: Water State After Test:

Pumping Test Method:1Pumping Duration HR:1Pumping Duration MIN:0Flowing:No

#### **Draw Down & Recovery**

Pump Test Detail ID: 934660796

Test Type:

 Test Duration:
 45

 Test Level:
 12.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934909333

Test Type:

Test Duration: 60
Test Level: 12.0
Test Level UOM: ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934391634

Test Type:

 Test Duration:
 30

 Test Level:
 12.0

 Test Level UOM:
 ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934116660

 Test Type:

 Test Duration:
 15

 Test Level:
 12.0

 Test Level UOM:
 ft

### Water Details

*Water ID:* 933489740

Layer: 1 Kind Code: 5

Kind: Not stated

Water Found Depth:

Water Found Depth UOM: ft

Site:

lot 26 ON

Database:

WWIS

Order No: 23022400359

*Well ID:* 1530327 *Flowing (Y/N):* 

Construction Date: Flow Rate:

Use 1st: Domestic Data Entry Status:

Use 2nd:

Data Src:

Final Well Status: Water Supply Date Received: 08-Dec-1998 00:00:00

Water Type: Selected Flag: TRUE

Casing Material:Abandonment Rec:Audit No:194764Contractor:1558

Audit No: 194764 Contractor: 155
Tag: Form Version: 1
Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty: Depth to Bedrock:

Well Depth: Overburden/Bedrock: Pump Rate:

Static Water Level:

Clear/Cloudy:

**GLOUCESTER TOWNSHIP** Municipality:

Site Info:

026 Lot: Concession: BF Concession Name: Easting NAD83: Northing NAD83:

Zone:

UTM Reliability:

#### **Bore Hole Information**

Bore Hole ID: 10051862 DP2BR:

Spatial Status: Code OB: Code OB Desc: Open Hole:

Cluster Kind:

Date Completed: 16-Oct-1998 00:00:00

Remarks:

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

### Overburden and Bedrock

**Materials Interval** 

Formation ID: 931075169

Layer: 6 Color: 2 General Color: **GREY** Mat1: 18

Most Common Material: SANDSTONE Mat2: 73 HARD

Mat2 Desc:

Mat3: Mat3 Desc:

Formation Top Depth: 71.0 Formation End Depth: 223.0 Formation End Depth UOM:

Overburden and Bedrock

**Materials Interval** 

Formation ID: 931075164

Layer: Color: 6

General Color: **BROWN** Mat1: 05 Most Common Material: CLAY Mat2: **PACKED** Mat2 Desc:

Mat3: Mat3 Desc:

Formation Top Depth: 0.0 Formation End Depth: 11.0 Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

Elevation:

Elevrc:

Zone: 18

East83: North83: Org CS:

UTMRC: 9

**UTMRC Desc:** unknown UTM

Order No: 23022400359

Location Method: na Formation ID: 931075168

Layer: 5 Color: 2 General Color: **GREY** Mat1: 15

LIMESTONE Most Common Material:

Mat2: 73 Mat2 Desc: HARD

Mat3:

Mat3 Desc:

Formation Top Depth: 57.0 Formation End Depth: 71.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

931075165 Formation ID:

Layer: Color: General Color: **GREY** Mat1: 05 Most Common Material: CLAY Mat2: 86 Mat2 Desc: **STICKY** 

Mat3: Mat3 Desc:

Formation Top Depth:

11.0 Formation End Depth: 32.0 Formation End Depth UOM:

# Overburden and Bedrock

Materials Interval

Formation ID: 931075166

Layer: Color: 2 General Color: **GREY** Mat1: 14

Most Common Material: **HARDPAN** Mat2: 13

Mat2 Desc: **BOULDERS** Mat3: 79 PACKED Mat3 Desc: Formation Top Depth: 32.0 Formation End Depth: 53.0

ft

Formation End Depth UOM:

### Overburden and Bedrock

Materials Interval

931075167 Formation ID:

Layer: 2 Color: General Color: **GREY** Mat1: 28 SAND Most Common Material: Mat2: 11 Mat2 Desc: **GRAVEL** 77 Mat3: Mat3 Desc: LOOSE Formation Top Depth: 53.0 Formation End Depth: 57.0 Formation End Depth UOM:

### Annular Space/Abandonment

### Sealing Record

933115461 Plug ID: Layer: 53.0 Plug From: 45.0 Plug To: Plug Depth UOM:

# Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961530327

**Method Construction Code:** 

**Method Construction:** Air Percussion

Other Method Construction:

## Pipe Information

Pipe ID: 10600432 Casing No:

Comment: Alt Name:

### Construction Record - Casing

Casing ID: 930090407

Layer: 2 Material:

**OPEN HOLE** Open Hole or Material:

Depth From: Depth To: 125.0 Casing Diameter: 6.0 Casing Diameter UOM: inch Casing Depth UOM: ft

### **Construction Record - Casing**

Casing ID: 930090408

Layer: 3 Material:

**OPEN HOLE** Open Hole or Material:

Depth From:

Depth To: 175.0 Casing Diameter: 5.0 Casing Diameter UOM: inch Casing Depth UOM: ft

### Construction Record - Casing

930090406 Casing ID:

Layer: Material: Open Hole or Material: STEEL

Depth From:

59.0 Depth To: Casing Diameter: 6.0 Casing Diameter UOM: inch Casing Depth UOM:

### Results of Well Yield Testing

Pumping Test Method Desc: **PUMP** Pump Test ID: 991530327

Pump Set At:

Static Level: 21.0

Final Level After Pumping: 55.0 Recommended Pump Depth: 90.0 Pumping Rate: 6.0 Flowing Rate:

Recommended Pump Rate: 5.0 Levels UOM: ft Rate UOM: **GPM** Water State After Test Code: 2 CLOUDY Water State After Test:

Pumping Test Method: **Pumping Duration HR:** 1 Pumping Duration MIN: 0 Flowing: No

### **Draw Down & Recovery**

934393315 Pump Test Detail ID: Test Type: Recovery Test Duration: 30 Test Level: 24.0 Test Level UOM: ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934662465 Test Type: Recovery Test Duration: 45 Test Level: 22.0 Test Level UOM: ft

### **Draw Down & Recovery**

Pump Test Detail ID: 934911009 Test Type: Recovery Test Duration: 60 21.0 Test Level: Test Level UOM: ft

## **Draw Down & Recovery**

Pump Test Detail ID: 934118327 Recovery Test Type: Test Duration: 15 Test Level: 26.0 Test Level UOM: ft

### Water Details

933490420 Water ID: 2 Layer: Kind Code: **FRESH** Kind: Water Found Depth: 148.0

### Water Details

Water Found Depth UOM:

Water ID: 933490419

Layer: Kind Code: **FRESH** Kind: 115.0

Water Found Depth: Water Found Depth UOM: ft

Order No: 23022400359

ft

### Water Details

933490421 Water ID:

Layer: 3 Kind Code: **FRESH** Kind: Water Found Depth: 211.0 Water Found Depth UOM: ft

Site: Database: **WWIS** lot 26 ON

UTM Reliability:

TRUE

18

Well ID: 1530328 Flowing (Y/N):

**Construction Date:** Flow Rate:

Use 1st: Livestock Data Entry Status:

Use 2nd: Data Src: Final Well Status: Abandoned-Quality Date Received: 08-Dec-1998 00:00:00

Water Type: Selected Flag: Casing Material: Abandonment Rec:

Audit No: 194762 Contractor: 1558

Tag: Form Version: 1 Constructn Method: Owner:

Elevation (m): County: **OTTAWA-CARLETON** 

Elevatn Reliabilty: 026 Lot:

Depth to Bedrock: Concession:

Well Depth: Concession Name: BF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

### **Bore Hole Information**

Clear/Cloudy:

Bore Hole ID: 10051863 Elevation: DP2BR:

Elevrc: Spatial Status: Zone:

East83: Code OB: Code OB Desc: North83: Open Hole: Org CS:

Cluster Kind: UTMRC: 19-Oct-1998 00:00:00 UTMRC Desc: unknown UTM Date Completed:

na

Remarks: Location Method: Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

### Annular Space/Abandonment

Sealing Record

933115462 Plug ID:

Layer: Plug From: 36.0 Plug To: 0.0 Plug Depth UOM: ft

## Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961530328

**Method Construction Code: Method Construction:** 

#### Other Method Construction:

Pipe Information

Pipe ID: 10600433

Casing No: Comment: Alt Name:

Site: Database: lot 27 ON

Well ID: 1532390 Flowing (Y/N):

**Construction Date:** Flow Rate:

Data Entry Status: Use 1st: Use 2nd: Data Src:

28-Nov-2001 00:00:00 Final Well Status: Abandoned-Other Date Received:

Water Type: Selected Flag: TRUE Casing Material: Abandonment Rec:

Audit No: 230289 Contractor: 1558

Tag: Form Version: 1 Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliabilty: 027 Lot:

Depth to Bedrock: Concession:

BF Well Depth: Concession Name:

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

**GLOUCESTER TOWNSHIP** Municipality:

Site Info:

**Bore Hole Information** 

Bore Hole ID: 10516840 Elevation:

DP2BR: Elevrc: Spatial Status: Zone: 18 East83: Code OB: Code OB Desc: North83:

Open Hole: Org CS: Cluster Kind: **UTMRC**: 9

Date Completed: 17-Oct-2001 00:00:00 **UTMRC Desc:** 

unknown UTM Remarks: Location Method: na

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date: Improvement Location Source:

Improvement Location Method: Source Revision Comment: **Supplier Comment:** 

Annular Space/Abandonment Sealing Record

Plug ID: 933219833

Layer: 61.0 Plug From: Plug To: 7.0 Plug Depth UOM: ft

Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961532390

**Method Construction Code:** 

Other Method **Method Construction:** 

Other Method Construction:

Pipe Information

Pipe ID: 11065410

Casing No: Comment: Alt Name:

Site: Database: lot 27 ON **WWIS** 

Well ID: Flowing (Y/N): 1533744 Flow Rate: **Construction Date:** 

Data Entry Status: Use 1st: Domestic

Use 2nd: Data Src: Final Well Status: Water Supply Date Received:

21-May-2003 00:00:00 TRUE Water Type: Selected Flag:

Casing Material: Abandonment Rec:

255805 6565 Audit No: Contractor: Form Version: Tag: 1

Constructn Method: Owner:

Elevation (m): County: **OTTAWA-CARLETON** Elevatn Reliabilty: Lot: 027

Depth to Bedrock: Concession:

Concession Name: BF Well Depth:

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone: Clear/Cloudy: UTM Reliability:

Municipality: **GLOUCESTER TOWNSHIP** 

Site Info:

**Bore Hole Information** 

10537578 Bore Hole ID: Elevation:

DP2BR: Elevrc: Spatial Status: Zone: 18 Code OB: East83: Code OB Desc: North83: Open Hole: Org CS:

Cluster Kind: **UTMRC**:

Date Completed: 22-Feb-2003 00:00:00 UTMRC Desc: unknown UTM

Location Method: Remarks: na

Order No: 23022400359

Loc Method Desc: Not Applicable i.e. no UTM Elevrc Desc:

Location Source Date:

Improvement Location Source: Improvement Location Method: **Source Revision Comment:** 

Supplier Comment:

Overburden and Bedrock

**Materials Interval** 

Formation ID: 932905631 Layer: 2 Color: 2 General Color: **GREY** Mat1:

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 54.0 Formation End Depth: 61.0 Formation End Depth UOM:

# Overburden and Bedrock

Materials Interval

Formation ID: 932905632

Layer: Color: General Color: **GREY** 15 Mat1:

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

61.0 Formation Top Depth: Formation End Depth: 105.0 Formation End Depth UOM: ft

# Overburden and Bedrock

Materials Interval

932905630 Formation ID: Layer: Color: 2 **GREY** General Color: Mat1: 05

CLAY Most Common Material: Mat2: 14

Mat2 Desc: **HARDPAN** 

Mat3: Mat3 Desc:

0.0 Formation Top Depth: Formation End Depth: 54.0 Formation End Depth UOM: ft

## Annular Space/Abandonment

Sealing Record

933236271 Plug ID: Layer: Plug From: 0.0 61.0 Plug To: Plug Depth UOM: ft

### Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961533744

**Method Construction Code:** 

Method Construction: Rotary (Air)

Other Method Construction:

# Pipe Information

Pipe ID: 11086148

Casing No:

Comment: Alt Name:

# **Construction Record - Casing**

930097537 Casing ID: Layer:

Material:1Open Hole or Material:STEELDepth From:61.0Casing Diameter:6.0Casing Diameter UOM:inch

Results of Well Yield Testing

Casing Depth UOM:

Pumping Test Method Desc:PUMPPump Test ID:991533744

ft

No

Pump Set At:

Static Level: 14.0
Final Level After Pumping: 20.0
Recommended Pump Depth: 80.0
Pumping Rate: 35.0

Flowing Rate:

Flowing:

Recommended Pump Rate: 6.0
Levels UOM: ft
Rate UOM: GPM
Water State After Test Code: 2
Water State After Test: CLOUDY
Pumping Test Method: 1
Pumping Duration HR: 1
Pumping Duration MIN: 0

**Draw Down & Recovery** 

 Pump Test Detail ID:
 934396111

 Test Type:
 Recovery

 Test Duration:
 30

 Test Level:
 14.0

 Test Level UOM:
 ft

**Draw Down & Recovery** 

 Pump Test Detail ID:
 934665391

 Test Type:
 Recovery

 Test Duration:
 45

 Test Level:
 14.0

 Test Level UOM:
 ft

**Draw Down & Recovery** 

 Pump Test Detail ID:
 934913518

 Test Type:
 Recovery

 Test Duration:
 60

 Test Level:
 14.0

 Test Level UOM:
 ft

**Draw Down & Recovery** 

 Pump Test Detail ID:
 934121258

 Test Type:
 Recovery

 Test Duration:
 15

 Test Level:
 14.0

 Test Level UOM:
 ft

Water Details

 Water ID:
 934031084

 Layer:
 1

 Kind Code:
 5

Kind: Not stated
Water Found Depth: 90.0
Water Found Depth UOM: ft

UTM Reliability:

Well ID: 1519599 Flowing (Y/N):
Construction Date: Flow Rate:

Use 1st: Domestic Data Entry Status:

 Use 2nd:
 Data Src:
 1

 Final Well Status:
 Water Supply
 Date Received:
 28-May-1985 00:00:00

Water Type: Selected Flag: TRUE

Casing Material: Abandonment Rec:

Audit No:Contractor:1558Tag:Form Version:1Constructn Method:Owner:

Constructn Method: Owner:
Elevation (m): County: OTTAWA-CARLETON

Elevation (Rin): Southly: Southly: O26

Depth to Bedrock:Concession:Well Depth:Concession Name:BF

Overburden/Bedrock: Easting NAD83: Pump Rate: Northing NAD83:

Static Water Level: Zone:

Clear/Cloudy:
Municipality: GLOUCESTER TOWNSHIP

Site Info:

**Bore Hole Information** 

Bore Hole ID: 10041469 Elevation: DP2BR: Elevro:

 DP2BR:
 Elevrc:

 Spatial Status:
 Zone:
 18

 Code OB:
 East83:

 Code OB Desc:
 North83:

 Open Hole:
 Org CS:

 Cluster Kind:
 UTMRC:
 9

Date Completed: 14-May-1985 00:00:00 UTMRC Desc: unknown UTM

Remarks: Location Method: na

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc: Location Source Date:

Improvement Location Source: Improvement Location Method: Source Revision Comment:

Supplier Comment:

Overburden and Bedrock

Materials Interval

**Formation ID:** 931042174

Layer: 3 Color: 6 **BROWN** General Color: Mat1: 28 Most Common Material: SAND Mat2: 11 Mat2 Desc: **GRAVEL** Mat3: 13 **BOULDERS** Mat3 Desc:

Mat3 Desc:BOULDERFormation Top Depth:40.0Formation End Depth:49.0Formation End Depth UOM:ft

Overburden and Bedrock

Materials Interval

**Formation ID:** 931042175

 Layer:
 4

 Color:
 2

 General Color:
 GREY

 Mat1:
 15

Most Common Material: LIMESTONE

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 49.0 Formation End Depth: 65.0 Formation End Depth UOM: ft

### Overburden and Bedrock

**Materials Interval** 

**Formation ID:** 931042172

Layer: 1 Color: 6

General Color: BROWN
Mat1: 05
Most Common Material: CLAY

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

Formation Top Depth: 0.0
Formation End Depth: 17.0
Formation End Depth UOM: ft

# Overburden and Bedrock

Materials Interval

 Formation ID:
 931042173

 Layer:
 2

 Color:
 2

 General Color:
 GREY

 Mat1:
 14

Most Common Material:HARDPANMat2:13Mat2 Desc:BOULDERSMat3:

Mat3 Desc:

Formation Top Depth: 17.0
Formation End Depth: 40.0
Formation End Depth UOM: ft

### Method of Construction & Well

<u>Use</u>

Method Construction ID: 961519599

Method Construction Code:

Method Construction: Air Percussion

Other Method Construction:

### Pipe Information

 Pipe ID:
 10590039

 Casing No:
 1

Comment: Alt Name:

### **Construction Record - Casing**

**Casing ID:** 930072412

Layer: 2 Material: 4

Open Hole or Material: OPEN HOLE

Depth From:

Depth To: 65.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

#### Construction Record - Casing

**Casing ID:** 930072411

Layer: 1
Material: 1
Open Hole or Material: STEEL

Depth From:

Depth To: 51.0
Casing Diameter: 6.0
Casing Diameter UOM: inch
Casing Depth UOM: ft

### Results of Well Yield Testing

Pumping Test Method Desc:PUMPPump Test ID:991519599

Pump Set At:

Static Level: 14.0 Final Level After Pumping: 20.0 30.0 Recommended Pump Depth: Pumping Rate: 20.0 Flowing Rate: 5.0 Recommended Pump Rate: Levels UOM: Rate UOM: **GPM** Water State After Test Code: **CLEAR** Water State After Test: Pumping Test Method: **Pumping Duration HR:** 0 **Pumping Duration MIN:** No Flowing:

# Draw Down & Recovery

 Pump Test Detail ID:
 934653801

 Test Type:
 Draw Down

 Test Duration:
 45

 Test Level:
 20.0

 Test Level UOM:
 ft

# **Draw Down & Recovery**

 Pump Test Detail ID:
 934108530

 Test Type:
 Draw Down

 Test Duration:
 15

 Test Level:
 20.0

 Test Level UOM:
 ft

## **Draw Down & Recovery**

 Pump Test Detail ID:
 934383821

 Test Type:
 Draw Down

 Test Duration:
 30

 Test Level:
 20.0

 Test Level UOM:
 ft

#### **Draw Down & Recovery**

Pump Test Detail ID: 934894144
Test Type: Draw Down

Test Duration: 60
Test Level: 20.0
Test Level UOM: ft

Water Details

*Water ID*: 933476639

 Layer:
 1

 Kind Code:
 1

 Kind:
 FRESH

 Water Found Depth:
 55.0

 Water Found Depth UOM:
 ft

Site:

con 1 ON

Database:

WWIS

18

Order No: 23022400359

con i on

Well ID: 1501587 Flowing (Y/N):
Construction Date: Flow Rate:

Use 1st: Domestic Data Entry Status:

Use 2nd:

O

Data Entry Status:

Data Entry Status:

Data Src:

Final Well Status: Water Supply Date Received: 06-Jan-1947 00:00:00

Water Type:Selected Flag:TRUECasing Material:Abandonment Rec:Audit No:Contractor:3566

Tag: Form Version: 1
Constructn Method: Owner:

Elevation (m): County: OTTAWA-CARLETON

Elevatn Reliability: Lot:

Depth to Bedrock: Concession: 01

Well Depth: Concession: 01

Concession Name: 05

Overburden/Bedrock:Easting NAD83:Pump Rate:Northing NAD83:Static Water Level:Zone:

Clear/Cloudy: UTM Reliability:

Municipality: GLOUCESTER TOWNSHIP Site Info:

### **Bore Hole Information**

Bore Hole ID: 10023630 Elevation:

DP2BR: Elevrc:
Spatial Status: Zone:
Code OB: East83:

Code OB:

Code OB Desc:

North83:

Open Hole:

Cluster Kind:

UTMRC:

 Cluster Kind:
 UTMRC:
 9

 Date Completed:
 15-Nov-1946 00:00:00
 UTMRC Desc:
 unknown UTM

Remarks: Location Method: na

Loc Method Desc: Not Applicable i.e. no UTM

Elevrc Desc:

Location Source Date: Improvement Location Source:

Improvement Location Source: Improvement Location Method: Source Revision Comment: Supplier Comment:

# Overburden and Bedrock

Materials Interval

 Formation ID:
 930992251

 Layer:
 1

 Color:
 2

 General Color:
 GREY

Mat1: 05 CLAY Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

0.0 Formation Top Depth: Formation End Depth: 90.0 Formation End Depth UOM: ft

Overburden and Bedrock

Materials Interval

930992252 Formation ID:

Layer:

Color:

General Color:

Mat1: 17 SHALE Most Common Material:

Mat2: Mat2 Desc: Mat3: Mat3 Desc:

90.0 Formation Top Depth: Formation End Depth: 167.0 Formation End Depth UOM:

Method of Construction & Well

<u>Use</u>

**Method Construction ID:** 961501587 **Method Construction Code:** 

**Method Construction:** Cable Tool

Other Method Construction:

Pipe Information

Pipe ID: 10572200

Casing No: Comment: Alt Name:

Construction Record - Casing

Casing ID: 930040106 Layer:

Material: Open Hole or Material: **STEEL** 

Depth From: 92.0 Depth To: Casing Diameter: 5.0 Casing Diameter UOM: inch Casing Depth UOM: ft

Construction Record - Casing

Casing ID: 930040107

Layer: Material:

Open Hole or Material: OPEN HOLE

Depth From:

167.0 Depth To: Casing Diameter: 5.0 Casing Diameter UOM: inch Casing Depth UOM: ft

### Results of Well Yield Testing

Pumping Test Method Desc: **PUMP** 991501587 Pump Test ID:

Pump Set At:

Static Level: 10.0 Final Level After Pumping: 30.0

Recommended Pump Depth:

30.0 Pumping Rate:

Flowing Rate:

Recommended Pump Rate: Levels UOM: ft Rate UOM: GPM Water State After Test Code: Water State After Test: **CLEAR** 

Pumping Test Method: Pumping Duration HR: 2 Pumping Duration MIN: 0 Flowing: No

## Water Details

Water ID: 933454305

Layer: 1 Kind Code:

**FRESH** Kind:

Water Found Depth:

Water Found Depth UOM: ft

# Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. **Note:** Databases denoted with " \* " indicates that the database will no longer be updated. See the individual database description for more information.

#### Abandoned Aggregate Inventory:

Provincial

AGR

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.\*

Government Publication Date: Sept 2002\*

Aggregate Inventory:

Provincial AGR

The Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (ONDMNRF) maintains this database of pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Oct 2022

#### Abandoned Mine Information System:

Provincial

**AMIS** 

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Mar 2022

### Anderson's Waste Disposal Sites:

Private

**ANDR** 

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

### Aboveground Storage Tanks:

Provincial

AST

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

### **Automobile Wrecking & Supplies:**

Private

**AUWR** 

Order No: 23022400359

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 1999-May 31, 2022

Borehole: Provincial BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

CA Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Government Publication Date: 1985-Oct 30, 2011\*

Dry Cleaning Facilities: Federal CDRY

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

Government Publication Date: Jan 2004-Dec 2020

Commercial Fuel Oil Tanks:

Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.

Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

#### **Chemical Manufacturers and Distributors:**

Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

<u>Chemical Register:</u> Private CHM

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

Government Publication Date: 1999-May 31, 2022

#### **Compressed Natural Gas Stations:**

Private CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 2012 -Sep 2022

#### **Inventory of Coal Gasification Plants and Coal Tar Sites:**

Provincial

COAL

Order No: 23022400359

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.\*

Government Publication Date: Apr 1987 and Nov 1988\*

Compliance and Convictions:

Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Nov 2022

Certificates of Property Use:

Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994 - Jan 31, 2023

<u>Drill Hole Database:</u> Provincial DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886 - Oct 2022

Delisted Fuel Tanks:

Provincial DTNK

List of fuel storage tank sites that were once found in - and have since been removed from - the list of fuel storage tanks made available by the regulatory agency under Access to Public Information.

Government Publication Date: Feb 28, 2022

### **Environmental Activity and Sector Registry:**

Provincial EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Government Publication Date: Oct 2011- Dec 31, 2022

Environmental Registry:

Provincial EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994 - Jan 31, 2023

#### **Environmental Compliance Approval:**

Provincial

FCA

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011- Dec 31, 2022

#### **Environmental Effects Monitoring:**

Federal

EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007\*

ERIS Historical Searches: Private EHS

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Jul 31, 2022

### **Environmental Issues Inventory System:**

Federal

EIIS

Order No: 23022400359

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001\*

#### Emergency Management Historical Event:

Provincial List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many

of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Apr 30, 2022

#### **Environmental Penalty Annual Report:**

Provincial

**EPAR** 

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2021

#### List of Expired Fuels Safety Facilities:

Provincial

**EXP** 

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.

Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

Federal Convictions: Federal **FCON** 

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007\*

#### Contaminated Sites on Federal Land:

Federal

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Dec 2022

#### Fisheries & Oceans Fuel Tanks:

Federal

**FOFT** 

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Government Publication Date: 1964-Sep 2019

### Federal Identification Registry for Storage Tank Systems (FIRSTS):

Federal

**FRST** 

Order No: 23022400359

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

Fuel Storage Tank: Provincial **FST** 

List of registered private and retail fuel storage tanks. This is not a comprehensive or complete inventory of private and retail fuel storage tanks in the province; this listing is a copy of registered private and retail fuel storage tanks, obtained under Access to Public Information. Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are

not verified for accuracy or completeness. Government Publication Date: Feb 28, 2022

Fuel Storage Tank - Historic:

Provincial FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010\*

### Ontario Regulation 347 Waste Generators Summary:

Provincial

GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Oct 31, 2022

#### **Greenhouse Gas Emissions from Large Facilities:**

Federal

GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

Government Publication Date: 2013-Dec 2019

TSSA Historic Incidents:

Provincial HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009\*

#### Indian & Northern Affairs Fuel Tanks:

Federal

IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003\*

Fuel Oil Spills and Leaks:

Provincial

INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing in a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

### **Landfill Inventory Management Ontario:**

Provincial

LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the Ministry of the Environment, Conservation and Parks compiles new and updated information. Includes small and large landfills currently operating as well as those which are closed and historic. Operators of larger landfills provide landfill information for the previous operating year to the ministry for LIMO including: estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Mar 21, 2022

Canadian Mine Locations:

Private

MINE

Order No: 23022400359

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009\*

Mineral Occurrences:

Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Feb 2022

#### National Analysis of Trends in Emergencies System (NATES):

Federal

**NATE** 

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994\*

**Non-Compliance Reports:** 

Provincial

**NCPL** 

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2021

#### National Defense & Canadian Forces Fuel Tanks:

Federal

NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001\*

#### National Defense & Canadian Forces Spills:

Federal

NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Apr 2018

#### National Defence & Canadian Forces Waste Disposal Sites:

Federal

NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007\*

#### National Energy Board Pipeline Incidents:

Federal

NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Jun 30, 2021

### National Energy Board Wells:

Federal

**NEBP** 

Order No: 23022400359

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release

Government Publication Date: 1920-Feb 2003\*

#### National Environmental Emergencies System (NEES):

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December

Government Publication Date: 1974-2003\*

National PCB Inventory: Federal NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008\*

#### National Pollutant Release Inventory:

Federal NPRI

Federal

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Government Publication Date: 1993-May 2017

Oil and Gas Wells:

Private OGWE

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-Nov 30, 2022

Ontario Oil and Gas Wells:

Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Aug 2021

### Inventory of PCB Storage Sites:

Provincial

**OPCB** 

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013

Orders: Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994 - Jan 31, 2023

<u>Canadian Pulp and Paper:</u> Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014

# Parks Canada Fuel Storage Tanks:

Federal

PCFT

Order No: 23022400359

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005

Pesticide Register:

Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

Government Publication Date: Oct 2011- Dec 31, 2022

Provincial PINC Provincial PINC

List of pipeline incidents (strikes, leaks, spills). This is not a comprehensive or complete inventory of pipeline incidents in the province; this listing in an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2021

#### Private and Retail Fuel Storage Tanks:

Provincial

PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996\*

Permit to Take Water:

Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994 - Jan 31, 2023

#### Ontario Regulation 347 Waste Receivers Summary:

Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-1990, 1992-2019

Record of Site Condition:

Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.

RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-Dec 2022

Retail Fuel Storage Tanks:

Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-May 31, 2022

#### Scott's Manufacturing Directory:

Private

SCT

Order No: 23022400359

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011\*

Ontario Spills:

Provincial SPL

List of spills and incidents made available the Ministry of the Environment, Conservation and Parks. This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X. The Ministry of the Environment, Conservation and Parks cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: 1988-Sep 2020; Dec 2020-Mar 2021

#### Wastewater Discharger Registration Database:

Facilities that report either municipal treated wastewater effluent or industrial wastewater discharges under the Effluent Monitoring and Effluent Limits (EMEL) and Municipal/Industrial Strategy for Abatement Regulations. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment keeps record of direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation, Mining, Petroleum Refining, Organic Chemicals, Inorganic Chemicals, Pulp & Paper, Metal Casting, Iron & Steel, and Quarries.

Government Publication Date: 1990-Dec 31, 2020

Private Anderson's Storage Tanks: **TANK** 

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1915-1953\*

#### Transport Canada Fuel Storage Tanks:

Federal **TCFT** 

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970 - Apr 2020

#### Variances for Abandonment of Underground Storage Tanks:

Provincial VAR

Provincial

**SRDS** 

Listing of variances granted for storage tank abandonment. This is not a comprehensive or complete inventory of tank abandonment variances in the province; this listing is a copy of tank abandonment variance records previously obtained under Access to Public Information. In Ontario, registered underground storage tanks must be removed within two years of disuse; if removal of a tank is not feasible, an application may be sought for a variance from this code requirement.

Records are not verified for accuracy or completeness.

Government Publication Date: Feb 28, 2022

#### Waste Disposal Sites - MOE CA Inventory:

Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011- Dec 31, 2022

#### Waste Disposal Sites - MOE 1991 Historical Approval Inventory:

Provincial **WDSH** 

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990\*

#### Water Well Information System:

Provincial

**WWIS** 

Order No: 23022400359

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Jun 30 2022

# **Definitions**

<u>Database Descriptions:</u> This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

<u>Detail Report</u>: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

<u>Distance:</u> The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

<u>Direction</u>: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

<u>Elevation:</u> The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

**Executive Summary:** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

**Map Key:** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

<u>Unplottables:</u> These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Order No: 23022400359

# **APPENDIX 3**

**QUALIFICATIONS OF ASSESSORS** 



# Jeremy Camposarcone, B.Eng. Junior Environmental Engineer

Jeremy joined Paterson Group in 2020 as part of the Environmental Group. Jeremy received his Bachelor of Engineering in Environmental Engineering from Carleton University in 2019. Jeremy completed his studies while researching water treatment processes for the wastewater effluent of a hydrothermal carbonization reactor. His responsibilities as a field engineer have brought him to various projects throughout the Ottawa-Valley. In his time with Paterson, Jeremy has been involved with residential and commercial development within Ottawa and the surrounding area. His scope of work consists of environmental investigation and reporting, field inspection, field testing, quality control and quality assurance.

.

#### **EDUCATION**

Bachelor of Engineering in Environmental Engineering, 2019 Carleton University Ottawa, Ontario

# LICENCE/PROSSFEIONAL AFFILIATIONS

PEO Engineer in Training

# YEARS OF EXPERIENCE

With Paterson: 2

# **OFFICE LOCATION**

9 Auriga Drive, Ottawa, Ontario, K2E 7T9

# **SELECT LIST OF PROJECTS**

- PSPC, Confederation Heights
   Redevelopment, Ottawa, ON Phase I and
   II ESA program for site redevelopment.
- Travelodge Hotel, Carling Avenue, Ottawa, ON – Remediation Program, Phase I and II ESA, Underground Storage Tank Pull and Remediation (Site Remediation Coordinator & Supervisor)
- Caivan Residential Development, Navan, ON - Large-Scale Remediation, Groundwater Monitoring, Phase I and II ESA, Remedial Action Plan (Site Remediation Coordinator & Supervisor)
- Rideau Centre Expansion, Ottawa, ON Phase I and II ESA, Soil Remediation Program
- Ottawa Trainyards, Ottawa, ON Large-Scale Remediation, Phase I and II ESA (Site Remediation Coordinator & Supervisor)
- Major Building, Downtown Ottawa, ON Phase I and II ESA



# PROFESSIONAL EXPERIENCE

# 2019 to present, Junior Environmental Engineer, Paterson Group, Ottawa, Ontario

- Conduct Phase I and Phase II Environmental Site Assessments (ESAs), Soil and Groundwater Remediation Programs and the preparation of Records of Site Condition
- Manage excavation contractors to ensure soil quality control; daily reporting to project manager
- Present analytical test results, interpretations, assessments, recommendation and/or conclusion in a final technical report
- Oversee geotechnical investigations for test pitting on numerous proposed utility installations, residential and commercial developments.
- Conduct laboratory testing program of soils and water for detail recommendations
- Problem solving to complete analysis required
- Adapt to unforeseen on-site challenges and provide first-hand insights to help collaborate toward a solution
- Oversee large-scale remediation projects and monitor material being excavated
- Monitor and sample multiple groundwater wells with a high degree of precision regarding the quality and parameters of the sample
- On-site settlement plate surveying of future residential developments





# Mark S. D'Arcy, P.Eng., QP<sub>ESA</sub> Senior Environmental/Geotechnical Engineer

After receiving his Bachelors of Applied Science from Queen's University in 1991 in Geological Engineering, Mark joined Paterson Group Inc. During the first 10 years of Mark's career, he was heavily involved in all aspects of field work, including drilling boreholes, excavating test pits, conducting phase I site inspections, environmental sampling and analysis and inspection of environmental remediations. During Mark's field experience, he gained invaluable field and office experience, which would prepare Mark to become the Environmental Division Manager. Mark's field experience ranges from Phase I Environmental Site Assessments (ESAs) to on-site soil and groundwater remediations, as well as, environmental/geotechnical borehole investigations. Mark's field experience has provided extensive knowledge of subsurface conditions, contractor relations and project management. These skills would provide Mark with the ability to understand a variety of situations, which has lead Paterson to an extremely successful Environmental Department. Mark became the Environmental Manager in 2006, which consisted of two engineers and two field technicians. Mark has been an integral part in growing the Environmental Division, which now consists of nine engineers and three field technicians. Mark is the Senior Project Manager for a wide variety of environmental projects within the Eastern Ontario area including Phase I ESAs, Phase II ESAs, remediations for filing Records of Site Condition in the Ontario Ministry of the Environment and Climate Change (MOECC) Environmental Site Registry, Brownfield Applications and Landfill Monitoring Programs. As the Senior Project Manager, Mark is responsible for directing project personnel, final report review and overall project success. Mark has proven leadership and ability to manage small to large scale projects within the allotted time and budget.

# **EDUCATION**

B.A.Sc. 1991, Geological Engineering Queen's University Kingston, ON

## LICENCE / PROFESSIONAL AFFILIATIONS

Professional Engineers of Ontario

Ottawa Geotechnical Group

ESA Qualified Person with MECP

Consulting Engineers of Ontario

#### YEARS OF EXPERIENCE

With Paterson: 31

# **OFFICE LOCATION**

9 Auriga Drive, Ottawa, Ontario, K2E 7T9

#### **SELECT LIST OF PROJECTS**

- 222 Beechwood Avenue, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Environmental Remediation)
- 409 MacKay Street, Ottawa, Ontario ( Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- Art's Court Redevelopment, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- Visitor Welcome Centre, Phase II and Phase III, Parliament Hill, Ottawa, Ontario (Senior Project Manager for Environmental Remediation)
- Mattawa Landfill, Mattawa, Ontario (Senior Project Manager, Annual Water Quality Monitoring report)
- Multi-Phase Redevelopment of the Ottawa Train Yards, Ottawa, Ontario (Senior Project Manager)
- Rideau Centre Expansion, Ottawa, Ontario (Senior Project Manager for Phase I ESA, Phase II ESA, Phase III ESA, Environmental Remediation)
- 26 Stanley Avenue, Ottawa, Ontario, Phase I ESA, Phase II ESA(Senior Project Manager)
- Riverview Development Kingston, Ontario, Phase I ESA, Phase II ESA, and filing of an RSC in the MOECC Environmental Site Registry (Senior Project Manager)
- Monitoring Landfills for River Valley, Kipling and Lavagine (Senior Project Manager)
- Energy Services Acquisition Program—Modernization Project- Ottawa;
   Environmental Services (Senior Project Manager)



### PROFESSIONAL EXPERIENCE

#### May 2001 to present, Manager of Environmental Division, Paterson Group, Ottawa, Ontario

- Manage all aspects of the environmental division (management of personnel, budgeting, invoicing, scheduling, business development, reporting, marketing, and fieldwork).
- Review day to day operations within the environmental division.
- Design, perform, and lead Phase I, II and Phase III ESAs, Remediation's, Brownfield Applications and Record of Site conditions, fieldwork surveys, excavation, monitoring, laboratory analysis, and interpretation.
- Write, present, and publish reports with methodology and laboratory analysis results, along with recommendations for environmental findings.
- Responsible for ensuring projects meet Ministry of Environment and Climate Change Standards and Guidelines.
- Building and fostering relationships with clients, stakeholders, and Ministry officials.
- Supervise and continuous training of staff in environmental methods (environmental sampling techniques, technical expertise and guidance).
- Applied due diligence in ensuring the health and safety of staff and the public in field locations.

## 1991 to 2001, Geotechnical and Environmental Engineer, Paterson Group, Ottawa, Ontario

- Provide on-site geotechnical and environmental expertise to various clients.
- Oversee geotechnical and environmental investigations for drilling and test pitting on numerous proposed utility installations, residential and commercial developments.
- Problem solving to help advance or maintain project schedules.
- Complete environmental reports with recommendations to meet environmental standards set by MOE and CCME standards.
- Conduct site inspections, bearing medium evaluations, bearing surface inspections, concrete testing and field density testing.
- · Liaising with contractors, consultants and government officials.
- Provide cost estimates for geotechnical and environmental field programs and construction costs.
- Review RFI's, submittals, monthly progress reports and other various construction related work.

# Appendix F Pre-consultation



Project Number: 160401787 A-16

Pre-application Consultation PC2023-0001 1184, 1188 and 1196 Cummings Avenue

Zoning By-law Amendment and Site Plan Control

Follow up Meeting Notes (revised), sent on 8 February 2023

Meeting Date: 13 January 2023 Location: Virtual meeting via Teams software

Attendees:

TCU Dev. Corp.

- -Dylan Desjardins, Vice President Operations
- -Brendan Kuffner, Assoc., Acquisition & Private Equity

Project 1 Studio -Ryan Koolwine

Fotenn Planning + Design

- -Tamara Nahal, Planner
- -Brian Casagrande, Partner
- -Timothy Beed, Senior Planner

City of Ottawa

ROW, Heritage and UD
-Moise Christopher, Urban Designer

Parks and Facilities Planning -Phil Castro, Parks Planner

**Development Review** 

- -Alex Polyak, Project Manager
- -Michael Boughton, Senior Planner
- -Patrick McMahon, Transportation Eng.
- -Evode Rwagasore, Planner

#### **Proposal summary**

The proposal is in a form of a residential development that will consist of a six (6) storey apartment building. The three existing detached dwellings located on 1184, 1188 and 1196 Cummings Avenue will be demolished

The properties southern side lot line abuts local commercial - a gas station and car wash. The northern side lot line abuts a detached residential dwelling. The rear lot line abuts Ogilvie Court a Planned Unit Development made up of townhouses and apartment building. Across the street there is currently local commercial. The property has frontage on Cummings Avenue, a major collector road. Approximately 40 metres south of the property, Cummings Avenue intersects with Ogilvie Road, an arterial road.

As part of Planning review, we will evaluate the proposed development against the Ottawa Official Plan, Zoning By-law 2008-250, and other relevant guidelines.

<u>PLANNING COMMENTS</u> **Evode Rwagasore** - <u>Evode.Rwagasore@ottawa.ca</u>

**Official Plan** - The City's *Official Plan* (OP) designates the subject site "Mixed-Use Centre". The Mixed-Use Centre designation supports higher densities, and compact and mixed-use development oriented to rapid transit.

**Secondary Plan -** The property is in the planning area of the Tremblay, St. Laurent and Cyrville Secondary Plan, which provides direction on maximum building heights and minimum densities. According to Schedule C of the Secondary Plan- Cyrville Transit-Oriented Development – Maximum Building Heights – the maximum number of storeys is 6 storeys and the minimum density is 150 units per net hectare (residential) and/or 0.5 floor space index (non-residential). Based on the preliminary plan between 32 to 40 unites are proposed. At 32 units the density for the site is 229 dwelling units/hectare and at 40 units the density for the site is 287 dwelling unites/hectare.

**Community Design Plan (CDP)** - Transit-Oriented Development Plans are a form of CDP. The property is in the *Cyrville TOD plan*. All six TOD studies are included in one document entitled, Transit-Oriented Development (TOD) Plans – Lees, Hurdman, Tremblay, St. Laurent, Cyrville Blair. The study area boundaries for the Transit Oriented Development (TOD) Plans were established based on an approximate 10-minute (800 metre) walking distance from the transit stations. The CDPs build upon previous plans and complement other general design guidelines prepared by the City and which may be applied to the area. Where a CDP conflicts with previously adopted guidelines, the guidelines in the CDP shall prevail. All TOD Plans are within a Design Priority Area as defined in the *Official Plan*.

**Guidelines** - The City has adopted Transit-Oriented Development (TOD) Guidelines for use in the Mixed Use Centres to assist applicants in submitting well-designed, context-sensitive development applications.

**Zoning** - The site is currently zone Residential Third Density, Subzone Y, Urban Exception 708 (R3Y [708]). The Planning Rationale and proposed site plan will need to demonstrate compliance with the proposed Transit Oriented Development Subzone 1 (TD1) provisions. Buildings in the TD1 zone are to have a minimum density of 150 units per net hectare for residential or a minimum Floor Space Index (FSI) 0.5 for non-residential land use. Proponents are encouraged to provide higher than the minimum densities required in the applicable TOD zone to bolster transit supportability. Buildings in this Zone shall range in height from two storeys to six storeys, and will be comprised of one or more of stacked dwellings, townhouses, apartment dwellings, or mixed-use and commercial uses. New single and semi-detached dwellings are not permitted. The maximum building height in any area up to and including 15 metres from a property line abutting a R3 zone is 14.5 metres.

To move forward a Major Zoning Amendment Application is required, and this proposal will be treated through a Site Plan Control Application - New Complex requiring an agreement.

Application forms, timeline and fees can be found through <u>Development applications | City of Ottawa</u>

# **Planning Application Fees**

Please note fees increase each year.

- 1. Zoning By-law Amendment: Major Zoning Amendment fee + Conservation Authority Fee
- 2. Site Plan Control Approval: New Complex + Initial Engineering Design Review and Inspection Fee, Ranges from \$1000 to \$10,000 dependent on value of hard and soft servicing + Conservation Authority Fee

**Note 1**: Additional Engineering Design Review and Inspection Fees of 4.5 % of the value of the hard servicing (road, sewers, watermains, sidewalks, curbs, stormwater, etc.) and 2.25 % of the soft servicing (landscaping, parking lot construction, etc.) are payable prior to the registration and should be forwarded to the Assigned Staff. The Engineering Design Review and Inspection Flat Rate Fee collected at submission will be credited to these fees. If the Site Plan process does not involve an agreement the Engineering Design Review and Inspection, Fee is required prior to Site Plan Approval.

**Note 2:** Each planning fee will be reduced by 10 % if two or more planning application are submitted at the same time and for the same lands. Conservation Authority, Engineering Design Review, Inspection fees and applications for Municipal Review and Concurrence of an Antenna System are not subject to this reduction.

#### **Parkland Dedication**

Any development application to which cash-in-lieu of parkland is applicable and for which an appraisal is required, will be subject to a fee for appraisal services as per the Parkland Dedication By-law.

# ENGINEERING COMMENTS \_ Alex Polyak - Alex.Polyak@ottawa.ca

### **Zoning By-Law Amendment**

Confirm if existing services (storm, water, sanitary) are adequate to service the site.

### Submission Documents:

- General Plan of Services
- Design Brief
- Geotechnical Report including a slope stability analysis

# Services fronting the property:

- 250mm diameter AC Sanitary
- 600mm diameter concrete Storm
- 305mm diameter Ductile Iron Watermain

Some Engineering Design Criteria to consider under a site plan control process:

Design Criteria - Civil Engineer to contact Alex Polyak directly

Storm post to pre, C of .5 or existing (whichever is more restrictive), Pre tc 20; post tc 10

Onsite, 5-year pipe minimum and store up to 100-year on site.

No 2-year ponding onsite.

Permissible ponding of 350mm for 100-year.

No spilling to adjacent properties.

At 100-year ponding elevation you must spill to City ROW

100-year Spill elevation must be 300mm lower than any building opening

<u>Water Boundary condition</u> requests must include the location of the service and the expected loads required by the proposed development. Please provide the following information:

- Location of service connections (MAP)
- Type of development and the amount of fire flow required (as per FUS).
- Average daily demand: \_\_\_\_ l/s.
- Maximum daily demand: I/s.
- Maximum hourly daily demand: I/s

#### Asset Management

There is an existing constraint in the downstream existing sanitary sewer on St. Laurent under the 417.

### TRANSPORTATION Patrick McMahon - Patrick.McMahon@ottawa.ca

- Follow Traffic Impact Assessment Guidelines
  - o Start this process as soon as possible.
  - Applicant advised that their application will not be deemed complete until the submission of the draft step 1-4.
- Cummings has a right of way protection of 26m as per the Official Plan. The existing ROW is approximately 20m, therefore a widening of approximately 3m will be required along the site frontage. Show this widening on future plans. Cummings is also being evaluated for cycling facilities within the draft Transportation Master Plan. If funding for the City project and timing align, opportunities should be sought to coordinate construction efforts.
- Ensure that sufficient accessible parking spaces are provided as per AODA requirements.

Future site plan considerations:

- Access location further away from Ogilvie is preferred, however any queueing impacts can be assessed within the TIA to determine whether a northbound left-turn would be warranted.
- Clear throat requirements for 100-200 apartment units accessing from a collector road are 15m which is met as proposed.
- Given TOD status and cycling infrastructure nearby, meeting one bicycle parking space per unit is recommended as well as other TDM measures given then the site is at the edge of the TOD zone
- A noise study will be required due to proximity to Cummings and Ogilvie. Stationary noise may also need review if there is exposed mechanical equipment.
- Emsure that all previous accesses are removed and the sidewalk and curb are reinstated to full height.

## FORESTRY Mark Richardson - Mark.Richardson@ottawa.ca

• A Tree Conservation Report is not mandatory but recommended at this stage; it will be required for Site Plan

# <u>ENVIRONMENTAL PLANNING</u> <u>Sami Rehman - Sami.Rehman@ottawa.ca</u>

"I don't see any major environmental concerns with the proposed development on the subject property.

However, since this proposal is over 4-storeys, I would suggest they review and incorporate design elements from the City's Bird-safe Design Guidelines into their proposal. I would also encourage them to plan as many locally appropriate native trees and shrubs as they can to help reach our urban canopy target."

# URBAN DESIGN Christopher Moise - Christopher.Moise@ottawa.ca

- The site is within a Design Priority Area and the proposal is subject to review by the City's Urban Design Review Panel prior to the application being deemed complete. Note this will be an Informal visit (prior to a full submission and is not a public meeting). Please contact udrp@ottawa.ca for details on submission requirements and scheduling.
- We recommend additional information to better understand the light well into the basement amenity space.
- We recommend a plan that illustrates the setback alignment with neighbouring properties to better understand the building placement in relation to the streetscape and surrounding existing and future development.
- We recommend investigating grade accessible units to the street if appropriate on one or both street frontages.
- We recommend tree planting in front of the buildings street facing facades.
- A scoped Design Brief is a required submittal (and separate from any UDRP submission) for all Site Plan/Re-zoning applications and can be combined with the Planning Rationale. Please see the Design Brief Terms of Reference provided for reference.
  - It is important to study the broader existing and future contexts.
  - It is important to explore and analyze alternative site planning and massing options.
     Alternative options explored and the analysis should be documented in the Design Brief.
  - A shadow study is required. Please refer to the Terms of Reference for the <u>shadow</u> analysis to conduct the study and evaluate the impacts.
  - Note. The Design Brief submittal should have a section which addresses these preconsultation comments.

# **SUBMISSION REQUIREMENTS**

- Site Plan.
- Landscape Plan / Tree Conservation Report
- Planning Rationale (including Design Statement)
- Coloured Elevations
- Site Survey Plan
- Phase 1 ESA
- General Plan of Services
- Design Brief
- Geotechnical Report including a slope stability analysis
- USB stick (all submitted plans and reports in .pdf format).

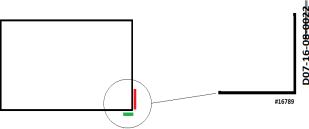
# Other points to note:

- 1. Contact the Conservation Authority (RVCA) Office for their requirements
- 2. As a suggestion, if you have not already done so, please contact and brief the Ward Councillor on your proposed application.
- 3. Minimum drawing and file requirements All plans

Plans are to be submitted on standard **A1 size** (594mm x 841mm) sheets, utilizing an appropriate Metric scale (1:200, 1:250, 1:300, 1:400, or 1:500).

4. Please use the standard border (below)

A0.1 Place on all plans; DWG # and D07 # as per sample



# Use Bold Black text:

Your Numbers are as per the colours listed here.

DWG XXXXX (place number on the bottom right)

D07 Number **D07-12-23-**

5. For information/question related to Development Charge, please contact AJ Mohmmand, Development Information Officer, Suburban East at <u>DIOCentrum@ottawa.ca</u> or 613-580-2424, ext. 29674

If you have any questions or require clarification with the above information, please contact me.

Sincerely,

Evode Rwagasore

# Appendix G Drawings



Project Number: 160401787 A-17